

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 Canisteo 115 Kilovolt High  
Voltage Transmission Line (HVTL)  
Project in Itasca County

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

A public hearing was held before Administrative Law Judge Steve M. Mihalchick on April 15, 2014, at the Bovey City Hall, 402 Second Street, Bovey, Minnesota.

David Moeller, Senior Attorney, appeared on behalf of Minnesota Power (Minnesota Power or the Company). Daniel McCourtney, Environmental Compliance Specialist, and Nicholas Boldt, Transmission Planning Engineer, also attended on behalf of Minnesota Power.

William Cole Storm, Environmental Review Manager, appeared on behalf of the Department of Commerce, Energy Environmental Review and Analysis (EERA).

Michael Kaluzniak, Senior Energy Facility Planner, appeared on behalf of the staff of the Public Utilities Commission (Commission or PUC).

**STATEMENT OF ISSUE**

Has Applicant satisfied the factors set forth in Minnesota Statutes Section 216E.03 and Minnesota Rules Chapter 7850 for a Route Permit for the Canisteo 115 kilovolt (kV) transmission line project in and near the city of Coleraine and other areas in Itasca County, Minnesota?

**SUMMARY OF RECOMMENDATIONS**

The Administrative Law Judge recommends that the Commission issue to Minnesota Power a Route Permit for two High Voltage Transmission Lines (HVTLs) and a substation along Minnesota Power's Proposed Route, which is depicted on Figure 1 of the Environmental Assessment, in and near the city of Coleraine and other areas in Itasca County, Minnesota.

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

hearing, written comments, and exhibits received in this proceeding,<sup>1</sup> the Administrative Law Judge makes the following:

## FINDINGS OF FACT

### Procedural Summary

1. Minnesota Power is an investor-owned utility headquartered in Duluth, Minnesota. Minnesota Power supplies retail electric service to 141,000 retail customers and wholesale electric service to 16 municipalities in 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.<sup>2</sup>

2. The proposed HVTL Project (Project) includes construction of two parallel 115 kV HVTLs, each approximately 4.5 miles long, and a substation in and near Coleraine, Minnesota, in Itasca County. The proposed transmission lines would connect to Minnesota Power's existing 28 Line west of Highway 7, traverse south across Reilly Beach Road to the Canisteo Pit, then turn southwest and terminate at the proposed Canisteo Substation. The new substation would be constructed north of County Highway 61 and east of County Road (CR) 325 near the western edge of the Canisteo Pit.<sup>3</sup>

3. On September 6, 2013, 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.<sup>4</sup>

4. On October 9, 2013, Minnesota Power submitted its Application for the Project.<sup>5</sup>

5. On October 15, 2013, the Commission issued a Notice of Comment Period on Application Completeness.<sup>6</sup>

6. On October 25, 2013, Minnesota Power filed proof of its compliance with the mailing and publication notice requirements of Minnesota Statutes

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<sup>1</sup> Exhibits include the documents filed on eDockets not assigned exhibit numbers but identified by EERA in Exhibit (Ex.) 18. These documents are identified herein by the corresponding eDocket Document Number.

<sup>2</sup> Ex. 1 at 7 (Application).

<sup>3</sup> Ex. 15 at 2 (Environmental Assessment (EA)).

<sup>4</sup> Document ID 20139-91043-01, September 6, 2013 (Notice of Intent to File Application).

<sup>5</sup> Ex. 1 (Application).

<sup>6</sup> Ex. 2 (Notice of Comment Period on Application Completeness).

sections 216E.03, subdivision 4 and 216E.04, subdivision 4; and Minnesota Rules parts 7850.2100, subpart 4.<sup>7</sup>

7. On October 28, 2013, EERA staff filed its comments and recommendations regarding the completeness of the Application and recommended the Application be found complete.<sup>8</sup>

8. On November 14, 2013, the Commission issued Notice of Meeting on Application Completeness for November 26, 2013.<sup>9</sup>

9. On November 20, 2013, Commission staff filed briefing papers recommending the Commission find the Application complete.<sup>10</sup>

10. On November 26, 2013, the Commission met to consider whether the Application was complete.<sup>11</sup>

11. On November 26, 2013, the Commission issued a Notice of Public Information and EA Scoping Meeting.<sup>12</sup>

12. The Notice of Public Information and EA Scoping Meeting was published in the *Scenic Range News Forum* on December 5, 2013, as required under Minnesota Statutes sections 216E.03, subdivision 4 and 216E.04, subdivision 4; and Minnesota Rules part 7850.2100, subpart 2.<sup>13</sup>

13. On December 17, 2013, the Commission issued its Order Accepting the Application as Complete.<sup>14</sup> In addition to finding the Application complete, the Commission referred the case to the Office of Administrative Hearings under the Alternative Permitting Process in Minnesota Rules Chapter 7850, and requested that the Administrative Law Judge: 1) emphasize the statutory time frame for the Commission to make final decisions on the Application; 2) direct Commission staff to contact relevant state agencies to request participation in record development and public hearings; 3) ask the parties whether the Project meets the selection criteria established in Minnesota Statutes section 216E.03 and Minnesota Rules Chapter 7850; 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, if any, on the language of the proposed permit.<sup>15</sup> The Commission asked that prior to the public hearing, EERA submit to the Administrative Law Judge

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<sup>7</sup> Ex. 3 (Notice of Application Filing).

<sup>8</sup> Ex. 4 (EERA Comments & Recommendations on Completeness).

<sup>9</sup> Document ID 201311-93679-08, November 14, 2013 (Commission Meeting Notice on Completeness).

<sup>10</sup> Document ID 201311-93886-01, November 20, 2013 (Staff Briefing Papers on Completeness).

<sup>11</sup> Document ID 201312-94675-01, December 17, 2013 (Commission Order Accepting Application as Complete).

<sup>12</sup> Ex. 5 (Notice of Public Information and EA Scoping Meetings Affidavit of Service).

<sup>13</sup> Document ID 201312-94811-01, December 20, 2013 (Notice of Public Information and EA Scoping Meetings Affidavit of Publication).

<sup>14</sup> Document ID 201312-94675-01 at 1, December 17, 2013 (Completeness Order).

<sup>15</sup> *Id.* at 3-4 (Completeness Order).

with the EA, comments and analysis on the relative merits of the route alternatives.<sup>16</sup> The Commission designated a public advisor.<sup>17</sup> The Commission determined that an advisory task force was not necessary.<sup>18</sup>

14. On December 18, 2013, the Commission and EERA held a Public Information and EA Scoping Meeting at the Bovey City Hall in Bovey, Minnesota.<sup>19</sup> At the EA Scoping Meeting, Minnesota Power noted that it was changing the Project by modifying the proposed location of the substation one half of a mile to the east of the original location that had been proposed in the Application. The change actually shortened the originally proposed route by about one half of a mile. EERA staff incorporated the change in its suggestions on the Deputy Commissioner's EA Scoping Decision and in the EA.<sup>20</sup>

15. On December 17, 2013, Minnesota Power had filed a comment explaining that the change was requested because Magnetation identified a need to have the substation location modified slightly to accommodate its processing facility, which will be constructed adjacent to the substation. Minnesota Power also described potential environmental and land use impacts associated with the change.<sup>21</sup>

16. On January 3, 2013, the scoping comment period ended.<sup>22</sup> 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).<sup>23</sup>

17. On January 7, 2014, EERA issued a memorandum to the Commission on the EA scoping process.<sup>24</sup>

18. On January 17, 2014, 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.<sup>25</sup>

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<sup>16</sup> *Id.* at 4 (Completeness Order).

<sup>17</sup> *Id.* at 4 (Completeness Order).

<sup>18</sup> *Id.* at 4-5 (Completeness Order).

<sup>19</sup> Ex. 9 at 11 (Transcript of December 18, 2013, EA Scoping Meeting); Ex.14 at 5-6 (EA).

<sup>20</sup> Ex. 14 at 5-6 (EA).

<sup>21</sup> Ex. 6 at 1 (Minnesota Power EA Scoping Comment).

<sup>22</sup> Ex. 14 at 5 (EA).

<sup>23</sup> *Id.* at 5-6 (EA).

<sup>24</sup> Ex. 10 (Memo to Commission on Scoping Process).

<sup>25</sup> Document ID 20141-95579-02, January 17, 2014 (Notice of Commission Meeting on EA Scope).

19. On January 22, 2014, Commission staff issued briefing papers on the EA scoping process and alternative routes.<sup>26</sup>

20. On January 30, 2014, the Commission met to consider EERA's memorandum on the EA scoping process. The Commission elected to take no action on the alternatives to be considered in the EA.<sup>27</sup>

21. On February 5, 2014, the Department of Commerce issued its EA Scoping Decision.<sup>28</sup>

22. On February 26, 2014, Magnetation, LLC (Magnetation) provided comments on the Project, including the importance of the timeline necessary to meet the Project construction schedule to allow the new Magnetation facility to begin operation.<sup>29</sup>

23. On March 17, 2014, the Administrative Law Judge issued a Notice of Prehearing Conference.<sup>30</sup>

24. On March 21, 2014, MnDNR provided comments on the requirement for Minnesota Power to obtain a License to Cross Public Lands for the Project.<sup>31</sup>

25. On March 28, 2014, the Administrative Law Judge held a prehearing conference via telephone.<sup>32</sup> David R. Moeller, Senior Attorney, Minnesota Power, and Kodi J. Church, Briggs and Morgan, P.A., appeared on behalf of Minnesota Power. Dan McCourtney of Minnesota Power also appeared. Michael Twite, Environment, Land and Government Affairs Manager for Magnetation was present. Michael Kaluzniak of the Commission Staff was present. William Storm, Environmental Review Manager for EERA, was also present.

26. On March 31, 2014, the Commission issued a Notice of Public Hearing to be held April 15, 2014, at 1:00 p.m. at the Bovey City Hall. The Notice of Public Hearing stated that the public comment period continued after the public hearing until May 14, 2014, and provided the mail, fax, and email addresses and numbers for sending such comments to the Administrative Law Judge.<sup>33</sup>

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<sup>26</sup> Document ID 20141-95678-01, January 22, 2014 (Staff Briefing Papers on EA Scoping Process and Alternative Routes).

<sup>27</sup> Ex. 14 at 6 (EA).

<sup>28</sup> Ex. 11 (EA Scoping Decision).

<sup>29</sup> Document ID 20142-96793-01, February 26, 2014 (Magnetation LLC Reply Comments).

<sup>30</sup> Document ID 20143-97400-01, March 17, 2014 (Notice of Prehearing Conference).

<sup>31</sup> Ex. 12 (MnDNR March 21, 2014 Comment Letter).

<sup>32</sup> Document ID 20143-97400-01, March 17, 2014 (Notice of Prehearing Conference); Document ID 20143-97757-01, March 31, 2014 (Scheduling Order).

<sup>33</sup> Ex. 13 (Notice of Public Hearing).

27. On March 31, 2014, the Administrative Law Judge issued a Scheduling Order.<sup>34</sup>

28. On April 2, 2014, EERA issued the EA for the Project and its Notice of Availability of the EA.<sup>35</sup>

29. On April 2, 2014, the Commission filed proof of mailing of the notice of public hearing to landowners along the Project.<sup>36</sup>

30. On April 2, 2014, Minnesota Power filed its Affidavit of Mailing of Notice of Environmental Assessment Availability to landowners along the Project.<sup>37</sup>

31. Notice of the public hearing was published in the *Mesabi Daily News* on April 4, 2014, the *Grand Rapids Herald-Review* on April 6, 2014, and the *Western Itasca Review* on or about April 6, 2014.<sup>38</sup>

32. On April 14, 2014, EERA published notice of the EA Availability in the EQB Monitor.<sup>39</sup>

33. On April 15, 2014, the Administrative Law Judge conducted a public hearing at the Bovey City Hall in Bovey, Minnesota, at 1:00 p.m.<sup>40</sup>

34. On April 25, 2014, the public hearing comment period ended.<sup>41</sup>

### **Description of the Project**

35. The proposed Project includes construction of two, approximately 4.5-mile, 115 kV HVTLs and a substation in and near Coleraine, Minnesota. The proposed transmission lines would connect to Minnesota Power's existing 28 Line west of Highway 7, traverse south across Reilly Beach Road to the Canisteo Pit, then turn southwest where the transmission lines would terminate at the proposed Canisteo Substation. The new substation would be constructed north of County Highway 61 and east of CR 325 near the western edge of the Canisteo Pit and near the western edge of Coleraine.<sup>42</sup>

36. Minnesota Power proposes to use single pole structures that will range in height from 60 to 110 feet for the Project with an average span of approximately 300 feet between structures. Minnesota Power also proposes to use H-Frame structures

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<sup>34</sup> Document ID 20143-97757-01, March 31, 2014 (Scheduling Order).

<sup>35</sup> Ex. 15 (Notice of Availability of the EA); Ex. 14 (EA).

<sup>36</sup> Ex. 16 (Certificate of Service to Landowners for Notice of Public Hearing).

<sup>37</sup> Document ID 20144-97913-01, April 2, 2014 (Affidavit of Mailing of Notice of Environmental Assessment Availability).

<sup>38</sup> Ex. 17 (Affidavit of Publication – Notice of Public Hearing).

<sup>39</sup> Ex. 19 (Notice of Availability of EA published in the EQB Monitor).

<sup>40</sup> Public Hearing Transcript (Tr.), Document ID 20144-98444-01 (Apr. 17, 2014).

<sup>41</sup> Document ID 20143-97757-01, March 31, 2014 (Scheduling Order).

<sup>42</sup> Ex. 14 at 2 (EA).

that will range in height from 70 to 75 feet with an average span of approximately 300 feet between structures. Pole height and span length will vary depending on topography and environmental constraints within the right-of-way.<sup>43</sup>

37. The total right-of-way for the parallel 115 kV transmission lines is proposed to be 160 feet wide.<sup>44</sup>

38. The Project is proposed to meet the needs of the planned Magnetation plant. The Magnetation plant will be designed to produce iron ore concentrate by recovering weakly magnetic iron oxide particles from I-grade natural ore tailings basins, already-mined iron formation (rocks containing iron) stockpiles, and newly-mined iron formation. Magnetation's project is a significant economic development opportunity for the area.<sup>45</sup> The substation and the Magnetation plant will be adjacent to the other near the western edge of Coleraine.

## Routes Evaluated

39. In this Alternative Permitting Process, Minnesota Power evaluated the Project area and other routing opportunities. Minnesota Power evaluated and rejected an alternative HVTL route that originated from Minnesota Power's existing Diamond Lake Tap. This option posed a number of challenges. The Diamond Lake Tap is one of three taps already on Minnesota Power's existing 28 Line and adding a tap off the Diamond Lake Tap would present an unacceptable degree of load risk from a single line outage. To accommodate the proposed need, significant outages on the 28 Line would be necessary. Such outages would affect other tap lines that serve the Cohasset, Taconite, and Nashwauk areas. This reconfiguration would also require an outage at Magnetation's facility.<sup>46</sup>

40. The new construction portion of the Project is located in Sections 5, 8, 16, 17, 19, 20, 21, and 30 of T56N, R24W and Section 25 of T56N, R25W. The route originally proposed in the Application by Minnesota Power extended to the west of Coleraine's western boundary about three quarters of a mile.<sup>47</sup> Minnesota Power provided a map of the revised alignment in a letter of April 17, 2014, to the Administrative Law Judge. While Minnesota Power referred to the change as a revised alignment, the map that Minnesota Power provided revised the alignment of the proposed transmission lines, revised the alignment and length of the proposed route, and moved the location of the proposed substation area.<sup>48</sup> To avoid possible confusion, the area designated on Attachment A to Minnesota Power's letter of April 17, 2014, as

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<sup>43</sup> *Id.* at 12 (EA).

<sup>44</sup> *Id.* at 2 and 11 (EA).

<sup>45</sup> *Id.* at 2-3 (EA).

<sup>46</sup> Ex. 14 at 18 (EA).

<sup>47</sup> Ex. 14 at Figure 1 (EA).

<sup>48</sup> Minnesota Power Public Hearing Comment Letter, Attachment A, Document ID 20144-98454-01 (Apr. 17, 2014).

the Proposed Route is the “Proposed Route” referred to in this report. The same Proposed Route appears on the figures in the EA.<sup>49</sup>

41. No alternative routes, alternative route segments, or alignment modifications were put forth during the EA scoping period and the EA only evaluated the Proposed Route.<sup>50</sup>

### **Transmission Line Structure Types, and Spans**

42. For the Project, Minnesota Power proposes to use overhead construction with wood or laminated wood structures. Wood poles would be direct embedded and may require guying at, but not limited to, angle locations. Monopole structures are proposed to use horizontal post or braced post insulators.<sup>51</sup>

43. Single pole structures will range in height from 60 feet to 110 feet above ground. H-Frame structures will range in height from 60 feet to 75 feet above ground.<sup>52</sup>

44. Spans between 115 kV structures are proposed to be approximately 300 feet for single pole and H-Frame structures.<sup>53</sup>

### **Transmission Line Conductors**

45. For the Project, Minnesota Power proposes to use 1,000 amp conductor and a shield wire(s) for lightening protection.<sup>54</sup>

### **Transmission Line Route Widths**

46. For the Project, Minnesota Power has requested a route width of 1,000 feet.<sup>55</sup>

### **Transmission Line Right-of-Way**

47. The Project will require a 160-foot right-of-way. Opportunities to locate the Proposed Route along existing infrastructure (e.g., roads, railroads, other utilities) between the 28 Line and the proposed Canisteo Substation were not available, resulting in a 160-foot stand-alone right-of-way.<sup>56</sup>

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<sup>49</sup> Ex. 14 at Fig. 1, for example (EA).

<sup>50</sup> Ex. 14 at 18 (EA).

<sup>51</sup> Ex. 14 at 12 (EA).

<sup>52</sup> *Id.*

<sup>53</sup> *Id.* at 12 (EA).

<sup>54</sup> Ex. 1 at 31 (Application).

<sup>55</sup> Ex. 14 at 11 (EA).

<sup>56</sup> Ex. 14 at 11 (EA).



## **Project Schedule**

48. Minnesota Power anticipates a first quarter 2015 in-service date for the Project.<sup>57</sup>

## **Project Costs**

49. Minnesota Power estimates that the installation of the Project, including the parallel 115 kV transmission lines and the Canisteo Substation would cost approximately \$6.2 million, depending on final route selection and mitigation.<sup>58</sup>

## **Permittee**

50. The permittee for the Project is Minnesota Power.<sup>59</sup>

## **Public and Local Government Participation**

### **Public Comments**

51. One person, Michael Twite, an employee of Magnetation, took the opportunity to speak during the Public Information and EA Scoping Meeting on December 18, 2013. He provided general information on Magnetation's proposed facility and how the Project would be located with respect to that facility.<sup>60</sup>

52. No written comments were received from the public on the scope of the EA.<sup>61</sup>

53. One person, Robert Tammen from Soudan, Minnesota, spoke at the public hearing on April 15, 2014. He asked a general question as to why Minnesota Power is proposing two lines and whether it was for capacity or reliability reasons.<sup>62</sup>

54. Nick Boldt, a transmission planning engineer from Minnesota Power, responded that it was for reliability reasons.<sup>63</sup>

55. No public comments were received by the Administrative Law Judge during the public hearing comment period.<sup>64</sup>

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<sup>57</sup> Ex. 14 at 17 (EA).

<sup>58</sup> Ex. 14 at 17 (EA).

<sup>59</sup> Ex. 14 at 1 (EA).

<sup>60</sup> Ex. 9 (Comments Received on the Scope of the EA – Oral Comments).

<sup>61</sup> Ex. 14 at 5 (EA).

<sup>62</sup> Pub. Hrg. Tr. at 19:16-17.

<sup>63</sup> Pub. Hrg. Tr. at 20:19-21:17; Minnesota Power Public Hearing Comment Letter, Document ID 20144-98454-01 (Apr. 17, 2014).

<sup>64</sup> Ex. 13 (Notice of Public Hearing). Information provided to the Administrative Law Judge by Legal Assistant Kendra McCausland.

## **Local Government and State Agency Participation**

### ***Minnesota Department of Commerce***

56. William Cole Storm, Environmental Review Manager, EERA, submitted written comments during the Reply Comment period. He stated that EERA had no revisions for the EA. He confirmed that the Project was accurately described in the proposed findings. Mr. Storm stated EERA's belief that it is appropriate to permit the route and anticipated alignment as requested with the substation modification and that the permit conditions in the proposed conclusions were supported by the proposed findings and are appropriate.<sup>65</sup>

### ***Minnesota Department of Transportation***

57. Stacy Kotch, Utility Transmission Route Coordinator for MnDOT, submitted written comments on the scope of the EA on January 3, 2014. Ms. Kotch stated that the Proposed Route did not appear to abut a state trunk highway, but requested that MnDOT be informed if the Project was revised to do so. Ms. Kotch also provided information on MnDOT accommodation policies and procedures for transmission lines within MnDOT right-of-way.<sup>66</sup>

### ***Minnesota Department of Natural Resources***

58. On January 3, 2014, Jamie Schrenzel, Principal Planner for the Environmental Review Unit of the MnDNR, submitted written comments on the scope of the EA. The MnDNR commented that it supported Minnesota Power's revised proposed Canisteo Substation location. Ms. Schrenzel also provided information on the License to Cross Public Lands that would be necessary for the Proposed Route.<sup>67</sup>

59. On March 21, 2014, Ms. Schrenzel provided written comments on the EA. Ms. Schrenzel reiterated the need for a License to Cross Public Lands from the MnDNR for the proposed route and the need to coordinate an assessment of timber values based on the final alignment for the Project.<sup>68</sup>

60. On April 17, 2014, Minnesota Power filed a letter stating that it would work with the MnDNR on the necessary timber value assessment and obtaining the required License to Cross Public Lands.<sup>69</sup>

61. On May 14, 2014, Ms. Schrenzel eFiled and emailed additional comments to the Administrative Law Judge. She asked that the issues raised in MnDNR's prior letters be considered in the hearing record. Ms. Schrenzel emphasized that the proposed route traverses an area that the Minnesota Biological Survey has preliminarily

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<sup>65</sup> EERA Reply Comment Letter, Document ID 20145-99404-01 (May 14, 2014).

<sup>66</sup> Ex. 8 (MnDOT Scoping Comments).

<sup>67</sup> Ex. 7 (MnDNR Scoping Comments).

<sup>68</sup> Ex. 12 (MnDNR Comments on the EA).

<sup>69</sup> Minnesota Power Public Hearing Comment Letter, Document ID 20144-98454-01 (Apr. 17, 2014).

identified as a “Site of Moderate Biodiversity Significance.” MnDNR typically requests that disturbance of such sites be minimized to the extent feasible.<sup>70</sup>

### **Statutory and Rule Factors for a Route Permit**

62. 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.”<sup>71</sup>

63. Under the PPSA, the Commission and the Administrative Law Judge 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;
- (4) evaluation of the potential for beneficial uses of waste energy from proposed large electric power generating plants;<sup>72</sup>
- (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;

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<sup>70</sup> MnDNR Comment Letter, Document ID 20145-99497-01 (May 14, 2014).

<sup>71</sup> Minn. Stat. § 216E.03, subd. 7.

<sup>72</sup> Factor 4 is not applicable because Minnesota Power is not proposing to site a large electric generating plant.

- (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.<sup>73</sup>

64. 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]ommission must state the reasons."

65. In addition to the PPSA, the Commission and the Administrative Law Judge are governed by Minn. R. 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;

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<sup>73</sup> Minn. Stat. § 216E.03, subd. 7.

- 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;<sup>74</sup>
- 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.<sup>75</sup>

66. The only route under consideration in this proceeding is Minnesota Power's Proposed Route.<sup>76</sup> 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 Routing Factors to the Proposed Route**

### **Effects on Human Settlement**

67. 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.<sup>77</sup>

68. The land within the Project area is zoned as tourism/recreational, municipal, industrial, and public by Itasca County.<sup>78</sup>

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<sup>74</sup> This factor is not applicable because it applies only to power plant siting.

<sup>75</sup> Minn. R. 7850.4100.

<sup>76</sup> Ex. 14 at 19 (EA).

<sup>77</sup> Minn. Stat. § 216E.03, subd. 7(b); Minn. R. 7850.4100(A).

<sup>78</sup> Ex. 14 at 40 (EA).

### ***Displacement***

69. There are three residences within, or adjacent to, the Proposed Route. Two residences are located within the Proposed Route. The nearest residence is located 700 feet from the anticipated alignment of the Proposed Route.<sup>79</sup>

70. No displacement is anticipated as a result of the Proposed Route for the Project.<sup>80</sup>

### ***Noise***

71. The MPCA has established standards for the regulation of noise levels.<sup>81</sup>

72. The most restrictive MPCA noise limits are 60-65 A-weighted decibel (dBA) during the daytime and 50-55 dBA during the nighttime.<sup>82</sup>

73. 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.<sup>83</sup>

74. Noise levels produced at substations are primarily related to transformer operation. The distance from the Canisteo to Substation to the nearest residence is approximately 1.25 miles. It would be very unlikely that substation noise would be audible at that residence. It is also likely that noise from Magnetation operations will exceed those of the substation and transmission line.<sup>84</sup>

75. The audible noise levels for the Proposed Route are predicted not to exceed the MPCA Noise Limits. Minnesota Power intends to limit construction activities to daytime hours. Occasionally, there may be construction outside of these hours or on a weekend if Minnesota Power is required to work around customer schedules, line outages, or the construction schedule has been significantly impacted due to other factors.<sup>85</sup>

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<sup>79</sup> Ex. 14 at 25-26 (EA).

<sup>80</sup> *Id.* (EA).

<sup>81</sup> Ex. 14 at 26 (EA).

<sup>82</sup> *Id.* at 26-27 (EA).

<sup>83</sup> *Id.* at 27 (EA).

<sup>84</sup> *Id.* at 28 (EA).

<sup>85</sup> *Id.* at 28-29 (EA).

### ***Aesthetics***

76. The Proposed Route is in an area near other 115 kV HVTLs and the Project will use structures similar to those existing 115 kV HVTLs. The area is also being developed for mining activities.<sup>86</sup>

77. The Project will use a variety of wood and wood laminate structures. Structures will be single pole structures or H-Frame structures. Direct embedded poles may require guying particularly at, but not limited to, angle structures.<sup>87</sup>

78. The Project will be visible throughout most of the Proposed Route. It is not incompatible with its setting among existing transmission lines, industrial development, and mining operations along the Proposed Route.<sup>88</sup>

### ***Cultural Values***

79. The region surrounding the Project area has cultural values tied to German, Norwegian, Swedish, Irish, English, French, Serbian/Croatian, and Native American heritages.<sup>89</sup>

80. No impacts are anticipated to cultural values as a result of construction of the Project.<sup>90</sup>

### ***Recreation***

81. The Project area provides outdoor recreation opportunities, such as fishing, kayaking, boating, cycling, hiking, skiing, hunting, and snowmobiling. 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.<sup>91</sup>

82. The Project is not anticipated to result in adverse or significant impacts on recreation in the area.<sup>92</sup>

### ***Public Service and Infrastructure***

83. 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.<sup>93</sup>

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<sup>86</sup> Ex. 14 at 30 (EA).

<sup>87</sup> *Id.* (EA).

<sup>88</sup> *Id.* (EA).

<sup>89</sup> Ex. 2 at 39 (Application).

<sup>90</sup> *Id.*

<sup>91</sup> Ex. 14 at 39 (EA).

<sup>92</sup> *Id.* at 40 (EA).

<sup>93</sup> Ex. 14 at 43 (EA).

84. Direct impacts on public services within the Project area will be avoided.<sup>94</sup>

### **Effects on Public Health and Safety**

85. Minnesota high voltage transmission line routing factors require consideration of the Project's effect on health and safety.<sup>95</sup>

### **Construction and Operation of Facilities**

86. 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.<sup>96</sup>

87. 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.<sup>97</sup>

88. 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.<sup>98</sup>

### **Electric and Magnetic Fields**

89. There are no federal standards for transmission line electric fields.<sup>99</sup>

90. 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.<sup>100</sup>

91. 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.<sup>101</sup>

92. There are no federal or Minnesota 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.<sup>102</sup>

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<sup>94</sup> *Id.* at 44 (EA).

<sup>95</sup> Minn. Stat. § 216E.03, subd. 7(b)(1); Minn. R. 7850.4100(B).

<sup>96</sup> Ex. 14 at 43-44 (EA).

<sup>97</sup> *Id.* at 44 (EA).

<sup>98</sup> *Id.*

<sup>99</sup> Ex. 14 at 32 and 35 (EA).

<sup>100</sup> *Id.* at 32 (EA).

<sup>101</sup> *Id.*

<sup>102</sup> *Id.* at 35 (EA).



93. Magnetic fields have been the subject of study and research for over 25 years.<sup>103</sup>

94. Research has not been able to establish a cause and effect relationship between exposure to magnetic fields and adverse health effects.<sup>104</sup>

95. 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 Luis found that:

The absence of any demonstrated impact by [ELF-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 [ELF-EMF] is adequately protective of human health and safety.<sup>105</sup>

96. Similarly, in the route permit proceeding for the St. Cloud–Fargo 345 kV transmission line, Administrative Law Judge 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.”<sup>106</sup>

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

### **Effects on Land-Based Economies and Direct and Indirect Economic Impacts**

98. 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.<sup>107</sup>

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<sup>103</sup> *Id.*

<sup>104</sup> *Id.* at 38 (EA).

<sup>105</sup> *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).

<sup>106</sup> *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).

<sup>107</sup> Minn. Stat. § 216E.03, subd. 7(b)(5); Minn. R. 7850.4100(C).

99. There is no prime farmland or prime farmland if drained within the Proposed Route. There are no croplands within the Proposed Route.<sup>108</sup>

100. There are no known tree farms or federal or state forests located within the Proposed Route. There is one quarter-quarter section that is intersected by the Proposed Route that is administered by the MnDNR Division of Forestry. The MnDNR filed comments that a License to Cross Public Lands is necessary to cross this parcel with the Project.<sup>109</sup> Additionally, MnDNR provided comments on the need to coordinate with Minnesota Power on an assessment of timber values based on the final alignment for the Project. Construction of the Project along the Proposed Route is not anticipated to adversely affect recreation.<sup>110</sup>

101. There are no defined tourism or recreational areas within the Proposed Route. There are nearby lakes, rivers, parks, forests, and the Mount Itasca winter sports facility that provide outdoor recreational activities. The Proposed Route does not cross any planned tourism or recreational development identified in the Itasca County Comprehensive Land Use Plan. Construction of the Project along the Proposed Route is not anticipated to adversely affect recreation.<sup>111</sup>

102. The Project is needed to provide power to Magnetation's new taconite mining operation. The majority of the Proposed Route crosses land intended for mining operations. The Proposed Route has been developed with input from Magnetation regarding its planned mining operations to ensure it does not interfere with those operations or encumber lands under the administration of the MnDNR's Division of Lands and Minerals.<sup>112</sup>

103. No impacts to land-based economies are anticipated as a result of the Project.<sup>113</sup>

### **Effects on Archeological and Historic Resources**

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

105. One historic district, considered eligible for listing on the National Register of Historic Places (NRHP), is partially located within one mile of the Proposed Route. There are no locally-designated historic properties within one mile of the Proposed Route. There are four architecture-history properties within one mile of the Proposed Route. Three of the four properties are contributing resources to the NRHP-eligible

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<sup>108</sup> Ex. 14 at 40 (EA).

<sup>109</sup> *Id.*; Ex. 12 (MnDNR Comments on the EA).

<sup>110</sup> Ex. 12 (MnDNR Comments on the EA).

<sup>111</sup> Ex. 14 at 41 (EA).

<sup>112</sup> *Id.* at 41 (EA).

<sup>113</sup> *Id.*

historic district. The fourth property is the former site of the now-raised Cleveland-Cliffs Concentrator Plant.<sup>114</sup>

106. None of the recorded properties are located within the Proposed Route and it is unlikely that the historic property or contributing properties would be affected by construction of the Proposed Route.<sup>115</sup>

107. The potential for unknown historic architectural resources to be affected by construction of the Project along the Proposed Route is low because the historic landscape and surroundings have been compromised due to the dynamic changes to the mine pit and supporting infrastructure.<sup>116</sup>

108. Minnesota Power would consult with the Minnesota State Historic Preservation Office to determine if there are any areas of the Proposed Route that may require surveys prior to construction of the Project.<sup>117</sup>

109. No impacts to archaeological or historic resources are anticipated as a result of construction of the Project along the Proposed Route.<sup>118</sup>

### **Effects on Natural Environment**

110. 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.<sup>119</sup>

### ***Air Quality***

111. 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.<sup>120</sup>

112. 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.<sup>121</sup>

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<sup>114</sup> Ex. 14 at 45-46 (EA).

<sup>115</sup> *Id.* at 46 (EA).

<sup>116</sup> *Id.*

<sup>117</sup> *Id.* at 47 (EA).

<sup>118</sup> *Id.*

<sup>119</sup> Minn. Stat. § 216E.03, subd. 7(b)(1) and (2); Minn. R. 7850.4100(E).

<sup>120</sup> Ex. 14 at 47 (EA).

<sup>121</sup> *Id.* at 49 (EA).

## **Water Quality and Resources**

113. The Project is located within the Mississippi River – Grand Rapids watershed. No Public Water Inventory (PWI) basins Federal Emergency Management Agency floodplains are present within the Proposed Route.<sup>122</sup>

114. There are wetlands within the Proposed Route and several water-filled mine pits located to the north and south of the Proposed Route.<sup>123</sup>

115. 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 Itasca County prior to commencing construction.<sup>124</sup>

116. 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.<sup>125</sup>

117. The Route Permit will include a condition that Minnesota Power employ erosion control best management practices and obtain any required permissions or approvals from State and federal agencies for work in waters and wetlands.<sup>126</sup>

118. After construction, maintenance and operation of the Project facilities are not expected to have an adverse impact on surface water quality.<sup>127</sup>

## **Flora**

119. The Project is proposed to be located within the Laurentian Mixed Forest Province, which is characterized by broad areas of conifer forest, mixed hardwood and conifer forests, and conifer bogs and swamps.<sup>128</sup>

120. The Proposed Route crosses land that is primarily deciduous forest, barren, and shrub/scrub and woody wetland. 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 Project<sup>129</sup>

121. To minimize the spread of invasive species, sensitive areas such as wetlands and high quality forests and prairies should be surveyed for invasive species

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<sup>122</sup> Ex. 14 at 49-50 (EA).

<sup>123</sup> *Id.* at 50 (EA).

<sup>124</sup> *Id.* at 51 (EA).

<sup>125</sup> *Id.*

<sup>126</sup> Ex. 14 at Appendix B at 5-6 (EA).

<sup>127</sup> Ex. 14 at 51 (EA).

<sup>128</sup> Ex. 14 at 52 (EA).

<sup>129</sup> *Id.* at 53 (EA).

following restoration of the construction area. If new infestations are identified, measures should be taken to control the infestation.<sup>130</sup>

122. The Route Permit should include a condition that requires development of an invasive species control plan that includes an opportunity for the MnDNR to review and comment on the plan.<sup>131</sup> The Route Permit should also require a plan to minimize disturbance of the identified Site of Moderate Biodiversity Significance that includes an opportunity for the MnDNR to review and comment on the plan.<sup>132</sup>

### ***Fauna***

123. 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.<sup>133</sup>

124. Raptors, waterfowl, and other bird species could be impacted by the Project through collision with transmission line conductors.<sup>134</sup>

125. 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.<sup>135</sup>

126. Such design standards and consultation with the MnDNR on the placement of bird flight diverters are appropriate to include as a Route Permit condition.<sup>136</sup>

127. Minnesota Power will use biodegradable erosion control materials where practicable to minimize impact on wildlife.<sup>137</sup>

### **Effects on Rare and Unique Natural Resources**

128. Minnesota's high voltage transmission line routing factors require consideration of the proposed route's effect on rare and unique natural resources.<sup>138</sup>

129. A review of the MnDNR's Natural Heritage Information System identified several State-listed species within the Project area, although none are within the

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<sup>130</sup> *Id.* at 54 (EA).

<sup>131</sup> *Id.*

<sup>132</sup> See, MnDNR Comment Letter, Document ID 20145-99497-01 (May 14, 2014).

<sup>133</sup> *Id.* at 55 (EA).

<sup>134</sup> *Id.*

<sup>135</sup> *Id.*

<sup>136</sup> *Id.* at 56 (EA).

<sup>137</sup> *Id.*

<sup>138</sup> Minn. Stat. § 216E.03, subd. 7(b)(1); Minn. R. 7850.4100 F.

Proposed Route. Minnesota Power will submit a Rare Plant Survey Work Plan to the MnDNR for review and comment.<sup>139</sup>

130. According to the United States Fish and Wildlife Service (USFWS) website, the Canada lynx (*Lynx canadensis*), a federally-listed species, is known to occur within Itasca County. The Proposed Route is not located within designated Critical Habitat but the Project Area could be populated with Canada lynx at the time of construction.<sup>140</sup>

131. Any impacts on the Canada lynx would be minor and temporary.<sup>141</sup>

### **Application of Various Design Considerations**

132. 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.<sup>142</sup>

133. The Proposed Route is designed with sufficient capacity to meet both existing and anticipated needs of the transmission system in the Project Area.<sup>143</sup>

### **Use or Paralleling of Existing Rights-of-Way, Survey Lines, Natural Division Lines, and Agricultural Field Boundaries**

134. 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.<sup>144</sup>

135. The Proposed Route is dictated and constrained by several factors including Magnetation's operation location, the location of ore bodies and iron formation stockpiles, and the location of the existing 28 Line. As a consequence, opportunities to use or parallel existing rights-of-way are minimal.<sup>145</sup>

### **Use of Existing Transportation, Pipeline, and Electrical Transmission System Rights-of-Way**

136. 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.<sup>146</sup>

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<sup>139</sup> Ex. 14 at 57 and Figure 19 (EA).

<sup>140</sup> Ex. 14 at 57 (EA).

<sup>141</sup> *Id.* at 57 (EA).

<sup>142</sup> Minn. Stat. § 216E.03, subd. 7(a) and (b); Minn. R. 7850.1900, subp. 2 L.

<sup>143</sup> Ex. 14 at 61 (EA).

<sup>144</sup> Minn. Stat. § 216E.03, subd. 7(b)(9); Minn. R. 7850.4100 H.

<sup>145</sup> Ex. 14 at 62 (EA).

<sup>146</sup> Minn. Stat. § 216E.03, subd. 7(b)(8); Minn. R. 7850.4100 J.

137. The Proposed Route is dictated and constrained by several factors including Magnetation's operation location, the location of ore bodies and iron formation stockpiles, and the location of the existing 28 Line. As a consequence, opportunities to use or parallel existing infrastructure rights-of-way are minimal.<sup>147</sup>

### **Electrical System Reliability**

138. Minnesota's high voltage transmission line routing factors require consideration of the Project's impact on electrical system reliability.<sup>148</sup>

139. The Project will be constructed to meet reliability requirements.<sup>149</sup>

### **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.<sup>150</sup>

141. The estimated cost of the Project along the Proposed Route is \$6.2 million, depending on final route selection and mitigation.<sup>151</sup>

142. Operating and maintenance costs for the transmission line will be nominal for several years since the line will be new, and minimal vegetation maintenance will be required. Annual operating and maintenance costs for the 115 kV wooden transmission structures across Minnesota Power's Upper Midwest system average approximately \$400 - \$600 per mile.<sup>152</sup>

### **Adverse Human and Natural Environmental Effects which cannot be Avoided**

143. 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.<sup>153</sup>

144. Unavoidable adverse impacts include the physical impacts to the land due to the construction of the Project.<sup>154</sup>

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<sup>147</sup> Ex. 14 at 62 (EA).

<sup>148</sup> Minn. Stat. § 216E.03, subd. 7(b)(10); Minn. R. 7850.4100 K.

<sup>149</sup> Ex. 14 at 62 (EA).

<sup>150</sup> Minn. R. 7850.4100 L.

<sup>151</sup> Ex. 14 at 17 and 62 (EA).

<sup>152</sup> Ex. 1 at 11 (Application).

<sup>153</sup> Minn. Stat. § 216E.03, subd. 7(b)(5) and (6); Minn. R. 7850.4100 M.

<sup>154</sup> Ex. 14 at 63 (EA).

145. Minnesota Power will implement measures as identified by regulatory agencies to minimize unavoidable impacts.<sup>155</sup>

### **Irreversible and Irretrievable Commitments of Resources**

146. 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.<sup>156</sup>

147. 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.<sup>157</sup>

148. 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.<sup>158</sup>

149. Only construction resources, such as concrete, steel, and hydrocarbon fuels, will irreversibly and irretrievably be committed to this Project.<sup>159</sup>

### **Completeness of the Environmental Assessment**

150. The Commission is required to determine the completeness of the EA. An EA is complete if the EA and the record address the issues and alternatives identified in the Scoping Decision.<sup>160</sup>

151. 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.<sup>161</sup>

152. Any of the forgoing Findings more properly designated Conclusions are hereby adopted as such.

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

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<sup>155</sup> *Id.* at Chapter 6 (EA).

<sup>156</sup> Minn. Stat. § 216E.03, subd. 7(b)(11); Minn. R. 7850.4100 N.

<sup>157</sup> Ex. 14 at 62-63 (EA).

<sup>158</sup> *Id.*

<sup>159</sup> *Id.*

<sup>160</sup> Minn. R. 7850.3900, subp. 2.

<sup>161</sup> See Ex. 11 (EA Scoping Decision); Ex. 14 (EA).



## CONCLUSIONS OF LAW

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 December 17, 2013.<sup>162</sup>

3. EERA has conducted an appropriate environmental analysis of the Project for purposes of this route permit proceeding and the EA satisfies Minn. R. 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 Minn. R. 7850.3700, subp. 4, and was prepared in compliance with the procedures in Minn. R 7850.3700.

4. Minnesota Power gave notice as required by applicable statutes and rules, namely, Minn. Stat. §§ 216E.03, subds. 3a and 4; and 216E.04, subd. 4; and Minn. R. 7850.2100, subps. 2 and 4.

5. Notice was provided by EERA and the Commission as required by applicable statutes and rules, namely, Minn. Stat. §§ 216E.03, subd. 6; and 216E.04, subd. 6; and Minn. R. 7850.2300, subp. 2; 7850.2500, subps. 2, 7, 8 and 9; 7850.3500, subp 1; 7850.3700, subps. 2; 3; and 6; and 7850.3800.

6. Public hearings were conducted in a 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.

7. All procedural requirements for the Route Permit were met.

8. The Proposed Route satisfies the Route Permit factors set forth in Minn. Stat. § 216E.04, subd. 8, which incorporates the considerations in Minn. Stat. § 216E.03, subd. 7, and satisfied the factors in Minn. R. 7850.4100.

9. The Proposed Route does not present a potential for significant adverse environmental effects pursuant to the Minnesota Environmental Rights Act and the Minnesota Environmental Policy Act.

10. The Proposed Route is the best alternative on the record for the 115 kV HVTLs and the Canisteo Substation.

11. The Route Permit should be granted for the Proposed Route.

12. The general Route Permit conditions are appropriate for the Project.

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<sup>162</sup> Document ID 201312-94675-01 at 1, December 17, 2013 (Completeness Order).

13. The Route Permit should include a condition that Minnesota Power should use biodegradable erosion control measures where practicable instead of plastic or non-biodegradable erosion control measures.

14. The Route Permit should include a condition that requires Minnesota Power to develop an invasive species control plan and provide an opportunity for the MnDNR to review and comment on the plan.

15. The Route Permit should include a condition that Minnesota Power will work with the MnDNR on an assessment of timber values and the final alignment for the Project across MnDNR land.

16. The Route Permit should include a condition that requires Minnesota Power to develop a plan to minimize disturbance to the site preliminarily identified as a “Site of Moderate Biodiversity Significance” and provide an opportunity for the MnDNR to review and comment on the plan.

17. 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.

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

### **RECOMMENDATIONS**

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

A Route Permit for two HVTLs along Minnesota Power’s Proposed Route, which is depicted on Figure 1 of the Environmental Assessment, in and near the city of Coleraine and other areas in Itasca County, Minnesota.

Dated: May 21, 2014

s/Steve M. Mihalchick  
\_\_\_\_\_  
STEVE M. MIHALCHICK  
Administrative Law Judge

Reported: Digitally Recorded

## NOTICES

**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.**

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 Minn. R. 7829.2700, subp. 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.



## 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

May 21, 2014

See Attached Service List

**Re: In the Matter of the Route Permit Application for the Canisteo HVTL  
Project in Itasca County**

**OAH 48-2500-31336  
MPUC E015/TL-13-805**

To All Persons on the Attached Service List:

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

If you have any questions, please contact my legal assistant Kendra McCausland at (651) 361-7870 or [kendra.mccausland@state.mn.us](mailto:kendra.mccausland@state.mn.us).

Sincerely,

s/Steve M. Mihalchick

STEVE M MIHALCHICK  
Administrative Law Judge

SMM:klm  
Enclosure

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

**CERTIFICATE OF SERVICE**

In the Matter of the Route Permit Application for the Canisteo HVTL Project in Itasca County - PUC 13-805	OAH Docket No.: 48-2500-31336
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Kendra McCausland, certifies that on May 21, 2014 she served the true and correct **FINDINGS OF FACT, CONCLUSIONS OF LAW, AND RECOMMENDATIONS** 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
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
Sharon	Ferguson	sharon.ferguson@state.mn.us	Department of Commerce	85 7th Place E Ste 500 Saint Paul, MN 551012198	Electronic Service
Burl W.	Haar	burl.haar@state.mn.us	Public Utilities Commission	Suite 350 121 7th Place East St. Paul, MN 551012147	Electronic Service
Stacy	Kotch	Stacy.Kotch@state.mn.us	MINNESOTA DEPARTMENT OF TRANSPORTATION	395 John Ireland Blvd. St. Paul, MN 55155	Electronic Service
John	Lindell	agorud.ecf@ag.state.mn.us	Office of the Attorney General-RUD	1400 BRM Tower 445 Minnesota St St. Paul, MN 551012130	Electronic Service
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