

STATE OF MINNESOTA PUBLIC UTILITIES COMMISSION

**ROUTE PERMIT FOR THE
MANKATO TO MISSISSIPPI RIVER 345 kV
TRANSMISSION LINE PROJECT**

A HIGH-VOLTAGE TRANSMISSION LINE AND ASSOCIATED FACILITIES

IN

**Blue Earth, Le Sueur, Waseca, Rice, Goodhue, Olmsted, AND
Wabasha Counties**

ISSUED TO

**Northern States Power Company dba Xcel Energy
[PERMITTEE]**

PUC DOCKET NO. E002/TL-23-157

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

Northern States Power Company dba Xcel Energy [Permittee]

[Permittee] is authorized by this route permit to construct and operate the Mankato to Mississippi River 345 kV Transmission project of new 345 kV transmission line from the Wilmarth Substation in Mankato, to a point near the West Faribault Substation, to the existing North Rocker Substations, to the Mississippi River near Kellogg (Segments 1, 2, and 3). The project also includes construction and operation of a new 161 kV transmission line from the North Rochester Substation to the Chester 161 kV transmission line (Segment 4).

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.

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

BY ORDER OF THE COMMISSION

Sasha Bergman,
Executive Secretary

To request this document in another format such as large print or audio, call 651-296-0406 or 800-657-3782 (voice). Persons with a hearing or speech impairment may call using their preferred Telecommunications Relay Service or email consumer.puc@state.mn.us for assistance.

CONTENTS

1	ROUTE PERMIT	1
1.1	Pre-emption	1
2	TRANSMISSION FACILITY DESCRIPTION	1
2.1	Structures	1
2.2	Conductors	1
2.3	Substations and Associated Facilities	2
3	DESIGNATED ROUTE	2
4	RIGHT-OF-WAY	2
5	GENERAL CONDITIONS	3
5.1	Route Permit Distribution	3
5.2	Access to Property	3
5.3	Construction and Operation Practices	3
5.3.1	Field Representative	4
5.3.2	Employee Training - Route Permit Terms and Conditions	4
5.3.3	Independent Third-Party Monitoring	4
5.3.4	Public Services, Public Utilities, and Existing Easements	4
5.3.5	Temporary Workspace	5
5.3.6	Noise	5
5.3.7	Aesthetics	5
5.3.8	Soil Erosion and Sediment Control	6
5.3.9	Wetlands and Water Resources	6
5.3.10	Vegetation Management	7
5.3.11	Application of Pesticides	7
5.3.12	Invasive Species	7
5.3.13	Noxious Weeds	8
5.3.14	Roads	8
5.3.15	Archaeological and Historic Resources	8
5.3.16	Avian Protection	9
5.3.17	Drainage Tiles	9
5.3.18	Restoration	9
5.3.19	Cleanup	9
5.3.20	Pollution and Hazardous Wastes	9
5.3.21	Damages	10
5.4	Electrical Performance Standards	10
5.4.1	Grounding	10

5.4.2	Electric Field.....	10
5.4.3	Interference with Communication Devices.....	10
5.5	Other Requirements.....	11
5.5.1	Safety Codes and Design Requirements.....	11
5.5.2	Other Permits and Regulations.....	11
6	SPECIAL CONDITIONS.....	11
7	DELAY IN CONSTRUCTION	12
8	COMPLAINT PROCEDURES	12
9	COMPLIANCE REQUIREMENTS	12
9.1	Pre-Construction Meeting.....	12
9.2	Plan and Profile	12
9.3	Status Reports	13
9.4	In-Service Date	13
9.5	As-Builts.....	14
9.6	GPS Data.....	14
9.7	Right of Entry.....	14
10	ROUTE PERMIT AMENDMENT	14
11	TRANSFER OF ROUTE PERMIT	14
12	REVOCATION OR SUSPENSION OF ROUTE PERMIT.....	15

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 Northern States Power Company dba Xcel Energy (Permittee) pursuant to Minnesota Statutes Chapter 216E and Minnesota Rules Chapter 7850. This route permit authorizes the Permittee to construct and operate the **Mankato to Mississippi River 345 kV Transmission project**, Segments 1, 2, and 3 are new 345 kV transmission line from the Wilmarth Substation in Mankato, to a point near the West Faribault Substation, to the existing North Rocker Substations, to the Mississippi River near Kellogg. Segment 4 of the project includes construction and operation of a new 161 kV transmission line from the North Rochester Substation to the Chester 161 kV transmission line, 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 Transmission Facility will consist of the following Segments and Route Options, as identified in the October 30, 2025 ALJ Report.

- Segment 1 (345 kV) – Wilmarth Substation, Mankato, MN, following Segment 1 North with Route Segment 18 and Alternative Alignment 2 to a point near the West Faribault Substation. Referred to as Segment 1, Route Option B in the Final Environmental Impact Statement (FEIS).
- Segment 2 (345 kV) – From a point near the West Faribault Substation, near Faribault, MN, following Segment 2 North to Connector Segment 2G to Segment 2 South to the North Rochester Substation, near Pine Island, MN. Referred to as Segment 2, Route Option B in the FEIS.
- Segment 3 (345 kV) – Segment 3 as proposed in the application. From the North Rochester Substation near Pine Island to a point to cross the Mississippi River near the City of Kellogg, MN. An additional 345 kV transmission line will be co-located on existing structures of the CapX Transmission Line project.

- Segment 4 (161 kV) – North Rochester Substation near Pine Island, MN, Route Segment 12, primarily running parallel to the existing CapX 345 kV transmission line to a point of connection on the Chester Junction transmission line. Referred to as the CapX Co-Locate Option or Segment 4, Option D in the FEIS.

Refer to the attached Detailed Route Maps to view permitted route locations.

The Transmission Facility is located in the following:

County	Township Name	Township	Range	Section
Blue Earth	Mankato	108	26	1-3, 10, 11, 32, 34
Blue Earth	Lime	109	26	27-32, 34
Blue Earth	Le Ray	108	25	1, 5, 6, 31, 32
Blue Earth	Jamestown	109	25	5, 20-24, 29-32
Blue Earth	Elysian	109	25	24
LeSueur	Elysian	109	24	13, 19-24
LeSueur	Waterville	109	23	13-18, 24
LeSueur	Morristown	109	23	13
Rice	Morristown	109	22	13-18
Rice	Warsaw	109	21	1, 2, 10, 12, 13, 16, 17
Rice	Walcott	109	20	8-10, 12, 13
Rice	Richland	109	19	13-16, 18
Goodhue	Kenyon	109	18	13-18
Goodhue	Cherry Grove	109	17	13-18
Goodhue	Roscoe	109	16	13, 15-18, 24
Goodhue	Pine Island	109	15	13, 19, 24-28, 30, 36
Wabasha	Mazeppa	109	14	31
Wabasha	Elgin	108	12	1-6
Wabasha	Plainview	108	11	1, 3, 5, 6, 35, 36
Wabasha	Highland	108	11	3, 5, 6
Wabasha	Highland	109	10	30
Wabasha	Highland	109	11	35, 36
Wabasha	Watopa	109	10	1, 2, 10, 15, 16, 21, 29, 30
Wabasha	Watopa	110	10	36
Wabasha	Watopa	110	9	31
Wabasha	Greenfield	109	10	1, 2
Wabasha	Greenfield	110	10	36
Wabasha	Greenfield	110	9	29-31
Olmsted	Oronoco	108	14	5-12
Olmsted	Farmington	108	13	1, 3, 7-9, 12

2.1 Structures

The 345 kV segments of the project will primarily use single-pole steel structures. Single circuit structures will be used in portions of the project that only have 345 kV transmission line present. Double circuit structures will be used in portions of the project that are planned to have 345 kV transmission line with co-located underbuild of existing 69 kV transmission lines.

The single circuit and double circuit 345 kV structures will be between 85 to 175 feet tall and spaced approximately 1,000 feet apart.

The 161 kV segments of the project will primarily use single-pole self-weathering steel structures. Single circuit structures will be used in portions of the project that only have 161 kV transmission line present. Double circuit structures will be used in portions of the project that are planned to have 161 kV transmission line with co-located underbuild of existing 69 kV transmission lines.

The single circuit and double circuit 161 kV structures will be between 75 to 140 feet tall and spaced approximately 350 to 700 feet apart.

2.2 Conductors

The new 345 kV transmission line in Segments 1 and 2 will be a double bundled 2x636 kcmil26/7 Twisted Pair ACSR “Grosbeak” conductor. The new 345 kV second circuit in Segment 3 will be a double bundled 954 kcmil ACSS/TW 20/7 “Cardinal” conductor.

The new 161 kV transmission line in Segment 4 will be single 2x397.5 kcmil 26/7 Twisted Pair ZTACSR “Ibis” conductor.

Rebuilt sections of existing 115 kV and 69 kV transmission lines throughout the project a 2x336 kcmil 26/7 Twisted Pair ACSR “Linnet” conductor. Rebuilt 115 kV conductor will be double bundled, and the rebuilt 69 kV conductor will be single wire.

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

Line Type	Conductor	Structure		Foundation Diameter (feet)	Height (Feet)	Span (Average)
		Type	Material			
345 kV Single-Circuit	Double bundled 2x636 kcmil26/7 Twisted Pair ACSR “Grosbeak”	Monopole w/Davit Arms	Galvanized or Self-Weathering Steel	7-12	84-175	1,000
345 kV with	Double	Monopole w/Davit	Galvanized or	7-12	85-175	1,000

69 kV Underbuild	bundled 2x636 kcmil26/7 Twisted Pair ACSR "Grosbeak"	Arms	Self- Weathering Steel			
345 kV/345 kV	Double bundled 954 kcmil ACSS/TW 20/7 "Cardinal"	Monopole w/Davit Arms	Galvanized or Self- Weathering Steel	7-12	85-175	1,000
345-115 kV Double- Circuit	Double bundled 2x636 kcmil26/7 Twisted Pair ACSR "Grosbeak" and Double bundled 2x336 kcmil 26/7 Twisted Pair ACSR "Linnet"	Monopole w/Davit Arms	Galvanized or Self- Weathering Steel	7-12	85-175	1,000
161 kV Single-Circuit	Single 2x397.5 kcmil 26/7 Twisted Pair ZTACSR "Ibis"	Monopole w/Davit Arms	Galvanized or Self- Weathering Steel	6-8	75-140	350-700
161 kV/69 kV Double- Circuit	Single 2x397.5 kcmil 26/7 Twisted Pair ZTACSR "Ibis" and Single 2x336 kcmil 26/7 Twisted Pair ACSR "Linnet"	Monopole w/Davit Arms	Galvanized or Self- Weathering Steel	6-8	75-140	350-700

2.3 Substations and Associated Facilities

The Project will include upgrades to the existing Wilmarth and North Rochester substations.

Upgrades to the Wilmarth Substation:

- 1) two new 345 kV circuit breakers
- 2) four new 345 kV group operated switches
- 3) three new one-phase bus stands
- 4) rigid bus to extend the existing rigid bus to the switches
- 5) a flexible bus to connect the switches to the breakers
- 6) an approximate 0.8 acre expansion of the northeast corner of the current fenced area and pad of the Wilmarth Substation

Upgrades to the North Rochester Substation:

- 1) new 345 kV circuit breakers
- 2) new 345 kV switches
- 3) new rigid and flexible bus
- 4) new bus stand
- 5) expansion of the Electrical Equipment Exposure (EEE)

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 Transmission Facility will consist of the following Segments and Route Options, as identified in the October 30, 2025 ALJ Report.

- Segment 1 (345 kV) – Wilmarth Substation, Mankato, MN, following Segment 1 North with Route Segment 18 and Alternative Alignment 2 to a point near the West Faribault Substation. Referred to as Segment 1, Route Option B in the Final Environmental Impact Statement (FEIS).
- Segment 2 (345 kV) – From a point near the West Faribault Substation, near Faribault, MN, following Segment 2 North to Connector Segment 2G to Segment 2 South to the North Rochester Substation, near Pine Island, MN. Referred to as Segment 2, Route Option B in the FEIS.
- Segment 3 (345 kV) – Segment 3 as proposed in the application. From the North Rochester Substation near Pine Island to a point to cross the Mississippi River

near the City of Kellogg, MN. An additional 345 kV transmission line will be co-located on existing structures of the CapX Transmission Line project.

- Segment 4 (161 kV) – North Rochester Substation near Pine Island, MN, Route Segment 12, primarily running parallel to the existing CapX 345 kV transmission line to a point of connection on the Chester Junction transmission line.
Referred to as the CapX Co-Locate Option or Segment 4, Option D in the FEIS.

Refer to the attached Detailed Route Maps to view permitted route locations.

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 is generally 1,000 feet wide, 500 feet on either side of the anticipated alignment center line, which 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 345 kV transmission line up to [150] feet in width and a new permanent right-of-way for the 161 kV transmission line up to [100] feet in width. The permanent right-of-way is typically [75] feet on both sides of the 345 kV transmission line measured from its centerline or alignment. The permanent right-of-way is typically [50] feet on both sides of the 161 kV 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 (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 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 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 construction monitoring on behalf of the Commission. The scope of work shall be developed in consultation with and approved by Commission staff. This third-party monitor will report directly to and will be under the control of Commission staff with costs borne by the Permittee. Commission 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 the approved scope of work.

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 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 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 (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.

5.3.9 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 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.

5.3.10 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.

The Permittees 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 DNR with the Commission as part of the plan and profile required in Section 9.2 of the Permit.

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 (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 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 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 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 Commission staff.

5.3.16 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 9.2.

5.3.17 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 Commission staff.

5.3.18 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.

5.3.19 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.

5.3.20 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.

5.3.21 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 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 milliampere 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 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 Commission staff.

6 SPECIAL CONDITIONS

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

6.1 Facility Lighting

The Permittee shall use shielded and downward facing lighting and LED lighting that minimizes blue hue.

6.2 Dust Control

The Permittee shall utilize non-chloride products for onsite dust control during construction.

6.3 Wildlife Friendly Erosion Control

The Permittee shall use only “bio-netting” or “natural netting” types of erosion control materials and mulch products without synthetic (plastic) fiber additives or malachite green dye.

6.4 Calcareous Fens

If any calcareous fens are identified within the Project Area, the Applicant must work with the MnDNR to determine if any impacts will occur during any phase of the Project. If the Project is anticipated to impact any calcareous fens, the Applicant must develop a Calcareous Fen Management Plan in coordination with MnDNR, as specified in Minn. Stat. 103G.223. If a Calcareous Fen Management Plan is required, the approved plan must be submitted at the same time as the plan and profile required under condition 9.2 of this permit.

6.5 Tree Replacement Plan

The Permittee in coordination with impacted landowners, the DNR and the affected counties shall develop a plan to replace any trees that are removed for construction of the project by planting new trees first on impacted landowner property or if that's not practical in the affected counties near the project area, and file the plan with the Commission at least 14 days before the pre-construction meeting. At least 90 days prior to the preconstruction meeting, and after consultation with landowners, the DNR, and the affected counties, the Applicant shall make a tree replacement plan compliance filing including an estimate of costs. For Xcel Energy's share of any prudent and reasonable costs associated with any tree replanting requirement may be recoverable under its Renewable Resources Rider.

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 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 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 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, 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-Builts

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

M

Commission shall act in accordance with the requirements of Minn. R. 7850.5100, to revoke or suspend this route permit.

DRAFT

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. 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 Sasha Bergman, 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. 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 Sasha Bergman, 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 Sasha Bergman, Executive Secretary, Minnesota Public Utilities Commission, 121 7th Place East, Suite 350, St. Paul, MN 55101-2147.

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

PERMIT COMPLIANCE FILINGS¹

PERMITTEE: Northern States Power Company

PERMIT TYPE: HVTL Route Permit

PROJECT LOCATION: Blue Earth, Le Sueur, Waseca, Rice, Dodge, Olmstead, Goodhue, Winona, and Wabasha counties

PUC DOCKET NUMBER: E002/CN-22-532, TL-23-157

Filing Number	Permit Section	Description of Compliance Filing	Due Date
1.	5.1	Route Permit Distribution	30 days after issuance of permit
2.	5.3.1	Field Representative	14 days prior to the pre-construction meeting
3.	5.3.11	Application of Pesticides	14 days prior to pesticide application
4.	5.3.12	Invasive Species	14 days prior to the pre-construction meeting
5.	5.3.18	Restoration	60 days after completion of all restoration activities
6.	5.5.2	Other Permits and Regulations	14 days prior to the pre-construction meeting
7.	6.5	Tree Replacement Plan	14 days prior to the pre-construction meeting
8.	7	Delay in Construction	Four years after issuance of site permit
9.	8	Complaint Procedures	14 days prior to the pre-construction meeting

¹ 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.

Filing Number	Permit Section	Description of Compliance Filing	Due Date
10.	9.1	Pre-Construction Meeting Summary	14 days after the pre-construction meeting
11.	9.2	Plan and Profile	14 days prior to commercial operation of the Project
12.	9.3	Status Reports	Monthly
13.	9.4	In-Service Date	3 days before
14.	9.5	As-Builts	90 days after completion of construction
15.	9.6	GPS Data	90 days after completion of construction
16.	Complaint Reporting	Attachment 1 to Route Permit	Monthly Complaint Reports
17.	Complaint Reporting	Attachment 1 to Route Permit	Immediate Complaint Reports