

Minnesota Public Utilities Commission
Revised Staff Briefing Papers

Meeting Date: June 19, 2014Agenda Item *2

Company: Minnesota Power

Docket No. E-015/TL-13-805

In the Matter of the Application of Minnesota Power for a Route Permit for the Canisteo 115 Kilovolt High Voltage Transmission Line Project in Itasca County

Issue(s): Should the Commission find that the environmental assessment and the record created at the public hearing adequately address the issues identified in the scoping decision? Should the Commission adopt the Administrative Law Judge Report? Should the Commission issue a route permit identifying a specific route and permit conditions for the Canisteo 115 Kilovolt High Voltage Transmission Line (HVTL) Project in Itasca County?

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Relevant Documents

Minnesota Power Application for a Route Permit.....October 9, 2013
Environmental Assessment Report (30 Parts) April 2, 2014
Department of Natural Resources Comments (4 parts) May 14, 2014
Administrative Law Judge Report April 14, 2014

Attached Documents

Proposed High Voltage Transmission Line Route Permit

The attached materials are work papers of the Commission staff. They are intended for use by the Minnesota Public Utilities Commission and are based upon information already in the record unless noted otherwise.

This document can be made available in alternative formats (i.e., large print or audio) by calling 651-296-0406 (voice). Persons with hearing or speech disabilities may call us through their preferred Telecommunications Relay Service.

Statement of the Issues

Should the Commission adopt the Administrative Law Judge Report? Should the Commission find that the environmental assessment and the record created at the public hearing adequately address the issues identified in the scoping decision? Should the Commission adopt the Administrative Law Judge Report? Should the Commission issue a route permit identifying a specific route and permit conditions for the Canisteo 115 Kilovolt (kV) High Voltage Transmission Line Project in Itasca County?

Proposed Project Overview

Minnesota Power (MP) has proposed to construct two, approximately 4.5-mile, 115 kV High Voltage Transmission Lines (HVTLs) and a substation near Coleraine, Minnesota. The two HVTLs, each approximately 4.5 miles in length, would be constructed parallel to one another with an overlapping right-of-way (ROW) totaling 160 feet. The proposed project would include connection of the proposed HVTLs to Minnesota Power's existing 28 Line west of Scenic Highway 7, traversing south across Reilly Beach Road to the Canisteo Pit, and then turning southwest where they would terminate at the proposed Canisteo Substation. The new Canisteo Substation would require approximately 1.5 acres of land and would be constructed north of County Highway 61 and east of County Road 325 near the western edge of the Canisteo Mine Pit.

Procedural History

On October 9, 2013, Minnesota Power filed a route permit application under the alternative permitting process¹ for the Canisteo 115 kV HVTL Project.

On November 26, 2013, the Commission met and found the Application complete. On December 17, 2013, the Commission issued its Order finding the application complete and referred the application to the Office of Administrative Hearings for summary proceedings under Minn. R. 7850.3800, to develop the record.

On December 18, 2013, MP filed scoping comments indicating that after the filing of the application, the location of Magnetation's plant had changed and therefore the location of the proposed substation was adjusted accordingly.²

On December 18, 2013, a public information and environmental assessment scoping meeting was held at the City Hall in Bovey, Minnesota.

¹ Minn. Stat. § 216E.04; Minn. R. 7850.2800 to 7850.3900.

² See e-Docket filing No. 20312-94704-01

On February 5, 2014, the deputy commissioner of the Department of Commerce issued the scoping decision for the environmental assessment.

On April 2, 2014, the Department of Commerce Energy Facility Permitting (Department EERA) filed its environmental assessment on the project.

On April 15, 2014, a public hearing was held before an administrative law judge (ALJ) at the City Hall in Bovey, Minnesota.

On May 21, 2014, the Office of Administrative Hearings filed the ALJ's Findings of Fact, Conclusions of Law and Recommendation.

No exceptions to the ALJ Report were received.

Statutes and Rules

Under Minn. Stat. § 216E.03, subd. 1, “No person may construct a high-voltage transmission line without a route permit from the commission. A high-voltage transmission line may be constructed only along a route approved by the commission.”

Minn. Stat. § 216E.01, subd. 4, defines a high-voltage transmission line as “...a conductor of electric energy and associated facilities designed for and capable of operation at a nominal voltage of 100 kilovolts or more and is greater than 1,500 feet in length.” The project as proposed by Minnesota Power would consist of approximately one mile of 115 kV HVTL and 0.3 miles of 230 kV HVTL and therefore requires a route permit from the Commission.

The proposed project qualifies for alternative review under Minn. Stat. § 216E.04 because it is a high-voltage transmission line between 100 and 200 kV and in excess of 200 kV but less than five miles in length.³ The alternate review process is a six month process that does not require the applicant to propose alternative routes.⁴

Under Minn. Stat. § 216B.243, subd. 2, “No large energy facility shall be sited or constructed in Minnesota without the issuance of a certificate of need by the commission...” Because the portion of the proposed transmission line capacity that is less than 200 kV, is less than ten miles in length, and does not cross a state border and the portion of the project is in excess of 200 kV is not greater than 1,500 feet, a certificate of need is not required.⁵

³ Minn. Stat. § 216E.04, subd. 2

⁴ Minn. Stat. § 216E.04, subd. 3.

⁵ Minn. Stat. § 216B.2421, subd. 2.

The proposed project is subject to Minn. Stat. § 216E which requires that high-voltage transmission lines be routed consistent with state policy⁶ and in a manner that “minimizes adverse human and environmental impact while insuring continuing electric power system reliability and integrity and insuring that electric energy needs are met and fulfilled in an orderly and timely fashion.”⁷ The statute also affords the Commission the authority to specify the design, routing, right-of-way preparation, and facility construction it deems necessary, and with any other appropriate conditions when issuing a permit for a high-voltage transmission line.⁸

Minn. Stat. § 216E.04, subd. 5 requires the commissioner of the Department of Commerce to prepare an environmental assessment on proposed high-voltage transmission lines. The environmental assessment must contain information on the potential human and environmental impacts of a proposed project and of alternative sites or routes considered and must address mitigation measures for identified impacts.

Environmental Assessment

On February 5, 2014, the Department EERA filed the environmental assessment scoping decision in accordance with Minn. R. 7850.3700. The scoping decision identified the issues to be addressed including routes; specific potential project impacts; and a schedule for completion of the environmental assessment.⁹

On April 2, 2104, the Department EERA filed the environmental assessment on the proposed project in accordance with Minn. R. 7850.3700. The environmental assessment contained a comprehensive description of the proposed project; a discussion of potential impacts of the project on the human and natural environment; reasonable mitigation measures that could be implemented to minimize any identified adverse impacts; and required permits and approvals.¹⁰

Public Hearing

Administrative Law Judge Steven Mihalchick with the Office of Administrative Hearings presided over a public hearing conducted on April 15, 2014, at the City Hall in Bovey, Minnesota.

The hearing procedures included a brief presentation to describe the proposed project; an explanation of the process to be followed; introduction of documents to be included in the record; and an opportunity for any person to present comments and to ask questions of the applicant, the Department EERA, and commission staff. A court reporter was present to

⁶ Minn. Stat. § 216E.03, subd. 7.

⁷ Minn. Stat. § 216E.02, subd. 1.

⁸ Minn. Stat. § 216E.04, subd. 9(b).

⁹ Minn. R. 7850.3700, subp. 3.

¹⁰ Minn. R. 7850.3700, subp. 4.

transcribe the public hearing. Following the public hearing, a comment period for submission of written comments into the record was open until April 25, 2014.¹¹

Administrative Law Judge Report

On May 14, 2014 the ALJ filed his Findings of Fact, Conclusions of Law and Recommendation (ALJ Report). The ALJ concluded that the environmental assessment prepared by the Department EERA was appropriate and satisfied the requirements of Minn. R. 7850.3900. The ALJ recommended that the Commission issue a Route Permit for the proposed HVTL as depicted in Minnesota Power's April 17, 2014 Comment Letter, in Itasca County, Minnesota west of the city of Coleraine.

The ALJ also stated that evidence in the record demonstrates that the Route Permit should include a condition that Minnesota Power should use biodegradable erosion control measures where practicable instead of plastic or non- biodegradable erosion control measures.

Staff Discussion

Commission staff has reviewed the record including Minnesota Power's route permit application, the Environmental Assessment, comments and briefs, as well as the report of the administrative law judge. Staff agrees with the recommendations of the ALJ, the Applicant and the Department EERA with the minor modifications discussed below.

A. Environmental Assessment Completeness

Staff has reviewed the environmental assessment and agrees with the ALJ that the Department EERA has conducted an appropriate environmental analysis of the project for purposes of this route permit proceeding and that the environmental assessment satisfies Minn. R. 7850.3700, subp. 4. Specifically, the environmental assessment and the record created at the public hearing addresses the issues identified in the scoping decision.¹²

B. Exceptions to ALJ Report

The applicant and EERA both filed letters with the Commission on May 23, 2014 stating that they had no exceptions to the ALJ Report.

Staff has identified one finding that should be modified to improve its accuracy. Finding #35 of the ALJ Report stated Minnesota Power also proposes to use H-Frame structures that will range

¹¹ Minn. Stat § 216E.04, subd. 6; Minn. R. 7850.3800.

¹² Minn. R. 7850.3900, subp 2.

in height from 70 to 75 feet with an average span of approximately 300 feet between structures.¹³ The application and EA both indicate that the span length for the H-Frame structures would be 600 feet +/-100 feet. Staff recommends modifying this finding as follows:

35. Minnesota Power proposes to use single pole structures that will range in height from 60 to 110 feet for the Project with ~~an average~~ span of approximately 300 feet plus or minus 100 feet between structures. Minnesota Power also proposes to use H-Frame structures that will range in height from 70 to 75 feet with ~~an average~~ span of approximately ~~300~~ 600 feet plus or minus 100 feet between structures. Pole height and span length will vary depending on topography and environmental constraints within the right-of-way.

C. Proposed Route Permit Language

The general conditions of the route permit are generally based on the Generic Route Permit Template entered into the record by Commission staff on April 23, 2014.

All route permit conditions recommended by the ALJ have been incorporated into the Commission permit as special conditions under Section 5.0. No party has objected to these conditions.

Staff incorporated the ALJ's proposed erosion control permit condition to require MP to use biodegradable erosion control measures where practicable. Staff also added the following information to the route permit to more clearly identify impacts and mitigation measures identified in the environmental assessment:

5.0.1 Displacement. Displacement of residential homes or businesses is not permitted. The Permittee will consult with landowners to discuss advantageous placement of the alignment on affected properties.

5.0.3. Site Disturbance Plan for areas of Biodiversity Significance. The Permit is required to develop a plan to minimize disturbance to the site preliminarily identified as a "Site of Moderate Biodiversity Significance" and provide an opportunity for the DNR to review and comment on the plan.

5.0.4 Timber Value Assessment The Permittee is required to work with the DNR on an assessment of timber values and the final alignment of the Project across DNR land.

¹³ See e-Dockets Filing No. 20145-99733-01 at pages 6-7.

Commission Decision Alternatives

A. Environmental Assessment

1. Determine that the environmental assessment and the record created at the public hearing addresses the issues identified in the environmental assessment scoping decision.
2. Take some other action deemed appropriate.

B. Findings of Fact, Conclusions of Law and Recommendation

1. Approve and adopt the ALJ's Findings of Fact, Conclusions of Law and Recommendation for Minnesota Power's Canisteo HVTL Project in Itasca County, Minnesota.
2. Approve and adopt the ALJ's Findings of Fact, Conclusions of Law and Recommendation for Minnesota Power's Canisteo HVTL Project in Itasca County, Minnesota with the modification to Finding #35 recommended by staff.
3. Take some other action deemed appropriate.

C. Environmental Assessment

3. Determine that the environmental assessment and the record created at the public hearing addresses the issues identified in the environmental assessment scoping decision.
4. Take some other action deemed appropriate.

D. Transmission Line Route Permit

1. Issue a high-voltage transmission line route permit identifying a specific route and permit conditions to Minnesota Power for the Canisteo Transmission Line Project in Itasca County.
2. Take some other action deemed appropriate.

Staff Recommendation: A1, B2, and C1.

STATE OF MINNESOTA PUBLIC UTILITIES COMMISSION

**ROUTE PERMIT FOR CONSTRUCTION OF A HIGH-VOLTAGE TRANSMISSION
LINE AND ASSOCIATED FACILITIES**

**IN
ITASCA COUNTY**

**ISSUED TO
MINNESOTA POWER**

PUC DOCKET NO. E015/TL-13-805

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 construct two parallel 115 kV HVTLs, each 4.5 miles long, and a substation in and near Coleraine, Minnesota, in Itasca County. The proposed transmission lines would connect to Minnesota Power's existing 28 Line west of Highway 7, traverse south across Reilly Beach Road to the Canisteo Pit, then turn southwest and terminate at the proposed Canisteo Substation. The new substation would be constructed north of County Highway 61 and east of County Road (CR) 325 near the western edge of the Canisteo Pit.

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

Approved and adopted this (day) of Month, 2014

BY ORDER OF THE COMMISSION

Burl W. Haar,
Executive Secretary

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- Attachment A – Compliant Procedures for High-Voltage Transmission Lines
- Attachment B – Compliance Filing Procedure for Permitted Energy Facilities
- Attachment C – Compliance Filing List

1.0 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 permit authorizes the Permittee to construct includes construction of two parallel 115 kilovolt (kV) high-voltage transmission lines (HVTLs) and a substation in and near Coleraine, Minnesota, in Itasca County as identified in the attached route permit maps, hereby incorporated into this document.

2.0 PROJECT DESCRIPTION

The proposed 115-kV transmission lines would connect to Minnesota Power’s existing 28 Line west of Highway 7, traverse south across Reilly Beach Road to the Canisteo Pit, then turn southwest and terminate at the proposed Canisteo Substation. The new substation would be constructed north of County Highway 61 and east of County Road (CR) 325 near the western edge of the Canisteo Pit.

2.1 Project Location

The new construction portion of the Project is located in Sections 5, 8, 16, 17, 19, 20, 21, and 30 of T56N, R24W and Section 25 of T56N, R25W, near Coleraine, Minnesota in Itasca County.

County	Township Name	Township	Range	Section
Itasca	Coleraine	T56N	R24W	5, 8, 16, 17, 19, 20, 21, and 30
Itasca	Arbo Township	T56N	R25W	25

2.2 Associated Facilities and Substations

The new Canisteo Substation will consist of two 115/4.16 kV transformers and one 115/13.8 kV transformer along with associated equipment including, circuit breakers, air break switched, instrument transformers, surge arrestors, and, control house. The estimated dimensions for the new Canisteo Substation are 290 feet by 220 feet. The substation location is in the NE ¼ SE ¼ Section 25 TWN 56N RNG 25S.

2.3 Structures and Conductors

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

Line Type	Conductor	Structure		Foundation	Height	Span
		Type	Material			
Single-Circuit 115-kV	1000 amp conductor with shield wire(s)	H-Frame	Wood or Steel	Wood: direct embed steel: 6-8 feet	60-110 feet*	300 feet average*
Single-Circuit 115-kV	1000 amp conductor with shield wire(s)	Monopole Angle	Wood or Steel	Wood: direct embed steel: 6-8 feet	70-75 feet*	300 feet average*

*Pole height and span length will vary depending on topography and environmental constraints within the right-of-way

The transmission line and associated facilities shall be designed to meet or exceed all relevant local and state codes, the National Electric Safety Code (NESC), and North American Electric Reliability Corporation (NERC) 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. The transmission line shall be equipped with protective devices to safeguard the public if an accident occurs.

3.0 DESIGNATED ROUTE

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

The proposed transmission lines would connect to Minnesota Power’s existing 28 Line west of Highway 7, traverse south across Reilly Beach Road to the Canisteo Pit, then turn southwest where the transmission lines would terminate at the proposed Canisteo Substation. The new substation would be constructed north of County Highway 61 and east of County Road 325 near the western edge of the Canisteo Pit and near the western edge of Coleraine.

The identified route widths will provide the Permittee with flexibility for minor adjustments of the specific alignment or right-of-way to accommodate landowner requests and unforeseen conditions. The final alignment (i.e., permanent and maintained rights-of-way) will be located within this designated route unless otherwise authorized below.

3.1 Right-of-Way

The approved right-of-way width for the project is up to 160 feet from the anticipated centerline. This permit anticipates that the right-of-way will generally conform to the anticipated alignment as noted on the attached route permit maps unless changes are requested by individual landowners and agreed to by Permittee, or for unforeseen conditions that are encountered or are otherwise provided for by this permit.

Any 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 alignment identified in this permit, and shall be specifically identified and documented in and approved as part of the plan and profile submitted pursuant to section 4.1 of this permit.

Where the transmission line route 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, the other requirements of this permit, and for highways under the jurisdiction of the Minnesota Department of Transportation (MNDOT) rules, policies, and procedures for accommodating utilities in trunk highway rights-of-way.

4.0 GENERAL CONDITIONS

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

4.1 Plan and Profile

At least 30 calendar days before right-of-way preparation for construction begins on any segment or portion of the project, the Permittee shall provide the Commission with a plan and profile of the right-of-way and the specifications and drawings for right-of-way preparation, construction, structure specifications and locations, cleanup, and restoration for the transmission line. 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 permit.

The Permittee may not commence construction until the 30 days has expired or until the Commission has advised the Permittee in writing that it has completed its review of the documents and determined that the planned construction is consistent with this 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 at least

five days before implementing the changes. No changes shall be made that would be in violation of any of the terms of this permit.

4.2 Construction Practices

The Permittee shall follow those specific construction practices and material specifications described in Minnesota Power's Application to the Commission for a route permit for the Canisteo 115 High Voltage Transmission Line Project in Itasca County, dated October 9, 2013, unless this permit establishes a different requirement in which case this permit shall prevail.

4.2.1 Field Representative

At least 14 days prior to commencing construction, the Permittee shall advise the Commission in writing of the person or persons designated to be the field representative for the Permittee with the responsibility to oversee compliance with the conditions of this permit during construction.

The field representative's address, phone number, emergency phone number, and email shall be provided to the Commission and shall be made available to affected landowners, residents, public officials and other interested persons. The Permittee may change the field representative at any time upon written notice to landowners and the Commission.

4.2.2 Local Governments

During 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 would be temporary and the Permittee will restore service promptly. Where any impacts to utilities have the potential to occur the Permittee will work with both landowners and local agencies to determine the most appropriate transmission structure placement.

The Permittee shall cooperate with county and city road authorities to develop appropriate signage and traffic management during construction.

4.2.3 Cleanup

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

4.2.4 Noise

Construction and routine maintenance activities shall be limited to daytime working hours, as defined in Minn. R. 7030.0200, to ensure nighttime noise level standards will not be exceeded. Heavy equipment would also be equipped with sound attenuation devices such as mufflers to minimize the daytime noise levels.

4.2.5 Vegetation Removal

The permitted route will not impact any managed forests or nurseries. No privately-owned forest production industry will be affected by the project. There is no prime farmland or prime farmland if drained within the permitted route. There are no croplands within the permitted route. 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.

Tall growing species located within the transmission line right-of-way that endanger the safe and reliable operation of the transmission facility will be removed by the Permittee. 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 facility or impede construction.

The Permittee shall avoid construction and maintenance practices, particularly the use of fertilizer, herbicides or other pesticides that are inconsistent with the landowner's or tenant's use of the land. The Permittee will provide notification to affected landowners and tenants before using these materials.

Minnesota Power will work with the Minnesota Department of Natural Resources (DNR) on an assessment of timber values and the final alignment for the Project across DNR land.

4.2.6 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. Care shall be used to preserve the natural landscape, minimize tree removal and prevent any unnecessary destruction of the natural

surroundings in the vicinity of the project during construction and maintenance. Structures shall be placed at a distance, consistent with sound engineering principles and system reliability criteria, from intersecting roads, highway, or trail crossings and could cross roads to minimize or avoid impacts.

The Permittee will work with landowners to identify concerns related to the transmission line aesthetics and will attempt to mitigate (structure placement/location) these concerns, to the greatest extent practicable, while adhering to the route and alignment conditions of the HVTL Route Permit.

4.2.7 Erosion Control

The Permittee shall implement those erosion prevention and sediment control Best Management Practices (BMPs) as recommended by the Minnesota Pollution Control Agency (MPCA) Construction Stormwater Program. The Permittee is required to use biodegradable erosion control measures where practicable instead of plastic or non-biodegradable erosion control measures.

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 facilities shall be returned to pre-construction conditions.

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 consult with landowners on the selection and use of seed for replanting.

Where larger areas of one acre or more are disturbed or other areas designated by the MPCA, the Permittee shall obtain a National Pollutant Discharge Elimination System (NPDES)/State Disposal System (SDS) Construction Stormwater permit from the MPCA.

4.2.8 Wetlands and Water Resources

The transmission lines will cross two water bodies (a drainage ditch and Elbow Creek) and 0.7 miles of wetlands. Construction equipment crews will not be allowed to drive

across waterways except under special circumstances and only after discussion with the appropriate resource agency. Where waterways must be crossed to pull in the new conductors and shield wires, workers may walk across, use boats, or drive equipment across ice in the winter. In areas where construction occurs close to waterways, Best Management Practices BMPs help prevent soil erosion and ensure that equipment fueling and lubricating occur at a distance from waterways.

Wetland impact avoidance measures that shall be implemented during design and construction of the transmission line will include spacing and placing the power poles at variable distances to span and avoid wetlands, 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, construction in wetland areas shall occur during frozen ground conditions. When construction during winter is not possible, wooden or composite mats shall be used to protect wetland vegetation. Soil excavated from the wetlands and riparian areas shall be contained and not placed back into the wetland or riparian area.

Wetlands and riparian areas shall be accessed using the shortest route possible in order to minimize travel through wetland areas and prevent unnecessary impacts. No staging or stringing set up areas shall be placed within or adjacent to wetlands or water resources, as practicable. Power pole structures shall be assembled on upland areas before they are brought to the site for installation. Areas disturbed by construction activities shall be restored to pre-construction conditions.

All requirements of the U.S. Army Corps of Engineers (wetlands under federal jurisdiction), Minnesota Department of Natural Resources (Public Waters/Wetlands), and County (wetlands under the jurisdiction of the Minnesota Wetland Conservation Act) shall be met.

As part of the preconstruction reports, the permittee will include a section evaluating the potential for the occurrence of Aquatic Invasive Species in the project area and describing if any best management practices apply to the project. The permittee should identify any infested waters or otherwise state that aquatic invasive species are not anticipated. The DNR must be provided an opportunity to review and comment on the plan. The DNR must be notified if any AIS are identified in an area not previously identified as infested water.

4.2.9 Archaeological and Historic Resources

There are no anticipated impacts to previously identified historic properties, and it is likely that physical impacts to any additional properties identified during corridor survey can be avoided. Visual impacts to identified and unidentified historic architectural properties are not anticipated.

The proposed alignment has not undergone an archaeological survey. No archaeological sites or archaeological site leads have been previously recorded within one mile of the proposed route. Since the proposed alignment has not yet undergone an archaeological survey, there is a potential for unrecorded archaeological resources to be present within the anticipated right-of-way. Avoidance of archaeological and historic architectural properties is the preferred mitigative policy for construction of infrastructure projects.

The Permittee shall make every effort to avoid impacts to identified archaeological and historic resources when installing the high-voltage transmission line on the approved route. In the event that a resource is encountered, the Permittee shall contact and consult with the State Historic Preservation Office (SHPO). Where feasible, avoidance of the resource is required. Where not feasible, mitigation must include an effort to minimize project impacts on the resource consistent with SHPO and State Archaeologist requirements.

Prior to construction, workers shall be trained 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.

4.2.10 Avian Mitigation

The Permittee's 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 will consult with the Minnesota Department of Natural Resources regarding type and placement of bird diverters.

4.2.11 Temporary Work Space

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. Temporary easements outside of the authorized transmission line right-of-way will be

obtained from affected landowners through rental agreements and are not provided for in this permit.

Temporary driveways may be constructed between the roadway and the structures to minimize impact using the shortest route possible. Construction mats should also be used to minimize impacts on access paths and construction areas.

4.2.12 Restoration

The Permittee shall restore the right-of-way, temporary work spaces, access roads, abandoned right-of-way, and other public or private lands affected by construction of the transmission line. Restoration within the right-of-way must be compatible with the safe operation, maintenance, and inspection of the transmission line. Within 60 days after completion of all restoration activities, the Permittee shall advise the Commission in writing of the completion of such activities.

The Permittee shall fairly compensate landowners for damage to crops, fences, landscaping, drain tile, or other damages sustained during construction.

4.2.13 Notice of Permit

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

4.3 Periodic Status Reports

The Permittee shall report to the Commission on progress regarding finalization of the route, design of structures, and construction of the transmission line. The Permittee need not report more frequently than monthly.

4.4 Complaint Procedures

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

4.5 Notification to Landowners

The Permittee shall provide all affected landowners with a copy of this permit and, as a separate information piece, the complaint procedures at the time of the first contact with the landowners

after issuance of this permit. The Permittee shall contact landowners prior to entering the property or conducting maintenance along the route.

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.

4.6 Completion of Construction

4.6.1 Notification to Commission

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

4.6.2 As-Builts

Within 60 days after completion of construction, the Permittee shall submit copies of all final as-built plans and specifications developed during the project.

4.6.3 GPS Data

Within 60 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 line and each substation connected.

4.7 Electrical Performance Standards

4.7.1 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 NESC. The Permittee

shall address and rectify any induced current problems that arise during transmission line operation.

4.7.2 Electric Field

The transmission line shall be designed, constructed, and operated in such a manner that the electric field measured one meter above ground level immediately below the transmission line shall not exceed 8.0 kV/m rms.

4.7.3 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 line, the Permittee shall take whatever action is feasible to restore or provide reception equivalent to reception levels in the immediate area just prior to the construction of the line.

4.8 Other Requirements

4.8.1 Applicable Codes

The Permittee shall comply with applicable NERC planning standards and requirements of the NESC including clearances to ground, clearance to crossing utilities, clearance to buildings, right-of way widths, erecting power poles, and stringing of transmission line conductors.

4.8.2 Other Permits

The Permittee shall comply with all applicable state rules and statutes. The Permittee shall obtain all required permits for the project and comply with the conditions of these permits. A list of the required permits is included in the permit application. The Permittee shall submit a copy of such permits to the Commission upon request.

4.8.3 Pre-emption

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

4.9 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 permit the Permittee shall file a report on the failure to construct and the Commission shall consider suspension of the permit in accordance with Minn. R. 7850.4700.

5.0 SPECIAL CONDITIONS

The Permittee shall provide a report to the Commission as part of the plan and profile submission that describes the actions taken and mitigative measures developed regarding the project and the following special conditions. Special conditions shall take precedence over other conditions of this permit should there be a conflict.

5.0.1 Displacement. Displacement of residential homes or businesses is not permitted. The Permittee will consult with landowners to discuss advantageous placement of the alignment on affected properties.

5.0.3. Site Disturbance Plan for areas of Biodiversity Significance. The Permit is required to develop a plan to minimize disturbance to the site preliminarily identified as a “Site of Moderate Biodiversity Significance” and provide an opportunity for the DNR to review and comment on the plan.

5.0.4 Timber Value Assessment The Permittee is required to work with the DNR on an assessment of timber values and the final alignment for the Project across DNR land.

6.0 PERMIT AMENDMENT

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

7.0 TRANSFER OF PERMIT

The Permittee may request at any time that the Commission transfer this permit to another person or entity. The Permittee shall provide the name and description of the person or entity to

whom the permit is requested to be transferred, the reasons for the transfer, a description of the facilities affected, and the proposed effective date of the transfer.

The person to whom the permit is to be transferred shall provide the Commission with such information as the Commission shall require whether the new Permittee can comply with the conditions of the permit. The Commission may authorize transfer of the permit after affording the Permittee, the new Permittee, and interested persons such process as is required.

8.0 REVOCATION OR SUSPENSION OF THE PERMIT

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

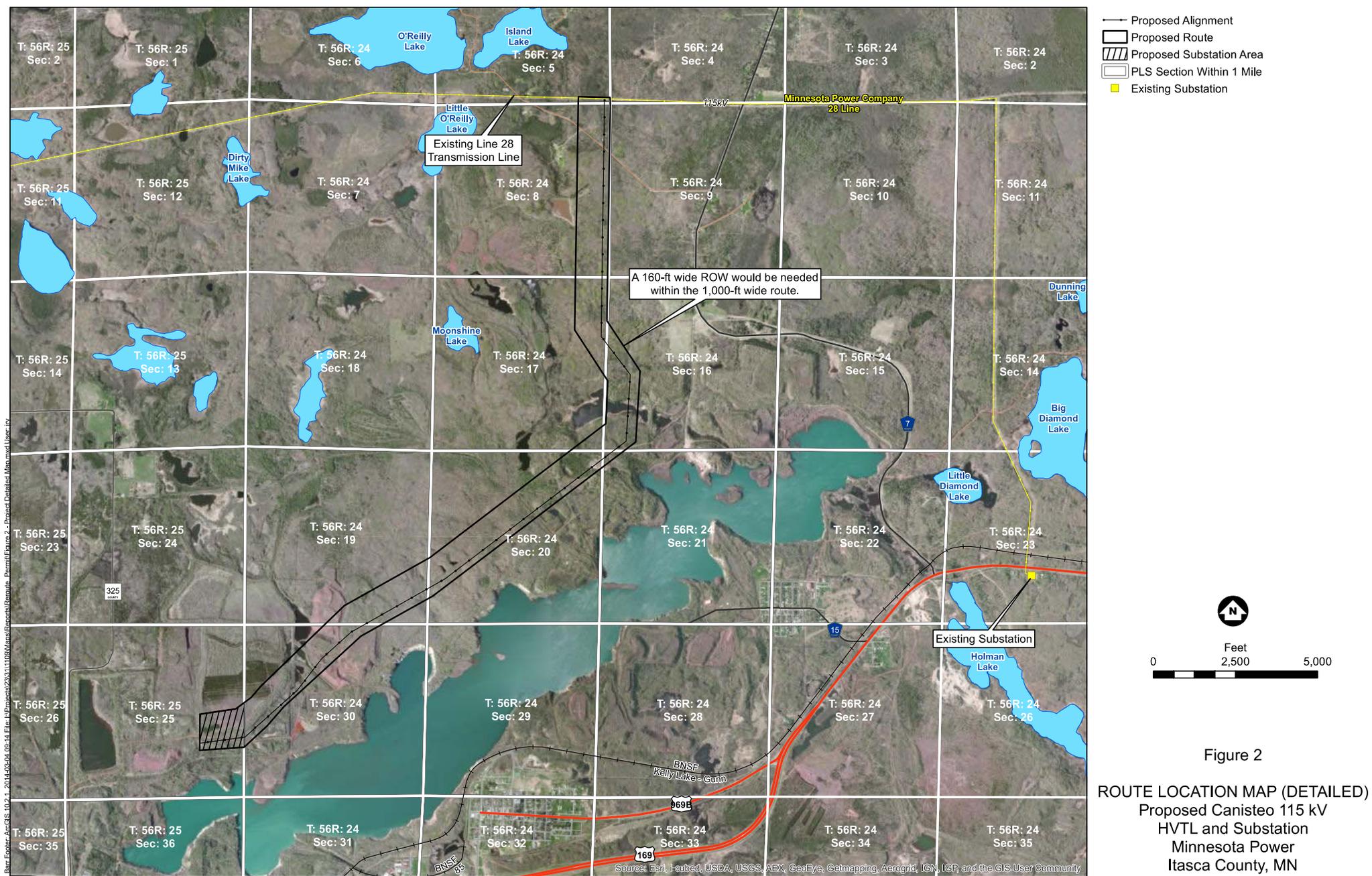
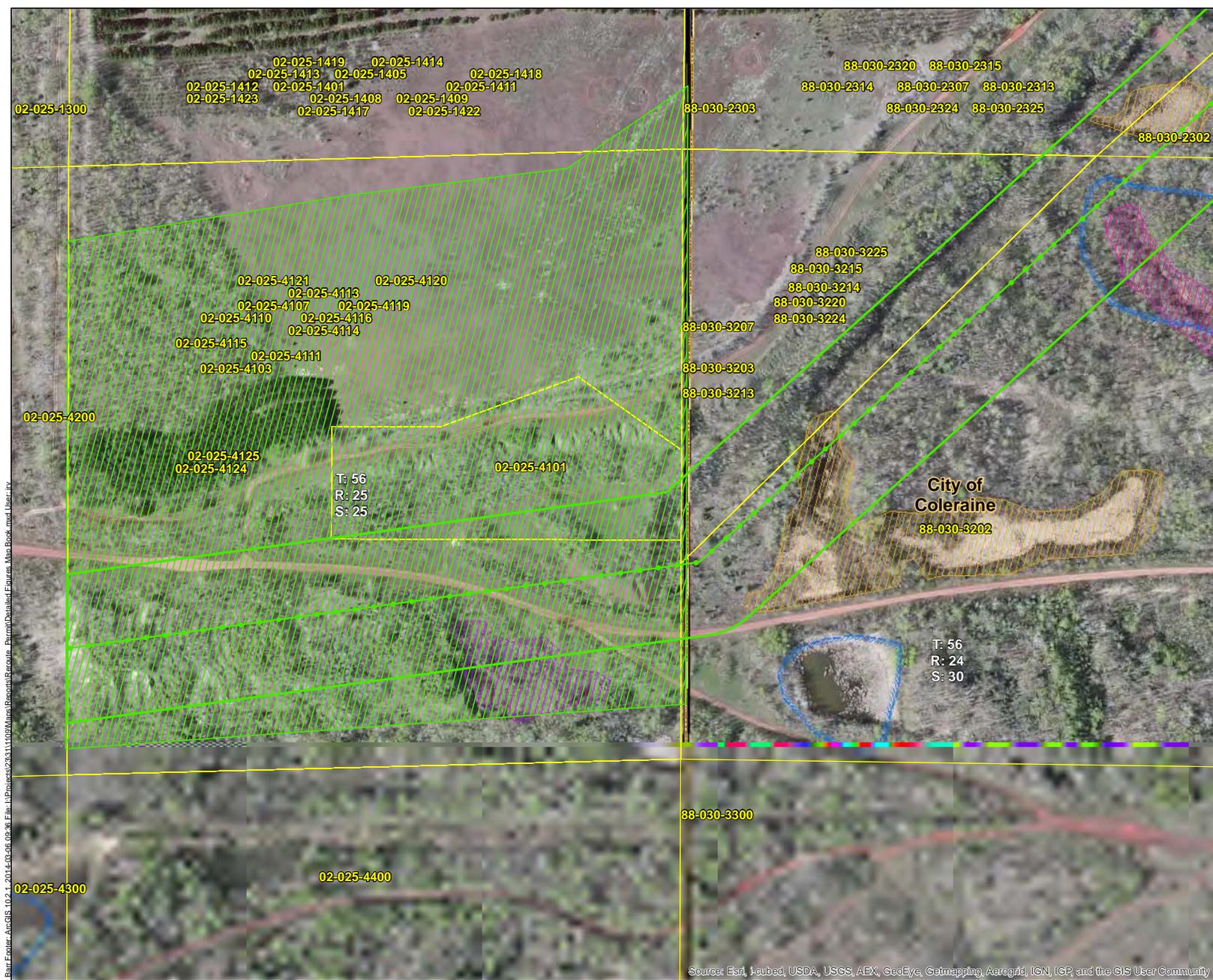


Figure 2
 ROUTE LOCATION MAP (DETAILED)
 Proposed Canisteo 115 kV
 HVTL and Substation
 Minnesota Power
 Itasca County, MN



- Proposed Alignment
- Proposed 160ft ROW
- Proposed Substation Area
- Commercial
- Residential
- Municipal Boundary
- Parcels
- Lands Administered by the DNR Department of Forestry
- PLS Section Line
- NWI Wetlands
- PWI Basin
- PWI Watercourse

Barr Wetland Determination
Eggers & Reed Wetland Types

- Conifer swamp
- Excavated - Shrub carr
- Excavated pond
- Hardwood swamp
- Shallow open water
- Shrub carr
- Wet meadow

T&E Species*

- Vertebrate Animal
- Community
- Invertebrate Animal
- Vascular Plant
- Nonvascular Plant; Fungus
- Animal Assemblage
- Geologic

Wetlands: National Wetland Inventory

T&E Species: *Rare features data included here were provided by the Natural Heritage and Nongame Research Program of the Division of Ecological Services, Minnesota Department of Natural Resources (DNR), and were current as of 05/15/13

N

Feet
0 200 400

Figure 3 Detailed Route Map

DETAILED MAPS
Proposed Canisteo 115 kV
HVTL and Substation
Minnesota Power
Itasca County, MN

Source: Esri, i-eubed, USDA, USGS, AEX, GeoEye, Geomapping, AeroGRID, IGN, IGR, and the GIS User Community

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- Proposed Alignment
- Proposed 160ft ROW
- Proposed Substation Area
- Commercial
- Residential
- Municipal Boundary
- Parcels
- Lands Administered by the DNR Department of Forestry
- PLS Section Line
- NWI Wetlands
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- Eggers & Reed Wetland Types
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- T&E Species*
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- Invertebrate Animal
- Vascular Plant
- Nonvascular Plant; Fungus
- Animal Assemblage
- Geologic

Wetlands: National Wetland Inventory

T&E Species: *Rare features data included here were provided by the Natural Heritage and Nongame Research Program of the Division of Ecological Services, Minnesota Department of Natural Resources (DNR), and were current as of 05/15/13

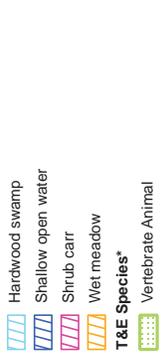


Figure 4 Detailed Route Map
 DETAILED MAPS
 Proposed Canisteo 115 kV
 HVTL and Substation
 Minnesota Power
 Itasca County, MN

Source: Esri, DeLorme, USGS, AEX, GeoEye, AeroGRID, IGN, IGP, and the GIS User Community

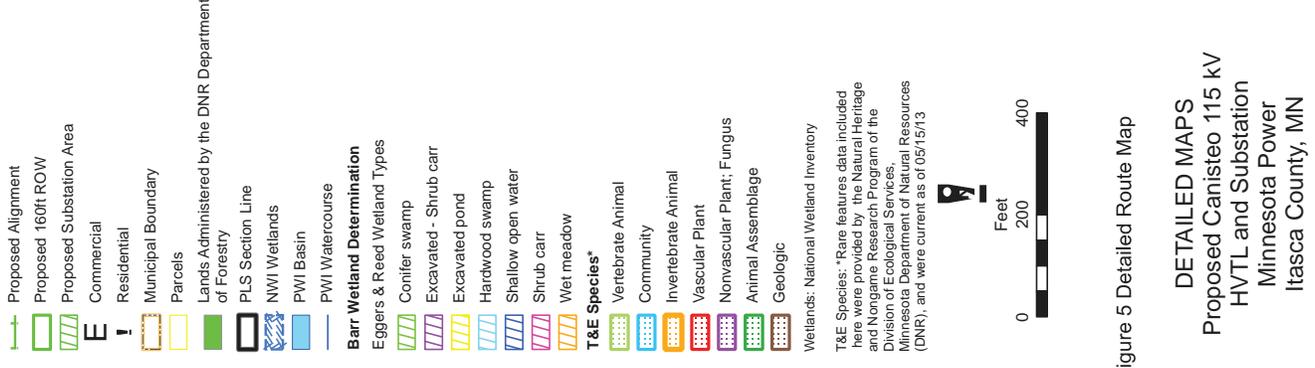
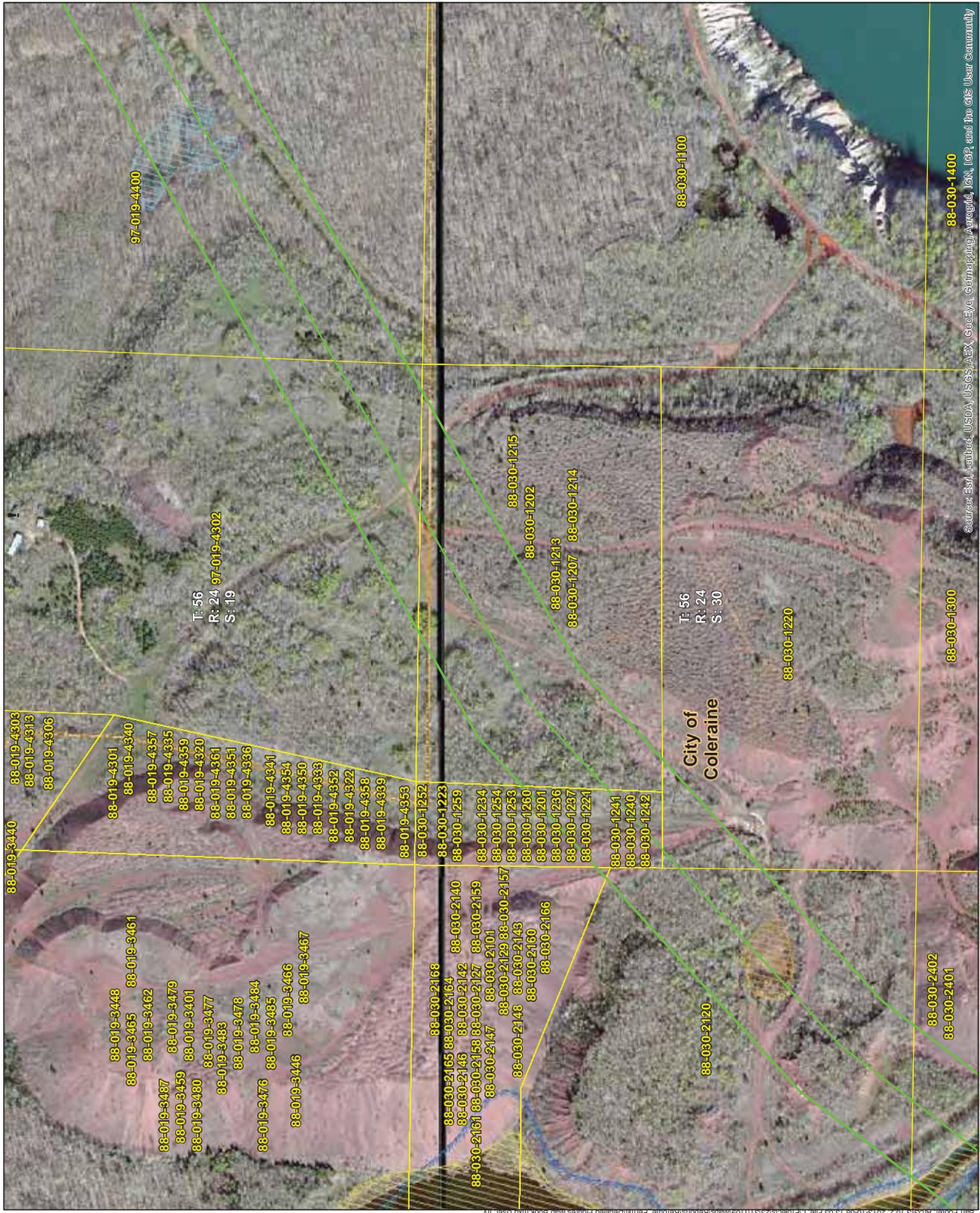


Figure 5 Detailed Route Map
DETAILED MAPS
Proposed Canisteo 115 kV
HVTL and Substation
Minnesota Power
Itasca County, MN





- Proposed Alignment
 - Proposed 160ft ROW
 - Proposed Substation Area
 - Commercial
 - Residential
 - Municipal Boundary
 - Parcels
 - Lands Administered by the DNR Department of Forestry
 - PLS Section Line
 - NWI Wetlands
 - PWI Basin
 - PWI Watercourse
 - Barr Wetland Determination
 - Eggers & Reed Wetland Types
 - Conifer swamp
 - Excavated - Shrub carr
 - Excavated pond
 - Hardwood swamp
 - Shallow open water
 - Shrub carr
 - Wet meadow
 - T&E Species*
 - Vertebrate Animal
 - Community
 - Invertebrate Animal
 - Vascular Plant
 - Nonvascular Plant: Fungus
 - Animal Assemblage
 - Geologic
 - Wetlands: National Wetland Inventory
- T&E Species: *Rare features data included here were provided by the Natural Heritage and Nongame Research Program of the Division of Ecological Services, Minnesota Department of Natural Resources (DNR), and were current as of 05/15/13



Figure 6 Detailed Route Map

DETAILED MAPS
Proposed Canisteo 115 kV
HVTL and Substation
Minnesota Power
Itasca County, MN



- Proposed Alignment
 - Proposed 160ft ROW
 - Proposed Substation Area
 - Commercial
 - Residential
 - Municipal Boundary
 - Parcels
 - Lands Administered by the DNR Department of Forestry
 - PLS Section Line
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 - Wetlands: National Wetland Inventory
- T&E Species: *Rare features data included here were provided by the Natural Heritage and Nongame Research Program of the Division of Ecological Services, Minnesota Department of Natural Resources (DNR), and were current as of 05/15/13



Figure 8 Detailed Route Map
 DETAILED MAPS
 Proposed Canisteo 115 kV
 HVTL and Substation
 Minnesota Power
 Itasca County, MN

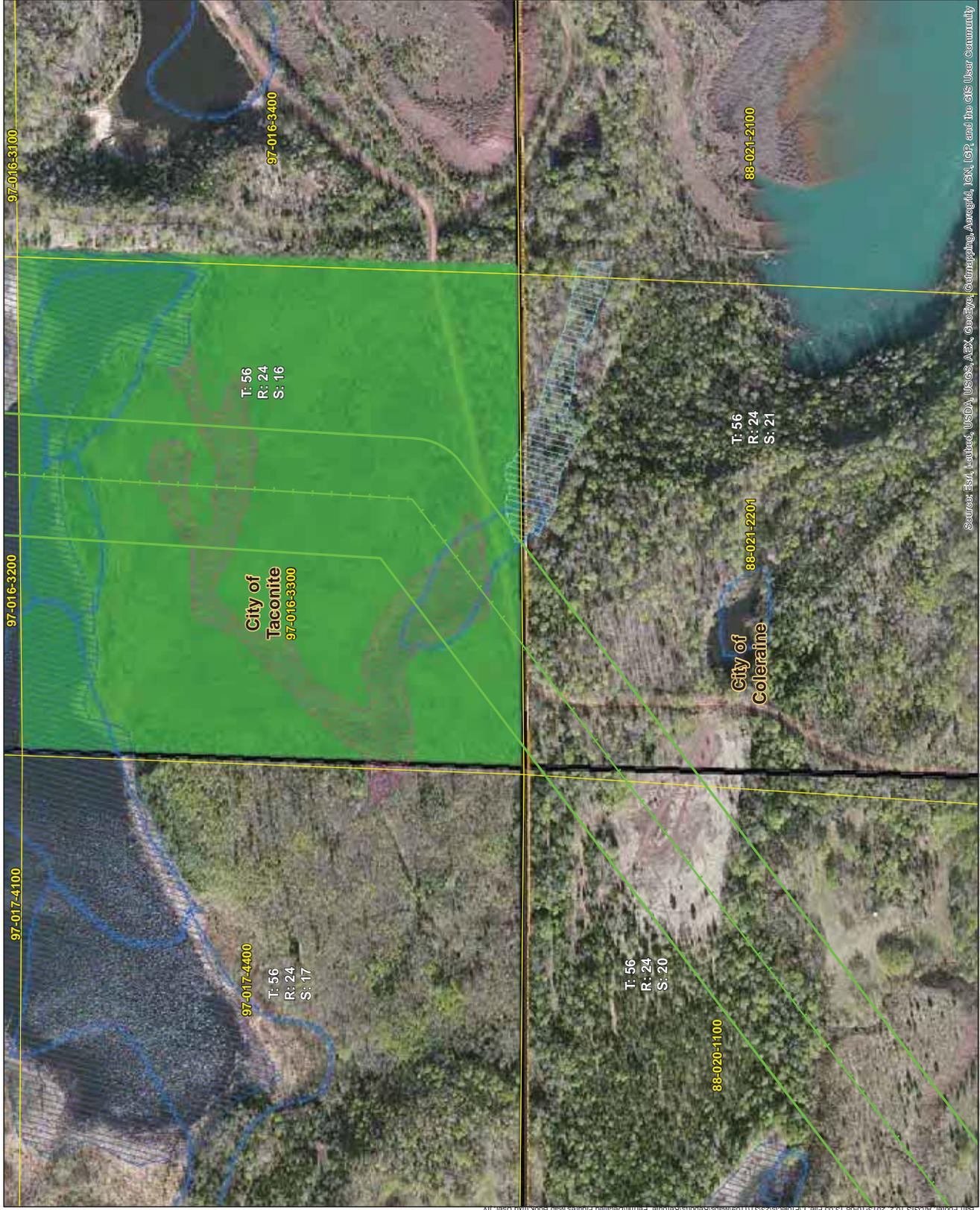


Figure 9 Detailed Route Map

DETAILED MAPS
Proposed Canisteo 115 kV
HVTL and Substation
Minnesota Power
Itasca County, MN

**MINNESOTA PUBLIC UTILITIES COMMISSION
COMPLAINT HANDLING PROCEDURES FOR
HIGH-VOLTAGE TRANSMISSION LINES**

A. Purpose

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

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 permittees by a person expressing dissatisfaction or concern regarding site preparation, cleanup or restoration or other route and associated facilities 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 to both or one of the parties unresolved or unsatisfactorily resolved.

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 an individual to summarize complaints for the Commission. This person's name, phone number and email address shall accompany all complaint submittals.
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. date of complaint;
 - c. tract or parcel number; and
 - d. whether the complaint relates to a permit matter or a compliance issue.
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. activities undertaken to resolve the complaint; and
 - g. 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. 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 Consumer Affairs Office at 1-800-657-3782 (voice messages are acceptable) or consumer.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: By the 15th of each month, a summary of all complaints, including substantial complaints received or resolved during the preceding month, shall be filed to Dr. Burl W. Haar, 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.

G. Complaints Received by the Commission

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

H. Commission Process for Unresolved Complaints

Commission staff shall perform an initial evaluation of unresolved complaints submitted to the Commission. Complaints raising substantial permit issues shall be processed and resolved by the Commission. Staff shall notify the permittee and appropriate persons if it determines that the complaint is a substantial complaint. With respect to such complaints, each party shall submit a written summary of its position to the Commission no later than ten (10) days after receipt of the staff notification. The complaint will be presented to the Commission for a decision as soon as practicable.

I. Permittee Contacts for Complaints and Complaint Reporting

Complaints may be filed by mail or email to:

Minnesota Power
Chris Mattila, Project Management Organization Manager
30 West Superior Street
Duluth, MN 55802
(218) 355-2629
cmattila@allete.com

This information shall be maintained current by informing the Commission of any changes by eFiling, as they become effective.

**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 the Commission energy facility permits.

B. Scope and Applicability

This procedure encompasses all 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 eFile all compliance filings with Dr. Burl W. Haar, 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 eFile 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 eFiled, be submitted as paper copies and on CD. Paper copies and CDs should be sent to: 1) Dr. Burl W. Haar, 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 eFiled document.

PERMIT COMPLIANCE FILINGS¹

PERMITTEE: Minnesota Power

PERMIT TYPE: HVTL Route Permit

PROJECT LOCATION: Itasca County

PUC DOCKET NUMBER: E015/TL-13-805

This summary is provided for the convenience of the Permittee and does not include all permit requirements.

Filing Number	Permit Section	Description of Compliance Filing	Due Date
1	4.1	Plan and profile of right-of-way (ROW)	30 days before ROW preparation for construction
2	4.2.1	Contact information for field representative	14 days prior to construction
3	4.2.12	Restoration complete	60 days after completion of all restoration activities
4	4.3	Periodic status reports	Monthly
5	4.4	Complaint procedures	Prior to start of construction
6	Complaint Handling Procedures	Complaint reports	By the 15 th of each month
7	4.5	Notification to landowners	First contact with landowners after permit issuance
8	4.6.1	Notice of completion and date of placement in service	Three days prior to energizing
9	4.6.2	Provide as-built plans and specifications	Within 60 days after completion of construction
10	4.6.3	Provide GPS data	Within 60 days after completion of construction

11	4.2.9	Notification of previously unrecorded archaeological sites	Upon discovery
12	5.1.4	Invasive species management plan	14 days prior to submission of plan and profile
13	5.0.3	Site Disturbance Plan for areas of Biodiversity Significance	30 days prior to commencing construction
14	5.0.4	Timber Value Assessment	30 days prior to commencing construction