

Appendix C Draft Route Permit

STATE OF MINNESOTA PUBLIC UTILITIES COMMISSION

ROUTE PERMIT FOR

[PROJECT NAME] PILOT KNOB TO BURNSVILLE 115 KV REBUILD AND UPGRADE PROJECT

A HIGH-VOLTAGE TRANSMISSION LINE AND ASSOCIATED FACILITIES

IN

[COUNTY] DAKOTA

ISSUED TO

[PERMITTEE] GREAT RIVER ENERGY

PUC DOCKET NO. [Docket Number] ET2/TL-23-410

In accordance with the requirements of Minnesota Statutes Chapter 216E and Minnesota Rules Chapter 7850 this route permit is hereby issued to:

[Permittee] Great River Energy

[Permittee] Great River Energy is authorized by this route permit to construct and operate the Pilot Knob to Burnsville 115 kV Rebuild and Upgrade Project [Provide a description of the project authorized by the Minnesota Public Utilities Commission].

The high-voltage transmission line and associated facilities shall be built within the route identified in this route permit and as portrayed on the route maps and in compliance with the conditions specified in this route permit.

Approved and adopted this ____ day of [Month, Year]

BY ORDER OF THE COMMISSION

Will Seuffert,
Executive Secretary

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ATTACHMENTS

Attachment 1 – Complaint Handling Procedures for Permitted Energy Facilities

Attachment 2 – Compliance Filing Procedures for Permitted Energy Facilities

Attachment 3 – Route Permit Maps

DRAFT PERMIT

1 ROUTE PERMIT

The Minnesota Public Utilities Commission (Commission) hereby issues this route permit to [Permittee Name] Great River Energy (Permittee) pursuant to Minnesota Statutes Chapter 216E and Minnesota Rules Chapter 7850. This route permit authorizes the Permittee to construct and operate a [Provide a description of the project as authorized by the Commission], and as identified in the attached route maps, hereby incorporated into this document ([Project Name] Pilot Knob to Burnsville 115 kV Rebuild and Upgrade Project, henceforth known as Transmission Facility).

1.1 Pre-emption

Pursuant to Minn. Stat. § 216E.10, this route permit shall be the sole route approval required for construction of the transmission facilities and this route permit shall supersede and preempt all zoning, building, or land use rules, regulations, or ordinances promulgated by regional, county, local and special purpose governments.

2 TRANSMISSION FACILITY DESCRIPTION

The project includes the following segments of existing 69 kV transmission to be rebuilt and upgraded:

- Approximately 2.1 miles between the existing Pilot Knob and Deerwood substations;
- Approximately 3.2 miles between the existing Deerwood and River Hills substations;
and
- Approximately 3.4 miles between the existing River Hills and Burnsville substations.

Additionally, the existing Burnsville Substation would be upgraded and modified as part of the project. [Provide a description of the Transmission Facility as authorized by the Commission]

The Transmission Facility is located in the following:

County	Township Name	Township	Range	Section
<u>Dakota</u>	<u>City of Eagan</u>	<u>27N</u>	<u>23W</u>	<u>20, 21, 22, 27,</u> <u>28, 29, 30, 31,</u> <u>32</u>
		<u>27N</u>	<u>24W</u>	<u>25, 35, 36</u>
	<u>City of Burnsville</u>	<u>115N</u>	<u>20W</u>	<u>17, 20</u>

	<u>City of Apple Valley</u>	<u>115N</u>	<u>20W</u>	<u>20</u>
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2.1 Structures

The majority of the new 115-kV transmission line will consist of single circuit, horizontal post, or braced post direct-imbedded monopole steel structures spaced approximately 300 to 400 feet apart. Transmission structures will typically range in height from 65 to 100 feet above ground. The diameter of the direct-embedded steel structures at ground level would be between 22 and 40 inches.

Laminated wood structures or steel structures on concrete foundations may be needed for switches and angled structures. Multi-pole (e.g., 3-pole deadend) and/or H-frame structures are designed in a horizontal configuration, which maintains the transmission line conductors parallel to the ground. Horizontal configuration is sometimes desirable where the proposed transmission line crosses under other existing high voltage transmission lines.

In some cases where overhead clearances require the use of H-frame structures, it may be necessary to also bury the optical ground shield/communication wire.

A deadend structure is used to change direction and / or wire tension on a transmission line. A typical deadend structure with bundled conductor has a height of approximately 75 feet, a diameter of approximately 70 inches, and a concrete foundation diameter of approximately 82 inches. [Provide a detailed description of the structures authorized by the Commission]

2.2 Conductors

Single circuit structures would have three phases of bundled conductor wires and one shield wire. It is anticipated that the phase wires would be 795 thousand circular mil aluminum-clad steel supported (795 ACSS) or a conductor with similar capacity. [Provide a detailed description of the conductors authorized by the Commission]

The table below details specifics on the various structure and conductor types as presented in the route permit application.

Line Type	Conductor	Structure		Foundation	Height	Span
		Type	Material			
<u>115 kV</u>	<u>795 ACSS</u>	<u>Monopole with horizontal</u>	<u>Wood, steel, or ductile iron</u>	<u>Direct embed or concrete</u>	<u>65 – 100 feet</u>	<u>300 – 400 feet</u>

		<u>post or braced post</u>				
		<u>H-Frame</u>	<u>Wood, steel, or ductile iron</u>	<u>Direct embed or concrete</u>	<u>65 – 100 feet</u>	<u>350 - 800</u>
		<u>Three-pole</u>	<u>Wood, steel, or ductile iron</u>	<u>Direct embed or concrete</u>	<u>65 – 100 feet</u>	<u>350 – 800</u>

2.1 Substations and Associated Facilities

Upgrades at Burnsville Substation include shifting the upgraded and rebuilt 69 kV transmission to the west side of Burnsville Substation, removal of existing bus work, and installation of new bus work, new breakers, and new control equipment. [Provide a detailed description of the associated facilities and substations as authorized by the Commission]

3 DESIGNATED ROUTE

The route designated by the Commission is described below and shown on the route maps attached to this route permit (Designated Route). The Designated Route is generally described as follows:

1. The entire 5.4-acre parcel where the Pilot Knob Substation is located.
2. A 400-foot-wide route for approximately 1 mile along Pilot Knob Road to the intersection with Deerwood Drive.
3. A 200-foot-wide route along Deerwood Drive and Blackhawk Road to the I-35E crossing.
4. The entire 2-acre parcel where Deerwood Substation is located.
5. An approximately 500-foot-wide route (at its widest point) along the proposed 1,250-foot minor reroute north of Blackhawk Road at the I-35E crossing.
6. A 200-foot-wide route for approximately 1,800 feet along the Blackhawk Road to the intersection at Cliff Road.
7. A 400-foot-wide route for approximately 2.2 miles along Cliff Road to the intersection at State Highway 13.
8. The entire 0.5-acre parcel where the River Hills Substation is located.
9. A 500-foot-wide route for approximately 2,000 feet along State Highway 13.
10. A 400-foot-wide route for 2 miles along County Highway 11.

11. A 200-foot-wide route for approximately 1,000 feet along I-35E to the Burnsville Substation.
- ~~12.~~ The entire 5.4-acre parcel where the Burnsville Substation is located to accommodate the substation upgrades and different potential connection points into the substation. [Provide detailed description of the authorized route including the route widths and any other specifics relevant to each segment. Also include a reference to the relevant route map to be attached to the route permit.]

The Designed Route includes an anticipated alignment and a right-of-way. The right-of-way is the physical land needed for the safe operation of the transmission line. The Permittee shall locate the alignment and associated right-of-way within the Designated Route unless otherwise authorized by this route permit or the Commission. The Designated Route provides the Permittee with flexibility for minor adjustments of the alignment and right-of-way to accommodate landowner requests and unforeseen conditions.

Any modifications to the Designated Route or modifications that would result in right-of-way placement outside the Designated Route shall be specifically reviewed by the Commission in accordance with Minn. R. 7850.4900 and Section 10 of this route permit.

4 RIGHT-OF-WAY

This route permit authorizes the Permittee to obtain a new permanent right-of-way for the transmission line up to ~~{number}~~500 feet in width. The permanent right-of-way is typically ~~{number}~~35 feet on both sides of the transmission line measured from its centerline or alignment.

The anticipated alignment is intended to minimize potential impacts relative to the criteria identified in Minn. R. 7850.4100. The final alignment must generally conform to the anticipated alignment identified on the route maps unless changes are requested by individual landowners and agreed to by the Permittee or for unforeseen conditions that are encountered or as otherwise provided for by this route permit.

Any right-of-way or alignment modifications within the Designated Route shall be located so as to have comparable overall impacts relative to the factors in Minn. R. 7850.4100, as does the right-of-way and alignment identified in this route permit, and shall be specifically identified and documented in and approved as part of the plan and profile submitted pursuant to Section 9.1 of this route permit.

Where the transmission line parallels existing highway and other road rights-of-way, the transmission line right-of-way shall occupy and utilize the existing right-of-way to the maximum

extent possible; consistent with the criteria in Minn. R. 7850.4100, and the other requirements of this route permit; and for highways under the jurisdiction of the Minnesota Department of Transportation, the procedures for accommodating utilities in trunk highway rights-of-way.

5 GENERAL CONDITIONS

The Permittee shall comply with the following conditions during construction and operation of the Transmission Facility over the life of this route permit.

5.1 Route Permit Distribution

Within 30 days of issuance of this route permit, the Permittee shall provide all affected landowners with a copy of this route permit and the complaint procedures. An affected landowner is any landowner or designee that is within or adjacent to the Designated Route. In no case shall a landowner receive this route permit and complaint procedures less than five days prior to the start of construction on their property. The Permittee shall also provide a copy of this route permit and the complaint procedures to the applicable regional development commissions, county environmental offices, and city and township clerks. The Permittee shall file with the Commission an affidavit of its route permit and complaint procedures distribution within 30 days of issuance of this route permit.

5.2 Access to Property

The Permittee shall notify landowners prior to entering or conducting maintenance within their property, unless otherwise negotiated with the landowner. The Permittee shall keep records of compliance with this section and provide them upon the request of the Minnesota Department of Commerce (Commerce) or Commission staff.

5.3 Construction and Operation Practices

The Permittee shall comply with the construction practices, operation and maintenance practices, and material specifications described in the permitting record for this Transmission Facility unless this route permit establishes a different requirement in which case this route permit shall prevail.

5.3.1 Field Representative

The Permittee shall designate a field representative responsible for overseeing compliance with the conditions of this route permit during construction of the Transmission Facility. This person

shall be accessible by telephone or other means during normal business hours throughout site preparation, construction, cleanup, and restoration.

The Permittee shall file with the Commission the name, address, email, phone number, and emergency phone number of the field representative at least 14 days prior to the pre-construction meeting. The Permittee shall provide the field representative's contact information to affected landowners, local government units and other interested persons at least 14 days prior to the pre-construction meeting. The Permittee may change the field representative at any time upon notice to the Commission, affected landowners, local government units and other interested persons. The Permittee shall file with the Commission an affidavit of distribution of its field representative's contact information at least 14 days prior to the pre-construction meeting and upon changes to the field representative.

5.3.2 Employee Training - Route Permit Terms and Conditions

The Permittee shall train all employees, contractors, and other persons involved in the Transmission Facility construction regarding the terms and conditions of this route permit. The Permittee shall keep records of compliance with this section and provide them upon the request of Commerce or Commission staff.

5.3.3 Independent Third-Party Monitoring

Prior to any construction, the Permittee shall propose a scope of work and identify an independent third-party monitor to conduct Project construction monitoring on behalf of the Department of Commerce. The scope of work shall be developed in consultation with and approved by the Department of Commerce. This third-party monitor will report directly to and will be under the control of the Department of Commerce with costs borne by the Permittee. Commerce staff shall keep records of compliance with this section and will ensure that status reports detailing the construction monitoring are filed with the Commission in accordance with scope of work approved by the Department of Commerce.

5.3.4 Public Services, Public Utilities, and Existing Easements

During Transmission Facility construction, the Permittee shall minimize any disruption to public services or public utilities. To the extent disruptions to public services or public utilities occur these shall be temporary, and the Permittee shall restore service promptly. Where any impacts to utilities have the potential to occur the Permittee will work with both landowners and local entities to determine the most appropriate mitigation measures if not already considered as part of this route permit.

The Permittee shall cooperate with county and city road authorities to develop appropriate signage and traffic management during construction. The Permittee shall keep records of compliance with this section and provide them upon the request of Commerce or Commission staff.

5.3.5 Temporary Workspace

The Permittee shall limit temporary easements to special construction access needs and additional staging or lay-down areas required outside of the authorized right-of-way. Temporary space shall be selected to limit the removal and impacts to vegetation. The Permittee shall obtain temporary easements outside of the authorized transmission line right-of-way from affected landowners through rental agreements. Temporary easements are not provided for in this route permit.

The Permittee may construct temporary driveways between the roadway and the structures to minimize impact using the shortest route feasible. The Permittee shall use construction mats to minimize impacts on access paths and construction areas. The Permittee shall submit the location of temporary workspaces and driveways with the plan and profile pursuant to Section 9.1.

5.3.6 Noise

The Permittee shall comply with noise standards established under Minn. R. 7030.0010 to 7030.0080. The Permittee shall limit construction and maintenance activities to daytime working hours to the extent practicable.

5.3.7 Aesthetics

The Permittee shall consider input pertaining to visual impacts from landowners or land management agencies prior to final location of structures, rights-of-way, and other areas with the potential for visual disturbance. The Permittee shall use care to preserve the natural landscape, minimize tree removal and prevent any unnecessary destruction of the natural surroundings in the vicinity of the Transmission Facility during construction and maintenance. The Permittee shall work with landowners to locate the high-voltage transmission line to minimize the loss of agricultural land, forest, and wetlands, and to avoid homes and farmsteads. The Permittee shall place structures at a distance, consistent with sound engineering principles and system reliability criteria, from intersecting roads, highways, or trail crossings.

5.3.8 Soil Erosion and Sediment Control

The Permittee shall implement those erosion prevention and sediment control practices recommended by the Minnesota Pollution Control Agency Construction Stormwater Program. If construction of the Transmission Facility disturbs more than one acre of land or is sited in an area designated by the Minnesota Pollution Control Agency as having potential for impacts to water resources, the Permittee shall obtain a National Pollutant Discharge Elimination System/State Disposal System Construction Stormwater Permit from the Minnesota Pollution Control Agency that provides for the development of a Stormwater Pollution Prevention Plan that describes methods to control erosion and runoff.

The Permittee shall implement reasonable measures to minimize erosion and sedimentation during construction and shall employ perimeter sediment controls, protect exposed soil by promptly planting, seeding, using erosion control blankets and turf reinforcement mats, stabilizing slopes, protecting storm drain inlets, protecting soil stockpiles, and controlling vehicle tracking. Contours shall be graded as required so that all surfaces provide for proper drainage, blend with the natural terrain, and are left in a condition that will facilitate re-vegetation and prevent erosion. All areas disturbed during construction of the Transmission Facility shall be returned to pre-construction conditions.

5.3.9 Wetlands and Water Resources

The Permittee shall develop wetland impact avoidance measures and implement them during construction of the Transmission Facility. Measures shall include spacing and placing the power poles at variable distances to span and avoid wetlands, watercourses, and floodplains. Unavoidable wetland impacts as a result of the placement of poles shall be limited to the immediate area around the poles. To minimize impacts, the Permittee shall construct in wetland areas during frozen ground conditions where practicable and according to permit requirements by the applicable permitting authority. When construction during winter is not possible, the Permittee shall use wooden or composite mats to protect wetland vegetation.

The Permittee shall contain soil excavated from the wetlands and riparian areas and not place it back into the wetland or riparian area. The Permittee shall access wetlands and riparian areas using the shortest route feasible in order to minimize travel through wetland areas and prevent unnecessary impacts. The Permittee shall not place staging or stringing set up areas within or adjacent to wetlands or water resources, as practicable. The Permittee shall assemble power pole structures on upland areas before they are brought to the site for installation.

The Permittee shall restore wetland and water resource areas disturbed by construction activities to pre-construction conditions in accordance with the requirements of applicable state and federal permits or laws and landowner agreements.

The Permittee shall meet all requirements of the U.S. Army Corps of Engineers, Minnesota Department of Natural Resources, and local units of government.

5.3.10 Vegetation Management

The Permittee shall minimize the number of trees to be removed in selecting the right-of-way specifically preserving to the maximum extent practicable windbreaks, shelterbelts, living snow fences, and vegetation in areas such as trail and stream crossings where vegetative screening may minimize aesthetic impacts, to the extent that such actions do not violate sound engineering principles or system reliability criteria.

The Permittee shall remove tall growing species located within the transmission line right-of-way that endanger the safe and reliable operation of the transmission line. The Permittee shall leave undisturbed, to the extent possible, existing low growing species in the right-of-way or replant such species in the right-of-way to blend the difference between the right-of-way and adjacent areas, to the extent that the low growing vegetation that will not pose a threat to the transmission line or impede construction.

5.3.11 Application of Pesticides

The Permittee shall restrict pesticide use to those pesticides and methods of application approved by the Minnesota Department of Agriculture, Minnesota Department of Natural Resources, and the U.S. Environmental Protection Agency. Selective foliage or basal application shall be used when practicable. All pesticides shall be applied in a safe and cautious manner so as not to damage adjacent properties including crops, orchards, tree farms, apiaries, or gardens. The Permittee shall contact the landowner at least 14 days prior to pesticide application on their property. The Permittee may not apply any pesticide if the landowner requests that there be no application of pesticides within the landowner's property. The Permittee shall provide notice of pesticide application to landowners and beekeepers operating apiaries within three miles of the pesticide application area at least 14 days prior to such application. The Permittee shall keep pesticide communication and application records and provide them upon the request of Commerce or Commission staff.

5.3.12 Invasive Species

The Permittee shall employ best management practices to avoid the potential introduction and spread of invasive species on lands disturbed by Transmission Facility construction activities. The Permittee shall develop an Invasive Species Prevention Plan and file it with the Commission at least 14 days prior to the pre-construction meeting. The Permittee shall comply with the most recently filed Invasive Species Prevention Plan.

5.3.13 Noxious Weeds

The Permittee shall take all reasonable precautions against the spread of noxious weeds during all phases of construction. When utilizing seed to establish temporary and permanent vegetative cover on exposed soil the Permittee shall select site appropriate seed certified to be free of noxious weeds. To the extent possible, the Permittee shall use native seed mixes. The Permittee shall keep records of compliance with this section and provide them upon the request of Commerce or Commission staff.

5.3.14 Roads

The Permittee shall advise the appropriate governing bodies having jurisdiction over all state, county, city, or township roads that will be used during the construction phase of the Transmission Facility. Where practical, existing roadways shall be used for all activities associated with construction of the Transmission Facility. Oversize or overweight loads associated with the Transmission Facility shall not be hauled across public roads without required permits and approvals.

The Permittee shall construct the fewest number of site access roads required. Access roads shall not be constructed across streams and drainage ways without the required permits and approvals. Access roads shall be constructed in accordance with all necessary township, county or state road requirements and permits.

The Permittee shall promptly repair private roads or lanes damaged when moving equipment or when accessing construction workspace, unless otherwise negotiated with the affected landowner.

5.3.15 Archaeological and Historic Resources

The Permittee shall make every effort to avoid impacts to archaeological and historic resources when constructing the Transmission Facility. In the event that a resource is encountered, the Permittee shall consult with the State Historic Preservation Office and the State Archaeologist. Where feasible, avoidance of the resource is required. Where not feasible, mitigation must include an effort to minimize Transmission Facility impacts on the resource consistent with State Historic Preservation Office and State Archaeologist requirements.

Prior to construction, the Permittee shall train workers about the need to avoid cultural properties, how to identify cultural properties, and procedures to follow if undocumented cultural properties, including gravesites, are found during construction. If human remains are encountered during construction, the Permittee shall immediately halt construction and promptly notify local law enforcement and the State Archaeologist. The Permittee shall not

resume construction at such location until authorized by local law enforcement or the State Archaeologist. The Permittee shall keep records of compliance with this section and provide them upon the request of Commerce or Commission staff.

5.3.16 Avian Protection

The Permittee in cooperation with the Minnesota Department of Natural Resources shall identify areas of the transmission line where bird flight diverters will be incorporated into the transmission line design to prevent large avian collisions attributed to visibility issues. Standard transmission design shall incorporate adequate spacing of conductors and grounding devices in accordance with Avian Power Line Interaction Committee standards to eliminate the risk of electrocution to raptors with larger wingspans that may simultaneously come in contact with a conductor and grounding devices. The Permittee shall submit documentation of its avian protection coordination with the plan and profile pursuant to Section 9.1.

5.3.17 Restoration

The Permittee shall restore the right-of-way, temporary workspaces, access roads, abandoned right-of-way, and other public or private lands affected by construction of the Transmission Facility. Restoration within the right-of-way must be compatible with the safe operation, maintenance, and inspection of the transmission line. Within 60 days after completion of all restoration activities, the Permittee shall file with the Commission a Notification of Restoration Completion.

5.3.18 Cleanup

The Permittee shall remove and properly dispose of all waste and scrap from the right-of-way and all premises on which construction activities were conducted upon completion of each task. The Permittee shall remove and properly dispose of all personal litter, including bottles, cans, and paper from construction activities on a daily basis.

5.3.19 Pollution and Hazardous Wastes

The Permittee shall take all appropriate precautions to protect against pollution of the environment. The Permittee shall be responsible for compliance with all laws applicable to the generation, storage, transportation, clean up and disposal of all wastes generated during construction and restoration of the right-of-way.

5.3.20 Damages

The Permittee shall fairly restore or compensate landowners for damage to crops, fences, private roads and lanes, landscaping, drain tile, or other damages sustained during construction. The Permittee shall keep records of compliance with this section and provide them upon the request of Commerce or Commission staff.

5.4 Electrical Performance Standards

5.4.1 Grounding

The Permittee shall design, construct, and operate the transmission line in a manner so that the maximum induced steady-state short-circuit current shall be limited to five milliamperes root mean square (rms) alternating current between the ground and any non-stationary object within the right-of-way, including but not limited to large motor vehicles and agricultural equipment. All fixed metallic objects on or off the right-of-way, except electric fences that parallel or cross the right-of-way, shall be grounded to the extent necessary to limit the induced short-circuit current between ground and the object so as not to exceed one milliamperes rms under steady state conditions of the transmission line and to comply with the ground fault conditions specified in the National Electric Safety Code. The Permittee shall address and rectify any induced current problems that arise during transmission line operation.

5.4.2 Electric Field

The Permittee shall design, construct, and operate the transmission line in such a manner that the electric field measured one meter above ground level immediately below the transmission line shall not exceed 8.0 kV/m rms.

5.4.3 Interference with Communication Devices

If interference with radio or television, satellite, wireless internet, GPS-based agriculture navigation systems or other communication devices is caused by the presence or operation of the Transmission Facility, the Permittee shall take whatever action is necessary to restore or provide reception equivalent to reception levels in the immediate area just prior to the construction of the Transmission Facility. The Permittee shall keep records of compliance with this section and provide them upon the request of Commerce or Commission staff.

5.5 Other Requirements

5.5.1 Safety Codes and Design Requirements

The Permittee shall design the transmission line and associated facilities to meet or exceed all relevant local and state codes, the National Electric Safety Code, and North American Electric Reliability Corporation requirements. This includes standards relating to clearances to ground, clearance to crossing utilities, clearance to buildings, strength of materials, clearances over roadways, right-of-way widths, and permit requirements.

5.5.2 Other Permits and Regulations

The Permittee shall comply with all applicable state rules and statutes. The Permittee shall obtain all required permits for the Transmission Facility and comply with the conditions of those permits unless those permits conflict with or are preempted by federal or state permits and regulations. The Permittee shall submit a copy of such permits upon the request of Commerce or Commission staff.

At least 14 days prior to the pre-construction meeting, the Permittee shall file with the Commission an Other Permits and Regulations Submittal that contains a detailed status of all permits, authorizations, and approvals that have been applied for specific to the Transmission Facility. The Other Permits and Regulations Submittal shall also include the permitting agency or authority, the name of the permit, authorization, or approval being sought, contact person and contact information for the permitting agency or authority, brief description of why the permit, authorization, or approval is needed, application submittal date, and the date the permit, authorization, or approval was issued or is anticipated to be issued.

6 SPECIAL CONDITIONS

The special conditions shall take precedence over other conditions of this permit should there be a conflict.

- Proximity to Radio Antennas
- Adherence to Minnesota Department of Transportation Requirements
- Minimize Effects to Existing Wells
- Wildlife-friendly Erosion Control
- Dust Control
- Facility Lighting
- Vegetation Management Plan
- Protection of Bats
- Protections for Blanding's Turtle
- Protection of Nesting Birds

6.1 Proximity to Radio Antennas

The Permittee shall conduct technical studies to determine the effects of rebuilding and upgrading the transmission line in proximity to the AM 980 KKMS antennas. The study shall be based on final engineering of the transmission structure components' location in space, identify radio signal interference, determine the ability for the antennas to induce a voltage on the transmission line, and propose mitigation for any interference or induced voltage. At least 30 days prior to commencing construction within one-half-mile of the AM 908 KKMS antennas, the Permittee shall submit a compliance filing summarizing the results of the technical studies conducted, its coordination with AM 908 KKMS, and any mitigation incorporated by the Permittee. Construction in proximity to the AM 908 KKMS antennas will not be authorized until the special condition has been met.

6.2 Adherence to Minnesota Department of Transportation (MnDOT) Requirements

Intersection related and roadway departure crashes are two of the leading types of fatal and serious injury crashes on Minnesota Roadways. Applicable and enforceable MnDOT Special Provisions are attached to all issued utility permits to minimize impacts. In addition:

- 1) The Permittee and its contractors shall understand and follow:
 - a) MnDOT's Utility Accommodation on Highway Right of Way Policy
 - b) Utility Accommodation and Coordination Manual
 - c) MnDOT Permitting Policy and Guidance
- 2) To avoid driver sight distance impairment, the Permittee shall not place poles within sight corners of at-grade road crossings; the Permittee shall meet additional clearance requirements and clear zones relating to the state highway system as specified by MnDOT.
- 3) The Permittee shall accommodate planned and existing active transportation facilities in design and construction of the Project, and pedestrian access shall be maintained or temporarily re-routed.
- 4) The Permittee shall give MnDOT District Specialists the opportunity to participate in pre-construction meetings as they apply to MnDOT-owned property.
- 5) The Permittee shall conduct construction and restoration activities consistent with:
 - a) Applicable sections of MnDOT Facility Design Guide
 - b) MnDOT Seeding Manual
 - c) MnDOT Approved Products List for Rolled Erosion Prevention products.
- 6) The Permittee shall coordinate with MnDOT when planning transportation of oversize loads.

The Permittee shall keep records of compliance with this section and provide them upon the request of Department of Commerce or Commission staff.

6.3 Minimize Effects to Existing Wells

To reduce effects of the Project to existing wells, the following measures shall be implemented:

- The project is within the Emergency Response Area for the City of Eagan's wells. Any project staging should take place more than 200 feet from the City's wells.
- The project crosses both the City of Burnsville and City of Eagan Drinking Water Supply Management Areas. The Applicant and its contractors shall familiarize themselves with the Emergency Response Plans for both cities, and the applicable Plan shall be on site in construction vehicles during work, and followed in the case of a spill.
- Contact information (name, address, phone number) for all well owners with wells located within 200 feet of the transmission line shall be identified and cataloged with the well location, for use in the event of a spill or release of hazardous substance. This list of wells shall include identification of wells that aren't included in the Minnesota Well Index (<https://mnwellindex.web.health.state.mn.us/#>), and shall be provided to Anneka Munsell at Anneka.munsell@state.mn.us.
- Drill rigs with masts are typically required to service or seal abandoned wells. The presence of active powerlines near a well can make it difficult or impossible to safely complete this necessary work. The transmission line shall be designed to provide safe clearance and legal access for well service or sealing with a drill rig when the transmission line is active at the maximum proposed voltage. Alternatively, accommodation can be made by the Applicant to well owners to provide an alternative source of water of similar chemistry and supply, as well as sealing the existing well in accordance with Minnesota Statute, prior to energizing the transmission line.

Records of compliance shall be retained by the Permittee, and be provided to the Commission and Commerce staff upon request.

6.4 Wildlife-friendly Erosion Control

Due to entanglement issues with small animals, the Permittee shall use erosion control blankets limited to "bio-netting" or "natural netting" types, and shall specifically not use products containing plastic mesh netting or other plastic components, including hydro-mulch products that may contain small synthetic (plastic) fibers to aid in its matrix strength. The Permittee shall keep records of compliance with this section and provide them upon the request of Department of Commerce or Commission staff.

6.5 Dust Control

To protect plants and wildlife from chloride products that do not break down in the environment, the Permittee is prohibited from using dust control products containing calcium chloride or magnesium chloride during construction and operation. The Permittee shall keep records of compliance with this section and provide them upon the request of Department of Commerce or Commission staff.

6.6 Facility Lighting

To reduce harm to birds, insects, and other animals, the Permittee shall follow the MnDOT Approved Products for luminaries for new construction at substations, which limits the uplight rating to zero. A nominal color temperature below 2700K is preferable for wildlife, and selecting products that have the lowest number for backlight and glare. The Permittee shall keep records of compliance with this section and provide them upon the request of Department of Commerce or Commission staff.

6.7 Vegetation Management Plan

The Permittee shall develop a vegetation management plan (VMP), in coordination with the Vegetation Management Plan Working Group (VMPWG), using best management practices established by the DNR and BWSR. The Permittee shall file the VMP and documentation of the coordination efforts between the Permittee and the coordinating agencies with the Commission at least 14 days prior to the plan and profile required under this permit. The Permittee shall provide all landowners along the route with copies of the VMP. The Permittee shall file an affidavit of its distribution of the VMP to landowners with the Commission at least 14 days prior to the plan and profile.

The VMP shall include, at a minimum, the following:

- 1) short term and long-term management objectives; roles and responsibilities of site personnel.
- 2) a description of planned restoration and vegetation activities, including how the route will be prepared, timing of activities, and how seeding will occur (broadcast, drilling, etc.), and the types of seed mixes to be used.
- 3) a description of how the route will be monitored and evaluated to meet management objectives.
- 4) a description of management tools used to maintain vegetation (e.g., mowing, spot spraying, hand removal, etc.), including timing/frequency of maintenance activity.

- 5) identification, monitoring and management plan for noxious weeds and invasive species (native and non-native) on route; and
- 6) a plan showing how the route will be revegetated and corresponding seed mixes. Seed mixes, seeding rates, and cover crops should follow best management practices.

6.8 Protection of Bats

All seven of Minnesota's bats, including the federally endangered northern long-eared bat (*Myotis septentrionalis*), can be found throughout Minnesota. During the active season (approximately April-November) bats roost underneath bark, in cavities, or in crevices of both live and dead trees. Tree removal can negatively impact bats by destroying roosting habitat, especially during the pup rearing season when females are forming maternity roosting colonies and the pups cannot yet fly. The Permittee shall not remove trees from June 1 through August 15. If trees must be removed during this timeframe, the Permittee shall conduct a bat survey and avoid removing trees near observed bat roosts. The Permittee shall keep records of compliance with this section and provide them upon the request of Department of Commerce or Commission staff.

6.9 Protections for Blanding's Turtle

Blanding's turtles (*Emydoidea blandingii*) is a state-listed threatened species documented in the project vicinity. Minnesota's Endangered Species Statute (Minnesota Statutes, section 84.0895) and associated Rules (Minnesota Rules, part 6212.1800 to 6212.2300 and 6134) prohibit the take of threatened or endangered species without a permit. As such, the following avoidance measures are required:

- 1) Avoid wetland and aquatic impacts during hibernation season, between September 15th and April 15th, if the area is suitable for hibernation.
- 2) The use of erosion control blanket shall be limited to 'bio-netting' or 'natural-netting' types, and specifically not products containing plastic mesh netting or other plastic components.
 - a) Hydro-mulch products may contain small synthetic (plastic) fibers to aid in their matrix strength. These loose fibers could potentially resuspend and make their way into wetlands and other waters. The Permittee shall not allow any materials with synthetic (plastic) fiber additives in areas that drain into water bodies.
- 3) Construction areas, especially aquatic or wetland areas, should be thoroughly checked for turtles before the use of heavy equipment or any ground disturbance. Any holes or trenches that are left unattended for prolonged periods should be checked before filling.

4) The Blanding's turtle flyer

(https://files.dnr.state.mn.us/natural_resources/animals/reptiles_amphibians/turtles/blandings_turtle/flyer.pdf) must be given to all contractors working in the area.

5) Monitor for turtles during construction and report any sightings to the MDNR's QUICK Species Observation Form at

<https://forms.office.com/Pages/ResponsePage.aspx?id=RrAU68QkGUWPJricIVmCjJd3sXwPSexFr77gaXwyG4RUN1dRT1U2RFNFMlhMRDZIVU9ONks4Mk1PVS4u>.

6) If turtles are in imminent danger they must be moved by hand out of harm's way, otherwise, they are to be left undisturbed.

The Permittee shall keep records of compliance with this section and provide them upon the request of Department of Commerce or Commission staff.

6.10 Protection of Nesting Birds

The Bell's vireo (*Vireo bellii*) is a state-listed bird species of special concern has been documented in the vicinity of the project. In Minnesota, Bell's vireo prefers shrub thickets within or bordering open habitats such as grasslands or wetlands. This bird suspends its nests from forks of low branches of small trees or shrubs. The Permittee shall avoid tree and shrub removal from May 15th through August 15th. If tree and shrub removal occurs during this timeframe, the Permittee shall conduct a nesting survey to avoid disturbance of nesting birds. The Permittee shall keep records of compliance with this section and provide them upon the request of Department of Commerce or Commission staff.

[Add Special Conditions in accordance with the record of the docket]

7 DELAY IN CONSTRUCTION

If the Permittee has not commenced construction or improvement of the route within four years after the date of issuance of this route permit the Permittee shall file a Failure to Construct Report and the Commission shall consider suspension of this route permit in accordance with Minn. R. 7850.4700.

8 COMPLAINT PROCEDURES

At least 14 days prior to the pre-construction meeting, the Permittee shall file with the Commission the complaint procedures that will be used to receive and respond to complaints. The complaint procedures shall be in accordance with the requirements of Minn. R. 7829.1500 or Minn. R. 7829.1700, and as set forth in the complaint procedures attached to this route permit.

Upon request, the Permittee shall assist Commerce or Commission staff with the disposition of unresolved or longstanding complaints. This assistance shall include, but is not limited to, the submittal of complaint correspondence and complaint resolution efforts.

9 COMPLIANCE REQUIREMENTS

Failure to timely and properly make compliance filings required by this route permit is a failure to comply with the conditions of this route permit. Compliance filings must be electronically filed with the Commission.

9.1 Pre-Construction Meeting

Prior to the start of construction, the Permittee shall participate in a pre-construction meeting with Commerce and Commission staff to review pre-construction filing requirements, scheduling, and to coordinate monitoring of construction and site restoration activities. Within 14 days following the pre-construction meeting, the Permittee shall file with the Commission a summary of the topics reviewed and discussed and a list of attendees. The Permittee shall indicate in the filing the anticipated construction start date.

9.2 Plan and Profile

At least 14 days prior to the pre-construction meeting, the Permittee shall file with the Commission, and provide the Department of Commerce, and the counties where the Transmission Facility, or portion of the Transmission Facility, will be constructed with a plan and profile of the right-of-way and the specifications and drawings for right-of-way preparation, construction, structure specifications and locations, cleanup, and restoration for the Transmission Facility. The documentation shall include maps depicting the plan and profile including the right-of-way, alignment, and structures in relation to the route and alignment approved per this route permit.

The Permittee may not commence construction until the earlier of (i) 30 days after the pre-construction meeting or (ii) or until the Commission staff has notified the Permittee in writing that it has completed its review of the documents and determined that the planned construction is consistent with this route permit.

If the Commission notifies the Permittee in writing within 30 days after the pre-construction meeting that it has completed its review of the documents and planned construction, and finds that the planned construction is not consistent with this route permit, the Permittee may submit additional and/or revised documentation and may not commence construction until the

Commission has notified the Permittee in writing that it has determined that the planned construction is consistent with this route permit.

If the Permittee intends to make any significant changes in its plan and profile or the specifications and drawings after submission to the Commission, the Permittee shall notify the Commission, the Department of Commerce, and county staff at least five days before implementing the changes. No changes shall be made that would be in violation of any of the terms of this route permit.

9.3 Status Reports

The Permittee shall file with the Commission monthly Construction Status Reports beginning with the pre-construction meeting and until completion of restoration. Construction Status Reports shall describe construction activities and progress, activities undertaken in compliance with this route permit, and shall include text and photographs.

If the Permittee does not commence construction of the Transmission Facility within six months of this route permit issuance, the Permittee shall file with the Commission Pre-Construction Status Reports on the anticipated timing of construction every six months beginning with the issuance of this route permit until the pre-construction meeting.

9.4 In-Service Date

At least three days before the Transmission Facility is to be placed into service, the Permittee shall notify the Commission of the date on which the Transmission Facility will be placed into service and the date on which construction was completed.

9.5 As-Built

Within 90 days after completion of construction, the Permittee shall submit to the Commission copies of all final as-built plans and specifications developed during the Transmission Facility construction.

9.6 GPS Data

Within 90 days after completion of construction, the Permittee shall submit to the Commission, in the format requested by the Commission, geo-spatial information (e.g., ArcGIS compatible map files, GPS coordinates, associated database of characteristics) for all structures associated with the Transmission Facility and each substation connected.

9.7 Right of Entry

The Permittee shall allow Commission designated representatives to perform the following, upon reasonable notice, upon presentation of credentials and at all times in compliance with the Permittee's site safety standards:

- (a) To enter upon the facilities easement of the property for the purpose of obtaining information, examining records, and conducting surveys or investigations.
- (b) To bring such equipment upon the facilities easement of the property as is necessary to conduct such surveys and investigations.
- (c) To sample and monitor upon the facilities easement of the property.
To examine and copy any documents pertaining to compliance with the conditions of this route permit.

10 ROUTE PERMIT AMENDMENT

This route permit may be amended at any time by the Commission. Any person may request an amendment of the conditions of this route permit by submitting a request to the Commission in writing describing the amendment sought and the reasons for the amendment. The Commission will mail notice of receipt of the request to the Permittee. The Commission may amend the conditions after affording the Permittee and interested persons such process as is required under Minn. R. 7850.4900.

11 TRANSFER OF ROUTE PERMIT

The Permittee may request at any time that the Commission transfer this route permit to another person or entity (transferee). In its request, the Permittee must provide the Commission with:

- (a) the name and description of the transferee;
- (b) the reasons for the transfer;
- (c) a description of the facilities affected; and
- (d) the proposed effective date of the transfer.

The transferee must provide the Commission with a certification that it has read, understands and is able to comply with the plans and procedures filed for the Transmission Facility and all conditions of this route permit. The Commission may authorize transfer of the route permit after affording the Permittee, the transferee, and interested persons such process as is required under Minn. R. 7850.5000.

12 REVOCATION OR SUSPENSION OF ROUTE PERMIT

The Commission may initiate action to revoke or suspend this route permit at any time. The Commission shall act in accordance with the requirements of Minn. R. 7850.5100, to revoke or suspend this route permit.

DRAFT PERMIT