

**STATE OF MINNESOTA PUBLIC UTILITIES COMMISSION**

**ROUTE PERMIT FOR  
THE HVDC MODERNIZATION PROJECT**

**A HIGH-VOLTAGE TRANSMISSION LINE AND ASSOCIATED FACILITIES**

**IN  
SAINT LOUIS COUNTY**

**ISSUED TO  
MINNESOTA POWER**

**PUC DOCKET NO. E-015/TL-22-611**

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

**Minnesota Power**

Minnesota Power is authorized by this route permit to upgrade and operate the Square Butte transmission line, a 465-mile,  $\pm 250$  kilovolt (kV), 550-megawatt (MW) high-voltage direct-current (HVDC) transmission line from the Minnesota-North Dakota border and Hermantown, Minnesota.

The transmission facilities shall be constructed within the route identified in this route permit and in compliance with the conditions specified in this route permit.

Approved and adopted this 25th day of October 2024

BY ORDER OF THE COMMISSION



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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

## **1 ROUTE PERMIT**

The Minnesota Public Utilities Commission (Commission) hereby issues this route permit to Minnesota Power (Permittee) pursuant to Minnesota Statutes Chapter 216E and Minnesota Rules Chapter 7850. This route permit authorizes the Permittee to upgrade and operate the Square Butte transmission line, a 465-mile,  $\pm 250$  kilovolt (kV), 550-megawatt (MW) high-voltage direct-current (HVDC) transmission line between Hermantown, Minnesota, and Center, North Dakota (HVDC Modernization Project, henceforth known as Transmission Facility). The high-voltage transmission line shall be constructed within the route identified in this route permit and in compliance with the conditions specified in this route permit.

### **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 HVDC Modernization Project will upgrade the HVDC transmission line terminals in Hermantown, Minnesota, and Center, North Dakota and interconnect the upgraded HVDC terminals to the existing alternating current (AC) transmission system at the existing points of interconnection. In Minnesota, the HVDC terminals will interconnect to Minnesota Power's local 230 kV system at the Minnesota Power Arrowhead 230 kV/115 kV Substation, the same location the HVDC system currently connected.

The Transmission Facility in Minnesota includes the following:

- a new St. Louis County HVDC/345 kV Converter Station;
- a new St. Louis County 345 kV/230 kV Substation;
- relocation of the existing HVDC transmission line to facilitate termination at the new St. Louis County HVDC/345 kV Converter Station;
- less than one mile of new 345 kV single-circuit transmission line between the new St. Louis County HVDC/345 kV Converter Station and the new St. Louis County 345 kV/230 kV Substation;
- less than one mile of new double-circuit 230 kV transmission line between the new St. Louis County 345 kV/230 kV Substation and the existing Minnesota Power Arrowhead 230 kV/115 kV Substation; and
- modifications at the existing Minnesota Power Arrowhead 230 kV/115 kV Substation.

The Transmission Facility is located in the following counties, cities, and townships:

County	Township Name	Township	Range	Section
St. Louis	Solway	50N	15W	31
St. Louis	City of Hermantown	50N	16W	36

## 2.1 Structures and Conductors

The table below details specifics on the various structure and conductor types as presented in the Minnesota Power's June 2023 Certificate of Need and Route Permit Application for the HVDC Modernization Project (Application).

Line Type	Conductor <sup>1</sup>	Structure		Foundation	Foundation Diameter (feet)	Height (feet)	Span (feet)	Right-of-Way Width (feet)
		Type	Material					
230 kV	ACSR or ACSS	Tubular Pole	Weathering Steel	Concrete Pier	4-12	60-180	200-1000	130
345 kV	ACSR or ACSS	Tubular Pole	Weathering Steel	Concrete Pier	4-12	60-180	200-1000	150
±250 kV	2839 ACSR	Tubular Pole	Weathering Steel	Concrete Pier	4-12	60-180	200-1000	120

Notes: ACSR=aluminum conductor steel reinforced, ACSS=aluminum conductor steel supported.

<sup>1</sup> Bundled configurations (e.g., two sub conductors per phase).

## 3 DESIGNATED ROUTE

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

The route is designated as a 40-acre polygon approximately 0.5 mile wide from north to south and 0.7 mile long from east to west located in St. Louis County in the cities and townships identified in Section 2 of this route permit.

In the case of this route permit, the route width is intended to provide flexibility to design facilities, to minimize system impacts and outages, to optimize future expandability work with

landowners, to address engineering concerns, to avoid sensitive natural resources, and to manage construction constraints as practical.

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 Facilities as designated on the route maps and in sections 2 and 2.1 of this route permit.

Any right-of-way 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 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 (MnDOT), 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 (Department of Commerce) staff 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 Department of Commerce staff or Commission staff.

### **5.3.3 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 shall 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 Department of Commerce staff or Commission staff.

### **5.3.4 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.

### **5.3.5 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.

### **5.3.6 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.

### **5.3.7 Soil Erosion and Sediment Control**

The Permittee shall implement those erosion prevention and sediment control practices recommended by the Minnesota Pollution Control Agency (MPCA) 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 MPCA 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 MPCA 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.

### **5.3.8 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 possible 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 the USACE, Minnesota Department of Natural Resources (DNR), Minnesota Board of Water and Soil Resources, and local units of government wetland and water resource requirements.

### **5.3.9 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.

### **5.3.10 Application of Pesticides**

The Permittee shall restrict pesticide use to those pesticides and methods of application approved by the Minnesota Department of Agriculture (MDA), DNR, and the U.S. Environmental Protection Agency (EPA). 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 known 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 Department of Commerce staff or Commission staff.

#### **5.3.11 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.

#### **5.3.12 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 Department of Commerce staff or Commission staff.

#### **5.3.13 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.

#### **5.3.14 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 Department of Commerce staff or Commission staff.

#### **5.3.15 Avian Protection**

The Permittee in cooperation with the DNR 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.

#### **5.3.16 Drainage Tiles**

The Permittee shall avoid, promptly repair, or replace all drainage tiles broken or damaged during all phases of the Transmission Facility's life unless otherwise negotiated with the affected landowner. The Permittee shall keep records of compliance with this section and provide them upon the request of Department of Commerce staff or Commission staff.

#### **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 Notice of Restoration Completion.

### **5.3.18 Cleanup**

The Permittee shall remove and properly dispose of all construction 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 daily.

### **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 waste generated during construction and restoration of the Transmission Facility.

### **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 Department of Commerce staff 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 Department of Commerce staff 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 statutes and rules. 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.

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 name; 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.

The Permittee shall demonstrate that it has obtained all necessary permits, authorizations, and approvals by filing an affidavit stating as such and an updated Other Permits and Regulations Submittal prior to commencing construction. The Permittee shall provide a copy of any such permits, authorizations, and approvals at the request of Department of Commerce staff or Commission staff.

## **6 SPECIAL CONDITIONS**

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

### **6.1 Vegetation Retention**

The Permittee may disturb or clear vegetation on the site only to the extent necessary to assure suitable access for construction, and for safe operation and maintenance of the Transmission Facilities. The existing vegetative buffer specifically between the St. Louis County 345 kV/230 kV Substation and Morris Thomas Road must be retained during construction of the Transmission Facilities and for the life of the Transmission Facilities.

### **6.2 HVDC Converter Station Aesthetics**

The Permittee must color its HVDC converter station to blend in with the natural landscape with a neutral color such as a shade of brown or green, or a combination thereof.

### **6.3 Noise Study**

The Permittee must file a pre-construction noise study at least 14 days prior to the pre-construction meeting. The pre-construction noise study must include assumptions made, baseline noise conditions in the area, modeled noise levels, planned minimization and mitigation efforts, and equipment studied. The study must compare modeled noise levels with the State of Minnesota's noise standards (Minn. R. 7030.0040).

### **6.4 Right-of-Way Restoration Near Trout Streams**

The Permittee must restore the right-of-way, forested habitat along existing rights-of-ways, and any rights-of-ways to be decommissioned affected by construction of the Transmission

Facilities. Restoration within the right-of-way near trout streams must be coordinated with DNR fisheries staff to ensure that restoration in these areas provide adequate resource protection.

### **6.5 Steep Slopes**

To avoid indirect impacts to surface waters from steep slopes, increased impervious surfaces, erosion, and altered drainage patterns, the Permittee must use rip rap or a similar material to stabilize steep slopes after construction to ensure the existing drainage pattern remains. The Permittee must maintain a well-vegetated buffer between West Rocky Run Creek and graded areas. The Permittee must 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 must utilize downlit and shielded lighting at all project facilities. Lighting must minimize blue hue. The Permittee must keep records of compliance with this section and provide them upon the request of Department of Commerce or Commission staff.

### **6.7 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 must keep records of compliance with this section and provide them upon the request of Department of Commerce or Commission staff.

### **6.8 Wildlife-Friendly Erosion Control**

The Permittee must use only “bionetting” or “natural netting” types and mulch products without synthetic (plastic) fiber additives.

### **6.9 Vegetation Management Plan**

The Permittee must develop and use 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 must 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 Route Permit. The Permittee must provide all landowners along the route with copies of the



VMP. The Permittee must 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 must include, at a minimum, the following:

- a) management objectives addressing short term (year 0-5, seeding and establishment) and long term (year 5 through the life of the Project) goals;
- b) 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;
- c) A description of tree removal/planting activities and the timing of such activities;
- d) a description of how the route will be monitored and evaluated to meet management goals;
- e) a description of management tools used to maintain vegetation (*e.g.*, mowing, spot spraying, hand removal, etc.), including timing/frequency of maintenance activities;
- f) identification of any third-party (*e.g.*, consultant, contractor, site manager, etc.) contracted for restoration, monitoring, and long-term vegetation management of the site;
- g) identification of on-site noxious weeds and invasive species (native and non-native) and the monitoring and management practices to be utilized; and
- h) a plan showing how the route will be revegetated and corresponding seed mixes.

Best management practices should be followed concerning seed mixes, seeding rates, and cover crops.

#### **6.10 Independent Third-Party Monitoring**

Prior to any construction, the Permittee must propose a scope of work and identify an independent third-party monitor to conduct Transmission Facility construction monitoring on behalf of Commerce. The scope of work must be developed in consultation with and approved by Commerce. This third-party monitor will report directly to and will be under the control of Commerce with costs borne by the Permittee.

The Permittee must file with the Commission the scope of work and the name, address, email, and telephone number of the third party-monitor at least 30 days prior to commencing any construction or right-of-way preparation and upon any change in the scope of work or contact information that may occur during construction of the Project and restoration of the right-of-way.

## **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 Department of Commerce staff 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 Department of 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.

**ATTACHMENT 1**

Complaint Handling Procedures for Permitted Energy Facilities

**MINNESOTA PUBLIC UTILITIES COMMISSION  
COMPLAINT HANDLING PROCEDURES FOR  
PERMITTED ENERGY FACILITIES**

**A. Purpose**

To establish a uniform and timely method of reporting and resolving complaints received by the permittee concerning permit conditions for site or route preparation, construction, cleanup, restoration, operation, and maintenance.

**B. Scope**

This document describes complaint reporting procedures and frequency.

**C. Applicability**

The procedures shall be used for all complaints received by the permittee and all complaints received by the Minnesota Public Utilities Commission (Commission) under Minn. R. 7829.1500 or Minn. R. 7829.1700 relevant to this permit.

**D. Definitions**

**Complaint:** A verbal or written statement presented to the permittee by a person expressing dissatisfaction or concern regarding site or route preparation, cleanup or restoration, or other permit conditions. Complaints do not include requests, inquiries, questions or general comments.

**Substantial Complaint:** A written complaint alleging a violation of a specific permit condition that, if substantiated, could result in permit modification or suspension pursuant to the applicable regulations.

**Unresolved Complaint:** A complaint which, despite the good faith efforts of the permittee and a person, remains unresolved or unsatisfactorily resolved to one or both of the parties.

**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.

## **E. Complaint Documentation and Processing**

1. The permittee shall designate a representative responsible for filing complaints to the Commission's eDocket system. This person's name, phone number and email address shall accompany all complaint submittals. The name and contact information for the representative shall be kept current in eDockets.
2. A person presenting the complaint should, to the extent possible, include the following information in their communications:
  - a. name, address, phone number, and email address;
  - b. initial date of the complaint;
  - c. tract, parcel number, or address of the complaint;
  - d. a summary of the complaint; and
  - e. whether the complaint relates to a permit violation, a construction practice issue, or other type of complaint.
3. The permittee shall document all complaints by maintaining a record of all applicable information concerning the complaint, including the following:
  - a. docket number and project name;
  - b. name of complainant, address, phone number and email address;
  - c. precise description of property or parcel number;
  - d. name of permittee representative receiving complaint and date of receipt;
  - e. nature of complaint and the applicable permit condition(s);
  - f. summary of activities undertaken to resolve the complaint; and
  - g. a statement on the final disposition of the complaint.

## **F. Reporting Requirements**

The permittee shall commence complaint reporting at the beginning of project construction and continue through the term of the permit, unless otherwise required below. The permittee shall report all complaints to the Commission according to the following schedule:

**Immediate Reports:** All substantial complaints shall be reported to the Commission the same day received, or on the following working day for complaints received after working hours. Such reports are to be directed to the Commission's Public Advisor at 1-800-657-3782 (voice messages are acceptable) or [publicadvisor.puc@state.mn.us](mailto:publicadvisor.puc@state.mn.us). For e-mail reporting, the email



subject line should read “PUC EFP Complaint” and include the appropriate project docket number.

**Monthly Reports:** During project construction, restoration, and operation, a summary of all complaints, including substantial complaints received or resolved during the preceding month, shall be filed by the 15th of each month to Will Seuffert, Executive Secretary, Public Utilities Commission, using the eDockets system. The eDockets system is located at: <https://www.edockets.state.mn.us/EFiling/home.jsp>. If no complaints were received during the preceding month, the permittee shall file a summary indicating that no complaints were received.

If a project has submitted twelve consecutive months of complaint reports with no complaints, monthly reports can terminate by a letter to eDockets notifying the Commission of such action. If a substantial complaint is received (by the company or the Commission) following termination of the monthly complaint report, as noted above, the monthly reporting should commence for a period of six months following the most recent complaint or upon resolution of all pending complaints.

If a permittee is found to be in violation of this section, the Commission may reinstate monthly complaint reporting for the remaining permit term or enact some other commensurate requirement via notification by the Executive Secretary or some other action as decided by the Commission.

#### **G. Complaints Received by the Commission**

Complaints received directly by the Commission from aggrieved persons regarding the permit or issues related to site or route preparation, construction, cleanup, restoration, or operation and maintenance will be promptly sent to the permittee.

The permittee shall notify the Commission when the issue has been resolved. The permittee will add the complaint to the monthly reports of all complaints. If the permittee is unable to find resolution, the Commission will use the process outlined in the Unresolved Complaints Section to process the issue.

#### **H. Commission Process for Unresolved Complaints**

Complaints raising substantial and unresolved permit issues will be investigated by the Commission. Staff will notify the permittee and appropriate people if it determines that the

complaint is a substantial complaint. With respect to such complaints, the permittee and complainant shall be required to submit a written summary of the complaint and its current position on the issues to the Commission. Staff will set a deadline for comments. As necessary, the complaint will be presented to the Commission for consideration.

**I. Permittee Contacts for Complaints and Complaint Reporting**

Complaints may be filed by mail or email to the permittee's designated complaint representative, or to the Commission's Public Advisor at 1-800-657-3782 or [publicadvisor.puc@state.mn.us](mailto:publicadvisor.puc@state.mn.us). The name and contact information for the permittee's designated complaint representative shall be kept current in the Commission's eDocket system.

**ATTACHMENT 2**

Compliance Filing Procedures for Permitted Energy Facilities

**MINNESOTA PUBLIC UTILITIES COMMISSION  
COMPLIANCE FILING PROCEDURE FOR  
PERMITTED ENERGY FACILITIES**

**A. Purpose**

To establish a uniform and timely method of submitting information required by Commission energy facility permits.

**B. Scope and Applicability**

This procedure encompasses all known compliance filings required by permit.

**C. Definitions**

**Compliance Filing:** A filing of information to the Commission, where the information is required by a Commission site or route permit.

**D. Responsibilities**

1. The permittee shall file all compliance filings with Will Seuffert, Executive Secretary, Public Utilities Commission, through the eDockets system. The eDockets system is located at:  
<https://www.edockets.state.mn.us/EFiling/home.jsp>

General instructions are provided on the eDockets website. Permittees must register on the website to file documents.

2. All filings must have a cover sheet that includes:
  - a. Date
  - b. Name of submitter/permittee
  - c. Type of permit (site or route)
  - d. Project location
  - e. Project docket number
  - f. Permit section under which the filing is made
  - g. Short description of the filing

3. Filings that are graphic intensive (e.g., maps, engineered drawings) must, in addition to being electronically filed, be submitted as paper copies and on CD. Paper copies and CDs should be sent to: 1) Will Seuffert, Executive Secretary, Minnesota Public Utilities Commission, 121 7th Place East, Suite 350, St. Paul, MN 55101-2147, and 2) Department of Commerce, Energy Environmental Review and Analysis, 85 7th Place East, Suite 500, St. Paul, MN 55101-2198.

The Commission may request a paper copy of any electronically filed document.

## PERMIT COMPLIANCE FILINGS<sup>1</sup>

PERMITTEE:

PERMIT TYPE:

PROJECT LOCATION:

PUC DOCKET NUMBER:

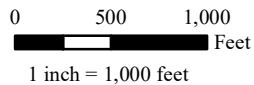
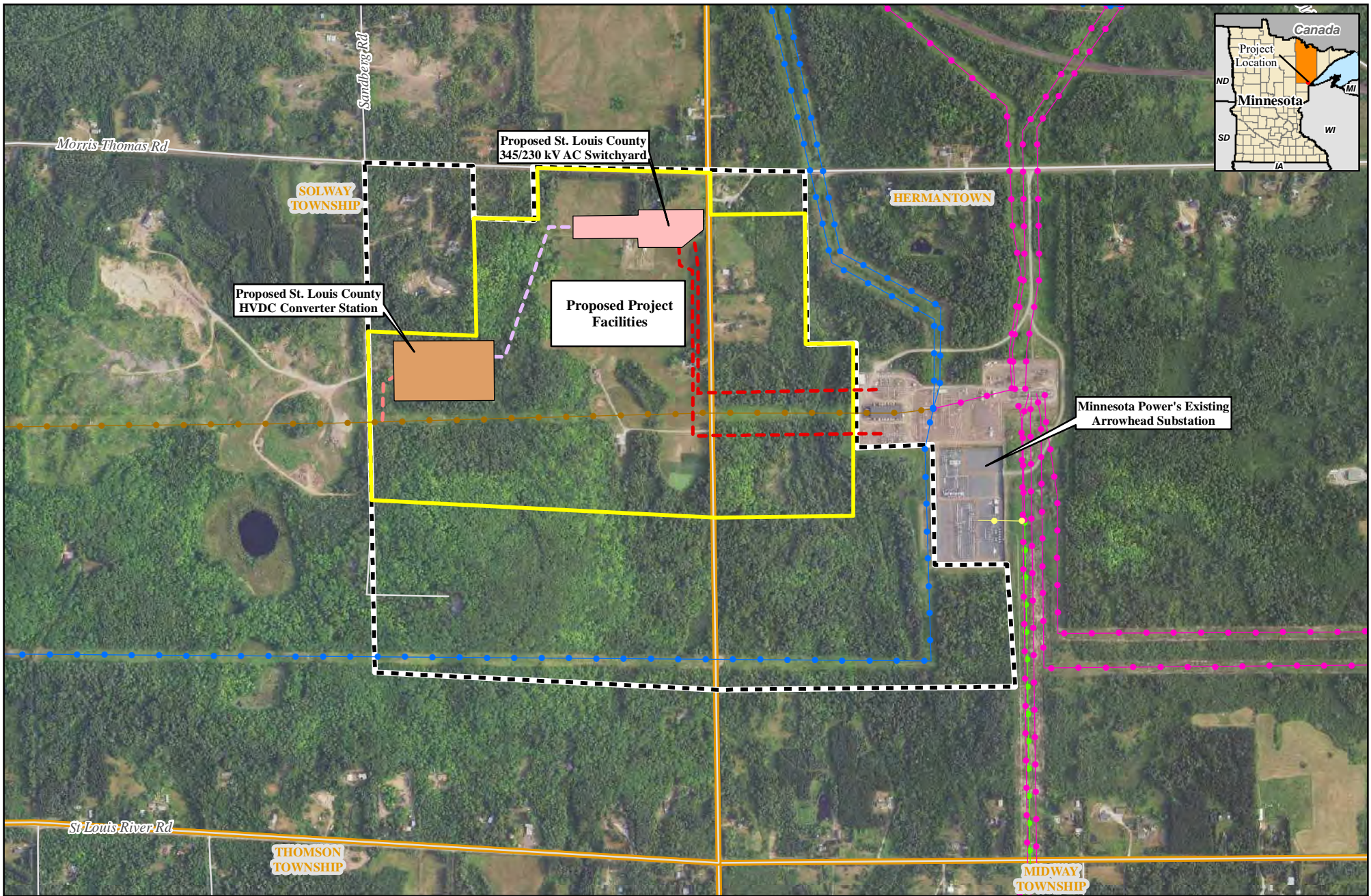
Filing Number	Permit Section	Description of Compliance Filing	Due Date

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<sup>1</sup> This compilation of permit compliance filings is provided for the convenience of the permittee and the Commission. It is not a substitute for the permit; the language of the permit controls.

**ATTACHMENT 3**  
Route Permit Maps





## **Proposed Route HVDC Modernization Project St. Louis County, Minnesota**

- |   |   |  |
|---|---|--|
| <p>--- Proposed St. Louis County – Arrowhead 230 kV AC Lines</p> <p>--- Proposed +/-250 kV HVDC Line Reroute</p> <p>--- Proposed St. Louis County HVDC – St. Louis County AC Switchyard 345 kV Line</p> <p>□ Proposed Route</p> | <p>--- Project Study Area</p> <p>□ Municipal Boundary</p> <p>--- Existing 115 kV Transmission Line</p> <p>--- Existing 230 kV Transmission Line</p> | <p>--- Existing 250 kV Transmission Line</p> <p>--- Existing 345 kV Transmission Line</p> <p>--- Existing 345kV/115 kV Transmission Line</p> |
|---|---|--|

MPUC Docket No. E-015/CN-22-611