

STATE OF MINNESOTA
OFFICE OF ADMINISTRATIVE HEARINGS
FOR THE PUBLIC UTILITIES COMMISSION

In the Matter of the Application of
Minnesota Power for a Route Permit for
the 39 Line 115 Kilovolt High Voltage
Transmission Line Project in St. Louis
County

TABLE OF CONTENTS

STATEMENT OF ISSUE	2
SUMMARY OF CONCLUSION.....	2
FINDINGS OF FACT	2
I. PROCEDURAL SUMMARY.....	2
II. GENERAL DESCRIPTION OF THE PROJECT	6
III. ROUTES EVALUATED.....	7
IV. TRANSMISSION LINE STRUCTURE TYPES AND SPANS	8
V. TRANSMISSION LINE CONDUCTORS	8
VI. TRANSMISSION LINE ROUTE WIDTHS	8
VII. TRANSMISSION LINE RIGHT-OF-WAY	8
VIII. PROJECT SCHEDULE.....	8
IX. PROJECT COSTS.....	8
X. PERMITTEE	9
XI. PUBLIC AND LOCAL GOVERNMENT PARTICIPATION.....	9
A. Public Comments	9
B. Local Government and State Agency Participation	9
1. St. Louis County	9
2. Minnesota Department of Transportation	10
3. Minnesota Department of Natural Resources.....	10
4. Minnesota Pollution Control Agency.....	11
CRITERIA FOR A ROUTE PERMIT.....	11

APPLICATION OF STATUTORY AND RULE CRITERIA	14
XII. APPLICATION OF ROUTING CRITERIA TO THE PROPOSED ROUTE	14
A. Effects on Human Settlement	14
1. Displacement.....	14
2. Noise	14
3. Aesthetics.....	15
4. Cultural Values	16
5. Recreation	16
6. Public Service and Infrastructure.....	16
B. Effects on Public Health and Safety	17
1. Construction and Operation of Facilities.....	17
2. Electric and Magnetic Fields.....	17
C. Effects on Land-Based Economies and Direct and Indirect Economic Impacts.....	19
1. Effect on Land-Based Economies	19
D. Effects on Archeological and Historic Resources.....	19
E. Effects on Natural Environment.....	20
1. Air Quality.....	20
2. Water Quality and Resources.....	21
3. Flora	21
4. Fauna	22
F. Effects on Rare and Unique Natural Resources	23
G. Application of Various Design Considerations	24
H. Use or Paralleling of Existing Right-of-Way, Survey Lines, Natural Division Lines, and Agricultural Field Boundaries.....	24
I. Use of Existing Transportation, Pipeline, and Electrical Transmission System Right-of-Way.....	25
J. Electrical System Reliability	25
K. Costs of Constructing, Operating, and Maintaining the Facility.....	25
L. Adverse Human and Natural Environmental Effects Which Cannot be Avoided.....	26
M. Irreversible and Irretrievable Commitments of Resources	27

XIII. NOTICE	27
XIV. COMPLETENESS OF EA.....	28
CONCLUSIONS OF LAW	28
RECOMMENDATIONS.....	30

STATE OF MINNESOTA
OFFICE OF ADMINISTRATIVE HEARINGS
FOR THE PUBLIC UTILITIES COMMISSION

In the Matter of the Application of
Minnesota Power for a Route Permit for
the 39 Line 115 Kilovolt High Voltage
Transmission Line Project in St. Louis
County

**FINDINGS OF FACT,
CONCLUSIONS OF LAW,
AND RECOMMENDATIONS**

This matter was assigned to Administrative Law Judge Jeanne M. Cochran to conduct a public hearing and prepare Findings of Fact, Conclusions and Recommendation on the application by Minnesota Power for a Route Permit for its 39 Line 115 kilovolt (kV) high voltage transmission line project in St. Louis County, Minnesota. The new line is proposed to be built near the cities of Eveleth and Leonidas.

A public hearing on Minnesota Power's proposed project was held on September 4, 2013 at the Leonidas Community Center, just west of Eveleth. The factual record remained open until September 18, 2013, for the receipt of written public comments. Post-hearing submissions were filed by the Minnesota Power and the Department of Commerce in accordance with the First Prehearing Order. The Office of Administrative Hearings (OAH) record closed on October 18, 2013, with the filing of the last post-hearing submission by the Department of Commerce.

Kodi J. Church, Briggs and Morgan, P.A., appeared as counsel for Minnesota Power. Daniel McCourtney, Environmental Compliance Specialist and Christian Winter, Transmission Planning Engineer, also attended the public hearing on behalf of Minnesota Power.

William Storm, Environmental Review Manager, appeared on behalf of the Energy Facility Permitting Unit (EFP) of the Department of Commerce.¹

Scott Ek, Energy Facility Planner, appeared on behalf of the Minnesota Public Utilities Commission (Commission) staff.

¹ Subsequent to the September 4, 2013 public hearing in this matter, the Energy Facility Permitting Unit (EFP) changed its name to the Energy Environmental Review and Analysis Unit (EERA). For ease of reference, the Unit is referred to as EFP in this report.

STATEMENT OF ISSUE

Has Minnesota Power satisfied the criteria set forth in Minnesota Statutes section 216E.03, subdivision 7 and Minnesota Rules Chapter 7850 for a Route Permit for the 39 Line 115 kV transmission line project in St. Louis County, Minnesota, near the city of Eveleth (Project)?

SUMMARY OF CONCLUSION

The Administrative Law Judge concludes that Minnesota Power has satisfied the applicable legal requirements and, accordingly, recommends that the Commission grant a Route Permit for the Project.

Based on information in the record, the Administrative Law Judge makes the following:

FINDINGS OF FACT

I. PROCEDURAL SUMMARY

1. Minnesota Power is an investor-owned utility with headquarters in Duluth, Minnesota. Minnesota Power supplies retail electric service to approximately 140,000 retail customers and wholesale electric service to 16 municipalities within a 26,000-square-mile electric service territory located in northeastern Minnesota. Minnesota Power generates and delivers electric energy through a network of transmission and distribution lines and substations throughout northeastern Minnesota. Minnesota Power's transmission network is interconnected with the regional transmission grid to promote reliability. Minnesota Power is a member of the Midwest Reliability Organization and the Midcontinent Independent System Operator.²

2. The proposed Project includes the construction of an approximately 3.0-mile long, 115 kV high voltage transmission line (HVTL) from Minnesota Power's existing 39 Line in the City of Eveleth to Minnesota Power's existing 37 Line northwest of the City of Leonidas in St. Louis County. At the request of United Taconite, Minnesota Power also proposes to remove approximately 1.9 miles of existing 39 Line that runs through United Taconite's north pit.³

3. On October 10, 2012, Minnesota Power filed with the Commission a Notice of Intent to File a Route Permit Application Pursuant to the Alternative Permitting Process for the Project.⁴

² Exhibit (Ex.) 2 at 2-1(Route Permit Application).

³ Ex. 2 at 3-1; Ex. 1(Notice of Intent to File Route Permit Application). The Alternative Permitting Process is governed by Minn. Stat. § 216E.04 (which incorporates the criteria of Minn. Stat. § 216E.03, subd. 7) and Minn. R. 7850.2900 through 7850.3900.

⁴ Ex. 1.

4. On November 30, 2012, Minnesota Power electronically filed its Route Permit Application (Application) for the Project with the Commission.⁵

5. On December 11, 2012, Minnesota Power provided written notice of its Application to landowners along the proposed route. On that same date, Minnesota Power also provided notice of its Application to a number of governmental units, including: St. Louis County (12 departments and commissions within the County government); the city of Eveleth; the city of Leonidas; the city of Mountain Iron; Eveleth-Virginia Municipal Airport; and interested state and federal agencies.⁶

6. Minnesota Power also published notice of its application in the *Mesabi Daily News* on December 15, 2012 and in the *Eveleth Scene/Gilbert Herald* on December 19, 2013.⁷

7. On December 19, 2012, EFP staff filed comments and recommendations regarding the completeness of the Application.⁸

8. On December 26, 2012, Minnesota Power filed reply comments on the EFP comments on completeness.⁹

9. On January 8, 2013, Minnesota Power filed confirmation that it provided notice of the Application to landowners and governmental units, and that it published notice in two local newspapers.¹⁰

10. By an Order dated January 16, 2013, the Commission accepted the Application as complete.¹¹ In the Order, the Commission referred the case to the OAH under the Alternative Permitting Process in Minnesota Rules Chapter 7850. The Commission requested that the Administrative Law Judge: (1) emphasize the statutory timeframe for the Commission to make final decisions on the Application; (2) ask the parties whether the Project meets the selection criteria established in Minnesota Statutes section 216E.03, subdivision 7, and Minnesota Rules Chapter 7850; (3) request that EFP submit comments and recommendations on the Application and record, any modified or new permit conditions, and proposed findings of fact by a specified time; and (4) prepare a report setting forth findings, conclusions, and recommendations on the merits of the Project, applying the routing criteria set forth in statute and rule, and provide comments,

⁵ Ex. 2 (Application).

⁶ Ex. 8 (Affidavit of Mailing and Publication).

⁷ *Id.*

⁸ Ex. 4 (EFP Comments on Completeness).

⁹ Ex. 5 (Minnesota Power Reply Comments on Completeness).

¹⁰ Ex. 8 (Confirmation of Mailing and Publication of Application Filing).

¹¹ Ex. 9 at 4 (ORDER FINDING APPLICATION COMPLETE, REFERRING APPLICATION TO OFFICE OF ADMINISTRATIVE HEARINGS, GRANTING VARIANCE AND APPOINTING A PUBLIC ADVISOR (January 16, 2013)).

if any, on the language of the proposed permit.¹² The Commission also directed its staff to contact relevant State agencies to request participation in the development of the record and public hearings.¹³ The Commission determined that an advisory task force was not necessary.¹⁴ The Commission designated a public advisor.¹⁵

11. On February 4, 2013, Commission Staff issued a Notice of Public Information and Environmental Assessment (EA) Scoping Meeting.¹⁶

12. On February 25, 2013, the Commission and EFP held a Public Information and EA Scoping Meeting at the Leonidas Community Center.¹⁷

13. On March 22, 2013, Applicant filed a Response to Scoping Comments received by EFP during the Scoping Meetings and comment period.¹⁸

14. On March 29, 2013, the Commission issued a Notice of Commission Meeting for April 11, 2012, indicating the Commission would consider what action it should take in regard to route alternatives to be evaluated in the EA.¹⁹

15. On April 1, 2013, EFP filed its comments and recommendations on the EA Scoping Process with the Commission.²⁰

16. On April 4, 2013, Commission staff issued briefing papers recommending that the Commission take no action regarding the route alternatives to be evaluated in the EA.²¹

17. On April 11, 2013, the Commission met to consider what action it should take in regard to route alternatives to be evaluated in the EA. The Commission took no action, which had the effect of authorizing the Department to make its Scoping Decision for the EA based on the EFP staff recommendations and analysis.²²

¹² *Id.* 9 at 4-5.

¹³ *Id.* 9 at 5.

¹⁴ *Id.* 9 at 4.

¹⁵ *Id.* at 5.

¹⁶ Ex. 11 (Notice of Public Information and EA Scoping Meeting).

¹⁷ Ex. 23 at 4 (EA).

¹⁸ Ex. 17 (Minnesota Power Response to EA Scoping Comments).

¹⁹ Ex. 19 (Notice of Commission Meeting on EA Scope).

²⁰ Ex. 18 (Comments and Recommendations of the EFP on the EA Scoping Process).

²¹ Ex. 20 (Commission Staff briefing papers on EA Scoping Process and Alternative Routes).

²² Minutes of the April 11, 2013 Commission Meeting (eDockets No. 20135-86558-07).

18. On April 18, 2013, the Department of Commerce issued its EA Scoping Decision.²³

19. On July 19, 2013, EFP issued the EA for the Project and the Notice of Availability of the EA.²⁴

20. On that same day, the OAH issued a Notice of Prehearing Conference.²⁵

21. On July 26, 2013, Administrative Law Judge Cochran held a prehearing conference at the Commission offices.²⁶ David R. Moeller, Senior Attorney, Minnesota Power, and Kodi J. Church, Briggs and Morgan, P.A., appeared on behalf of Minnesota Power.²⁷ Tricia DeBleeckere and Scott Ek of the Commission staff were present.²⁸ Linda Jensen, Assistant Attorney General, appeared on behalf of EFP. Deborah Pile, Director of EFP, and William Storm, Environmental Review Manager with EFP, were also present.²⁹

22. On July 30, 2013, the Administrative Law Judge issued the First Prehearing Order setting the dates for the public hearing, the close of the public comment period, and the submission of other filings.³⁰

23. On August 5, 2013, the Notice of Availability of the EA was published in the EQB Monitor.³¹

24. On August 12, 2013, the Commission issued its Notice of Public Hearing and advised that an Administrative Law Judge of the OAH would preside at the hearing.³²

25. On August 19, 2013, the Commission issued a Revised Notice of Public Hearing.³³

²³ Ex. 21 (EA Scoping Decision).

²⁴ Ex. 23 (EA); Ex. 22 (Notice of Availability of the EA).

²⁵ Ex. 30 (Notice of Prehearing Conference).

²⁶ Ex. 31 (First Prehearing Order).

²⁷ *Id.*

²⁸ *Id.*

²⁹ *Id.*

³⁰ *Id.*

³¹ Ex. 24 (Notice of Availability of the EA in the EQB Monitor).

³² Ex. 25 (Notice of Public Hearing); Ex. 27 (List of LGUs that received the Public Hearing Notice by Certified Mail).

³³ Ex. 26 (Revised Notice of Public Hearing and Affidavit of Service); Ex. 28 (Revised Notice of Public Hearing Certificate of Service).

26. Also on August 19, 2013, the Commission issued a letter to State agency technical representatives inviting participation in record development and public hearings.³⁴

27. On August 27, 2013, Minnesota Power filed an Affidavit of Mailing for the Public Hearing. On that same date, Minnesota Power filed an Affidavit of Publication for the Public Information and EA Scoping Meeting.³⁵

28. On September 4, 2013, a public hearing was held at the Leonidas Community Center. Administrative Law Judge Cochran presided. Three members of the public attended as well as a representative of the Minnesota Department of Natural Resources. Representatives of Minnesota Power, EFP, and Commission staff were also present to explain the proposed Project and answer questions.³⁶

29. On September 18, 2013, the public comment period on the Project ended.³⁷

II. GENERAL DESCRIPTION OF THE PROJECT

30. The Project includes the construction a new, approximately 3.0-mile long, 115 kV HVTL from Minnesota Power's existing 39 Line in the city of Eveleth to Minnesota Power's existing 37 Line northwest of the city of Leonidas. As part of the Project, Minnesota Power also proposes to remove approximately 1.9 miles of its existing 39 Line that runs through United Taconite's north pit. The existing line will be removed to accommodate United Taconite's planned expansion of its mining operations in the Project area.³⁸

31. The construction of the new 115 kV HVTL is needed to allow the removal of the existing line without degrading the area's high voltage transmission system.³⁹

32. The Project will use single pole structures that are proposed to be 60 to 105 feet tall, and H-frame structures, that are proposed to be 60 to 70 feet tall. Spans between structures are proposed to be 250 to 350 feet for single pole structures, and 500 to 1,000 feet for H-frame structures. The right-of-way is proposed to be 100 feet wide.⁴⁰

³⁴ Ex. 29 (Notice to State Agency Technical Representatives).

³⁵ Ex. 12 (Affidavit for Public Hearing; Affidavit of Publication).

³⁶ Transcript of Public Hearing (Pub. Hrg. Tr.).

³⁷ Ex. 30 (First Prehearing Order).

³⁸ Ex. 23 at 2 (EA).

³⁹ *Id.*

⁴⁰ *Id.* at 11.

III. ROUTES EVALUATED

33. In this Alternative Permitting Process, Minnesota Power evaluated routes that would accommodate United Taconite's request for removal of 1.9 miles of the existing 39 Line and would minimize effects on landowners and the environment from the new construction portion of the Project.⁴¹

34. The route proposed in the Application by Minnesota Power crosses through the cities of Eveleth, Leonidas, and Mountain Iron. The route deviates from the existing 39 Line west of the city of Eveleth. The route continues south for approximately 0.8 mile then joins Highway 101. The route continues along Highway 101 past the Leonidas Overlook for approximately 1.3 miles before deviating from Highway 101 and continuing west for 0.8 mile before joining the existing 37 Line just east of the Duluth Missabe and Iron Range Railroad line (Proposed Route).⁴²

35. Prior to submitting its Application, Minnesota Power also evaluated and rejected an alternative route that followed existing rights-of-way for the majority of its length. This route originated east of Eveleth in Gilbert Township and terminated where it interconnected with the 37 Line.⁴³ This route alternative was rejected by Minnesota Power because of its considerable length and greater impacts to private land owners than the Proposed Route.⁴⁴

36. Minnesota Power also considered following Highway 101 west to its intersecting point with the 37 Line, as opposed to deviating from Highway 101 for 4,000 feet, as does the Proposed Route.⁴⁵ Minnesota Power rejected this route option because of its increased impacts to wetlands and because it is closer in proximity to residences than the Proposed Route.⁴⁶

37. No alternative routes, alternative route segments, or alignment modifications were put forth during the EA scoping period. As a result, the EA only evaluated the Proposed Route.⁴⁷

IV. TRANSMISSION LINE STRUCTURE TYPES AND SPANS

38. Minnesota Power proposes to use overhead construction with single pole or H-frame structures. For the single pole structures, the Company proposes to use horizontal or braced post insulators.⁴⁸

⁴¹ *Id.* at 16.

⁴² *Id.* at Figure 2.

⁴³ *Id.* at 16.

⁴⁴ *Id.*

⁴⁵ *Id.*

⁴⁶ *Id.*

⁴⁷ *Id.*

39. Average spans between single pole structures are proposed to be 250 to 350 feet, and 500 to 1,000 feet for H-frame structures.⁴⁹

V. TRANSMISSION LINE CONDUCTORS

40. Minnesota Power proposes to use Aluminum Core Steel Reinforced cables or conductors, accompanied by shield wire(s) for lightning protection.⁵⁰

VI. TRANSMISSION LINE ROUTE WIDTHS

41. Minnesota Power has requested a route width of 500 feet for the Project.⁵¹

VII. TRANSMISSION LINE RIGHT-OF-WAY

42. The right-of-way required for the Project is 100 feet.⁵² Where the Proposed Route parallels other existing infrastructure (e.g., roads, railroads, other utilities, etc.), the easement required from the adjacent landowner may be narrower because a portion of the transmission right-of-way can safely overlap with public right-of-way.⁵³

VIII. PROJECT SCHEDULE

43. Minnesota Power initially anticipated a winter 2013 in-service date when it filed its Application.⁵⁴

44. At the time of the Public Hearing, Minnesota Power stated it anticipates an in-service date during the second quarter of 2014. Minnesota Power anticipates starting construction in the first quarter 2014.⁵⁵

IX. PROJECT COSTS

45. Minnesota Power estimates that the installation of the new transmission line and removal of the existing transmission line will cost approximately \$2 million, depending upon final route selection and mitigation requirements.⁵⁶

⁴⁸ *Id.* at 11.

⁴⁹ *Id.*

⁵⁰ Ex. 2 at 3-1 (Application).

⁵¹ *Id.* at 4-2; Ex. 23 at 10 (EA).

⁵² *Id.*

⁵³ Ex. 23 at 10.

⁵⁴ *Id.* at 15.

⁵⁵ Pub. Hrg. Tr. at 12:19-21 (Daniel McCourtney).

⁵⁶ Ex. 23 at 15 (EA).

X. PERMITTEE

46. The permittee for the Project is Minnesota Power.⁵⁷

XI. PUBLIC AND LOCAL GOVERNMENT PARTICIPATION

A. Public Comments

47. Two members of the public spoke at the Public Information and EA Scoping Meeting on February 25, 2013. One member of the public asked about the process to identify buried public service infrastructure. Another member of the public asked that the EA include a discussion of any aesthetic impacts the Project may have on the Leonidas Scenic Overlook.⁵⁸

48. No written comments were received from the public on the scope of the EA.⁵⁹

49. Two members of the public spoke at the Public Hearing on September 4, 2013. One member of the public wanted clarification on which side of the creek the transmission line would be located. Another member of the public questioned whether the construction of the transmission line raised any safety concerns. Representatives of Minnesota Power answered these questions at the Public Hearing.⁶⁰

B. Local Government and State Agency Participation

1. St. Louis County

50. Gary Kuyava, St. Louis County Agriculture Inspector, submitted a written comment on the scope of the EA on February 6, 2013.⁶¹ Mr. Kuyava stated a concern related to noxious weeds in the area of the proposed Project and provided information on how to destroy the noxious weeds and additional mitigation.⁶² Minnesota Power responded that soil disturbance from the Project will be minimal. Minnesota Power also stated that all soil disturbed during Project construction will remain on site and any aggregate material required during construction will be sourced from areas clear of noxious weeds. Finally, Minnesota Power noted that areas re-vegetated after construction will be seeded using noxious weed-free seed.⁶³

⁵⁷ Ex. 2 at 2-1 (Application).

⁵⁸ Ex. 16 (Tr. Public Information and EA Scoping Meeting Tr. at 3:2-22 (Cindy Spartz) and 5:14-6:11 (Joanne Mannikko)).

⁵⁹ See Ex. 15 (Written Comments Received on the Scope of the EA).

⁶⁰ Pub. Hrg. Tr. at 15:16-20 (Len Belobaba) and 16:22-17:1 (Priscilla Triestman).

⁶¹ Ex. 15 (Written Comments Received on the Scope of the EA).

⁶² *Id.*

⁶³ Ex. 17 (Minnesota Power Response to EA Scoping Comments).

2. *Minnesota Department of Transportation*

51. Stacy Kotch, Utility Transmission Route Coordinator for the Minnesota Department of Transportation (MnDOT), submitted written comments on the scope of the EA on March 22, 2013.⁶⁴ Ms. Kotch stated that the Project does not appear to abut a state trunk highway, and requested that MnDOT be made aware of any changes to the Project that would locate it within a portion of current MnDOT right-of-way.⁶⁵ Minnesota Power responded that it would notify MnDOT of any changes to the Project that would result in the Project overlapping with any MnDOT right-of-way.⁶⁶

3. *Minnesota Department of Natural Resources*

52. On March 11, 2013, Jamie Schrenzel, Principal Planner for the Environmental Review Unit of the Minnesota Department of Natural Resources (DNR), submitted written comments on the scope of the EA.⁶⁷ The DNR comments related to use of “existing corridors” for the Project, work in wetlands, bird diverters, vegetation management and restoration, and crossing of public lands administered by the DNR.⁶⁸

53. On March 22, 2013, Minnesota Power responded to the DNR comments by providing information on its analysis of the use of existing rights-of-way for routing of the proposed Project, and on its vegetation clearing and restoration procedures. MP also stated that it would work with the DNR regarding public lands crossed by the Project, and obtain all necessary permissions and licenses from the DNR before commencing construction.⁶⁹

54. On September 18, 2013, the DNR submitted additional comments on the Route Permit Application and the EA. The DNR recommended that construction in wetland areas take place when the wetlands are frozen to the extent feasible, and encouraged the use of “wildlife-friendly” erosion control methods, particularly near wetlands. The DNR also requested additional information on the timing of the removal of the existing line. Finally, the DNR stated that it agreed with the proposed placement of poles in the DNR owned land along Highway 101.⁷⁰

55. On October 4, 2013, Minnesota Power responded to the DNR’s comments. With regard to erosion control, Minnesota Power stated that it will use wildlife-friendly erosion control materials. As to the timing of the removal of the existing line, Minnesota

⁶⁴ Ex. 13 (MnDOT EA Scoping Comments).

⁶⁵ *Id.*

⁶⁶ Ex. 17 (Minnesota Power Response to EA Scoping Comments).

⁶⁷ Ex. 14 (DNR Scoping Comments).

⁶⁸ *Id.*

⁶⁹ Ex. 17 (Minnesota Power Response to EA Scoping Comments).

⁷⁰ Letter from Jamie Schrenzel, Principal Planner, DNR, to Hon. Jeanne Cochran (September 18, 2013) (eDockets Nos. 20139-91437-01 through 20139-91437-05).

Power stated that it will remove the structures no longer needed for the transmission of electric power as soon as practicable following agreements with affected landowners and installation of the new line.⁷¹

4. *Minnesota Pollution Control Agency*

56. On September 18, 2013, the Minnesota Pollution Control Agency (MPCA) filed comments. The MPCA noted that the new National Pollutant Discharge Elimination System/State Disposal System (NPDES/SDS) Construction Stormwater (CSW) Permit became effective on August 1, 2013. The new NPDES/SDS CWS has significantly more stringent requirements for permanent stormwater treatment than current permits. The MPCA also noted that where permanent treatment methods for stormwater management are not an NPDES/SDS CSW Permit requirement, such as is likely for the Project, the MPCA encourages project proposers to use best stormwater management practices.⁷²

57. On October 4, 2013, Minnesota Power responded to the MPCA, stating that Minnesota Power intends to comply with applicable permit requirements during the construction of the Project.⁷³

CRITERIA FOR A ROUTE PERMIT

58. The Power Plant Siting Act (PPSA), Minnesota Statutes chapter 216E, requires that route permit determinations “be guided by the state’s goals to conserve resources, minimize environmental impacts, minimize human settlement and other land use conflicts, and ensure the state’s electric energy security through efficient, cost-effective power supply and electric transmission infrastructure.”⁷⁴

59. Under the PPSA, the Commission and the Office of Administrative Hearings must be guided by the following responsibilities, procedures, and considerations:

- (1) evaluation of research and investigations relating to the effects on land, water and air resources of large electric power generating plants and high-voltage transmission lines and the effects of water and air discharges and electric and magnetic fields resulting from such facilities on public health and welfare, vegetation, animals, materials and aesthetic values, including baseline studies, predictive modeling, and evaluation of new or improved methods for minimizing

⁷¹ Letter from David R. Moeller, Senior Attorney, Minnesota Power to Honorable Jeanne M. Cochran (October 4, 2013) (eDockets No. 201310-92131-01).

⁷² Letter from Craig Affeldt, Supervisor, MPCA to Honorable Jeanne M. Cochran (September 18, 2013) (eDockets No. 20139-91532-01).

⁷³ Letter from David R. Moeller, Senior Attorney, Minnesota Power to Honorable Jeanne M. Cochran (October 4, 2013) (eDockets No. 201310-92131-01).

⁷⁴ Minn. Stat. § 216E.03, subd. 7.

adverse impacts of water and air discharges and other matters pertaining to the effects of power plants on the water and air environment;

(2) environmental evaluation of sites and routes proposed for future development and expansion and their relationship to the land, water, air and human resources of the state;

(3) evaluation of the effects of new electric power generation and transmission technologies and systems related to power plants designed to minimize adverse environmental effects;

(4) evaluation of the potential for beneficial uses of waste energy from proposed large electric power generating plants;⁷⁵

(5) analysis of the direct and indirect economic impact of proposed sites and routes including, but not limited to, productive agricultural land lost or impaired;

(6) evaluation of adverse direct and indirect environmental effects that cannot be avoided should the proposed site and route be accepted;

(7) evaluation of alternatives to the applicant's proposed site or route proposed pursuant to subdivisions 1 and 2;

(8) evaluation of potential routes that would use or parallel existing railroad and highway rights-of-way;

(9) evaluation of governmental survey lines and other natural division lines of agricultural land so as to minimize interference with agricultural operations;

(10) evaluation of future needs for additional high-voltage transmission lines in the same general area as any proposed route, and the advisability of ordering the construction of structures capable of expansion in transmission capacity through multiple circuiting or design modifications;

(11) evaluation of irreversible and irretrievable commitments of resources should the proposed site or route be approved; and

(12) when appropriate, consideration of problems raised by other state and federal agencies and local entities.⁷⁶

60. In addition, Minnesota Statutes Section 216E.03, subdivision 7(e), provides that the Commission "must make specific findings that it has considered locating a route for a high-voltage transmission line on an existing high-voltage transmission route and

⁷⁵ Factor 4 is not applicable because Minnesota Power is not proposing to site a large electric generating plant.

⁷⁶ Minn. Stat. § 216E.03, subd. 7; see *also*, Minn. Stat. § 216E.04, subd. 8.

the use of parallel existing highway right-of-way and, to the extent those are not used for the route, the [C]ommission must state the reasons.”

61. In addition to the PPSA, the Commission and the Office of Administrative Hearings are governed by Minnesota Rule 7850.4100, which mandates consideration of the following factors when determining whether to issue a route permit for a high voltage transmission line:

- A. effects on human settlement, including, but not limited to, displacement, noise, aesthetics, cultural values, recreation, and public services;
- B. effects on public health and safety;
- C. effects on land-based economies, including, but not limited to, agriculture, forestry, tourism, and mining;
- D. effects on archaeological and historic resources;
- E. effects on the natural environment, including effects on air and water quality resources and flora and fauna;
- F. effects on rare and unique natural resources;
- G. application of design options that maximize energy efficiencies, mitigate adverse environmental effects, and could accommodate expansion of transmission or generating capacity;
- H. use or paralleling of existing rights-of-way, survey lines, natural division lines, and agricultural field boundaries;
- I. use of existing large electric power generating plant sites;⁷⁷
- J. use of existing transportation, pipeline, and electrical transmission systems or rights-of-way;
- K. electrical system reliability;
- L. costs of constructing, operating, and maintaining the facility which are dependent on design and route;
- M. adverse human and natural environmental effects which cannot be avoided; and
- N. irreversible and irretrievable commitments of resources.⁷⁸

⁷⁷ This factor is not applicable because it applies only to power plant siting.

⁷⁸ Minn. R. 7850.4100.

62. There is sufficient evidence on the record for the Administrative Law Judge to assess the Proposed Route using the criteria and factors set out above.

APPLICATION OF STATUTORY AND RULE CRITERIA

XII. APPLICATION OF ROUTING CRITERIA TO THE PROPOSED ROUTE

A. Effects on Human Settlement

63. The high voltage transmission line routing criteria set forth in applicable Minnesota statutes and rules require consideration of the proposed transmission line route's effect on human settlement, including displacement of residences and businesses; noise created during construction and by operation of the Project; and impacts to aesthetics, cultural values, recreation, and public services.⁷⁹

64. The land within the Project area is zoned for mining and rural residential purposes and includes existing road and utility infrastructure.⁸⁰

1. *Displacement*

65. There are 23 residences within 300 feet of the proposed alignment for the Project, one of which is within 100 feet of the proposed alignment. There are also 13 commercial buildings within 300 feet of the proposed alignment, two of which are within 100 feet of the proposed alignment.⁸¹

66. No residential or commercial displacement will occur as a result of the Project.⁸²

2. *Noise*

67. The MPCA has established standards for the regulation of noise levels.⁸³

68. The most restrictive MPCA noise limits are 60-65 A-weighted decibel (dBA) during the daytime and 50-55 dBA during the nighttime.⁸⁴

69. Noise concerns for the Project may be associated with construction and operation of the transmission line. Transmission lines produce noise under certain conditions. The level of noise depends on conductor conditions, voltage level, and weather conditions. Generally, activity related noise levels during the operation and

⁷⁹ Minn. Stat. § 216E.03, subd. 7(b); Minn. R. 7850.4100(A).

⁸⁰ Ex. 23 at 39 (EA).

⁸¹ *Id.*

⁸² *Id.*

⁸³ *Id.* at 24-25.

⁸⁴ *Id.* at 25.

maintenance of transmission lines are minimal and do not exceed the MPCA Noise Limits outside the right-of-way.⁸⁵

70. The audible noise levels from construction and operation of the Project along the Proposed Route are not predicted to exceed the MPCA Noise Limits.⁸⁶

3. *Aesthetics*

71. Construction of the Project will occur adjacent to existing road rights-of-way for the majority of its length, as well as within an area already populated by transmission lines, structures, and mining activities.⁸⁷

72. The proposed structures for the Project will be similar to the other 115 kV transmission lines used by Minnesota Power in the area. The structures will be constructed with both single pole and H-frame direct embedded wood or laminated wood structures. The single pole structures will be constructed with horizontal post or braced post insulators and poles will range in height from 60 to 105 feet above ground with spans ranging from 250 to 350 feet. The H-frame structures will range in height from 60 to 70 feet above ground with spans ranging from 500 to 1,000 feet.⁸⁸

73. Like the existing transmission lines in the area, the new 115 kV transmission line may be visible to some area residents along the western edge of Eveleth, as well as to users along an existing mining road and Highway 101. The Project also includes the removal of approximately 1.9 miles of existing 115 kV transmission line.⁸⁹

74. A comment was made during the Public Information and EA Scoping Meeting related to the Leonidas Scenic Overlook. Active and former mine sites can be viewed from the Leonidas Overlook, located along Highway 101. This Overlook is the highest man-made point on the Mesabi Iron Range and was built from stockpiled overburden and lean ore. The new 39 Line may be a less visible distraction than the existing 39 Line due to the elevation of the Leonidas Overlook and proximity to Highway 101. The Project is not incompatible with its setting among existing transmission lines, transportation corridors, and mining development along the Proposed Route.⁹⁰

75. Overall, impacts to aesthetics from the Project are expected to be nominal. In addition, Minnesota Power agreed to work with landowners to identify concerns

⁸⁵ *Id.* at 25-26.

⁸⁶ *Id.* at 26.

⁸⁷ *Id.* at 28.

⁸⁸ *Id.*

⁸⁹ *Id.*

⁹⁰ *Id.* at 29.

related to transmission line aesthetics and to mitigate those concerns while adhering to the conditions of the Route Permit.⁹¹

4. *Cultural Values*

76. The region surrounding the Project area has cultural values tied to German, Norwegian, Swedish, Italian, English, and Irish heritages. The region also has cultural values tied to the major industries in the area, including mining, wood and paper products, aviation, higher education, transportation, health care, and tourism.⁹²

77. In the immediate Project area, mining is an especially important cultural value. The Project area is bounded by the Mesabi Iron Range, a vast deposit of iron ore and the largest of three ranges in Minnesota.⁹³

78. Because the Project will not conflict with cultural practices in the area, no impacts are anticipated to cultural values from the construction and operation of the Project.⁹⁴

5. *Recreation*

79. No federal, state, or county parks, forests, recreational areas, wildlife refuges, wildlife protections areas, trails, or natural areas will be affected by the Proposed Route.⁹⁵

80. The city of Eveleth offers several recreational opportunities. The Proposed Route is located west of the city of Eveleth and will not affect these recreation areas.⁹⁶

81. The region around the Proposed Route supports general recreational activities including hiking, snowmobiling, biking, hunting, and fishing. Direct adverse or significant impacts on existing recreational opportunities in the region are not anticipated to result from construction or operation of the Project.⁹⁷

6. *Public Service and Infrastructure*

82. Public services in the Project area include a fully-staffed police department, a volunteer fire department, four medical clinics, a paid-on-call ambulance service in the city of Eveleth, and a volunteer fire department in the city of Leonidas. Public

⁹¹ *Id.*

⁹² Ex. 2 at 6-7 (Application).

⁹³ *Id.*

⁹⁴ *Id.*

⁹⁵ Ex. 23 at 38 (EA).

⁹⁶ *Id.*

⁹⁷ *Id.*

infrastructure in the Project area includes State Highway 53 and County Road 101. The nearest airport is approximately 2.7 miles from the Project area in the city of Virginia. No direct impacts to public service or public infrastructure are expected to result from the construction or operation of the Project.⁹⁸

B. Effects on Public Health and Safety

83. Minnesota high voltage transmission line routing criteria require consideration of the Project's effect on health and safety.⁹⁹

1. Construction and Operation of Facilities

84. The Project will be designed in compliance with local, state, NESC, and Minnesota Power standards regarding clearance to ground, clearance to crossing utilities, clearance to buildings, strength of materials, and right-of-way widths.¹⁰⁰

85. Minnesota Power will direct its construction crews and/or contract crews to comply with local, state, NESC, and Minnesota Power standards regarding installation of facilities and standard construction practices. Minnesota Power has committed to follow industry safety procedures during and after installation of the transmission lines. This will include clear signage during all construction activities.¹⁰¹

86. The transmission lines will be equipped with protective devices that will de-energize the line if an accident occurs, such as a structure or conductor falling to the ground.¹⁰²

87. No significant impacts to safety of workers or the public are expected to result from the construction or operation of the Project given Minnesota Power's commitment to comply with applicable construction standards and implement appropriate safeguards.

2. Electric and Magnetic Fields (EMF)

88. There are no federal standards for transmission line EMFs.¹⁰³ However, the Commission has imposed a maximum electric field limit of 8 kV/m measured at one meter above the ground at the edge of the right-of-way.¹⁰⁴

⁹⁸ Ex. 2 at 6-7 (Application).

⁹⁹ Minn. Stat. § 216E.03, subd. 7(b)(1); Minn. R. 7850.4100(B).

¹⁰⁰ Ex. 23 at 30 (EA); Ex. 2 at 6-2 (Application).

¹⁰¹ Ex. 23 at 30 (EA).

¹⁰² *Id.*

¹⁰³ *Id.* at 31-34.

¹⁰⁴ *Id.* at 31.

89. The calculated electric fields for the Project are significantly less than the maximum limit of 8 kV/m that has been imposed by the Commission.¹⁰⁵

90. The possible impact of EMF exposure on human health has been investigated by public health professionals for the past several decades.¹⁰⁶ Epidemiological and toxicological studies have shown only weak associations between EMF exposure and health risks. Studies have failed to establish a cause and effect relationship between exposure to EMFs and adverse health effects.¹⁰⁷

91. The potential impacts of EMF on human health were also recently at issue in the route permit proceeding for the Brookings-Hampton 345 kV transmission line. In that proceeding, Administrative Law Judge Richard C. Luis found that:

The absence of any demonstrated impact by [EMF] exposure supports the conclusion that there is no demonstrated impact on human health and safety that is not adequately addressed by the existing State standards for such exposure. The record shows that the current exposure standard for [EMF] is adequately protective of human health and safety.¹⁰⁸

92. Similarly, in the route permit proceeding for the St. Cloud–Fargo 345 kV transmission line, then-Administrative Law Judge Beverly J. Heydinger found:

Over the past 30 years, many epidemiological studies have been conducted to determine if there is a correlation between childhood leukemia and proximity to electrical structures. Some studies have shown that there is an association and some have not. Although the epidemiological studies have been refined and increased in size, the studies do not show a stronger related effect. In addition, a great deal of experimental, laboratory research has been conducted to determine causality, and none has been found.¹⁰⁹

¹⁰⁵ *Id.*

¹⁰⁶ *Id.* at 34.

¹⁰⁷ *Id.* at 35 - 37.

¹⁰⁸ *In the Matter of the Route Permit Application by Great River Energy and Xcel Energy for a 345 kV Transmission Line from Brookings County, South Dakota to Hampton, Minnesota*, Docket No. ET-2/TL-08-1474, FINDINGS OF FACT, CONCLUSIONS OF LAW, AND ORDER ISSUING AN HVTL ROUTE PERMIT TO GREAT RIVER ENERGY AND XCEL ENERGY ADOPTING ALJ FINDINGS OF FACT, CONCLUSIONS AND RECOMMENDATION AS AMENDED at Finding 216 (Sept. 14, 2010).

¹⁰⁹ *In the Matter of the Application for a Route Permit for the Fargo to St. Cloud 345 kV Transmission Line Project*, Docket No. ET-2, E002/TL-09-1056, FINDINGS OF FACT, CONCLUSIONS OF LAW, AND ORDER ISSUING AN HVTL ROUTE PERMIT TO XCEL ENERGY AND GREAT RIVER ENERGY, *adopting* ALJ FINDINGS OF FACT, CONCLUSIONS AND RECOMMENDATION at Finding 125 (June 24, 2011).

93. No significant impacts to human health are anticipated to arise from EMF exposure or from other sources related to the construction and operation of the Project.

C. Effects on Land-Based Economies and Direct and Indirect Economic Impacts

1. Effect on Land-Based Economies

94. Minnesota's high voltage transmission line routing criteria require consideration of the impacts to land-based economies, specifically agriculture, forestry, tourism, and mining.¹¹⁰

95. There are no agricultural or forestry operations along the Proposed Route. The nearest significant tracts of land with evidence of agricultural operations are located approximately 0.5 mile west of the western-most portion of the Project. The Proposed Route will not impact any agricultural land, managed forests or nurseries.¹¹¹

96. Tourism opportunities in the Eveleth area include touring the U.S. Hockey Hall of Fame, biking on the Mesabi Trail, golfing, fishing, boating, snowmobiling, cross country skiing, and wildlife viewing. While the construction of the Project will cause some temporary visual and noise impacts, there are not expected to be any adverse or serious impacts to the area's tourism resulting from the Project.¹¹²

97. Impacts to mining in the region are anticipated to be positive because the Project will remove the existing 115 kV 39 Line from the mine area and allow for expansion of mining activities. The Proposed Route was selected by Minnesota Power in consultation with United Taconite.¹¹³

98. Overall, no significant adverse impacts to land-based economies are anticipated to result from the Project.

D. Effects on Archeological and Historic Resources

99. Minnesota Rules part 7850.4100(D) requires consideration of the effects on historic and archaeological resources.

100. During the preparation of the Application, a Phase 1a cultural resource assessment was conducted at the State Historic Preservation Office by a consultant for Minnesota Power. This review indicated that there are no archaeological sites within one

¹¹⁰ Minn. Stat. § 216E.03, subd. 7(b)(5); Minn. R. 7850.4100(C).

¹¹¹ Ex. 23 at 39 (EA).

¹¹² Ex. 2 at 6-8 (Application).

¹¹³ *Id.*

mile of the Proposed Route. The review, however, identified 29 inventoried historic architectural properties.¹¹⁴

101. Five of the historic architectural properties are listed on the National Register of Historic Places, including a single family home and four public buildings. The period of significance for these properties dates from 1900 to 1924. Each of the properties has direct ties to the mining industry. The historic character of these five properties will not be affected by the Project.¹¹⁵

102. Nor will any of the remaining 24 historic properties be affected by the Project. None of the properties is located adjacent to the Proposed Route.¹¹⁶

103. No impacts to archaeological or historic resources are anticipated as a result of construction of the Project along the Proposed Route.¹¹⁷

E. Effects on Natural Environment

104. Minnesota's high voltage transmission line routing criteria require consideration of the proposed route's effect on the natural environment, including effects on air and water quality resources, and flora and fauna.¹¹⁸

1. Air Quality

105. Construction of the Project will result in temporary air quality impacts caused by, among other things, construction-vehicle emissions and fugitive dust from right-of-way preparation. Additionally, ozone generation might occur during transmission line operation.¹¹⁹

106. Ozone and nitrous oxide emissions are expected to be well below the federal and state standards. Impacts to the surrounding environment due to construction dust and construction vehicle emissions are anticipated to be minor and temporary. The standard HTVL Permit condition that construction activities follow best management practices would serve to minimize any impacts to air quality.¹²⁰

107. No significant impacts to air quality are anticipated as part of the Project.

¹¹⁴ Ex. 23 at 41-42 (EA).

¹¹⁵ *Id.* at 42.

¹¹⁶ *Id.*

¹¹⁷ *Id.* at 43.

¹¹⁸ Minn. Stat. §§ 216E.03, subd. 7(b)(1) and (2); Minn. R. 7850.4100(E).

¹¹⁹ Ex. 23 at 44-45 (EA).

¹²⁰ *Id.* at 45-46.

2. *Water Quality and Resources*

108. The Project is located within the Great Lakes Basin and the St. Louis River and Vermillion River Watersheds. Along the Proposed Route, two water bodies and several wetland areas have been identified. There are also several water-filled mine pits located to the north and south of the Proposed Route.¹²¹

109. Wetlands are important resources for flood abatement, wildlife habitat, and water quality. Based on a wetland survey conducted for Minnesota Power, the Proposed Route will cross a total of 0.7 miles of wetlands.¹²²

110. The Project's temporary impacts to water resources include the possibility of sediment reaching wetlands and surface waters when the ground is disturbed by excavation, grading, and construction traffic.¹²³ No impacts to groundwater are anticipated as part of the Project.¹²⁴

111. Impacts from construction can be mitigated by several reasonable and appropriate mitigation strategies that are generally covered as standard route permit conditions, including: (1) utilizing existing roads for movement of equipment and machinery, (2) crossing wetlands when frozen (winter construction), (3) using stabilization mats to facilitate construction, and (4) placing staging and assembly areas outside of the wetlands. In addition, Minnesota Power will be required to obtain additional permits from federal and state agencies with regulatory authority over public waters, including wetlands, and will be required to adhere to the requirements of those permits. Through these measures, impacts to wetlands and surface water will be minimized to the extent practicable.

112. No significant adverse impacts to water resources are expected from construction of the Project along the Proposed Route.¹²⁵

3. *Flora*

113. The Proposed Route is located adjacent to road rights-of-way for a little more than half of its length. The remaining portion of the Proposed Route is primarily deciduous forest, barren land, and shrub/scrub and woody wetland.¹²⁶

114. Temporary impacts to flora may occur due to construction activities and vegetative clearing. The construction of the Project may contribute to the spread of

¹²¹ *Id.* at 46.

¹²² *Id.* at 47.

¹²³ *Id.* at 48.

¹²⁴ *Id.* at 49.

¹²⁵ *Id.* at 48-49.

¹²⁶ *Id.* at 49-50.

invasive and non-native plant species through disturbance of soils and vegetation, and by construction vehicles inadvertently bringing such species into new areas.¹²⁷

115. The impacts to flora will be mitigated by marking and avoiding invasive species, and by using seed that is free of invasive species when restoring land.¹²⁸ Other strategies for mitigating impacts to flora that will be used include: (1) constructing during fall and winter months to minimize plant damage; (2) inspecting and cleaning equipment to avoid the introduction of exotic plant species; and (3) revegetating disturbed soils with low-growing native plant species. Mitigation and restoration measures for impacts to flora are standard route permit conditions, and are reasonable and appropriate for the Project.

116. According to the DNR, invasive species management is particularly important for work done near public waters in the Project area.¹²⁹ A route permit condition requiring development of an invasive species management plan in consultation with the DNR would be a reasonable and appropriate mitigation strategy to ensure that best management practices for invasive species control are applied to the construction and maintenance of the Project.

117. The Project is not expected to result in significant impacts to flora given that the majority of the Proposed Route follows existing road rights-of-way and appropriate mitigation measures will be in place.¹³⁰

4. *Fauna*

118. The grasslands, wetlands, and woodlands in the general area of the Project provide habitat for a variety of wildlife such as mice, voles, squirrels, deer, and birds.¹³¹

119. Wildlife within the construction zone will be temporarily displaced to adjacent wildlife habitats during the construction process. No significant permanent effect on wildlife is expected because the majority of the Proposed Route is located within and adjacent to a developed, commercial area.¹³²

120. To minimize the impacts to wildlife during construction of the Project, the DNR has recommended the use of wildlife-friendly erosion control materials instead of plastic mesh erosion control materials. The DNR advises against using plastic erosion control materials because wildlife can become entangled in the plastic materials.¹³³ In

¹²⁷ *Id.* at 50.

¹²⁸ Ex. 17 (Minnesota Power Response to EA Scoping Comments).; Ex. 23 at 50 (EA).

¹²⁹ Ex. 14 (Letter from Jamie Schrenzel, DNR, to William Storm, EFP).

¹³⁰ Ex. 23 at 50-51 (EA).

¹³¹ *Id.* at 51.

¹³² *Id.*

¹³³ Ex. 14 (DNR Scoping Comments).

response, Minnesota Power has agreed not to use plastic erosion control materials.¹³⁴ A route permit condition requiring the use of wildlife-friendly erosion control materials would be a reasonable and appropriate mitigation strategy to minimize impacts to wildlife during construction.

121. Once construction is complete, raptors, waterfowl, and other bird species could be impacted by the Project through collision with transmission line conductors.¹³⁵

122. The electrocution of large birds, such as raptors, is more commonly associated with small distribution lines than large transmission lines. In addition, Minnesota Power transmission line design standards provide adequate spacing to eliminate the risk of electrocution of large birds.¹³⁶ Such design standards are standard route permit conditions, and are reasonable and appropriate for the Project.

123. The open water wetlands present in the Project area are not sizeable enough to attract the presence of water birds and do not provide habitat required by waterfowl. This fact, along with the relatively small area involved for the Proposed Route when compared to the available surrounding area for avian migration, led to Minnesota Power's decision not to propose installation of bird flight diverters along the Proposed Route.¹³⁷

124. Construction and operation of the Project along the Proposed Route is not anticipated to have any significant permanent effect on wildlife present in the Project area.¹³⁸

F. Effects on Rare and Unique Natural Resources

125. Minnesota's high voltage transmission line routing factors require consideration of the proposed route's effect on rare and unique natural resources.¹³⁹

126. A review of the DNR's Natural Heritage Information System by Minnesota Power did not identify any State-listed species within the Proposed Route or within a one-mile buffer around the Proposed Route. The DNR concurred with this assessment.¹⁴⁰

¹³⁴ Ex 2 at 5-5 (Application); Letter from David Moeller, Minnesota Power to Hon. Jeanne Cochran (October 4, 2013) (eDockets No. 201310-92131-01).

¹³⁵ *Id.* at 52 (EA).

¹³⁶ *Id.*

¹³⁷ *Id.*

¹³⁸ Ex. 23 at 51 (EA).

¹³⁹ Minn. Stat. § 216E.03, subd. 7(b)(1); Minn. R. 7850.4100(F).

¹⁴⁰ Ex. 23 at 53 (EA).

127. The United States Fish and Wildlife Service website was reviewed by Minnesota Power for a list of species covered under the Endangered Species Act. According to this website, two federally-listed species are known to occur within St. Louis County: the piping plover (*Charadrius melodus*) and the Canada lynx (*Lynx Canadensis*).¹⁴¹

128. The piping plover inhabit sandy beaches, barrier islands, and sand pits formed along the Great Lakes' perimeters. The Proposed Route is not located near the Great Lakes or within designated Critical Habitat for the piping plover, and is not expected to have any adverse impacts on the piping plover.¹⁴²

129. Canada lynx live in dense forests with boreal features across northern Minnesota. The Proposed Route is not located within designated Critical Habitat for the Canada lynx, but the Project Area could be populated with Canada lynx at the time of construction. Any impacts on the Canada lynx would be minor and temporary.¹⁴³

G. Application of Various Design Considerations

130. Minnesota's high voltage transmission line routing factors require consideration of the Project's applied design options that maximize energy efficiencies, mitigate adverse environmental effects, and accommodate expansion of transmission or generating capacity.¹⁴⁴

131. The Proposed Route is designed with sufficient capacity to meet both existing and anticipated needs of the transmission system in the Project Area.¹⁴⁵

H. Use or Paralleling of Existing Right-of-Way, Survey Lines, Natural Division Lines, and Agricultural Field Boundaries

132. Minnesota's high voltage transmission line routing criteria require consideration of the proposed route's use or paralleling of existing rights-of-way, survey lines, natural division lines, and agricultural field boundaries.¹⁴⁶

133. The Proposed Route effectively uses existing road right-of-way. Approximately 52 percent of the Proposed Route is within or adjacent to existing road right-of-way.¹⁴⁷

¹⁴¹ *Id.*

¹⁴² *Id.* at 53-54.

¹⁴³ *Id.* at 54.

¹⁴⁴ Minn. Stat. § 216E.03, subd. 7(a),(b); Minn. R. 7850.1900, subp. 2(L).

¹⁴⁵ Ex. 23 at 58 (EA).

¹⁴⁶ Minn. Stat. § 216E.03, subd. 7(b)(9),(e); Minn. R. 7850.4100(H).

¹⁴⁷ Ex. 23 at 58 (EA).

134. Using existing corridors reduces and minimizes impacts on planned future residential areas, commercial properties, and environmental resources.¹⁴⁸

I. Use of Existing Transportation, Pipeline, and Electrical Transmission System Rights-of-Way

135. Minnesota's high voltage transmission line routing criteria require consideration of the proposed routes' use of existing transportation, pipeline and electrical transmission system rights-of-way.¹⁴⁹

136. The Proposed Route effectively uses existing transportation rights-of-way. Approximately 52 percent of the Proposed Route is within or adjacent to existing road right-of-way.¹⁵⁰

137. As part of the permitting process, Minnesota Power also considered two alternative routes that would have used more existing right-of-way than the Proposed Route, but rejected the alternatives due to the greater potential impacts to land owners, wetlands, and cost. The evidence in the record shows that any alternative to the Proposed Route along existing transportation, pipeline, or electrical rights-of-way would cause greater impacts to private land owners and wetlands than the Proposed Route, and would be more expensive than the Proposed Route.¹⁵¹

J. Electrical System Reliability

138. Minnesota's high voltage transmission line routing criteria require consideration of the Project's impact on electrical system reliability.¹⁵²

139. The Project will be constructed to meet applicable reliability requirements.¹⁵³

K. Costs of Constructing, Operating, and Maintaining the Facility

140. Minnesota's high voltage transmission line routing factors require consideration of the proposed route's cost of construction, operation, and maintenance.¹⁵⁴

¹⁴⁸ *Id.*

¹⁴⁹ Minn. Stat. § 216E.03, subd. 7(b)(8),(e); Minn. R. 7850.4100(J).

¹⁵⁰ Ex. 23 at 58 (EA).

¹⁵¹ See Ex. 2 at 4-2 (Application); Ex. 17 (Minnesota Power Response to EA Scoping Comments); Ex. 23 at 16 (EA).

¹⁵² Minn. Stat. § 216E.03, subd. 7(b)(10)(e); Minn. R. 7850.4100(K).

¹⁵³ Ex. 23 at 8-9 (EA).

¹⁵⁴ Minn. R. 7850.4100(L).

141. Construction cost estimates are subject to change as they can be affected considerably by several variables such as the timing of construction, availability of construction crews and components, and the final route selected by the Commission.

142. The estimated cost of the Project along the Proposed Route is \$2 million, depending on final route selection and mitigation.¹⁵⁵

143. Operating and maintenance costs for the transmission line will be nominal for several years because the line will be new, and minimal vegetation maintenance is required. Annual operating and maintenance costs for the 115 kV wooden transmission structures across Minnesota Power's Upper Midwest system average approximately \$105 per mile of transmission right-of-way for scheduled maintenance. Vegetation management is performed on a seven-year cycle at an approximate average annual cost of \$480 per mile of transmission right-of-way.¹⁵⁶

L. Adverse Human and Natural Environmental Effects Which Cannot be Avoided

144. Minnesota's high voltage transmission line routing factors require consideration of the adverse human and natural environmental effects which cannot be avoided.¹⁵⁷

145. Unavoidable impacts are those that remain after applying mitigation measures. Unavoidable adverse impacts from the Proposed Route lasting only as long as the construction period are expected to include: soil compaction, erosion, and vegetation degradation; disturbance to wetland vegetation and soil; disturbance to and displacement of some species of wildlife; disturbance to nearby residences; traffic delays in some areas; and minor air quality impacts due to fugitive dust. Unavoidable adverse effects from the proposed Project that would last at least as long as the life of the Project include: the addition to the visual landscape of transmission towers and lines; habitat type changes and fragmentation; impacts to habitat; and impacts to birds as a result of collisions with the transmission line.¹⁵⁸

146. The unavoidable impacts from the construction of the Project along the Proposed Route, after implementation of mitigation measures, are not expected to result in any significant adverse effects.¹⁵⁹

¹⁵⁵ Ex. 2 at 3-2 (Application); Ex. 23 at 15 (EA).

¹⁵⁶ *Id.* at 13 (EA).

¹⁵⁷ Minn. Stat. §§ 216E.03, subd. 7(b)(5) and (6); Minn. R. 7850.4100(M).

¹⁵⁸ Ex. 23 at 59 (EA).

¹⁵⁹ *Id.* at Chapter 5.

M. Irreversible and Irretrievable Commitments of Resources

147. Minnesota's high voltage transmission line routing criteria require consideration of the irreversible and irretrievable commitments of resources that are necessary for each proposed route.¹⁶⁰

148. Irreversible and irretrievable resource commitments are related to the use of nonrenewable resources and the effects that the use of those resources have on future generations. Irreversible effects result primarily from the use or destruction of a specific resource that cannot be replaced within a reasonable time frame. Irretrievable resource commitments involve the loss in value of an affected resource that cannot be restored as a result of action.¹⁶¹

149. There are few commitments of resources associated with this proposed Project that are irreversible and irretrievable, but those few resources primarily relate to construction of the Project.¹⁶²

150. Only construction resources, such as concrete, steel, and hydrocarbon fuels, will be irreversibly and irretrievably committed to this Project.¹⁶³

XIII. NOTICE

151. Minnesota statutes and rules require Minnesota Power to provide certain notice to the public and to local governments before and during the Application for a Route Permit process.¹⁶⁴

152. Minnesota Power provided notice to the public and local governments as described in paragraphs 5-6 above.¹⁶⁵

153. Minnesota statutes and rules also require EFP and the Commission to provide certain notice to the public throughout the Route Permit process.¹⁶⁶

¹⁶⁰ Minn. Stat. § 216E.03, subd. 7(b)(11); Minn. R. 7850.4100(N).

¹⁶¹ Ex. 23 at 59 (EA).

¹⁶² *Id.*

¹⁶³ *Id.*

¹⁶⁴ Minn. Stat. § 216E.03, subd. 4; Minn. Stat. § 216E.04, subd. 4; Minn. R. 7850.2100, subps. 2, 4.; Minn. R. 7850.3300.

¹⁶⁵ See also, Ex. 8 (Minnesota Power's Confirmation of Mailing and Publication); Ex. 12 (Minnesota Power Affidavit of Newspaper Publication of Public Information and Scoping Meeting).

¹⁶⁶ Minn. Stat. § 216E.03, subd. 6; Minn. Stat. § 216E.04, subd. 6; Minn. R. 7850.2300, subp. 2; Minn. R. 7850.3500; Minn. R. 7850.3700; Minn. R. 7850.3800.

154. EFP and the Commission provided notice as described in paragraphs 10-11, 14, 19, and 24-26 above.¹⁶⁷

XIV. COMPLETENESS OF EA

155. The Commission is required to determine the completeness of the EA.¹⁶⁸ An EA is complete if the EA and the record created at the Public Hearing address the issues identified in the Scoping Decision.¹⁶⁹

156. The evidence on the record demonstrates that the EA is complete because the EA and the record created at the Public Hearing address the issues raised in the Scoping Decision.¹⁷⁰

Based on the foregoing Findings of Fact and the record in this proceeding, the Administrative Law Judge makes the following:

CONCLUSIONS OF LAW

1. The Commission and the Administrative Law Judge have the jurisdiction to consider Minnesota Power's Application for a Route Permit pursuant to Minnesota Statutes sections 216E.02 and 216E.04.

2. The Commission determined that the Application was complete and accepted the Application on January 16, 2013.¹⁷¹

3. EFP has conducted an appropriate environmental analysis of the Project for purposes of this route permit proceeding, and the EA satisfies the requirements of Minnesota Rules part 7850.3900.

4. Minnesota Power gave notice to landowners and local units of government as required by Minnesota Statutes section 216E.03, subdivision 4; Minnesota Statutes section 216E.04, subdivision 4; Minnesota Rules part 7850.2100, subpart 2; and Minnesota Rules part 7850.3300.

¹⁶⁷ See also, Ex. 3 (Notice of Comment Period on Application Completeness); Ex. 11 (Notice of Public Information and Scoping Meeting); Ex. 18 (EFP Summary of EA Scoping Process); Ex. 22 (EFP Notice of Availability of EA); Ex. 24 (EFP Notice of Availability of EA published in the EQB Monitor); Ex. 25 (PUC Public Hearing Notice); Ex. 26 (PUC Revised Public Hearing Notice); Ex. 27 (Notice by Certified Mail of Public Hearing); Ex. 29 (Notice to State Agencies Request for Participation).

¹⁶⁸ Minn. R. 7850.3900, subp. 2.

¹⁶⁹ *Id.*

¹⁷⁰ See Ex. 23 (EA).

¹⁷¹ Ex. 9 at 1, 4 (ORDER FINDING APPLICATION COMPLETE, REFERRING APPLICATION TO THE OFFICE OF ADMINISTRATIVE HEARINGS, GRANTING VARIANCE, AND APPOINTING A PUBLIC ADVISOR).

5. Minnesota Power published notice of the application in a newspaper of general circulation in St. Louis County as required by Minnesota Statutes section 216E.03, subdivision 4; Minnesota Statutes section 216E.04, subdivision 4; Minnesota Rules part 7850.2100, subparts 4; and Minnesota Rules part 7850.3300.

6. Minnesota Statutes sections 216E.04 and 216E.03, subdivision 4, require Minnesota Power to mail notice of the filing of the application to persons who have requested to be placed on a list maintained by the Commission for receiving notice of high voltage transmission line application filings (hereinafter general service list). While Minnesota Power did not provide evidence that it mailed notice of the filing of its Application to the Commission's general service list, the Application was electronically filed with the Commission through the Commission's e-Dockets system and was electronically mailed to persons who elected to receive notice of such filings through the e-Dockets system. For this reason, the Administrative Law Judge concludes that Minnesota Power is in substantial compliance with the requirement to provide notice to persons on the Commission's general service list.¹⁷²

7. Notice was provided by the Commission and EFP as required by Minnesota Statutes section 216E.04, subdivision 6; Minnesota Rules part 7850.2300, subpart 2; Minnesota Rules part 7850.3500, subpart 1; Minnesota Rules part 7850.3700, subpart 2; Minnesota Rules part 7850.3700, subpart 3; Minnesota Rules part 7850.3700, subpart 6; and Minnesota Rules part 7850.3800, subpart 2.¹⁷³

8. A Public Hearing was conducted in the community near the Proposed Route. Proper notice of the Public Hearing was provided, and the public was given the opportunity to speak at the hearing and to submit written comments.

9. The Proposed Route satisfies the route permit criteria set forth in Minnesota Statutes section 216E.04, subdivision 8 (which incorporates Minnesota Statutes Section 216E.03, subdivision 7) and Minnesota Rules part 7850.4100.

10. The Proposed Route, with the mitigation measures recommended in this report, does not present a potential for significant adverse environmental effects pursuant to the Minnesota Environmental Rights Act and the Minnesota Environmental Policy Act.

11. The Proposed Route is the best alternative on the record for the 115 kV transmission line between the existing 37 Line and 39 Line.

12. It is appropriate for the Route Permit to contain a condition requiring Minnesota Power to use wildlife-friendly erosion control materials, and a condition prohibiting the use of plastic mesh erosion control materials.

¹⁷² Ex. 8 (Confirmation of Notice).

¹⁷³ See *supra* at note 166.

13. It is appropriate for the Route Permit to contain a condition requiring Minnesota Power to develop an invasive species management plan for the Project in consultation with the DNR.

14. It is appropriate for the Route Permit to contain a condition requiring Minnesota Power to obtain all required local, state, and federal permits and licenses; to comply with the terms of those permits or licenses; and to comply with all applicable rules and regulations.

15. It is appropriate for the Route Permit to include the general route permit conditions that the Commission includes as standard conditions in HTVL route permits.

16. It is appropriate for the Route Permit to contain a condition requiring Minnesota Power to remove approximately 1.9 miles of the existing 39 Line as soon as practicable and upon agreement with affected landowners after the new line is constructed and in service.

17. Any of the foregoing Conclusions more properly designated Findings are hereby adopted as such.

Based upon these Conclusions of Law, the Administrative Law Judge makes the following:

RECOMMENDATIONS

The Commission issue to Minnesota Power the following permit for the Project:

A route permit for a high voltage transmission line along Minnesota Power's Proposed Route, which is described here in and depicted in Figure 2 of the Environmental Assessment, between the existing 39 Line and existing 37 Line in St. Louis County, Minnesota, near the city of Eveleth, with a route width up to 500 feet wide, and that includes the mitigation measures and conditions set forth above.

Dated: November 15, 2013

s/Jeanne M. Cochran

JEANNE M. COCHRAN
Administrative Law Judge

NOTICE

Notice is hereby given that exceptions to this Report, if any, by any party adversely affected must be filed under the time frames established in the Commission's rules of practice and procedure, Minn. R. 7829.2700 and 7829.3100, unless otherwise directed by the Commission. Exceptions should be specific and stated and numbered separately. Oral argument before a majority of the Commission will be permitted pursuant to Part 7829.2700, Subpart 3. The Commission will make the final determination of the matter after the expiration of the period for filing exceptions, or after oral argument, if an oral argument is held.

The Commission may, at its own discretion, accept, modify, or reject the Administrative Law Judge's recommendations. The recommendations of the Administrative Law Judge have no legal effect unless expressly adopted by the Commission as its final order.



MINNESOTA OFFICE OF ADMINISTRATIVE HEARINGS

600 North Robert Street
Saint Paul, Minnesota 55101

Mailing Address:
P.O. Box 64620
St. Paul, Minnesota 55164-0620

Voice: (651) 361-7900
TTY: (651) 361-7878
Fax: (651) 361-7936

November 15, 2013

See Attached Service List

**Re: In the Matter of the Application of MN Power for a Route Permit for
the 39 Line 115 kHVT Project in St. Louis County**

**OAH 68-2500-30811
MPUC E015/TL-12-1123**

To All Persons on the Attached Service List:

Enclosed herewith and served upon you is the Administrative Law Judge's
FINDINGS OF FACT, CONCLUSIONS OF LAW AND RECOMMENDATION in the
above-entitled matter.

Sincerely,

s/Jeanne M. Cochran

JEANNE M. COCHRAN
Administrative Law Judge

JMC:km

Enclosure

STATE OF MINNESOTA
OFFICE OF ADMINISTRATIVE HEARINGS
ADMINISTRATIVE LAW SECTION
PO BOX 64620
600 NORTH ROBERT STREET
ST. PAUL, MINNESOTA 55164

CERTIFICATE OF SERVICE

In the Matter of the Application of MN Power for a Route Permit for the 39 Line 115 kHVT Project in St. Louis County	OAH Docket No.: 68-2500-30811
--	----------------------------------

Kendra McCausland, certifies that on November 15, 2013 she served a true and correct copy of the attached **FINDINGS OF FACT, CONCLUSIONS OF LAW AND RECOMMENDATION** by eService, and U.S. Mail, (in the manner indicated below) to the following individuals:

First Name	Last Name	Email	Company Name	Address	Delivery Method	View Trade Secret
Julia	Anderson	Julia.Anderson@ag.state.mn.us	Office of the Attorney General-DOC	1800 BRM Tower 445 Minnesota St St. Paul, MN 551012134	Electronic Service	Yes
Kodi	Church	kchurch@briggs.com	Briggs & Morgan	2200 IDS Center 80 South Eighth Street Minneapolis, Minnesota 55402	Electronic Service	No
Jeanne	Cochran	Jeanne.Cochran@state.mn.us	Office of Administrative Hearings	P.O. Box 64620 St. Paul, MN 55164-0620	Electronic Service	Yes
Sharon	Ferguson	sharon.ferguson@state.mn.us	Department of Commerce	85 7th Place E Ste 500 Saint Paul, MN 551012198	Electronic Service	Yes
Burl W.	Haar	burl.haar@state.mn.us	Public Utilities Commission	Suite 350 121 7th Place East St. Paul, MN 551012147	Electronic Service	Yes
Linda	Jensen	linda.s.jensen@ag.state.mn.us	Office of the Attorney General-DOC	1800 BRM Tower 445 Minnesota Street St. Paul, MN 551012134	Electronic Service	Yes
Stacy	Kotch	Stacy.Kotch@state.mn.us	MINNESOTA DEPARTMENT OF TRANSPORTATION	395 John Ireland Blvd. St. Paul, MN 55155	Electronic Service	Yes
John	Lindell	agorud.edf@ag.state.mn.us	Office of the Attorney General-RUD	1400 BRM Tower 445 Minnesota St St. Paul, MN 551012130	Electronic Service	Yes
David	Moeller	dmoeller@allete.com	Minnesota Power	30 W Superior St Duluth, MN 558022093	Electronic Service	No
Jamie	Schrenzel	jamie.schrenzel@state.mn.us	Minnesota Department of Natural Resources	500 Lafayette Road Saint Paul, MN 55117	Electronic Service	Yes
First Name	Last Name	Email	Company Name	Address	Delivery Method	View Trade Secret
Patricia	DeBleedkere	tricia.debleedkere@state.mn.us	Public Utilities Commission	Suite 350 121 Seventh Place East St. Paul, MN 55101	Electronic Service	No
Tracy	Smetana	tracy.smetana@state.mn.us	Public Utilities Commission	121 7th Place East Suite 350 St. Paul, MN 55101	Electronic Service	No