

STATE OF MINNESOTA PUBLIC UTILITIES COMMISSION

**ROUTE PERMIT FOR CONSTRUCTION OF A HIGH
VOLTAGE TRANSMISSION LINE
IN**

CASS COUNTY AND CROW WING COUNTY, MINNESOTA

**ISSUED TO
GREAT RIVER ENERGY AND MINNESOTA POWER**

PUC DOCKET No. ET2/TL-08-712

In accordance with the requirements of Minnesota Statutes Chapter 216E and Minnesota Rules Chapter 7849, this route permit is hereby issued to:

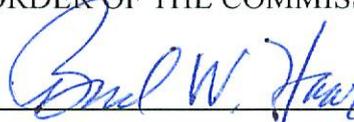
Great River Energy and Minnesota Power

Great River Energy and Minnesota Power, are authorized by this route permit to construct the nine and three-tenths mile segment located within the State of Minnesota, of a new 115 kilovolt (kV) high voltage transmission line between the Southdale Substation in Crow Wing County, Minnesota to a new Scarcyville Breaker Station in Cass County, Minnesota.

The transmission line shall be built within the route identified in this permit and as portrayed on the attached official route map, and in compliance with the conditions specified in this permit.

Approved and adopted this 9th day of April 2009

BY ORDER OF THE COMMISSION



Burl W. Haar,
Executive Secretary

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I. ROUTE PERMIT

The Minnesota Public Utilities Commission (Commission) hereby issues this route permit to Great River Energy and Minnesota Power (permittees) pursuant to Minnesota Statutes Chapter 216E and Minnesota Rules Chapter 7849. This permit authorizes the permittees to construct approximately nine and three-tenths miles of 115 kV high voltage transmission line and associated facilities between the Southdale Substation and a new Sceauxville Breaker Station.

II. PROJECT DESCRIPTION

The permittees are authorized to build an approximately nine and three-tenths mile segment of 115 kV transmission line and a new 115 kV breaker station. The proposed project will extend from the west side of Baxter to the north end of Sylvan Township and be located in Crow Wing and Cass counties, Minnesota.

The transmission line will be supported by single pole wood or steel structures with horizontal post insulators. In cases where longer spans are required, a braced post insulator design may be utilized. The pole structures will be approximately two to four feet in diameter, span 300 to 400 feet in length, and range from 65 to 80 feet in height. Pole structures will be anchored by directly embedding the pole 10 to 15 feet into an excavation roughly three to four feet greater than the pole diameter. Areas where existing distribution lines are present, the poles will be taller (75 to 90 feet) and designed to underbuild the distribution lines on the same poles, below the 115 kV circuit. Anchors and support cables or specialty structures will be required where the transmission line alignment angles or turns.

The three phases for this project will consist of one 795 steel supported aluminum conductor or ACSS. The ACSS conductors are 795,000 circular mils or approximately 1.1 inches in diameter and comprised of seven steel wires in the center surrounded by 26 aluminum strands. There will also be shield wires strung above the phases to prevent damage from potential lightning strikes. The shield wire may include a fiber optic cable that allows for substation protection equipment to communicate with other terminals on the line.

The breaker station will be constructed on approximately 10 acres of land and enclosed by a perimeter fence for security. The site location will likely require grading prior to construction. The breaker station will serve as the termination point for the proposed 115 kV transmission line and will be connected to Minnesota Power's existing 115 kV "24" transmission line by two new 115 kV lines approximately 0.1 miles in length total. A "lattice box" or low-profile structure design will be used for the construction of the breaker station, with the 115 kV transmission line termination towers being the tallest structure at 45 feet above grade.

A 280 foot by 290 foot fenced-in enclosure will house 115 kV switch structures, capacitors, breakers, and a control building. The breaker station will be designed to accommodate a future 230/115 kV transformer.

III. DESIGNATED ROUTE / SITE

The route designated by the Commission in this permit comprises the nine and three-tenths mile segment located in Cass and Crow Wing counties, Minnesota, and as described in detail below, and shown on the official route map attached to this permit.

The route width approved by this permit varies with each route segment and are as follows:

- a. A 100 foot route width (centered on the current 34.5 kV distribution alignment) from the interconnect near the Southdale substation to the Crow Wing-Cass county line.
- b. A 4,010 foot route width from the existing 34.5 kV distribution line north to Mapleton Road, incorporating 50 feet west of the Cass-Crow Wing county line and 3,960 feet (three-fourths of a mile) east of the county line.
- c. A 2,690 foot route from Mapleton Road to Highway 210, this includes 50 feet west of the Cass-Crow Wing county line and 2,640 feet (one half of a mile) east of the county line.
- d. A 535 foot route width along State Highway 210 from the Crow Wing County Line to County Highway 18 that includes the existing BNSF railroad corridor.
- e. A 180 foot route width along County Highway 18 (90 feet on each side of road centerline) to the existing Minnesota Power transmission right-of-way.
- f. A 400 foot route width centered along the existing Minnesota Power transmission right-of-way.

The portions of the proposed transmission alignment that would parallel State Highway 210 and County Highway 18 will be centered within a 70 foot right-of-way. The transmission line will be centered on a 100 foot right-of-way in Segment 1 where the new transmission line carries the Minnesota Power 34.5 kV distribution line and follows the existing alignment to the county line. When the transmission alignment is adjacent to a Public Waters Inventory (PWI) water body, the right-of-way will be limited to 70 feet when within 100 feet of the PWI. H-frame structures, if used, would also require at least a 100 foot wide right-of-way.

The proposed transmission line and breaker station will be designed to meet or exceed all relevant state and local codes, and requirements of the National Electric Safety Code, which is the utility safety standard that applies to all transmission lines. In addition, the breaker station facilities will be fenced, and access will be limited to authorized personnel. Appropriate standards will be met for construction and installation, and all applicable safety procedures will be followed during and after installation.

IV. PERMIT CONDITIONS

The permittees shall comply with the following conditions during construction of the transmission line and associated facilities and the life of this permit.

A. Plan and Profile. At least 14 calendar days before right-of-way preparation for construction begins, the permittees shall provide the Commission with a plan and profile of the right-of-way and the specifications and drawings for right-of-way preparation, construction, cleanup, and restoration for the transmission line. The permittees may not commence construction until the 14 days has expired or until the Commission has advised the permittees in writing that it has completed its review of the documents and determined that the planned construction is consistent with this permit. If the permittees intends to make any significant changes in its plan and profile or the specifications and drawings after submission to the Commission, the permittees shall notify the Commission 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 permit.

B. Construction Practices.

- 1. Application.** The permittees shall follow those specific construction practices and material specifications described in the Great River Energy and Minnesota Power Application to the Public Utilities Commission for a Route Permit, dated July 17, 2008, and as described in the environmental assessment and findings of fact, unless this permit establishes a different requirement, in which case this permit shall prevail.
- 2. Field Representative.** At least 10 days prior to commencing construction, the permittees shall advise the Commission in writing of the person or persons designated to be the field representative for the permittees with the responsibility to oversee compliance with the conditions of this permit during construction. The field representative's address, phone number, and emergency phone number shall be provided to the Commission and shall be made available to affected landowners, residents, public officials and other interested persons. The permittees may change its field representative at any time upon written notice to the Commission.
- 3. Local Governments.** The permittees shall cooperate with county and city road authorities to develop appropriate signage and traffic management during construction.

4. Cleanup. All waste and scrap that is the product of construction shall be removed from the area and properly disposed of upon completion of each task. Personal litter, including bottles, cans, and paper from construction activities shall be removed on a daily basis.

5. Vegetation Removal in the Right-of-Way. The permittees shall minimize the number of trees to be removed in selecting the right-of-way. As part of construction, low growing brush or tree species are allowable within and at the outer limits of the easement area. Taller tree species that endanger the safe and reliable operation of the transmission facility need to be removed. To the extent practical, low growing vegetation that will not pose a threat to the transmission facility or impede construction should remain in the easement area.

6. Erosion Control. The permittees shall implement reasonable measures to minimize runoff during construction and shall promptly plant or seed, erect silt fences, and/or use erosion control blankets in non-agricultural areas that were disturbed where structures are installed. All areas disturbed during construction of the facilities will be returned to their pre-construction condition.

7. Temporary Work Space. The permittees shall limit temporary easements to special construction access needs and additional staging or lay-down areas required outside of the authorized right-of-way.

8. Restoration. The permittees shall restore the right-of-way, temporary work spaces, access roads, abandoned right-of-way, and other private lands affected by construction of the transmission line. 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 permittees shall advise the Commission in writing of the completion of such activities. The permittees shall compensate landowners for any yard/landscape, crop damage, soil compaction, or other that may occur during construction.

9. Notice of Permit. The permittees shall inform all employees, contractors, and other persons involved in the transmission line construction of the terms and conditions of this permit.

C. Periodic Status Reports. Upon request, the permittees shall report to the Commission on progress regarding finalization of the route, design of structures, and construction of the transmission line. The permittees need not report more frequently than quarterly.

D. Complaint Procedure. Prior to the start of construction, the permittees shall submit to the Commission, the procedures that will be used to receive and respond to complaints. The procedures shall be in accordance with the requirements set forth in the complaint procedures attached to this permit.

E. Notification to Landowners. The permittees shall provide all affected landowners with a copy of this permit at the time of the first contact with the landowners after issuance of this permit.

The permittees shall contact landowners prior to entering the property or conducting maintenance along the route and avoid maintenance practices, particularly the use of fertilizer, herbicides, or pesticides, inconsistent with the landowner's or tenant's use of the land.

The permittees shall work with landowners to locate the high voltage transmission lines to minimize the loss of agricultural land, forest, and wetlands, and to avoid homes and farmsteads.

F. Completion of Construction.

- 1. Notification to Commission.** At least three days before the line is to be placed into service, the permittees shall notify the Commission of the date on which the line will be placed into service and the date on which construction was complete.
- 2. As-Builts.** Upon request of the Commission, the permittees shall submit copies of all the final as-built plans and specifications developed during the project.
- 3. GPS Data.** Within 60 days after completion of construction, the permittees shall submit to the Commission, in the format requested by the Commission, geo-spatial information (GIS compatible maps, GPS coordinates, etc.) for all above ground structures associated with the transmission lines, each switch, and each substation connected.

G. Electrical Performance Standards.

- 1. Grounding.** The permittees shall design, construct, and operate the transmission line in a manner 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.
- 2. Electric Field.** The transmission line shall be designed, constructed, and operated 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.

3. Interference with Communication Devices. If interference with radio or television, satellite or other communication devices is caused by the presence or operation of the transmission line, the permittees shall take whatever action is prudently feasible to restore or provide reception equivalent to reception levels in the immediate area just prior to the construction of the line.

H. Special Conditions

1. Archaeological and Historic Resources. The permittees shall make every effort to avoid impacts to identified archaeological and historic resources when installing the high voltage transmission line on the approved route. In the event that an impact would occur, the applicants will consult with State Historic Preservation Office and invited consulting parties. Where feasible, avoidance of the resource is required. Where not feasible, mitigation for project-related impacts on National Register of Historic Properties-eligible archaeological and historic resources must include an effort to minimize project impacts on the resource.

2. Wetlands/Water Resources. Wetland impact avoidance measures that shall be implemented during design and construction of the transmission line will include spacing and placing the power poles at variable distances to span and avoid wetlands. Unavoidable wetland impacts as a result of the placement of poles shall be limited to the immediate area around the poles. To minimize impacts, construction in wetland areas shall occur in the winter. If necessary, wooden or composite mats will be used to protect wetland vegetation. All requirements of the U.S. Army Corps of Engineers (wetlands under federal jurisdiction), Minnesota Department of Natural Resources (Public Waters/Wetlands), and County (wetlands under the jurisdiction of the Minnesota Wetland Conservation Act) shall be met.

Impacts to floodplains, in particular the placement of power pole structures, shall be avoided to the maximum extent possible by placing these structures above the floodplain contours outside of the designated floodplain, and by spanning the floodplain with the transmission line.

If construction activities will result in the disturbance of one acre or more of soils, a National Pollutant Discharge Elimination System stormwater permit from the Minnesota Pollution Control Agency will be required. Standard erosion control measures outlined in Minnesota Pollution Control Agency guidance and best management practices regarding sediment control practice during construction. These practices include, but are not limited to, protecting storm drain inlets, use of silt fences, protecting exposed soil, immediately stabilizing restored soil, controlling temporary soil stockpiles, and controlling vehicle tracking.

3. Avian Collision. The applicant will evaluate mitigative measures in areas of the project where the chance of avian collision or electrocution is higher, specifically where the route will span the Gull River. The Gull River and other areas will be identified by the permittees in cooperation with the Minnesota Department of Natural Resources (DNR) and the U.S. Fish and Wildlife Service where bird flight diverters will be incorporated into the transmission line design to prevent large avian collisions attributed to visibility issues.

Due to the areas importance to Osprey, Red-shouldered hawks, and other raptors, standard transmission design will incorporate adequate spacing of conductor(s) and grounding devices. This is intended to eliminate the risk of electrocution to raptors with larger wingspans that may simultaneously come in contact with a conductor and grounding devices.

The applicants will work with the DNR to ensure construction activities are scheduled so as not to impact Osprey nesting.

4. Rare and Unique Resources. The DNR indicated occurrences of Blanding's turtles near the project area. The Blanding's turtle is considered a species in greatest need of conservation in Minnesota. The permittees will use silt fencing or other erosion control measures when working near waterways and wetlands to prevent sedimentation and disturbance of these areas. Construction and maintenance personnel will be made aware of the Blanding's turtle and their habitat during pre-construction meetings in an effort to minimize possible disturbance.

5. Accommodation of Existing and Planned Infrastructure. The permittees are required to work with the landowners, townships, cities, and counties along the route to accommodate their concerns regarding tree clearing, distance from existing structures, drain tiles, pole depth and placement in relationship to existing roads and road expansion plans. The permittees will work with Minnesota Department of Transportation when locating the transmission facilities along State Highway 210.

I. Other Requirements.

1. Applicable Codes. The permittees shall comply with applicable requirements of the National Electric Safety Code including clearances to ground, clearance to crossing utilities, clearance to buildings, right-of-way widths, erecting power poles, and stringing of transmission line conductors.

2. Other Permits. The permittees shall comply with all applicable state rules and statutes. The permittees shall obtain all required local, state and federal permits for the project and comply with the conditions of these permits. A list of the required permits is included in the route permit application and the environmental assessment. The permittees shall submit a copy of such permits to the Commission upon request.

3. Pre-emption. Pursuant to Minnesota Statutes 216E.10, subdivisions 1 and 2, this route permit shall be the sole route approval required to be obtained by the permittees and this permit shall supersede and preempt all zoning, building, or land use rules, regulations, or ordinances promulgated by regional, county, local and special purpose government.

J. Delay in Construction. If the permittees have not commenced construction or improvement of the route within four years after the date of issuance of this permit, the Commission shall consider suspension of the permit in accordance with Minnesota Rule 7849.5970.

V. PERMIT AMENDMENT

The permit conditions in Section IV may be amended at any time by the Commission. Any person may request an amendment of the conditions of this 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 permittees. The Commission may amend the conditions after affording the permittees and interested persons such process as is required.

VI. TRANSFER OF PERMIT

The permittees may request at any time that the Commission transfer this permit to another person or entity. The permittees shall provide the name and description of the person or entity to whom the permit is requested to be transferred, the reasons for the transfer, a description of the facilities affected, and the proposed effective date of the transfer. The person to whom the permit is to be transferred shall provide the Commission with such information as the Commission shall require to determine whether the new permittees can comply with the conditions of the permit. The Commission may authorize transfer of the permit after affording the permittees, the new permittees, and interested persons such process as is required.

VII. REVOCATION OR SUSPENSION OF THE PERMIT

The Commission may initiate action to revoke or suspend this permit at any time. The Commission shall act in accordance with the requirements of Minnesota Rules part 7849.6010 to revoke or suspend the permit.

**PUBLIC UTILITIES COMMISSION
COMPLAINT REPORT PROCEDURES FOR
HIGH VOLTAGE TRANSMISSION LINES**

1. Purpose

To establish a uniform and timely method of reporting complaints received by the permittee concerning the permit conditions for site preparation, construction, cleanup and restoration, special conditions, other requirements, and resolution of such complaints.

2. Scope

This reporting plan encompasses complaint report procedures and frequency.

3. Applicability

The procedures shall be used for all complaints received by the permittee.

4. Definitions

Complaint – A statement presented by a person expressing dissatisfaction, resentment, or discontent as a direct result of the high voltage transmission line and associated facilities. Complaints do not include requests, inquiries, questions or general comments.

Telephone Complaint – A person presenting a complaint by telephone shall indicate whether the complaint relates to (1) a substantive routing permit matter, (2) a high voltage transmission line location matter, or (3) a compensation matter. All callers must provide the following information when presenting a complaint by telephone: (1) name; (2) date and time of call; (3) phone number; (4) email address (if available); (5) home address; (6) parcel number.

Substantial Complaint – Written complaints alleging a violation of a specific route permit condition that, if substantiated, could result in permit modification or suspension pursuant to the applicable regulations.

Person – An individual, partnership, joint venture, private or public corporation, association, firm, public service company, cooperative, political subdivision, municipal corporation, government agency, public utility district, or any other entity, public or private, however organized.

5. Responsibilities

Everyone involved with any phase of the high voltage transmission line is responsible to ensure expeditious and equitable resolution of all complaints. It is therefore necessary to establish a uniform method for documenting and handling complaints related to this high voltage transmission line project. The following procedures will satisfy this requirement:

- A. The permittee shall document all complaints by maintaining a record of all applicable information concerning the complaint, including the following:
 - 1. Name of the permittee and project.
 - 2. Name of complainant, address and phone number.
 - 3. Precise property description or tract numbers (where applicable).
 - 4. Nature of complaint.
 - 5. Response given.
 - 6. Name of person receiving complaint and date of receipt.
 - 7. Name of person reporting complaint to the PUC and phone number.
 - 8. Final disposition and date.

- B. The permittee shall assign an individual to summarize complaints for transmittal to the PUC.

6. Requirements

The permittee shall report all complaints to the PUC according to the following schedule:

Immediate Reports – All substantial complaints shall be reported to the PUC by phone or by e-mail the same day received or on the following working day for complaints received after working hours. Such reports are to be directed to high voltage transmission line permit compliance at the following: DOC.energypermitcompliance@state.mn.us or 1-800-657-3794. Voice messages are acceptable.

Monthly Reports – By the 15th of each month, a summary of all complaints, including substantial complaints received or resolved during the preceding month. Such summaries shall be sent to Dr. Burl W. Haar, Executive Secretary, Minnesota Public Utilities Commission, Metro Square Building, 121 7th Place East, Suite 350, St. Paul, MN 55101-2147. A copy of each complaint shall be sent to Permit Compliance, Minnesota Department of Commerce, 85 7th Place East, Suite 500, St. Paul, MN 55101-2198.

Unresolved Complaints – The permittee shall submit all unresolved complaints to the PUC for resolution by the PUC, where appropriate, no later than 45 days after the date of the submission.

7. Complaints Received by the PUC

Copies of complaints received directly by the PUC from aggrieved persons regarding site preparation, construction, cleanup, restoration, operation and maintenance shall be promptly sent to the permittee.

Initial Screening – Commission staff shall perform an initial evaluation of unresolved complaints submitted to the Commission. Complaints raising substantive routing permit issues shall be processed and resolved by the Commission. Staff shall notify permittee and the complainant if it determines that the complaint is a substantial complaint. With respect to such complaints, each party shall submit a written summary of its position to the Commission no later than ten days after receipt of the staff notification. Staff shall present briefing papers to the Commission, which shall resolve the complaint within twenty days of submission of the briefing papers.

Condemnation/Compensation Issues – If the Commission’s staff initial screening determines that a complaint raises issues concerning the just compensation to be paid to landowners on account of permittee acquisition of high voltage transmission line easements, staff shall recommend to the Executive Secretary that the matter be resolved under the provisions of Minnesota Statutes, Chapter 117. If the Executive Secretary concurs, he shall so report to the Commission and the matter shall be dealt with in the high voltage transmission line condemnation proceedings as an issue of just compensation.

