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November 6, 2015

VIA ELECTRONIC FILING

The Honorable Jeanne M. Cochran Office of Administrative Hearings P.O. Box 64620 600 North Robert Street St. Paul, MN 55164-0620

Re: Minnesota Power's Proposed Findings of Fact

In the Matter of the Application of Minnesota Power for a Route Permit for the

Line 16 Reroute Project in St. Louis County

MPUC Docket No. E015/TL-14-977 OAH Docket No. 68-2500-32500

Dear Judge Cochran:

Minnesota Power provides the enclosed proposed Findings of Fact for its Line 16 Reroute Project in St. Louis County ("Project"). Minnesota Power appreciates the opportunity to provide its proposed Findings of Fact for the Project. Minnesota Power respectfully requests that the Administrative Law Judge recommend that the Minnesota Public Utilities Commission grant a Route Permit for Minnesota Power's Application Route which is depicted on Figure 1 of the Environmental Assessment. Minnesota Power further requests that the Administrative Law Judge adopt the proposed Findings of Fact enclosed with this letter.

Please contact me if you have any questions or concerns.

Sincerely,

Davis R. Molle

David R. Moeller

Enclosures

cc: Mr. Michael Kaluzniak

Mr. Bill Storm

Service List (w/enc.)

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 Line 16 Reroute Project in St. Louis County PUC Docket No. E015/TL-14-977 OAH Docket No. 68-2500-32500

Minnesota Power's Proposed Findings of Fact, Conclusions of Law, and Recommendations

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STATE OF MINNESOTA OFFICE OF ADMINISTRATIVE HEARINGS FOR PUBLIC UTILITIES COMMISSION

IN THE MATTER OF THE APPLICATION OF MINNESOTA POWER FOR A ROUTE PERMIT FOR THE LINE 16 REROUTE PROJECT IN ST. LOUIS COUNTY

PUC DOCKET NO. E015/TL-14-977 OAH DOCKET NO. 68-2500-32500

FINDINGS OF FACT, CONCLUSIONS OF LAW, AND RECOMMENDATIONS

A public hearing was held before The Honorable Jeanne M. Cochran, Administrative Law Judge ("ALJ"), on October 27, 2015 at the Eveleth City Hall, 413 Pierce Street, Eveleth, MN 55734 at 7:00 p.m.

David Moeller, Senior Attorney, appeared on behalf of Minnesota Power ("Applicant" or the "Company"), 30 West Superior Street, Duluth, MN 55802-2093. Daniel McCourtney, Environmental Compliance Specialist, and Nicholas Boldt, Transmission Planning Engineer, also attended on behalf of Minnesota Power.

Bill Storm, Environmental Review Manager, 445 Minnesota Street, Suite 1500, St. Paul, MN 55101 appeared on behalf of the Department of Commerce, Energy Environmental Review and Analysis ("EERA").

Michael Kaluzniak, Minnesota Public Utilities Commission ("Commission") Staff, 121 Seventh Place East, Suite 350, St. Paul, MN 55101 appeared on behalf of the Commission.

STATEMENT OF ISSUE

Has Applicant satisfied the factors set forth in Minnesota Statutes Section 216E.03¹ and Minnesota Rules Chapter 7850 for a Route Permit for the 16 Line Reroute Project located in St. Louis County, Minnesota south of the City of Eveleth, Minnesota?

Based on information in the Route Permit Application ("Application") to the Commission, the Environmental Assessment ("EA"), the testimony at the public

¹ Unless otherwise noted, all Minnesota Statutes and Minnesota Rules referenced are to the 2014 editions.

hearing, written comments and exhibits received in this proceeding,² the ALJ makes the following:

FINDINGS OF FACT

I. PROCEDURAL SUMMARY

- 1. Minnesota Power is an investor-owned utility headquartered in Duluth, Minnesota. Minnesota Power supplies retail electric service to 144,000 retail customers and wholesale electric service to 16 municipalities in 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.³
- 2. The proposed 16 Line High Voltage Transmission Line ("HVTL") Project ("Project") includes the relocation of one, approximately three-mile, 115 kilovolt ("kV") HVTL located south of Fayal Township and approximately four miles east of McDavitt Township in St. Louis County, Minnesota. The Project would connect Minnesota Power's existing 16 Line on the east side of United Taconite's existing tailings basin and proceed approximately three miles to the south and west to reconnect to Minnesota Power's existing 16 Line. The Project is intended to relocate a portion of the 16 Line that United Taconite has identified as conflicting with its planned tailings basin expansion. The existing 16 Line to be relocated is on property leased from United Taconite and the lease agreement provides that if United Taconite requests relocation of the existing line, Minnesota Power must complete that relocation in a timely manner.⁴
- 3. On November 17, 2014, 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.⁵
- 4. On January 16, 2015, Minnesota Power submitted its Application for the Project.⁶

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² Exhibits include the documents filed on eDockets not assigned exhibit numbers at the public hearing. These documents are identified herein by the corresponding eDocket Document Number.

³ Ex. 4 at 7 (Application).

⁴ Ex. 4 at 9 (Application); Ex. 45 at 2 (Environmental Assessment ("EA")); Ex. 12 (Minnesota Power Comment Letter).

⁵ Ex. 1 (Notice of Intent to File Application).

⁶ Ex. 4 (Application).

- 5. On January 26, 2015, the Commission issued a Notice of Comment Period on Application Completeness.⁷
- 6. On February 3, 2015, EERA staff filed its comments and recommendations regarding the completeness of the Application and recommended the Application be found complete.⁸
- 7. On February 6, 2015, Minnesota Power filed comments acknowledging EERA staff's review of the Application and requesting that the Commission find the Application complete.⁹
- 8. On February 13, 2015, the Commission issued Notice of Meeting on Application Completeness for February 26, 2015. 10
- 9. On February 18, 2015, Commission staff filed briefing papers recommending the Commission find the Application complete, to appoint a Commission staff person as the Project's public advisor, to take no action on an advisory task force at this time, to grant a variance of the 10-day timeline to 40 days to allow for analysis of route alternatives to include in the EA, to direct staff to contact state agencies and request their participation in the development of the record, to direct staff to file a generic route permit template into the record, to request EERA to begin the environmental review process and perform related administrative tasks, and to request that EERA present draft route alternatives to the Commission prior to issuance of the EA Scoping Decision.¹¹
- 10. On February 20, 2015, Minnesota Power filed proof of its compliance with the mailing and publication notice requirements of Minnesota Statutes Sections 216E.03, subdivision 4 and 216E.04, subdivision 4; and Minnesota Rule 7850.2100, Subpart 4.¹²
- 11. On February 26, 2015, the Commission met to consider whether the Application was complete. 13

⁷ Ex. 20 (Notice of Comment Period on Application Completeness).

⁸ Ex. 40 (EERA Comments & Recommendations on Completeness).

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

¹⁰ Ex. 21 (Commission Meeting Notice on Completeness).

¹¹ Ex. 22 at 6-7 (Staff Briefing Papers on Completeness).

¹² Ex. 6 (Affidavits of Mailing and Publication of Notice of Application).

¹³ Ex. 25 (Commission Order Accepting Application as Complete).

- 12. On February 27, 2015, the Commission mailed a Notice of Public Information and EA Scoping Meeting to those persons on the General List maintained by the Commission, the agency technical representatives list, and the project contact list.¹⁴
- 13. The Notice of Public Information and EA Scoping Meeting was published in the *Mesabi Daily News* on March 3, 2015, and the *Hometown Focus* on March 6, 2015, as required under Minnesota Statutes Sections 216E.03, subdivision 4 and 216E.04, subdivision 4; and Minnesota Rule 7850.2100, Subpart 2.¹⁵
- 14. On March 17, 2015, the Commission issued its Order Accepting the Application as Complete. ¹⁶ In addition to finding the Application complete, the Commission appointed a Commission staff person as the Project's public advisor, took no action on an advisory task force at this time, to grant a variance of the 10-day timeline to 40 days to allow for analysis of route alternatives to include in the EA, directed staff to contact state agencies and request their participation in the development of the record, to direct staff to file a generic route permit template into the record, requested EERA to begin the environmental review process and perform related administrative tasks, and requested that EERA present draft route alternatives to the Commission prior to issuance of the EA Scoping Decision to facilitate Commission input.¹⁷
- 15. On March 23, 2015, the Commission Staff and EERA held a Public Information and EA Scoping Meeting at the Eveleth City Hall in Eveleth, MN.¹⁸
- 16. On April 3, 2015, the scoping comment period ended.¹⁹ Three written comments were received: one from Minnesota Power, one from the Minnesota Department of Natural Resources ("MnDNR") and one from the Minnesota Department of Transportation ("MnDOT").²⁰

¹⁴ Ex. 23 (Notice of Public Information and EA Scoping Meetings Affidavit of Service).

¹⁵ Ex. 7 (Notice of Public Information and EA Scoping Meetings Affidavit of Publication).

¹⁶ Ex. 25 (Completeness Order).

¹⁷ *Id.* at 4-5 (Completeness Order).

¹⁸ Ex.43 at 5 (EERA Comments and Recommendations – Alternative Routes); Ex. 45 at 5 (EA).

¹⁹ Ex.43 at 5 (EERA Comments and Recommendations – Alternative Routes); Ex. 45 at 5 (EA).

²⁰ Ex. 27 (MnDNR EA Scoping Comments); Ex. 28 (MnDOT EA Scoping Comments); Ex. 8 (Minnesota Power Comments – Environmental Assessment Scoping Comment); Ex. 43 at 5 (EERA Comments and Recommendations – Alternative Routes); Ex. 45 at 5-6 (EA).

- 17. On April 17, 2015, EERA issued a memorandum to the Commission on the EA scoping process and its recommendation on routes and alternatives to include in the EA.²¹
- 18. On April 17, 2015, the Commission issued a Notice of Commission Meeting noting that it would consider what action it should take in regard to route alternatives to be evaluated in the EA at its regular meeting on April 30, 2015.²²
- 19. On April 22, 2015, Commission staff issued briefing papers on the EA scoping process and alternative routes and recommended that two alternative segments not previously proposed during the scoping process be included in the EA.²³
- 20. On April 27, 2015, Minnesota Power submitted comments on the April 22, 2015 Commission staff briefing papers that it was supportive of EERA's recommendation made on April 17, 2015 that no routes other than the route proposed by Minnesota Power in its Application be included in the EA but if the Commission directed EERA to include any of the alternative segments developed by Commission staff in the EA, Minnesota Power would provide any necessary information in a timely manner.²⁴
- 21. On April 29, 2015, EERA submitted comments that it did not support adding the two alternative segments developed by Commission staff to the EA as "no issue requiring mitigation or area of concern requiring avoidance has been identified."²⁵
- 22. On April 30, 2015, the Commission met to consider EERA's memorandum on the EA scoping process. The Commission elected to direct EERA to include the two alternative segments developed by Commission staff in the EA and referred the Application to the Office of Administrative Hearings for a summary proceeding. In its Order, the Commission requested: 1) that the ALJ emphasize the statutory time frame for the Commission to make a final decision on the Application; 2) that the ALJ ask the parties to address whether the Project meets the selection criteria of Minnesota Statutes Section 216E.03, subdivision 7 and Minnesota Rule 7850.4100; 3) that EERA submit to the ALJ the EA prior to the public hearing; and 4) that the ALJ prepare a report for the Commission setting forth findings, conclusions, and recommendations on the merits of the

²¹ Ex. 41 (EERA Comments and Recommendations – Alternative Routes).

²² Ex. 29 (Notice of Commission Meeting – April 30, 2015).

²³ Ex. 30 (Staff Briefing Papers – April 30, 2015 Agenda).

²⁴ Ex. 10 (Comments on Staff Request to Include Alternatives in the EA).

²⁵ Ex. 43 (EERA Comments – On Alternative Routes).

Project, alternatives, and a preferred route, applying the routing criteria set forth in statute and rule and provide comments and recommendations, if any, on the conditions and provisions of the proposed permit.²⁶

- 23. On May 19, 2015, the Office of Administrative Hearings issued a Notice of Prehearing Conference.²⁷
- 24. On May 20, 2015, the Department of Commerce issued its EA Scoping Decision. ²⁸
- 25. On May 27, 2015, ALJ Cochran held a prehearing conference via telephone. David R. Moeller, Senior Attorney, Minnesota Power, and Kodi Jean Verhalen, Briggs and Morgan, P.A., appeared on behalf of Minnesota Power. Dan McCourtney of Minnesota Power also appeared. Michael Kaluzniak, Senior Facilities Planner, and Tracy Smetana, Public Advisor, of the Commission were present. Deborah Pile, Director, and Bill Storm, Environmental Review Manager, participated on behalf of EERA.²⁹
 - 26. On June 2, 2015, ALJ Cochran issued the First Prehearing Order.³⁰
- 27. On June 19, 2015, Minnesota Power filed information requested by EERA for its development of the EA related to the alternative segments the Commission directed to be included in the EA.³¹
- 28. On August 3, 2015, ALJ Cochran issued the Second Prehearing Order scheduling a prehearing conference to revise the public hearing schedule and subsequent procedural deadlines to accommodate EERA's development of the EA.³²
- 29. On August 17, 2015, ALJ Cochran issued the Third Prehearing Order setting the date for the public hearing and subsequent procedural deadlines.³³

²⁶ Ex. 31 at 3-4 (Order Identifying Additional Routes for Environmental Review and Referring Application to Office of Administrative Hearings).

²⁷ Ex. 60 (First Notice of Prehearing Conference).

²⁸ Ex. 44 (EA Scoping Decision).

²⁹ Ex. 61 (Prehearing Conference Transcript 05/27/2015).

³⁰ Ex. 62 (First Prehearing Order).

³¹ Ex. 11 (Route Alternative Comparison as Requested by EERA).

³² Ex. 63 (Second Prehearing Order).

³³ Ex. 64 (Third Prehearing Order).

- 30. On October 5, 2015, EERA issued the EA for the Project and its Notice of Availability of the EA.³⁴
- 31. On October 12, 2015, the Commission filed proof of mailing of the notice of public hearing to landowners along the Project.³⁵
- 32. Notice of the public hearing was published in the *Mesabi Daily News* on October 9, 2015, and the *Hometown Focus* on October 9, 2015.³⁶
- 33. On October 12, 2015, EERA published notice of the EA Availability in the EQB Monitor.³⁷
- 34. On October 27, 2015, ALJ Cochran conducted a public hearing at the Eveleth City Hall in Eveleth, Minnesota at 7:00 p.m.³⁸ No members of the public attended the public hearing.³⁹
- 35. On October 28, 2015, Minnesota Power filed Comments Responding to an Issued Raised by PUC Staff.⁴⁰
- 36. On October 30, 2015, the public hearing comment period ended and the factual record closed.⁴¹ No additional public comments were submitted into the factual record.

II. DESCRIPTION OF THE PROJECT

37. The proposed Project includes the relocation of one, approximately three-mile, 115 kV HVTL located south of Fayal Township and approximately four miles east of McDavitt Township in St. Louis County, Minnesota. The Project would connect Minnesota Power's existing 16 Line on the east side of United Taconite's existing tailings basin and proceed approximately three miles to the south and west to reconnect to Minnesota Power's existing 16 Line. The Project is intended to relocate a portion of the 16 Line that United Taconite has identified as conflicting with its planned tailings basin expansion. The existing 16 Line to be

³⁴ Ex. 46 (Notice of Availability of the EA); Ex. 45 (EA).

 $^{^{\}rm 35}$ Ex. 33 (Certificate of Service to Landowners for Notice of Public Hearing).

 $^{^{36}}$ Ex. 13 (Affidavit of Publication – Notice of Public Hearing).

³⁷ Ex. 47 (Notice of Availability of EA published in the EQB Monitor).

³⁸ Ex. 65 Public Hearing Transcript (Pub. Hrg. Tr.).

³⁹ Ex. 65 at 6 (Pub. Hrg. Tr.).

⁴⁰ Ex. 66 (Minnesota Power Comments Responding to an Issue Raised by Commission Staff).

⁴¹ Ex. 64 at 2 (Third Prehearing Order).

relocated is on property leased from United Taconite and the lease agreement provides that if United Taconite requests relocation of the existing line, Minnesota Power must complete that relocation in a timely manner.⁴²

- 38. Minnesota Power proposes to primarily use H-Frame structures that will range in height from 60 to 75 feet for the Project with spans ranging from 500 to 800 feet between structures. Minnesota Power also proposes to use 3-Pole angle structures that will range in height from 60 to 75 feet. Pole height and span length will vary depending on topography and environmental constraints within the right-of-way.⁴³
- 39. The total right-of-way for the parallel 115 kV transmission lines is proposed to be 100 feet wide.⁴⁴
- 40. The Project is proposed to accommodate United Taconite's planned existing tailings basin expansion in Sections 17, 18, 19, and 20, T56N, R 17W. The existing 16 Line to be reconstructed to accommodate this expansion is located on property leased from United Taconite.⁴⁵

III. ROUTES EVALUATED

- 41. In this Alternative Permitting Process, Minnesota Power developed the route it included in its application ("Application Route") with consideration of the statutory and rule criteria set forth in Minnesota Statutes Section 216E.04 and Minnesota Rule 7850.4100 and the State of Minnesota's practice of non-proliferation of new infrastructure routes. The Application Route represented the route identified by Minnesota Power that had the least impacts on private residences and private, non-corporate, landowners. The Application Route also followed approximately 1.25 miles of existing railway to maximize right-of-way sharing. 46
- 42. The Application Route connects to Minnesota Power's existing 16 Line on the east side of United Taconite's existing tailings basin and proceeds southeast, parallel to an existing railroad grade for approximately 1.25 miles. The Application Route then turns and proceeds southwest for approximately 1.75

⁴² Ex. 4 at 9 (Application); Ex. 45 at 2 (EA).

⁴³ Ex. 4 at 13 (Application); Ex. 45 at 12-13 (EA).

⁴⁴ Ex. 4 at 13 (Application); Ex.45 at 12-13 (EA).

⁴⁵ Ex. 4 at 9 and Figure 2 (Application); Ex. 45 at 11 (EA).

⁴⁶ Ex. 4 at 11 (Application); Ex. 45 at 11 (EA).

miles where it, again, connects to Minnesota Power's existing 16 Line. The Application Route is approximately 3.0 miles in length.⁴⁷

- 43. Minnesota Power stated that during its evaluation of potential alternative route segments for the Project the range of potential alternatives was constrained by a need to connect to existing infrastructure, the small geographic area of the proposed Project. Minnesota Power also sought to develop a route that maximized the use of existing infrastructure in the area and avoid wetland and peat soils rather than the mineral soils along the Application Route to support the Project's heavy angle structures.
- 44. As part of the EA Scoping Decision development, the Commission directed EERA to include two additional alternative segments for the Project in the $\rm EA.^{50}$
- 45. The first alternative segment ("Alternative Route 2") connects to Minnesota Power's existing 16 Line on the east side of United Taconite's existing tailings basin and proceeds southeast approximately 0.65 miles parallel to an existing railroad grade. Alternative Route 2 then turns and proceeds south for approximately 1.10 miles before it turns and proceeds west for approximately 0.60 miles to connect, again, to the existing Minnesota Power 16 Line. Alternative Route 2 is approximately 1.7 miles in length. ⁵¹
- 46. The second alternative segment ("Alternative Route 3") connects to Minnesota Power's existing 16 Line on the east side of United Taconite's existing tailings basin and proceeds southeast approximately 0.65 miles parallel to an existing railroad grade. Alternative Route 3 then turns and proceeds south for approximately 1.30 miles before it turns and proceeds southwest for approximately 0.75 miles to connect, again, to the existing Minnesota Power 16 Line. Alternative Route 3 is approximately 2.7 miles in length. 52
- 47. The Project is proposed to be located in Sections 16, 17, 18, 20, 21, 28, and 29, T56N, R17W. The Application Route, Alternative Route 2, and

⁴⁷ Ex. 4 at 1 and Figure 1 (Application); Ex .45 at 11 (EA).

⁴⁸ Ex. 4 at 12 (Application); Ex. 45 at 19 (EA).

⁴⁹ Ex. 9 (Minnesota Power EA Scoping Comment); Ex. 45 at 6 (EA).

⁵⁰ Ex. 31 at 3 (Order Identifying Additional Routes for Environmental Review and Referring Application to Office of Administrative Hearings).

⁵¹ Ex. 11 at 3 (Route Alternative Comparison as Requested by EERA); Ex. 45 at 19 (EA).

⁵² Ex. 11 at 3 (Route Alternative Comparison as Requested by EERA); Ex. 45 at 19 (EA).

Alternative Route 3 would be located in the same Township, Range, and Sections.⁵³

IV. TRANSMISSION LINE STRUCTURE TYPES, AND SPANS

- 48. For the Project, Minnesota Power proposes to use overhead construction with wood structures. Wood poles would be direct embedded and may require guying at, but not limited to, angle locations.⁵⁴
- 49. 3-Pole angle structures and H-Frame structures will range in height from 60 feet to 75 feet with structure diameters ranging from 16 feet to 32 feet. 55
- 50. Spans between 115 kV structures are proposed to range from 500 feet to 800 feet. 56

V. TRANSMISSION LINE CONDUCTORS

51. For the Project, Minnesota Power proposes to use shield wire(s) for lightening protection and 336.4 kcmil aluminum conductor steel reinforced conductor.⁵⁷

VI. TRANSMISSION LINE ROUTE WIDTHS

52. For the Project, Minnesota Power has requested a route width of 500 feet.⁵⁸

VII. TRANSMISSION LINE RIGHT-OF-WAY

- 53. The Project will require a 100-foot right-of-way. 59
- 54. The Application Route follows existing infrastructure for approximately 1.25 miles. 60

⁵³ Ex. 11 at 2 and Figure 2 (Route Alternative Comparison as Requested by EERA); Ex. 45 at 19 and Figure 3 (EA).

⁵⁴ Ex. 4 at 13 and 17 (Application); Ex. 45 at 14 (EA).

⁵⁵ Ex. 4 at 13 (Application); Ex. 45 at 13 (EA).

⁵⁶ Ex. 4 at 13 (Application); Ex. 11 at Table 2; Ex. 45 at 13 (EA).

⁵⁷ Ex. 12 (Minnesota Power Public Hearing Comment Letter).

 $^{^{58}}$ Ex. 4 at 7 (Application); Ex. 45 at 12 (EA).

⁵⁹ Ex. 4 at 13 (Application); Ex. 45 at 12 (EA).

⁶⁰ Ex. 11 at 3 (Route Alternative Comparison as Requested by EERA); Ex. 45 at 11 (EA).

- 55. Alternative Route 2 follows existing infrastructure for approximately 0.65 miles. 61
- 56. Alternative Route 3 follows existing infrastructure for approximately 0.65 miles.⁶²

VIII. PROJECT SCHEDULE

57. Minnesota Power anticipates a third quarter 2016 in-service date for the Project. 63

IX. PROJECT COSTS

- 58. Minnesota Power estimates that construction of the Project along the Application Route will cost approximately \$4.7 million.⁶⁴
- 59. Construction of the Project along Alternative Route 2 is estimated to cost approximately \$397,000 to \$534,000 more than if constructed along the Application Route if mine tailings or granular fill, respectively, are used for construction. These increased costs are attributable to the wetland and peat soils located along Alternative Route 2 instead of the more stable mineral soils found along the Application Route. 66
- 60. Construction of the Project along Alternative Route 3 is estimated to cost approximately \$832,000 to \$862,000 more than if constructed along the Application Route if mine tailings or granular fill, respectively, are used for construction. These increased costs are attributable to the wetland and peat soils located along Alternative Route 2 instead of the more stable mineral soils found along the Application Route. 68

⁶¹ Ex. 11 at 3 (Route Alternative Comparison as Requested by EERA); Ex. 45 at 19 (EA).

⁶² Ex. 11 at 3 (Route Alternative Comparison as Requested by EERA); Ex. 45 at 19 (EA).

⁶³ Ex. 4 at 10 (Application); Ex. 45 at 17 (EA). The Application initially contemplated a first quarter 2016 in-service date, based on obtaining a Route Permit in the third quarter 2015. Because of the agreed-upon two quarter delay in the Route Permit process, Minnesota Power is now estimating a third quarter 2016 in-service date.

⁶⁴ Ex. 4 at 10 (Application); Ex. 45 at 18 (EA).

⁶⁵ Ex. 11 at 3 (Route Alternative Comparison as Requested by EERA); Ex. 45 at 62 (EA).

⁶⁶ Ex. 8 (Minnesota Power EA Scoping Comment); Ex. 45 at 62 (EA).

⁶⁷ Ex. 11 at 3 (Route Alternative Comparison as Requested by EERA); Ex. 45 at 62 (EA).

⁶⁸ Ex. 8 (Minnesota Power EA Scoping Comment); Ex. 45 at 62 (EA).

X. PERMITTEE

61. The permittee for the Project is Minnesota Power.⁶⁹

XI. PUBLIC AND LOCAL GOVERNMENT PARTICIPATION

A. <u>Public Comments</u>

- 62. One person attended the Public Information and EA Scoping Meeting on March 23, 2015. No individuals took the opportunity to speak on the record at that meeting.⁷⁰
- 63. No written comments were received from the public on the scope of the EA.⁷¹
- 64. No members of the public attended the public hearing on October 27, 2015.⁷²
- 65. Minnesota Power did respond to questions from Commission Staff related to corrections on the route alternative proposed by Commission Staff. On October 28, 2015, Minnesota Power submitted a corrected table utilizing the DOC-EERA's EA. 74

B. <u>Local Government and State Agency Participation</u>

1. <u>Minnesota Department of Transportation</u>

66. Stacy Kotch, Utility Transmission Route Coordinator, for MnDOT submitted written comments on the scope of the EA on April 2, 2015. Ms. Kotch stated that the Application Route does not appear to abut a state trunk highway but sought to be informed in the Project area were revised.⁷⁵

⁶⁹ Ex. 4 at 8 (Application); Ex. 45 at 1 (EA).

⁷⁰ Ex. 41 at 3 (EERA Comments and Recommendations – Alternative Routes).

⁷¹ *Id.*

⁷² Ex. 65 at 6 (Pub. Hrg. Tr.).

⁷³ Ex. 65 at 9-16 (Pub. Hrg. Tr.).

⁷⁴ Fx. 66 (Minnesota Power Comments Responding to an Issue Raised by Commission Staff).

⁷⁵ Ex. 28 (MnDOT EA Scoping Comments).

2. Minnesota Department of Natural Resources

67. On April 1, 2015, Rian Reed, Regional Environmental Assessment Ecologist for the MnDNR, submitted written comments on the scope of the EA. The MnDNR commented that it previously informed Minnesota Power that the proposed Project (using the Application Route) "is not likely to negatively affect any known occurrences of rare features" and that it had no other comments or concerns at the time of filing the comment.⁷⁶

FACTORS FOR A ROUTE PERMIT

- 68. 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."
- 69. Under the PPSA, the Commission and the ALJ 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 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;

⁷⁶ Ex. 27 (MnDNR EA Scoping Comments).

⁷⁷ Minn. Stat. § 216E.03, subd. 7.

- (4) evaluation of the potential for beneficial uses of waste energy from proposed large electric power generating plants;⁷⁸
- (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 subdivision 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.⁷⁹
- 70. 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 the use of parallel existing highway right-of-way and, to the extent those are not used for the route, the [C]omission must state the reasons."
- 71. In addition to the PPSA, the Commission and the ALJ are governed by Minnesota Rule 7850.4100, which mandates consideration of the following

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⁷⁸ Factor 4 is not applicable because Minnesota Power is not proposing to site a large electric generating plant.

⁷⁹ Minn. Stat. § 216E.03, subd. 7.

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;⁸⁰
- 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.81

⁸⁰ This factor is not applicable because it applies only to power plant siting.

⁸¹ Minn, R. 7850,4100.

72. There is sufficient evidence on the record for the ALJ to assess the Application Route using the criteria and factors set out above.

APPLICATION OF STATUTORY AND RULE FACTORS

XII. APPLICATION OF ROUTING FACTORS

73. This proceeding considered the Application Route, Alternative Route 2, and Alternative Route 3.82

A. Effects on Human Settlement

- 74. Minnesota statutory and rule HVTL routing factors require consideration of the proposed transmission line route's effect on human settlement, including displacement of residences and business; noise created during construction and by operation of the Project; and impacts to aesthetics, cultural values, recreation, and public services.⁸³
- 75. The land crossed by the Application Route includes areas zoned as industrial, residential, and forest agricultural management. Approximately 1.6 acres of the Application Route is zoned residential.⁸⁴
- 76. The land crossed by Alternative Route 2 includes land zoned as industrial and forest agricultural management.⁸⁵
- 77. The land crossed by Alternative Route 3 includes land zoned as industrial, residential, and forest agricultural management. Approximately 1.3 acres of Alternative Route 3 is zoned residential.⁸⁶

1. <u>Displacement</u>

- 78. There are no residences located within 1,000 of the Application Route, Alternative Route 2, or Alternative Route 3.87
 - 79. No displacement is anticipated as a result of the Project.⁸⁸

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

⁸² Ex. 45 at 19 (EA).

⁸⁴ Ex. 11 at 6 (Route Alternative Comparison as Requested by EERA); Ex. 45 at 46 (EA).

⁸⁵ Ex. 11 at 6 (Route Alternative Comparison as Requested by EERA); Ex. 45 at 61 (EA).

⁸⁶ Ex. 11 at 6 (Route Alternative Comparison as Requested by EERA); Ex. 45 at 61 (EA).

⁸⁷ Ex. 11 at 6 (Route Alternative Comparison as Requested by EERA); Ex. 45 at 31 (EA).

⁸⁸ Ex. 4 at 29 (Application); Ex. 45 at 31 (EA).

2. Noise

- 80. The MPCA has established standards for the regulation of noise levels.⁸⁹
- 81. The most restrictive MPCA noise limits are 60-65 A-weighted decibel ("dBA") during the daytime and 50-55 dBA during the nighttime. ⁹⁰
- 82. Noise concerns for the Project may be associated with construction and operation of the transmission lines. 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 maintenance of transmission lines are minimal and do not exceed the MPCA Noise Limits outside the right-of-way.⁹¹
- 83. The audible noise levels for any of the routes under consideration for the Project would not exceed background noise levels and would, therefore, not be audible at any receptor location. The HVTL will be designed and constructed to comply with the noise standards established by the MPCA. 92

3. Aesthetics

- 84. The routes under consideration for the Project are located in areas zoned industrial and forest agricultural management. The Application Route and Alternative Route 3 also cross lands zoned residential. There are no residential structures located within 1,950 feet of any route under consideration for the project. 93
- 85. The Project will use wood structures. Structures will be H-Frame structures or 3-Pole angle structures. Direct embedded poles may require guying particularly at, but not limited to, angle structures.⁹⁴
- 86. Although the Project will be visible in the area, it is also in an area with active mining operations in close proximity. The Project will also remove an

⁸⁹ Ex. 4 at 31 (Application); Ex. 45 at 32 (EA).

⁹⁰ Ex. 4 at 31 (Application); Ex. 45 at 32 (EA).

⁹¹ Ex. 45 at 33 (EA).

⁹² Ex. 11 at 6 (Route Alternative Comparison as Requested by EERA); Ex. 45 at 33-34 (EA).

⁹³ Ex. 11 at 7 (Route Alternative Comparison as Requested by EERA); Ex. 45 at 31, 36 (EA).

⁹⁴ Ex. 4 at 13 and 17 (Application); Ex. 45 at 12-13 (EA).

existing segment of overhead transmission line in the area. The Project is not anticipated to have adverse effects on aesthetics. ⁹⁵

4. Cultural Values

- 87. The region surrounding the Project area has cultural values tied to German, Norwegian, Swedish, Finnish, English, Italian, and Native American heritages.⁹⁶
- 88. No impacts are anticipated to cultural values as a result of construction of the Project. 97

5. Recreation

- 89. The Project area provides outdoor recreation opportunities. The Project is not in the immediate vicinity of any recognized recreational area and is also not in the immediate vicinity of the two lakes located within one mile of the Project. ⁹⁸
- 90. The Project is not anticipated to result in adverse or significant impacts on recreation in the area. ⁹⁹

6. <u>Public Service and Infrastructure</u>

91. Public services in the Project area include emergency services provided by government entities, including hospitals, fire departments, and police departments, transportation corridors and projects, water supply, wastewater disposal systems, gas services, and electricity services.¹⁰⁰

⁹⁵ Ex. 4 at 34 (Application); Ex. 45 at 36 (EA).

⁹⁶ Ex. 4 at 35 (Application).

⁹⁷ Ex. 4 at 35 (Application); Ex. 11 at 7 (Route Alternative Comparison as Requested by EERA); Ex. 45 at 30 (EA).

⁹⁸ Ex. 4 at 35 (Application); Ex. 11 at 7 (Route Alternative Comparison as Requested by EERA); Ex. 45 at 45 (EA).

⁹⁹ Ex. 4 at 36 (Application); Ex. 11 at 7 (Route Alternative Comparison as Requested by EERA); Ex. 45 at 45 (EA).

¹⁰⁰ Ex. 4 at 36 (Application); Ex. 11 at 7 (Route Alternative Comparison as Requested by EERA); Ex. 45 at 48 (EA).

92. Direct impacts on public services within the Project area will be avoided.¹⁰¹

B. <u>Effects on Public Health and Safety</u>

93. Minnesota high voltage transmission line routing factors require consideration of the Project's effect on health and safety. 102

1. <u>Construction and Operation of Facilities</u>

- 94. The Project will be designed in compliance with local, state, National Electric Safety Code, and Minnesota Power standards regarding clearance to ground, clearance to crossing utilities, clearance to buildings, strength of materials, and right-of-way widths. 103
- 95. Minnesota Power construction crews and/or contract crews will comply with local, state, NESC, and Minnesota Power standards regarding installation of facilities and standard construction practices. Minnesota Power and industry safety procedures will be followed during and after installation of the transmission lines. This will include clear signage during all construction activities. 104
- 96. The Project will be equipped with protective devices that will deenergize the line if an accident occurs, such as a structure or conductor falling to the ground. 105

2. <u>Electric and Magnetic Fields</u>

- 97. There are no official state or federal standards for transmission line electric fields. 106
- 98. The Commission has incorporated a maximum electric field limit of 8 kV/m measured at one meter above the ground at the edge of the right-of-way into Route Permits for transmission lines. 107

¹⁰¹ Ex. 4 at 36 (Application); Ex. 11 at 7 (Route Alternative Comparison as Requested by EERA); Ex. 45 at 49 (EA).

¹⁰² Minn. Stat. § 216E.03, subd. 7(b)(1); Minn. R. 7850.4100(B).

 $^{^{\}rm 103}$ Ex. 4 at 13 and 28 (Application); Ex. 45 at 36 (EA).

 $^{^{104}}$ Ex. 4 at 28-29 (Application); Ex. 45 at 36 (EA).

¹⁰⁵ Ex. 4 at 29 (Application); Ex. 45 at 36 (EA).

¹⁰⁶ Ex. 4 at 21 (Application); Ex. 45 at 38 (EA).

¹⁰⁷ Ex. 4 at 21 (Application); Ex. 45 at 38 (EA).

- 99. 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. 108
- 100. There are no federal or State regulations for the permitted strength of magnetic fields from transmission lines. Some states have set magnetic field limits ranging from 150 mG to 250 mG at the edge of the transmission line right-of-way. 109
- 101. All of the routes under consideration for the Project will have the same calculated magnetic fields during operation. 110
- 102. Magnetic fields have been the subject of study and research for over 25 years. 111
- 103. Research has not been able to establish a cause and effect relationship between exposure to magnetic fields and adverse health effects. 112
- 104. 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, ALJ Luis found that: "The absence of any demonstrated impact by EMF-ELF (sic) 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-ELF (sic) is adequately protective of human health and safety."
- 105. Similarly, in the route permit proceeding for the St. Cloud–Fargo 345 kV transmission line, ALJ 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.

¹⁰⁸ Ex. 4 at 22 (Application); Ex. 11 at 5 (Route Alternative Comparison as Requested by EERA); Ex. 45 at 37 (EA).

¹⁰⁹ Ex. 4 at 23 (Application); Ex. 45 at 41 (EA).

¹¹⁰ Ex. 4 at 24 (Application); Ex. 11 at 5 (Route Alternative Comparison as Requested by EERA); Ex. 45 at 38 (EA).

¹¹¹ Ex. 45 at 41 (EA).

¹¹² Ex. 45 at 44 (EA).

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).

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."¹¹⁴

106. There is no indication that any significant impact on human health and safety will arise from the Project.

C. <u>Effects on Land-Based Economies and Direct and Indirect Economic Impacts</u>

- 107. Minnesota's high voltage transmission line routing factors require consideration of the Project's impacts to land-based economies, specifically agriculture, forestry, tourism, and mining.¹¹⁵
- 108. There is no prime farmland or prime farmland if drained within the Application Route, Alternative Route 2, or Alternative Route 3. There are no croplands within any of the routes under consideration for the Project. 116
- 109. There are no known tree farms or federal or state forests located within the Application Route, Alternative Route 2, or Alternative Route 3. 117
- 110. There are no defined tourism or recreational areas within the Application Route, Alternative Route 2, or Alternative Route 3. 118
- 111. All three routes under consideration for the Project would allow for United Taconite to complete its planned expansion of its existing tailings basin. Alternative Route 2 and Alternative Route 3 would be located in close proximity to the basin expansion. ¹¹⁹

¹¹⁴ 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).

¹¹⁵ Minn. Stat. § 216E.03, subd. 7(b)(5); Minn. R. 7850.4100(C).

¹¹⁶ Ex. 11 at 8 (Route Alternative Comparison as Requested by EERA); Ex. 45 at 46, 66 (EA).

¹¹⁷ Ex. 11 at 8 (Route Alternative Comparison as Requested by EERA); Ex. 45 at 46, 66 (EA).

¹¹⁸ Ex. 11 at 8 (Route Alternative Comparison as Requested by EERA); Ex. 45 at 45, 66 (EA).

¹¹⁹ Ex. 11 at 8 (Route Alternative Comparison as Requested by EERA); Ex. 45 at 46, 66 (EA).

112. No impacts to land-based economies are anticipated as a result of the Project. Because Alternative Route 2 and Alternative Route 3 would be located in close proximity to the tailings basin expansion, selection of one of these two routes for the Project future expansion or maintenance by United Taconite which may require the line to be relocated again in the future. 120

D. Effects on Archeological and Historic Resources

- 113. Minnesota Rule 7850.4100(D) requires consideration of the effects on historic and archaeological resources.
- 114. No archaeological or historic resources have been documented within one mile of the Application Route, Alternative Route 2, or Alternative Route 3.121
- 115. No impacts to archaeological or historic resources are anticipated as a result of construction of the HVTL along any of the three routes under consideration for the Project. 122

E. Effects on Natural Environment

116. Minnesota's high voltage transmission line routing factors require consideration of the proposed route's effect on the natural environment, including effects on air and water quality resources and flora and fauna.¹²³

1. Air Quality

117. 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. 124

¹²⁰ Ex. 11 at 8 (Route Alternative Comparison as Requested by EERA); Ex. 45 at 46, 61, 66 (EA).

¹²¹ Ex. 4 at 38 (Application); Ex. 11 at 9 (Route Alternative Comparison as Requested by EERA); Ex. 45 at 49 (EA).

¹²² Ex. 4 at 38 (Application); Ex. 11 at 9 (Route Alternative Comparison as Requested by EERA); Ex. 45 at 49 (EA).

¹²³ Minn. Stat. §§ 216E.03, subd. 7(b)(1) and (2); Minn. R. 7850.4100(E).

¹²⁴ Ex. 4 at 38-39 (Application); Ex. 11 at 9 (Route Alternative Comparison as Requested by EERA); Ex. 45 at 50-52 (EA).

118. No significant impacts to air quality are anticipated as part of the Project and the Route Permit will include a condition that construction activities follow best management practices.¹²⁵

2. Water Quality and Resources

- 119. No Public Water Inventory ("PWI") basins or Federal Emergency Management Agency floodplains are present within the Application Route, Alternative Route 2, or Alternative Route 3. 126
- 120. The Application Route crosses approximately 157.7 acres of forested/shrub wetlands. 127
- 121. Alternative Route 2 crosses approximately 144.5 acres of forested/shrub wetlands. 128
- 122. Alternative Route 3 crosses approximately 161.1 acres of forested/shrub wetlands. 129
- 123. Minnesota Power will submit the Minnesota Local/State/Federal Application Form for water/wetland projects to the U.S. Army Corps of Engineers' Two Harbors District, the MnDNR, and St. Louis County, as necessary, prior to commencing construction. 130
- 124. The Project's temporary impacts to water resources include the possibility of sediment reaching surface waters and wetlands as the ground is disturbed by excavation, grading, and construction traffic.¹³¹
- 125. The Route Permit will include a condition that Minnesota Power employ erosion control best management practices and obtain any required

¹²⁵ Ex. 4 at 39 (Application); Ex. 11 at 9 (Route Alternative Comparison as Requested by EERA); Ex. 45 at 52 (EA).

¹²⁶ Ex. 4 at 40 (Application); Ex. 11 at 9 (Route Alternative Comparison as Requested by EERA); Ex. 45 at 52 (EA).

¹²⁷ Ex. 11 at 10 (Route Alternative Comparison as Requested by EERA); Ex. 45 at 53 (EA).

¹²⁸ Ex. 11 at 10 (Route Alternative Comparison as Requested by EERA).

¹²⁹ Ex. 11 at 10 (Route Alternative Comparison as Requested by EERA).

¹³⁰ Ex. 45 at 54-55(EA).

¹³¹ Ex. 45 at 54-55 (EA).

permissions or approvals from State and federal agencies for work in waters and wetlands. 132

126. No impacts to groundwater are anticipated as part of the Project. 133

3. Flora

- 127. The Project is located within the Tamarack Lowlands Subsection of the Northern Minnesota Drift and Lake Plains Section, near the transition between the St. Louis Moraines and Toimi Uplands Subsections. The most common forest communities include lowland hardwoods and conifers as well as northern hardwood and aspen-birch forests.¹³⁴
- 128. The Application Route crosses approximately 4.89 acres of tamarack, 15 acres of lowland black spruce. 0.55 acres of aspen-birch, and 0.6 acres of pine land cover. 135
- 129. Alternative Route 2 crosses approximately 4.35 acres of tamarack and 14.62 acres of lowland black spruce land cover. 136
- 130. Alternative Route 3 crosses approximately 5.42 acres of tamarac, 17.87 acres of lowland black spruce, 0.55 acres of aspen-birch, and 0.05 acres of pine land cover. 137
- 131. To minimize impacts to trees in the Project area, Minnesota Power will limit tree clearing and removal to the transmission line right-of-way, areas that limit construction access to the Project area, and areas that impact the safe operation of the facilities. Impacts to non-forested areas would be temporary and would primarily occur during construction of the Project¹³⁸
- 132. To minimize the spread of invasive species, sensitive areas such as wetlands and high quality forests and prairies should be surveyed for invasive

¹³² Ex. 45 at Appendix C.

¹³³ Ex. 45 at 54 (EA).

¹³⁴ Ex. 4 at 28 (Application); Ex. 45 at 55 (EA).

¹³⁵ Ex. 11 at Table 5 (Route Alternative Comparison as Requested by EERA); Ex. 45 at 55 (EA).

¹³⁶ Ex. 11 at Table 5 (Route Alternative Comparison as Requested by EERA).

¹³⁷ Ex. 11 at Table 5 (Route Alternative Comparison as Requested by EERA).

¹³⁸ Ex. 4 at 42 (Application); Ex. 45 at 55-56 (EA).

species following restoration of the construction area. If new infestations are identified, measures should be taken to control the infestation. 139

4. Fauna

- 133. The Project area is comprised of grasslands, wetlands, and woodlands that provide habitat for a variety of wildlife. Wildlife that resides in the Project area will likely be temporarily displaced to adjacent habitats during the construction process.¹⁴⁰
- 134. Raptors, waterfowl, and other bird species could be impacted by the Project through collision with transmission line conductors.¹⁴¹
- 135. The electrocution of large birds, such as raptors, is more commonly associated with small distribution lines than large transmission lines. In addition, Minnesota Power's transmission line design standards provide adequate spacing to eliminate the risk of electrocution of large birds. 142
- 136. Such design standards and consultation with the MnDNR and USFWS on the placement of bird flight diverters are appropriate to include as a Route Permit condition.¹⁴³

F. <u>Effects on Rare and Unique Natural Resources</u>

- 137. Minnesota's high voltage transmission line routing factors require consideration of the proposed route's effect on rare and unique natural resources. 144
- 138. A review of the MnDNR's Natural Heritage Information System identified several State-listed species within the Project area although none are within the Application Route, Alternative Route 2, or Alternative Route 3. 145

¹³⁹ Ex. 4 at 42 (Application); Ex. 45 at 57 (EA).

¹⁴⁰ Ex. 4 at 42-43 (Application); Ex. 11 at 10 (Route Alternative Comparison as Requested by EERA); Ex. 45 at 57 (EA).

¹⁴¹ Ex. 4 at 43 (Application); Ex. 45 at 57-58 (EA).

 $^{^{142}}$ Ex. 4 at 43 (Application); Ex. 11 at 10 (Route Alternative Comparison as Requested by EERA); Ex. 45 at 58 (EA).

¹⁴³ Ex. 4 at 43 (Application); Ex. 11 at 10 (Route Alternative Comparison as Requested by EERA); Ex. 45 at 58 (EA).

¹⁴⁴ Minn. Stat. § 216E.03, subd. 7(b)(1); Minn. R. 7850.4100(F).

¹⁴⁵ Ex. 4 at 44 (Application); Ex. 11 at 11 (Route Alternative Comparison as Requested by EERA); Ex. 45 at 59 and Figure 5 (EA).

- 139. According to the United States Fish and Wildlife Service ("USFWS") website, the Canada lynx (*Lynx canadensis*), Gray Wolf (*Canis lupus*), the piping plover (*Charadrius melodus*), the rufa red knot (*Calidris canutus rufa*), and the northern long-eared bat, federally-listed species, is known to occur within St. Louis County. These species could be present along or near the Project area.¹⁴⁶
- 140. If Canada Lynx or Grey Wolf are present along the final route, impacts are not anticipated to be adverse as it would not limit their movements. Piping plover typically occupy shoreline and open sandy habitats not found along any of the routes under consideration for the Project. No rufa red knot are anticipated along any of the routes as the species utilizes shoreline during migration. There is suitable northern long-eared bat habitat near the Project. Tree removal will be limited to November 1 through March 31 to minimize the risk of adverse impact on the northern long-eared bat.¹⁴⁷

G. Application of Various Design Considerations

- 141. 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 could accommodate expansion of transmission or generating capacity.¹⁴⁸
- 142. The Project is designed with sufficient capacity to meet both existing and anticipated needs of the transmission system in the Project area. 149

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

- 143. Minnesota's high voltage transmission line routing factors require consideration of the proposed route's use or paralleling of existing rights-of-way, survey lines, natural division lines, and agricultural field boundaries. ¹⁵⁰
- 144. The Application Route makes the greatest use of existing rights-of-way (1.25 miles) followed by Alternative Route 2 and Alternative Route 3 (both at 0.65 miles).¹⁵¹

¹⁴⁶ Ex. 11 at 10 (Route Alternative Comparison as Requested by EERA); Ex. 45 at 59 (EA).

¹⁴⁷ Ex. 11 at 10 (Route Alternative Comparison as Requested by EERA); Ex. 45 at 59-60 (EA).

¹⁴⁸ Minn. Stat. § 216E.03, subd. 7(a) and (b); Minn. R. 7850.1900, Subp. 2(L).

¹⁴⁹ Ex. 12 (Minnesota Power Public Hearing Comment).

¹⁵⁰ Minn. Stat. § 216E.03, subd. 7(b)(9); Minn. R. 7850.4100(H).

¹⁵¹ Ex. 11 at 3 (Route Alternative Comparison as Requested by EERA); Ex. 45 at 67 (EA).

I. <u>Use of Existing Transportation, Pipeline, and Electrical Transmission</u> System Rights-of-Way

- 145. Minnesota's high voltage transmission line routing factors require consideration of the proposed routes' use or existing transportation, pipeline and electrical transmission system rights-of-way. 152
- 146. The Project area has limited transportation, pipeline, and electrical transmission system rights-of-way. An existing railway is followed to the greatest extent possible by each of the routes under consideration for the Project.¹⁵³

J. <u>Electrical System Reliability</u>

- 147. Minnesota's high voltage transmission line routing factors require consideration of the Project's impact on electrical system reliability. 154
 - 148. The Project will be constructed to meet reliability requirements. 155

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

- 149. Minnesota's high voltage transmission line routing factors require consideration of the proposed route's cost of construction, operation, and maintenance. 156
- 150. The estimated cost of the Project along the Application Route is approximately \$4.7 million. 157
- 151. Construction of the Project along Alternative Route 2 is estimated to cost approximately \$397,000 to \$534,000 more than if constructed along the Application Route if mine tailings or granular fill, respectively, are used for construction. 158
- 152. Construction of the Project along Alternative Route 3 is estimated to cost approximately \$832,000 to \$862,000 more than if constructed along the

¹⁵² Minn. Stat. § 216E.03, subd. 7(b)(8); Minn. R. 7850.4100(J).

¹⁵³ Ex. 11 at 3 (Route Alternative Comparison as Requested by EERA); Ex. 45 at 67 (EA).

¹⁵⁴ Minn. Stat. § 216E.03, subd. 7(b)(10); Minn. R. 7850.4100(K).

¹⁵⁵ Ex. 45 at 12 (EA).

¹⁵⁶ Minn. R. 7850.4100(L).

 $^{^{157}}$ Ex. 4 at 10 (Application); Ex. 11 at 3 (Route Alternative Comparison as Requested by EERA); Ex. 45 at 62 (EA).

¹⁵⁸ Ex. 11 at 3 (Route Alternative Comparison as Requested by EERA); Ex. 45 at 62 (EA).

Application Route if mine tailings or granular fill, respectively, are used for construction. 159

153. For all of the overhead designs, operating and maintenance costs for the transmission line will be nominal for several years since 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 \$585 per mile. 160

L. <u>Adverse Human and Natural Environmental Effects Which Cannot be Avoided</u>

- 154. Minnesota's high voltage transmission line routing factors require consideration of the adverse human and natural environmental effects, which cannot be avoided, for each proposed route. 161
- 155. Unavoidable adverse impacts include the physical impacts to the land due to the construction of the Project. 162
- 156. Minnesota Power will implement measures as identified by regulatory agencies to minimize unavoidable impacts. 163

M. <u>Irreversible and Irretrievable Commitments of Resources</u>

- 157. Minnesota's high voltage transmission line routing factors require consideration of the irreversible and irretrievable commitments of resources that are necessary for each proposed route.¹⁶⁴
- 158. 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

¹⁵⁹ Ex. 11 at 3 (Route Alternative Comparison as Requested by EERA); Ex. 45 at 62 (EA).

¹⁶⁰ Ex. 4 at 10 (Application).

¹⁶¹ Minn. Stat. §§ 216E.03, subd. 7(b)(5) and (6); Minn. R. 7850.4100(M).

¹⁶² Ex. 45 at 63 (EA).

¹⁶³ Ex. 45 at Section 5 (EA).

¹⁶⁴ Minn. Stat. § 216E.03, subd. 7(b)(11); Minn. R. 7850.4100(N).

reasonable time frame. Irretrievable resource commitments involve the loss in value of an affected resource that cannot be restored as a result of action. 165

- 159. There are few commitments of resources associated with this Project that are irreversible and irretrievable, but those few resources primarily relate to construction of the Project. 166
- 160. Only construction resources, such as concrete, steel, and hydrocarbon fuels, will irreversibly and irretrievably be committed to this Project. 167

XIII. NOTICE

- 161. Minnesota statutes and rules require Minnesota Power to provide certain notice to the public and local governments before and during the Application for a Route Permit process.¹⁶⁸
- 162. Minnesota Power provided notice to the public and local governments in satisfaction of Minnesota statutory and rule requirements. 169
- 163. Minnesota statutes and rules also require EERA and the Commission to provide certain notice to the public throughout the Route Permit process. 170
- 164. EERA and the Commission provided the notice in satisfaction of Minnesota statutes and rules. 171

¹⁶⁶ Ex. 45 at 63 (EA).

¹⁶⁵ Ex. 45 at 63 (EA).

¹⁶⁷ Ex. 45 at 63 (EA).

¹⁶⁸ Minn. Stat. § 216E.04, subd. 4; Minn. R. 7850.3300; Minn. R. 7850.2100, Subp. 2; Minn. R. 7850.2100, Subp. 4.

¹⁶⁹ Ex. 3 (Notice of Route Permit Application Submission).

¹⁷⁰ Minn. Stat. § 216E.04, subd. 6; Minn. R. 7850.3500; Minn. R. 7850.2300, Subp. 2; Minn. R. 7850.2500, Subp. 2; Minn. R. 7850.2500, Subp. 7; Minn. R. 7850.2500, Subp. 8; and Minn. R. 7850.2500, Subp. 9.

¹⁷¹ Ex. 20 (Notice of Comment Period on Application Completeness); Ex. 21 (Commission Meeting Notice on Completeness); Ex. 23 (Notice of Public Information and Scoping Meeting); Ex. 7 (Published Notice of Public Information and Scoping Meeting); Ex. 44 (EA Scoping Decision); Ex. 46 (Notice of Availability of EA); Ex. 47 (Notice of Availability of EA in EQB Monitor); Ex. 33 (Public Hearing Notice); Ex. 13 (Published Public Hearing Notice).

XIV. COMPLETENESS OF EA

- 165. The Commission is required to determine the completeness of the EA.¹⁷² An EA is complete if it and the record addresses the issues and alternatives identified in the Scoping Decision.¹⁷³
- 166. The evidence on the record demonstrates that the EA is adequate because the EA and the record created at the public hearing and during the subsequent comment period addresses the issues and alternatives raised in the Scoping Decision.¹⁷⁴

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

CONCLUSIONS

- 1. The Commission has jurisdiction to consider Minnesota Power's Application for a Route Permit.
- 2. The Commission determined that the Application was substantially complete and accepted the Application on March 17, 2015. 175
- 3. EERA has conducted an appropriate environmental analysis of the Project for purposes of this route permit proceeding and the EA satisfies Minnesota Rule 7850.3700. Specifically, the EA and the record address the issues and alternatives identified in the Scoping Decision to a reasonable extent considering the availability of information, includes the items required by Minnesota Rule 7850.3700, Subpart 4, and was prepared in compliance with the procedures in Minnesota Rule 7850.3700.
- 4. Minnesota Power gave notice as required by Minnesota Statutes Section 216E.04, subdivision 4; Minnesota Rule 7850.2100, Subpart 2; Minnesota Rule 7850.2100, Subpart. 4.
- 5. Notice was provided as required by Minnesota Statutes Section 216E.04, subdivision 6; Minnesota Rule 7850.3500, Subpart 1; Minnesota Rule 7850.3700, Subpart 2; Minnesota Rule 7850.3700, Subpart 3; Minnesota Rule 7850.3700, Subpart 6; and Minnesota Rule 7850.3800.

¹⁷² Minn. R. 7850.3900, Subp. 2.

¹⁷³ Id

¹⁷⁴ See Ex. 44 (EA Scoping Decision); Ex. 45 (EA).

¹⁷⁵ Ex. 25 (Completeness Order).

- 6. Public hearings were conducted in the community near the Project area. Proper notice of the public hearings was provided, and the public was given the opportunity to speak at the hearings and to submit written comments. All procedural requirements for the Route Permit were met.
- 7. The evidence on the record demonstrates that the Application Route, Alternative Route 2, and Alternative Route 3 all satisfy the route permit factors set forth in Minnesota Statutes Section 216E.04, subdivision 8 (referencing Minnesota Statutes Section 216E.03, subdivision 7) and Minnesota Rule 7850.4100.
- 8. The Application Route, Alternative Route 2, and Alternative Route 3 do not present the potential for significant adverse environmental effects pursuant to the Minnesota Environmental Rights Act and the Minnesota Environmental Policy Act.
- 9. The evidence on the record demonstrates that the Application Route is the best alternative on the record for the Project because it is the least costly alternative and provides the greatest future opportunity for further expansion of United Taconite's tailings basin without resulting in significant incremental impacts to other routing factors as compared to the other two routes under consideration.
- 10. If Alternative Route 2 of Alternative Route 3 were selected for the Project, they would be more costly to construct than the Application Route and have the greatest potential to require additional relocation and cost should United Taconite further expand its tailings basin.
- 11. The evidence on the record demonstrates that the Route Permit should be granted for the Application Route.
- 12. The evidence on the record demonstrates that the general Route Permit conditions are appropriate for the Project.
- 13. The Route Permit should require 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.
- 14. Any of the forgoing Findings more properly designated Conclusions are hereby adopted as such.

Based upon these Conclusions, the ALJ makes the following:

RECOMMENDATIONS

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

A Route Permit for an HVTL along Minnesota Power's Application Route, which is depicted on Exhibit A, taken from Minnesota Power's January 16, 2015 Application, in St. Louis County, Minnesota.

THIS REPORT IS NOT AN ORDER AND NO AUTHORITY IS GRANTED HEREIN. THE MINNESOTA PUBLIC UTILITIES COMMISSION WILL ISSUE THE ORDER THAT MAY ADOPT OR DIFFER FROM THE PRECEDING RECOMMENDATION.

Dated on		
	Jeanne M. Cochran	
	Administrative Law Judge	

IN THE MATTER OF THE APPLICATION OF MINNESOTA POWER FOR A ROUTE PERMIT FOR THE LINE 16 REROUTE PROJECT IN ST. LOUIS COUNTY

MPUC DOCKET NUMBER E015/TL-14-977 OAH DOCKET NO. 68-2500-32500

CERTIFICATE OF SERVICE

Jill N. Yeaman certifies that on the 6th day of November, 2015, she filed a true and correct copy of MINNESOTA POWER'S PROPOSED FINDINGS OF FACT, CONCLUSIONS OF LAW, AND RECOMMENDATIONS by posting the same on www.edockets.state.mn.us. Said document is also served via U.S. Mail or email as designated on the attached Service List on file with the Minnesota Public Utilities Commission in the above-referenced docket.

/s/ Jill N. Yeaman
Jill N. Yeaman

MPUC Docket No. E015/TL-14-977

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