

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

In the Matter of the Application for a Route Permit for the Monticello to St. Cloud 345 kV Transmission Line Project	<b>TABLE OF CONTENTS</b>
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	Page No.
STATEMENT OF ISSUE .....	3
FINDINGS OF FACT .....	4
<b>Procedural History</b> .....	4
<b>Description of the Proposed HVTL</b> .....	6
Preferred Route and Route Alternates.....	7
Alignment.....	8
Structure Type and Spans .....	8
Route Width .....	9
Project Schedule and Costs.....	10
Substations .....	10
<b>Minnesota Department of Agriculture</b> .....	11
<b>Minnesota Department of Transportation – Right-of Way</b> .....	11
<b>Minnesota Department of Transportation – Fuller Lake Rest Area</b> .....	12
<b>Minnesota Department of Transportation – Other Concerns</b> .....	13
<b>Minnesota Department of Natural Resources (DNR)</b> .....	13
<b>OES Environmental Review</b> .....	14
<b>Public Comments</b> .....	16
Preferred Route .....	16
Preferred Route – Fish Lake and Fish Creek Basin.....	17
Route D.....	18
Great River Road.....	20
EIS Process .....	21
Task Force Process .....	21
Electro Magnetic Fields.....	21
Fuller Lake Rest Area .....	22
Route A and Route B .....	22
Undergrounding .....	22
<b>Criteria for Route Permit</b> .....	22
<b>Application Of Statutory And Rule Criteria</b> .....	25
A.    Effects on Human Settlement.....	25

Displacement .....	25
Noise .....	27
Aesthetics .....	28
Cultural Values .....	29
Recreation .....	29
Public Services .....	30
B. Effects on Public Health and Safety .....	30
Electromagnetic Fields .....	30
HVTL Design and Construction .....	30
C. Effects on Land-Based Economies .....	31
Agriculture.....	31
Forestry.....	32
Tourism.....	32
Mining .....	32
D. Effects on Archaeological and Historical Resources.....	32
E. Effects on Natural Environment.....	33
Air Quality .....	33
Water Quality and Resources .....	33
Flora .....	37
Fauna .....	38
F. Effects on Rare and Unique Natural Resources .....	39
G. Application of Various Design Considerations .....	40
H. Use or Paralleling of Existing Right-of-Way, Survey Lines, Natural Division Lines and Agricultural Field Boundaries .....	41
I. Use of Existing Transportation, Pipeline, and Electrical Transmission System Right-of-Way .....	41
J. Electrical System Reliability .....	42
K. Costs of Constructing, Operating and Maintaining the Facility .....	42
L. Adverse Human and Natural Environmental Effects That Cannot be Avoided ..	43
M. Irreversible and Irretrievable Commitments of Resources .....	44
N. Consideration of Issues Presented by State and Federal Agencies.....	44
O. Evaluation of Additional Alternatives .....	45
Route C.....	45
Route D.....	47
Undergrounding.....	50
P. Associated Facilities .....	51
Alternative Quarry Substation Site 3.....	53
Q. Route Width .....	54
R. Notice.....	55
S. Adequacy of FEIS.....	57
CONCLUSIONS.....	57
RECOMMENDATION .....	58
NOTICE .....	59

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In the Matter of the Application for a Route Permit for the Monticello to St. Cloud 345 kV Transmission Line Project	<b>FINDINGS OF FACT, CONCLUSIONS AND RECOMMENDATION</b>
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This matter was assigned to Administrative Law Judge (ALJ) Beverly Jones Heydinger to conduct a contested case hearing on the application by Xcel Energy and Great River Energy for a route permit for the Monticello to St. Cloud 345 kV Transmission Line Project.

A combined public and evidentiary hearing was held on March 8, 2010, in Clearwater, Minnesota, and the evidentiary hearing continued on March 9, 2010, and March 15, 2010, at the office of the Public Utilities Commission (Commission) in St. Paul, Minnesota.

Post-hearing submissions were filed. The record closed upon receipt of OES post-hearing comments on April 16, 2010.

Appearances: Lisa M. Agrimonti and Matthew A. Slaven, Briggs and Morgan, P.A., appeared on behalf of Applicants, Northern States Power Company (Xcel Energy) and Great River Energy. Karen Finstad Hammel, Assistant Attorney General, appeared on behalf of the Department of Commerce – Office of Energy Security, Energy Facility Permitting (OES). Bret Eknes appeared on behalf of the Commission staff.

**STATEMENT OF ISSUE**

Should the Commission issue a route permit to Applicants Xcel Energy and Great River Energy (Applicants) and if so, for which of the routes under consideration and under what conditions?

Based on information in the Route Permit Application to the Commission, the testimony at the public hearing, written comments and exhibits received in this proceeding, the ALJ makes the following:

## FINDINGS OF FACT

### Procedural History

1. Xcel Energy is a Minnesota corporation headquartered in Minneapolis, Minnesota. Great River Energy is a not-for-profit electric cooperative that owns and operates high voltage transmission lines (HVTL) in Minnesota and provides wholesale electric service to distribution cooperatives in Minnesota and Wisconsin.

2. On April 8, 2009, Applicants submitted a Route Permit Application (RPA or Application) for a 345 kV transmission line project between Monticello and St. Cloud, Minnesota, as required by Minnesota Rules Chapter 7850 and Minnesota Statutes Chapter 216E. The Proposed for which a permit is being requested includes:

- Construction of one 345 kV HVTL approximately 28 miles long from the existing Monticello Substation to a new Quarry Substation, west of St. Cloud, on single poles that are double-circuit compatible;
- Construction of the new Quarry Substation at Substation Site 1, 2 or 4, as identified in Exhibit 7C;
- Modifications and additions to the existing Monticello Substation to accommodate the new transmission line facilities;
- A 115 kV transmission line connector between the existing St. Cloud to Sauk River 115 kV line and the new Quarry Substation.

3. Because the Monticello to St. Cloud transmission line is over 200 kV, it requires a Certificate of Need as well as the Route Permit sought in the current docket. On November 5, 2005, the Applicants and other utilities requested a Certificate of Need for the entire CAPX 2020 project, which included the Monticello to St. Cloud transmission line. On May 22, 2009, the Commission issued an Order granting Certificates of Need for CAPX 2020 with conditions.<sup>1</sup>

4. The Applicants have proposed three possible routes for the transmission line – a preferred route and two alternate routes.

5. On May 13, 2009, the Commission issued an order that accepted the Application as complete and authorized OES staff to process the Application under the full review process in Minn. R. 7850.1700 to 7850.2700. The Commission also authorized OES staff to name a public advisor and to establish an advisory task force (ATF).<sup>2</sup>

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<sup>1</sup> MPUC Docket No. ET-2, E-002, et al./CN-06-1115.

<sup>2</sup> Order, MPUC Docket No. ET2/TL-09-246, filed May 13, 2009.

6. On June 18, 2009, the OES issued a Notice of Public Information and Environmental Impact Statement (EIS) Scoping Meetings to provide information to the public about the Proposed Project. The purpose of the Scoping Meeting was to receive public comment and input on the draft site permit issued by the Commission, and to take public comment and input on the scope of the EIS that would be prepared for the Application. The public was invited to review the Application, learn more about the Commission review process, offer comments and ask questions.<sup>3</sup>

7. OES staff held two public information and scoping meetings for the Proposed Project in Clearwater, Minnesota, on July 2, 2009. Approximately 100 people attended the two public meetings. The public comment period on the EIS scoping for the Proposed Project was open until July 24, 2009. Members of the public submitted 64 comments to the OES regarding the scoping of the EIS.<sup>4</sup>

8. On September 25, 2009, the ALJ held a prehearing conference at the Commission offices in St. Paul, Minnesota. Appearances were made by counsel for the Applicants and counsel for OES. David Seykora appeared on behalf of the Minnesota Department of Transportation (MnDOT). OES staff and Commission staff were also present.

9. On September 29, 2009, the ALJ issued a Prehearing Order and on September 30, 2009, the ALJ issued an Amended Prehearing Order establishing the schedule and procedures for intervention, prefiled testimony, hearing and other matters.

10. On October 12, 2009, OES issued its EIS Scoping Decision. OES responded to the public comments on the scope of the EIS and determined the matters to be addressed in it. The EIS Scoping Decision specified that an analysis of the potential environmental and socio-economic impacts of two of the four ATF identified routes (ATF Group 3 Alternate 3 (Route C), and ATF Group 3 Alternate 2 (Route D)) and one of two substation location alternatives (ATF Substation Alternate Group 4-1 (Alternative Quarry Substation Site 3)) would be performed.<sup>5</sup>

11. On January 11, 2010, the OES issued the Draft EIS (DEIS) and issued its notice of the availability of the DEIS for the Proposed Project.<sup>6</sup>

12. The Prehearing Order specified an intervention deadline of January 22, 2010. No petitions to intervene were filed and Applicants are the only parties to this proceeding.

13. On February 1, 2010, Applicants filed the Prefiled Direct Testimony of Darrin Lahr, Gerald Chezik and Daniel Kline. The three witnesses also testified at the hearings on March 8 and March 9, 2009.<sup>7</sup>

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<sup>3</sup> Ex. 9, Notice of Public Scoping Meeting.

<sup>4</sup> Ex. 12, EIS Scoping Decision.

<sup>5</sup> Ex. 12, EIS Scoping Decision.

<sup>6</sup> Ex. 14, DEIS; Ex. 15, Notice of Availability of DEIS.

14. On February 9, 2010, OES staff conducted a public information meeting at the Clearwater Township Hall to obtain comments on the DEIS. Written comments were received through February 26, 2010. A total of 47 respondents commented on the DEIS during the comment period.<sup>8</sup>

15. On March 26, 2010, OES issued the Final Environmental Impact Statement (FEIS).<sup>9</sup>

16. Notices were issued for the Proposed HVTL as follows:

- The OES published notice of the contested case hearing in two legal newspapers of general circulation in central Minnesota – the St. Cloud Times on February 24, 2010, and the Monticello Times on February 25, 2010.<sup>10</sup>
- The OES sent notice of the contested case hearing to local government officials.<sup>11</sup>
- The OES sent notice of the contested case to persons on the project contact list maintained by the Commission on February 10, 2010.<sup>12</sup>

17. Minn. Stat. § 216E.03, subd. 6, and Minn. R. 7850.2600 set out the notice requirements for the contested case hearing on the routing for a proposed HVTL. The content of these notices fully complied with Minn. R. 1405.0500 and the applicable rules and statute.

### **Description of the Proposed HVTL**

18. The Proposed Project consists of approximately 28 miles of 345 kV transmission line and associated facilities between the existing Monticello Substation and a new substation, Quarry Substation, to be located west of St. Cloud, Minnesota, in Stearns County.<sup>13</sup>

19. The Monticello Substation will be modified to include 345 kV equipment including switches, control panels, and circuit breakers.<sup>14</sup>

20. The Project includes a connection to the existing St. Cloud to Sauk River 115 kV transmission line, located near the new Quarry Substation. Specifically, a tap of the existing 115 kV transmission line would be constructed and two 115 kV transmission

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<sup>7</sup> Ex. 2, Lahr Prefiled Direct Testimony; Ex. 4, Chezik Prefiled Direct Testimony; Ex. 6 Kline Prefiled Direct Testimony.

<sup>8</sup> FEIS.

<sup>9</sup> FEIS.

<sup>10</sup> Ex. 19, Notice of Public Hearing as published.

<sup>11</sup> Ex. 18, Certified Letters to Local Governments.

<sup>12</sup> Ex. 17, Notice of Public Hearing with Certificate of Service.

<sup>13</sup> Ex. 2, at 6.

<sup>14</sup> Ex. 2, at 6.

lines, an “in” and an “out,” would connect the existing 115 kV transmission line to the new Quarry Substation.<sup>15</sup>

21. The new Quarry Substation will require a graded, fenced area of approximately six acres to accommodate the St. Cloud – Monticello Project and the proposed Fargo – St. Cloud 345 kV transmission line. Applicants intend to acquire at least 40 acres for the Quarry Substation site to create a buffer around the substation and to provide for future expansion.<sup>16</sup>

22. In the Certificate of Need Order, the Commission approved Applicants’ Upsized Alternative for this Project, which includes double circuit capable structures so that a second 345 kV circuit may be added when the Commission determines that a second circuit is needed.<sup>17</sup>

### Preferred Route and Route Alternates

23. In the Application, Applicants identified three proposed routes for the 345 kV transmission line – the Preferred Route, Route A and Route B.<sup>18</sup>

24. The Preferred Route is approximately 28 miles long and extends southwest from the existing Monticello Substation on property currently owned by Xcel Energy, until intersecting with County State Aid Highway 75 (CSAH 75) and Interstate 94 (I-94). The Preferred Route then follows CSAH 75 and I-94 until west of Fish Lake where the Preferred Route then follows I-94 to the intersection of I-94 and State Highway 23. The Preferred Route then extends north along State Highway 23 to the proposed Quarry Substation.<sup>19</sup>

25. Route A is approximately 32 miles long, exiting southwest from the existing Monticello Substation until intersecting with I-94. Route A then generally extends northwest, paralleling I-94 for brief distances only and mainly following CSAHs, State Highways, and city or township roads west of I-94 until it terminates at Applicants’ proposed Quarry Substation. There are several places where Alternate Route follows property lines.<sup>20</sup>

26. Route B is approximately 35 miles long, exiting southwest from the existing Monticello Substation until intersecting with an abandoned railroad corridor, which it parallels for a short distance. Route B extends generally northwest, following CSAHs, State Highways, and city or township roads west of I-94 until it terminates at Applicants’ proposed Quarry Substation. Route B parallels I-94 for less of its length than Route A. There are several places where Route B follows property lines.<sup>21</sup>

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<sup>15</sup> Ex. 4, at 3.

<sup>16</sup> Ex. 2, at 7.

<sup>17</sup> MPUC Docket No. ET-2, E-002, et al./CN-06-1115, Order, May 22, 2009, as modified Aug. 10, 2009.

<sup>18</sup> Ex. 1A (RPA), at 5-1; Ex. 2, at 8-9 and Schedule 4; Exs. 7A, 7B and 7C (Hearing Maps).

<sup>19</sup> Ex. 1A, at § 5.1; Ex. 2, at 8.

<sup>20</sup> Ex. 1A, at § 5.2; Ex. 2, at 9.

<sup>21</sup> Ex. 1A, at § 5.3; Ex. 2, at 9.

## Alignment

27. For the Preferred Route and Route A, both of which parallel the I-94 right-of-way at least in part, a number of alignments were considered. The proposed alignments include: five feet from the edge of the I-94 right-of-way; 25 feet from the edge of the I-94 right-of-way; and 75 feet from the edge of the I-94 right-of-way.<sup>22</sup>

28. According to MnDOT, the permitting of the five-foot alignment would constitute an “exception” under its rules and policies and would therefore require separate approval from the Federal Highway Administration (FHWA) because the davit arms and conductors on the highway-side of each pole would result in the permanent, physical overhang of the I-94 right-of-way. The transmission structures, including the poles and davit arms, would have to be placed approximately 20 to 25 feet outside of the right-of-way to comply with MnDOT policies.<sup>23</sup>

29. The 25-foot alignment would not result in a permanent, physical encroachment of the I-94 right-of-way, but may still result in intermittent encroachment because of conductor “blowout” (the occupancy of right-of-way under certain weather conditions that cause the conductors to swing). MnDOT confirmed that it can issue a Utility Permit for an alignment that does not create a permanent, physical encroachment of the I-94 right-of-way under its current rules and policies and that such approval would not require FHWA to approve an exception.<sup>24</sup>

30. The 75-foot alignment would generally place the utility facilities far enough from the I-94 right-of-way that Applicants would not need to obtain MnDOT permits.<sup>25</sup>

## Structure Type and Spans

31. Applicants propose to use single pole, galvanized or self-weathering steel, double-circuit-capable, structures for the majority of the 345 kV transmission line Project. The poles will be manufactured to support two circuits, and davit arms for both circuits, a total of six, will be built during initial construction. For the Proposed Project, however, generally only one circuit (three conductors) will be installed on three davit arms.<sup>26</sup>

32. At I-94 crossings and interchanges, Applicants propose to install six conductors to facilitate the addition of a second circuit when conditions warrant. Installation of six conductors initially would prevent construction-related conflicts and disruptions to highway facilities when the second circuit is added. MnDOT agrees that six conductors should be installed at interchanges to minimize future highway disruptions.<sup>27</sup>

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<sup>22</sup> Ex. 1A at 4-5 and Figure 2-2.

<sup>23</sup> Ex. 1A at Figure ES-1; Ex. 2 at Schedule 9; Trans. Vol. 1 at 77 (Lahr); Ex. 14 (DEIS) at 5-78.

<sup>24</sup> Ex. 1A at 2-9; Ex. 2 at Schedule 10; Trans. Vol. 3 at 46-47 (Seykora).

<sup>25</sup> Ex. 1A at 2-9; Ex. 2 at Schedule 10.

<sup>26</sup> Ex. 1A at § 3.1; Ex. 4 at 3-4; Ex. 2 at 7.

<sup>27</sup> Trans. Vol. 2 at 43-53 (Chizek); Trans. Vol. 3 at 59-60 (Seykora).



33. Specialty structures, including H-frame structures and dead-end structures, may be required in certain limited circumstances, such as near environmentally sensitive areas when longer spans are required.<sup>28</sup>

34. Spans of 750 to 1,100 feet between structures are expected for the majority of the 345 kV line. For the 115 kV transmission line, spans of 600 to 800 feet are anticipated.<sup>29</sup>

### Route Width

35. Applicants requested a route width of up to 1,000 feet for the majority of the length of each of the proposed routes.<sup>30</sup>

36. Applicants request a route of up to 1.25 miles in width in five areas along the proposed routes to accommodate site-specific concerns.<sup>31</sup> There are three areas on the Preferred Route for which Applicants request a route width of up to 1.25 miles to retain the flexibility for structure placement near the I-94 right-of-way. The transmission line may need to be constructed more than 75 feet from the edge of the I-94 right-of-way to minimize potential impacts or to route around the Fuller Lake Rest Area.<sup>32</sup>

37. At a fourth location on the Preferred Route, Applicants request a route width up to 1.25 miles to work with the existing Great River Energy 115 kV transmission line and MnDOT for structure placement along or adjacent to the existing 115 kV transmission line, or along an existing road and CSAH 75.<sup>33</sup>

38. Applicants also request a route up to 1.25 miles in width at Quarry Substation Sites 1, 2 and 4 to allow for flexibility in substation interconnection.<sup>34</sup>

39. The OES submitted post-hearing comments on April 16, 2010, in which it noted its concerns regarding the requested width of the Proposed and Alternate Routes. Applicants and OES have agreed to evaluate whether the proposed route width can be narrowed and appropriate permit language drafted that would allow landowners greater certainty and predictability regarding the final alignment.<sup>35</sup>

40. A 150-foot wide right-of-way will be needed for the majority of the 345 kV transmission line. In some limited instances a larger 180-foot wide right-of-way may be required.<sup>36</sup>

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<sup>28</sup> Ex. 4 at 4.

<sup>29</sup> Ex. 4 at 5.

<sup>30</sup> Ex. 4 at 2-4; Ex. 2 at 10.

<sup>31</sup> Ex. 1A at 2-4 and § 2.3, Figures 2-3 to 2-8.

<sup>32</sup> Ex. 1A at §2.3, Figures 2-4 to 2-6.

<sup>33</sup> Ex. 1A at 2-15.

<sup>34</sup> Ex. 1A at 2-17 and Figure 2-7.

<sup>35</sup> Trans. Vol. 2 at 7-9 (Lahr).

<sup>36</sup> Ex. 1A a 3-3; Ex. 4 at 5.

41. For the transmission line extension of the existing St. Cloud to Sauk River 115 kV transmission line to the new Quarry Substation, 75 feet of right-of-way will be needed.<sup>37</sup>

### Project Schedule and Costs

42. If the Route Permit is approved for the Preferred Route or Routes A or B, Applicants expect to begin construction of the Project in the fourth quarter of 2010 and estimate that the Project will be completed by the second quarter of 2012.<sup>38</sup>

43. The total cost of the Project, including the survey, engineering, materials, construction, right-of-way, and project management associated with the transmission line and substations, is estimated to be between \$76.2 million and \$93.5 million in 2008 dollars depending on the route selected.<sup>39</sup>

### Substations

44. This Project includes the modification of the Monticello Substation and the construction of a new Quarry Substation west of St. Cloud in an area of St. Joseph Township near Minnesota State Highway 23 just north of I-94.<sup>40</sup>

45. No additional land or access roads will be required to accommodate the modifications to the existing Monticello Substation. Equipment to be installed at the existing Monticello Substation includes switches, control panels and circuit breakers.<sup>41</sup>

46. Applicants have proposed three possible substation sites for the new Quarry Substation. Quarry Substation Site 1 is located along the east side of Minnesota State Highway 23 approximately one-half mile northeast of the I-94 and Highway 23 interchange. Quarry Substation 2 is located along the north side of State Highway 23 approximately one mile northwest of the I-94 and Highway 23 interchange. Quarry Substation 4, which Applicants identified after submitting the Application, is located north of the intersection of State Highway 23 and 76th Avenue in St. Joseph Township.<sup>42</sup>

47. The owners of the proposed Quarry Substation Site 2 and Site 4 properties have notified the Applicants that they are willing to sell the sites. Applicants confirmed that Quarry Substation Site 2 and Site 4 would provide good access to the existing 115 kV line intersect, and good access for connection to the proposed Fargo to St. Cloud 345 kV line.<sup>43</sup>

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<sup>37</sup> Ex. 4 at 5.

<sup>38</sup> Ex. 4 at 5-6.

<sup>39</sup> Ex. 4 at 7.

<sup>40</sup> Ex. 1A at 3-5; Ex. 2 at 6.

<sup>41</sup> Ex. 1A at § 3.1.

<sup>42</sup> Ex. 2 at 7-8; Ex. 1A at § 2.4.

<sup>43</sup> Trans. Vol. 1 at 40-43 (Lahr).

48. The Applicants have provided no information regarding the ownership of Quarry Substation Site 1.

49. The Quarry Substation will be connected to the existing 115 kV transmission line running between the St. Cloud and Sauk River Substations. The new Quarry Substation construction will require a graded, fenced area of approximately six acres for the initial St. Cloud – Monticello Project and to accommodate the proposed Fargo to St. Cloud 345 kV line. Access roads will be required for the site.<sup>44</sup>

50. Equipment being installed at the new Quarry Substation during the initial phase includes a 345 kV ring bus with three circuit breakers, two 345 kV line positions, 448 MVA 345/115 kV transformer, 115 kV ring bus with three circuit breakers and two 115 kV line positions. Other equipment to be installed includes associated switches, bus work, foundations, steel structures and control equipment.<sup>45</sup>

51. The substation will be configured to accommodate the possible addition of the second circuit of the Monticello to St. Cloud 345 kV line and other future high voltage transmission lines,<sup>46</sup> including the proposed Fargo to St. Cloud 345 kV line.

### **Minnesota Department of Agriculture**

52. Applicants developed an Agricultural Impact Mitigation Plan (AIMP) to address mitigation action, restoration of damaged tiles, removal of construction debris, and restoration of soil to existing preconstruction conditions. The Minnesota Department of Agriculture (MnDOA) approved the AIMP in September 2009.<sup>47</sup>

### **Minnesota Department of Transportation – Right-of Way**

53. A utility must obtain a MnDOT Utility Permit to occupy highway right-of-way, including interstate right-of-way, for crossings and longitudinal installations. Applicants' proposed routes require Utility Permits because they cross or parallel highway right-of-way. The Preferred Route and Route A parallel the I-94 right-of-way, in part.<sup>48</sup>

54. On July 20, 2009, MnDOT provided written EIS scoping comments to the OES. MnDOT expressed concerns regarding the proximity of the proposed transmission lines to highway right-of-way and how the proximity would affect MnDOT's maintenance and reconstruction or new construction of roads and interchanges. MnDOT also expressed concern that Minnesota statutes would require the agency to pay relocation costs if utilities within the interstate highway right-of-way have to be moved in the future.<sup>49</sup>

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<sup>44</sup> Ex. 1A at § 3.1.2; Ex. 2 at 6.

<sup>45</sup> Ex. 1A at 3-5; Ex. 2 at 6.

<sup>46</sup> Ex. 1A at 3-5.

<sup>47</sup> Ex. 2 at 26-27.

<sup>48</sup> Minn. R. 8810.3300; Ex 2 at 19-24 and Schedule 8.

<sup>49</sup> Ex. 2 at 22 and Schedule 9; Trans. Vol. 3 at 8 (Seykora).

55. MnDOT can permit blow out within the interstate right-of-way under its existing rules and policies without seeking FHWA approval. In contrast, a permanent physical occupation of the right-of-way, including arm or conductor overhang, would require FHWA approval.<sup>50</sup>

56. MnDOT has stated that the requirements of the National Environmental Policy Act (NEPA) could potentially apply if FHWA approval of the Proposed Project is required.<sup>51</sup>

57. Each of the three proposed alignments (5-feet, 25-feet and 75-feet from the I-94 right-of-way) creates a different set of impacts. Generally, the farther away the poles are from the road right-of-way, the larger the easement that must be acquired from a landowner. Placement of poles farther from the road right-of-way generally increases the impact on agricultural and commercial operations because the poles are placed farther into adjacent landowners' properties.<sup>52</sup>

### **Minnesota Department of Transportation – Fuller Lake Rest Area**

58. MnDOT noted particular concern with the Fuller Lake Rest Area, which is part of the I-94 right-of-way. MnDOT would have to grant an exception for the transmission line to pass through the right-of-way longitudinally, and MnDOT has indicated that it is unlikely to grant such an exception. Applicants have therefore proposed a diagonal interstate crossing that would avoid the Warner Lake County Park and the Fuller Lake Rest Area by crossing from the south/west side of I-94 to the north/east side of I-94 near the Fuller Lake Rest Area to avoid Warner Lake County Park.<sup>53</sup>

59. If Applicants are unable to follow an alignment on the north/east side of I-94 through the Fuller Lake Rest Area or, alternatively, an alignment on the south/west side of I-94 that would avoid the Fuller Lake Rest Area but cross I-94 diagonally to the north/east side of I-94 to avoid Warner Lake County Park, the Preferred Route would have to proceed around the Fuller Lake Rest Area to the north along roads that would have greater impacts on human settlement because of the proximity of ten homes in the area. Applicants could not follow an alignment entirely on the south/west side of I-94 in this area without crossing through Warner Lake County Park, which abuts I-94.<sup>54</sup>

60. MnDOT's policies generally discourage diagonal crossings of highways by utility facilities, but the agency could permit a diagonal crossing subject to review and approval of the specific pole and crossing locations.<sup>55</sup>

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<sup>50</sup> Trans. Vol. 3 at 46-47 (Seykora) (overriding earlier MnDOT concerns that intermittent encroachment would require advance FHWA approval, as noted in Ex. 2 at 22 and Schedule 9).

<sup>51</sup> Ex. 2 at Schedule 9 and 24; 23 C.F.R. 771.117(c)(2)(2009).

<sup>52</sup> Ex. 2 at 25-26; Ex 1B at Appendix E; Ex. 22; FEIS at 3-10 and 3-11.

<sup>53</sup> Trans. Vol. 1 at 30-31(Lahr); Trans. Vol. 3 at 39-43, 61 (Seykora).

<sup>54</sup> Trans. Vol. 1 at 27-30 (Lahr); Ex. 7B; Ex. 3 at Schedule 14.

<sup>55</sup> Trans. Vol. 3 at 39-43, 61 (Seykora).

## **Minnesota Department of Transportation – Other Concerns**

61. MnDOT intends to expand I-94 from two lanes to three lanes of travel in each direction between Monticello and Clearwater in the next ten years but MnDOT anticipates that there will be sufficient width in the existing I-94 right-of-way to accommodate the additional lanes. Although planning is not complete, at this time MnDOT does not anticipate that any portion of the proposed transmission line would need to be relocated in the future as a result of MnDOT's expansion of I-94 to six lanes.<sup>56</sup>

62. MnDOT noted some concerns regarding its proposed interregional connection between I-94 and U.S. Highway 10, which would create a new interchange on I-94 approximately one and one-half miles east of the intersection of I-94 and Highway 24. MnDOT's preferred location for the transmission line at this new interchange location would be on the south and west side of I-94 and routed entirely outside the "flyover ramp" in that area. As proposed, the Preferred Route in the area of the new interchange is too narrow to accommodate placement of the 345 kV transmission line poles in MnDOT's preferred location. Applicants believe they can accommodate MnDOT's concerns with their proposed alignment on the north/east side of I-94. Applicants anticipate they can place the poles to avoid the future traffic lanes and alter pole height in anticipation of MnDOT's final design and construction.<sup>57</sup>

63. MnDOT has not identified any specific impediments to permitting along Alternate Routes A, B, C or D.<sup>58</sup>

64. Each of the proposed Quarry Substation sites is far enough from highway right-of-way that it would not require a MnDOT permit.<sup>59</sup>

## **Minnesota Department of Natural Resources (DNR)**

65. The DNR provided written comments in response to the DEIS on February 26, 2010. It provided supplemental comments on March 19, 2010, in response to items discussed at the March 8, 2010, public hearing. The DNR expressed concerns with potential environmental impacts of the proposed Project, particularly with respect to the two Mississippi River crossings associated with Route D. The DNR also expressed concern with potential environmental impacts related to Alternative Quarry Substation Sites 3 and 4.<sup>60</sup>

66. In its comments to the DEIS, the DNR noted that it does not favor Route D because it requires two line crossings of the Mississippi River. Though Route D utilizes existing transmission corridors, increasing the number of lines at the river would pose

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<sup>56</sup> Trans. Vol. 3 at 21-23, 30-32, 58-59 (Seykora).

<sup>57</sup> Trans. Vol. 3 at 17-21, 48-49 (Seykora); Ex. 29 (Map); Trans. Vol. 1 at 24-25 (Lahr).

<sup>58</sup> Trans. Vol. 3 at 51-52.

<sup>59</sup> Trans. Vol. 3 at 52.

<sup>60</sup> DNR Comments, E-Docket Doc. No. 20103-48255-02.

hazards for migrating birds, particularly trumpeter swans, bald eagles, and other waterfowl that utilize the Mississippi River as a flyway and wintering area.<sup>61</sup>

67. The DNR further noted that the Route D Mississippi River crossings may visually impact the Mississippi River, which is designated as a Scenic River District between St. Cloud and Clearwater, and as a Recreational River District between Clearwater and Anoka.<sup>62</sup>

68. The DNR noted that if the segment of transmission line from Monticello to St. Cloud is considered independent of CAPX 2020 plans, the Quarry Substation Alternative Site 3 appears to be the best route from a natural resource perspective. But because this line is expected to link to the Fargo-Moorhead transmission line, the environmental effects of linking these segments should be considered. The area between the Quarry Station Alternative Site 3 and the link to the Fargo-Moorhead segment is environmentally sensitive. The linkage route may need to cross the Great Bel Claire Marsh and oak forests that provide habitat for red-shouldered hawks, which are listed on the state list of species of special concern. Additionally, the linkage route may cross a low income community, which would raise environmental justice concerns. When considering both segments of the CAPX 2020 project, the DNR recommends a deviation onto Route A/B from I-94 to Quarry Substation Alternatives Sites 1 and 2, as the best route through this sensitive area. The deviation recommended by the DNR was not formally identified or evaluated.<sup>63</sup>

69. The DNR also noted that much public concern has been generated by the proposed crossing of the Fish Lake area and surrounding wetlands. The DNR notes that public waters and wetlands should generally be avoided when choosing transmission routes, and that alternatives such as underground routing and spanning of these areas should be considered.<sup>64</sup>

70. The DNR commented that any route would likely impact the trumpeter swans and Blanding's turtles found near the Mississippi River. The trumpeter swans, state-listed as threatened, may be at risk for collision mortality. Hundreds of trumpeter swans overwinter in Monticello and Fergus Falls, and often move between the two locations. The Blanding's turtle, also state-listed as threatened, is found along all of the routes.<sup>65</sup>

## **OES Environmental Review**

71. Minnesota statutes and rules require OES to prepare an EIS for the Project.<sup>66</sup>

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<sup>61</sup> DNR Comment, Feb. 26, 2010.

<sup>62</sup> DNR Comment, Feb. 26, 2010.

<sup>63</sup> DNR Comment, Mar. 19, 2010, citing DEIS Appendix H, p. 1.

<sup>64</sup> DNR Comment, Jamie Schrenzel, Mar. 19, 2010.

<sup>65</sup> DNR Comment, Feb. 26, 2010.

<sup>66</sup> Minn. R. 7850.2500, subp. 1.

72. The scoping process is the first step in developing an environmental impact statement. OES “shall provide the public with an opportunity to participate in the development of the scope of the environmental impact statement by holding a public meeting and by soliciting public comments.” During the scoping process, alternative routes may be suggested for evaluation in the EIS.<sup>67</sup>

73. The scoping process “must be used to reduce the scope and bulk of an environmental impact statement by identifying the potentially significant issues and alternatives requiring analysis and establishing the detail into which the issues will be analyzed.”<sup>68</sup>

74. At the conclusion of the scoping process, OES must issue a scoping decision which shall address at least the following: 1) the issues to be addressed in the environmental impact statement; 2) the alternative sites and routes to be addressed in the environmental impact statement; and 3) the schedule for completion of the environmental impact statement.<sup>69</sup>

75. For this Project, OES staff collected and reviewed comments on the scope of the EIS by holding two Scoping Meetings and convening an ATF. The OES also accepted written comments through July 24, 2009, and a total of 64 comments were received by the close of the comment period.<sup>70</sup>

76. The ATF recommended four additional route alternatives and two alternate substation locations.<sup>71</sup>

77. On October 12, 2009, OES issued its Scoping Decision for the EIS. The Scoping Decision identified the topics to be covered in the Project EIS: regulatory framework; Project engineering and design; Project construction; and human and environmental resources impacted by the Project and each proposed route alternative. The Scoping Decision also determined that the EIS would address two of the ATF proposed route alternatives and one of the ATF alternate substation locations.<sup>72</sup>

78. On January 11, 2010, OES published the DEIS which included a discussion of all of the alternatives and topics required by the Scoping Decision.<sup>73</sup>

79. On February 9, 2010, OES held two informational meetings for the public to comment on the DEIS. The OES also accepted written comments through February 26, 2010.<sup>74</sup>

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<sup>67</sup> Minn. R. 7850.2500, subps. 1 and 2.

<sup>68</sup> Minn. R. 7850.2500, subp. 4.

<sup>69</sup> Minn. R. 7850.2500, subp. 4.

<sup>70</sup> Ex. 12 at 2-3 (Scoping Decision).

<sup>71</sup> Ex. 12 at 4-8 (Scoping Decision).

<sup>72</sup> Ex. 12 at 4-6, 4-8 (Scoping Decision).

<sup>73</sup> Ex. 14 (DEIS).

<sup>74</sup> Ex. 15 at 2; Ex. 16.

80. Minnesota rules require OES to “respond to timely substantive comments received on the draft environmental impact statement consistent with the scoping decision and prepare the final environmental impact statement.” OES may “attach to the draft environmental impact statement the comments received and its response to comments without preparing a separate document.”<sup>75</sup>

81. A total of 47 respondents commented on the DEIS during the comment period. OES extracted 179 separate, substantive comments that are addressed at Section 2.0 of the FEIS.<sup>76</sup>

82. On March 26, 2010, OES published the FEIS.

## **Public Comments**

83. A number of interested parties submitted comments in this proceeding. The ALJ received more than 50 written comments and 44 persons submitted oral comments and 45 written exhibits at the public hearing on March 8, 2010. The comments fall into general areas, summarized below.

### Preferred Route

84. Many people voiced support for the Preferred Route.<sup>77</sup> John and Rita McCoolley commented that the power line should be aligned on the north side of I-94, where the land is open and undeveloped between I-94 and Highway 75, just west of County Road 8 near Hasty, Minnesota.<sup>78</sup>

85. The City of Clearwater opposed the Preferred Route because it runs through the City’s identified Drinking Water Supply Management Area. The Preferred Route also runs through land, currently undeveloped, that is planned for industrial growth, and through the Clearwater Orderly Annexation Agreement Area in Clearwater Township along Highway 24. Under the Annexation Agreement, the land is zoned as a high density residential area and the lines could impact the residential growth of the community. The City prefers the lines to be placed as close to MnDOT’s right-of-way as possible.<sup>79</sup>

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<sup>75</sup> Minn. R. 7850.2500, subp. 9.

<sup>76</sup> FEIS at 1-4; FEIS at § 2.0.

<sup>77</sup> See e.g., Jerry Zabinski, Trans. Mar. 8, afternoon, at 59; Paul Schwinghammer, Trans. Mar. 8, afternoon, at 78; Mark Conroy, Trans. Mar. 8, afternoon, at 79; Phil Bautch, Trans. Mar. 8, afternoon, at 102; Ex. 124 (City of St. Augusta); Ex. 125 (William and Karen Rademacher); Ex. 126 (Town of Lynden, Resolution No. 2010-1); Comment, Jim and Dawn Froelich, Mar. 18, 2010; Comment, Robert and Shirley Laudenbach, Mar. 9, 2010; Comment, Jerry and Judi Tollefson, Mar. 15, 2010; Comment, Gary and Karen Smith, Mar. 14, 2010; Comment, Gene and Judy Post, Mar. 12, 2010; Comment, Mark Sytsma, Mar. 19, 2010.

<sup>78</sup> Comment, Mar. 5, 2010.

<sup>79</sup> City of Clearwater, Comment, Mar. 17, 2010 (City Resolution 2010-06).



86. Although the City did not mention the Alternative Routes, it appears from the maps that Routes A, B, and C would each affect the Annexation Area along Highway 24, as much, if not more than, the Preferred Route.

#### Preferred Route – Fish Lake and Fish Creek Basin

87. The ALJ received numerous comments that expressing concern that the Preferred Route will negatively affect Fish Lake and Fish Creek Basin, which is an environmentally sensitive area. Carlos Lopez, on behalf of the Fish Lake Property Owners Association in Wright County, an association of 43 families who own property on or near Fish Lake, spoke against the Preferred Route because it would span environmentally sensitive areas. Lopez stated that the Fish Creek Basin contains the Wild and Scenic Mississippi River, the Mississippi River backwaters, the Great River Road, County Road 75, which has been designated as a National Scenic Byway, Fish Creek, Fish Lake, the Clearwater Township public access recreational area and various wetlands. The Association believes the Proposed Route will negatively affect the lake and creek basin, which have been designated as impaired by the MPCA. The Association is particularly concerned because no specific analysis of the Fish Lake and Creek Basin was included in the DEIS.<sup>80</sup>

88. Ronald Schabel also voiced concern regarding the Fish Lake and Fish Creek Basin. He suggested that the Applicants bypass the lake and creek basin to the west via Route Alternatives A, B or C.<sup>81</sup> In his written comments, Schabel suggested the transmission line should bypass Fish Lake to the west. He suggested such a bypass would avoid the environmentally sensitive Fish Lake and Fish Creek Basin, avoid the placement of transmission towers within the basin flood plain, avoid crossing I-94 within the Clearwater City and Clearwater Township Orderly Annexation Area, avoid the FHWA and MnDOT I-94 interchange between mile post 178.5 to 180.5, and minimize the cumulative impacts to the Great River Road National Scenic Byway view.<sup>82</sup>

89. Karen Durant commented regarding the environmental sensitivities of Fish Lake and Fish Creek Basin. She noted particular concern regarding the drainage issues that have arisen in the past few years because of the construction in the I-94 corridor that eliminated some wetlands.<sup>83</sup>

90. John Pazik noted that the Fish Creek Basin area contains a fully developed and groomed snowmobile trail and it is the site of a proposed bike-train link to existing trails in the area. He noted that the basin is surrounded by 60-foot hills, and it is a natural flyway for birds, which are endangered by transmission lines. He suggested that Route A, or an alteration of Route A, should be used to avoid the Fish Lake Basin area.<sup>84</sup>

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<sup>80</sup> Carlos Lopez, Trans. Mar. 8, afternoon, at 61-63; Ex. 106; Ex. 107.

<sup>81</sup> Ronald Schabel, Trans. Mar. 8, afternoon, at 84; Ex. 112.

<sup>82</sup> Comment, Mar. 15, 2010.

<sup>83</sup> Karen Durant, Trans. Mar. 8, afternoon, at 97-99; Ex. 115-119.

<sup>84</sup> Comment, Mar. 12, 2010, with Attachment, citing proposed Route A hybrid suggested by Ron Schabel.

## Route D

91. The ALJ received many comments regarding Route D. A few commenters supported Route D. The Mississippi River Parkway Commission and Wright County Soil and Water District support the use of Route D.<sup>85</sup> The Mississippi River Parkway Commission stated that the Minnesota Great River Road has achieved the esteemed designation of a National Scenic Byway because it possesses characteristics of regional significance. The east side of the river has a pattern of existing highway, utility and rail corridors that detract from a scenic byway. The west side offers a rural landscape close to the river. To protect scenic qualities along the scenic byway, corridor viewsheds must be protected from unwarranted scenic intrusions. The Commission suggested that the transmission lines should be routed along the east side of the river.<sup>86</sup>

92. The Wright County Office of Planning and Zoning supports the use of Route D or the Preferred Route because either of those routes allows the state to protect and conserve agricultural lands, according to Minn. Stat. § 17.80. Also, the Hasty area within Wright County (County Highway 8 and I-94) is a rural center that serves as the gateway to Lake Maria State Park. If the Preferred Route is selected, Wright County requests Applicants to work with Wright County and Silver Creek Township to plan and construct the line in accordance to Wright County's Northwest Quadrant Land Use Plan.<sup>87</sup>

93. Some commenters supported Route D because it would reduce or eliminate any negative impact to the Great River Road.<sup>88</sup> Others commented that Route D would allow the new 345 kV line to share right-of-way with an existing 115 kV line.<sup>89</sup>

94. Many people opposed Alternative Route D. The ALJ received numerous comments in opposition to Route D because the route would require two Mississippi River crossings in designated recreational and scenic areas.<sup>90</sup> Jeff Schlingmann, on behalf of the Haven Township, stated that the scenic designation carries several more restrictions than the recreational designation and that Haven Township has diligently exercised its responsibilities to preserve the integrity of the scenic designation. Schlingmann stated that if Route D were chosen, a 150-foot swath of trees would need to be clear cut at the Mississippi River crossing.<sup>91</sup>

95. Lynn Waytashek of the Sherburne County Zoning Office opposed Route D because it passes through the Wild and Scenic River District. She stated that

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<sup>85</sup> Mississippi River Parkway Commission of Minnesota (Sheldon Johnson), Letter to D. Birkholz, Oct. 22, 2009; Ex. 132 (Wright County Soil and Water Conservation District, Feb. 24, 2010).

<sup>86</sup> Mississippi River Parkway Commission of Minnesota (Sheldon Johnson), Letter to D. Birkholz, Oct. 22, 2009.

<sup>87</sup> Comment, Wright County Planning and Zoning Administrator Tom Salkowski, Mar. 16, 2010.

<sup>88</sup> See e.g., Comment, Stephen Nohava, Mar. 11, 2010; Comment, Rick Phipps, Mar. 16, 2010.

<sup>89</sup> See e.g., Ex. 113 (Elaine Paumen); David Shore, Trans. Mar. 8, evening, at 52; Comment, Stephen F. Nohava, Mar. 11, 2010; Comment, Rick Phipps, Mar. 15, 2010.

<sup>90</sup> See e.g., Roger Neils, Trans. Mar. 8, afternoon, at 45-49.

<sup>91</sup> Jeff Schlingmann, Trans. Mar. 8, afternoon, at 71; see also Comment, Haven Township (Tim Sime), Mar. 18, 2010.

Sherburne County adopted the Wild and Scenic River ordinance in 1979 and the county has spent considerable time and resources in protecting the river through limited development and through enforcement of its zoning ordinance. She noted that Alternative Route D would disturb an additional 137 wooded acres if it were chosen over the Preferred Route.<sup>92</sup>

96. Some people opposed Route D because it would pass through or near several parks. Roger Neils commented that Route D would parallel Clear Lake Township Park (a.k.a. Riverwood Park).<sup>93</sup> Felix Schmiesing, Sherburne County Board Chairperson, and Jeff Schlingmann, on behalf of Haven Township, commented that Route D would pass through the new regional park – West Mississippi River Park.<sup>94</sup> The City of Becker opposed Route D because the transmission corridor is adjacent to Snuffy's Landing, the City's only park on the Mississippi River.<sup>95</sup>

97. Some people commented that Route D would not promote electrical system reliability. Jeff Schlingmann commented that the concentration of transmission lines serving the St. Cloud area seems to be contrary to the purpose for which the Certificate of Need was issued.<sup>96</sup> Haven Township believes that constructing additional lines in Haven Township along the current lines jeopardizes the electrical grid because if the poles and lines suffer from a catastrophe such as a tornado, there would be a major loss of electrical power to the St. Cloud area.<sup>97</sup>

98. A number of people who live along Route D opposed the use of Route D because it would be unfair if another transmission line ran over or near their properties. They stated that they should not have to bear the burden of hosting all the transmission lines serving the St. Cloud area.<sup>98</sup>

99. The City of Becker opposed Route D because it runs diagonally through land identified for future industrial development within the City.<sup>99</sup> Lynn Waytashek commented that Alternative Route D would impact a large landfill and an area planned for future development in Becker Township.<sup>100</sup>

100. Many people commented that proposed Route D would severely limit farming activity.<sup>101</sup> According to Sherburne County, the soils in Sherburne County have a higher sand concentration than the soils in Stearns and Wright County and therefore

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<sup>92</sup> Trans. Mar. 8, afternoon, at 108, Ex. 122 (Sherburne County Board of Commissioners, citing DEIS Table 5-9); see also Ex. 123 (City of Becker).

<sup>93</sup> Roger Neils, Trans. Mar. 8, afternoon, at 51-53.

<sup>94</sup> Schmiesing, Trans. Mar. 8, afternoon, at 70; Schlingmann Comment, Mar. 2, 2010.

<sup>95</sup> Ex. 123.

<sup>96</sup> Ex. 108; see also Ex. 123 (City of Becker).

<sup>97</sup> Ex. 109 (Haven Township Resolution No. 2010-02); see also, Comment, Barbara Gulbrandson, Mar. 17, 2010.

<sup>98</sup> See e.g., Comment, Michael and Barb Fitch, Mar. 19, 2010; Comment, Barbara Gulbrandson, Mar. 17, 2010; Comment, Joe and Mary Jansky, Mar. 16, 2010.

<sup>99</sup> Ex. 123.

<sup>100</sup> Trans. Mar. 8, afternoon, at 108-109; see also Ex. 121 (Becker Township).

<sup>101</sup> See e.g., Comment, Clear Lake Township (Jack Gallagher), received Mar. 3, 2010.

many of the fields in Sherburne County require irrigation to ensure adequate crop production.<sup>102</sup> Roger Neils commented on behalf of Clear Lake Township that Route D would impact a large number of center-pivot irrigation systems within the township.<sup>103</sup> Likewise, John Golly opposed Alternative Route D because it would disrupt the irrigation system he uses for farming.<sup>104</sup>

101. Alan Peterson, President of the Irrigator’s Association of Minnesota, stated that irrigated land allows farmers to produce specialty crops, which often require aerial spraying, but that it is difficult to maneuver aerial spray helicopters or fixed wing aircraft around transmission lines and structures. He stated that irrigation is necessary to sustain agriculture in the Sherburne County area.<sup>105</sup>

102. Bud Stimmler opposed Alternative Route D because it would interfere with the pioneer burial site that is located near the existing 115 kV line.<sup>106</sup>

103. Michael D. Aune, Director of Facilities at Ziegler, opposed Route D because it would traverse Ziegler’s place of business. Ziegler sells, rents and services large, high-reaching construction equipment such as aerial lift booms capable of reaching a height of 135 feet. Power lines over or near the Ziegler property would jeopardize employees’ safety.<sup>107</sup>

### Great River Road

104. The ALJ received numerous comments expressing concerns with the potential aesthetic impact to the Great River Road, designated a National Scenic Byway. Some commenters were also concerned that the State of Minnesota could lose the funding it receives for the roadway.<sup>108</sup>

105. Richard Phipps noted that the national scenic byway was developed in 1938. It is overseen by the Mississippi River Parkway Commission. The State of Minnesota receives over \$10 million annually to maintain its National Scenic Byways. Phipps is concerned that the Great River Road could lose its “Scenic Byway” designation if defaced by transmission lines.<sup>109</sup>

106. The Mississippi River Parkway Commission of Minnesota requested that decision makers utilize strategies to avoid, minimize and mitigate any impact to the

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<sup>102</sup> Ex. 122.

<sup>103</sup> Roger Neils, Trans. Mar. 8, afternoon, at 49.

<sup>104</sup> Trans. Mar. 8, afternoon, at 36-38; see also Larry Seeley, Trans. Mar. 8, afternoon, at 38-40.

<sup>105</sup> Ex. 114; see also, Mike Hayes, Trans. Mar. 8, afternoon, at 110-113.

<sup>106</sup> Trans. Mar. 8, afternoon, at 40-41; Ex. 100; Ex. 101.

<sup>107</sup> Comment, Feb. 25, 2010.

<sup>108</sup> See e.g., Comment, Heidi and Donald Cox, Mar. 18, 2010; Comment, Carol Overland, Mar. 19, 2010; Comment, John Pazik, Mar. 12, 2010.

<sup>109</sup> Ex. 127; Ex. 128; Ex. 129; Ex. 130.

Great River Road and Mississippi River corridors and exercise due diligence to assess potential impacts to the Great River Road.<sup>110</sup>

### EIS Process

107. Some members of the public commented that they believed the EIS process was flawed. Carlos Lopez, on behalf of the Fish Lake Property Owners Association, stated that the DEIS public meeting was inadequate because there were no sign-in sheets, no maps, no displays, and only two copies of the DEIS for fifty people. He stated that the scoping phase was presented to the public and governmental agencies to gather input and ideas but that it seemed the scope was predetermined and that their comments were largely ignored.<sup>111</sup>

### Task Force Process

108. The ALJ received comments from Sherburne County, the City of Becker, Becker Township, Clear Lake Township and Haven Township expressing disappointment with the Task Force process and lack of notice provided to local governmental units on the east side of the Mississippi River.<sup>112</sup> State Senator Lisa Fobbe commented on behalf of her constituents in Sherburne County that the decision by the Advisory Task Force to consider Route D was made without involvement from the residents of Sherburne County.<sup>113</sup>

109. Clear Lake Township commented that no representative of any governmental body in Sherburne County participated in the EIS scoping process before or after the identification of four proposed alternate routes located in Sherburne County. Clear Lake Township believes the Advisory Task Force did not comply with Minn. Stat. § 216E.08, which requires public participation in the EIS preparation process.<sup>114</sup>

### Electro Magnetic Fields

110. The ALJ received numerous comments regarding the potential health effects of electric and magnetic fields.<sup>115</sup> Carol Overland and Richard Phipps commented that the electromagnetic fields were underestimated in the EIS.<sup>116</sup>

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<sup>110</sup> Ex. 130.

<sup>111</sup> Carlos Lopez, Trans. Mar. 8, afternoon, at 61-63; Ex. 106; Ex. 107.

<sup>112</sup> Roger Neils, Trans. Mar. 8, afternoon, at 48; Jeff Schlingmann, Trans. Mar. 8, afternoon, at 67-68; Ex. 110 (Paul Gray); Felix Schmiesing, Trans. Mar. 8, afternoon, at 106-107, and Comment, received Mar. 19, 2010; Gary Hammer, Trans. Mar. 8, afternoon, at 114-116; Ex. 120 (City of Becker); Ex. 121 (Becker Township); Ex. 122 (Sherburne County Board of Commissioners); Ex. 123 (City of Becker).

<sup>113</sup> Comment, Mar. 25, 2010; see *also* Comment, William Gulbrandson, Mar. 19, 2010.

<sup>114</sup> Comment, Roger Neils, Mar. 18, 2010.

<sup>115</sup> See *e.g.*, Joe Kenning, Trans. Mar. 8, evening, at 43-51, and Ex. 139, and Comment, received Mar. 22, 2010; Brad Zadow, Trans. Mar. 8, evening, at 59-60, and Ex. 143; Comment, Kenneth and Mary Wolters, Mar. 15, 2010; Gary and Karen Smith, Comment, Mar. 14, 2010.

<sup>116</sup> Ex. 128.

## Fuller Lake Rest Area

111. The ALJ received some comments from those who objected to the Preferred Route's alternative alignment that would circumvent the Fuller Lake Rest Area and impact homes to its north..<sup>117</sup>

112. A number of people commented that the travelers who stop briefly at the Fuller Lake Rest Area should not be given the same consideration as the residents in the area. The travelers will view the transmission lines for only a short time, but the lines will be a permanent fixture for the residents.<sup>118</sup>

## Route A and Route B

113. A number of people opposed Routes A and B because they did not want the transmission line near their homes or farms.<sup>119</sup>

114. One party observed that Route A and Route B appear to cross or parallel Nina Creek, which he indicated was a state-designated trout stream.<sup>120</sup>

115. Eugene Smith opposed Route B but supported Route A. He stated that he has over 200 acres of irrigated land, but that production on that land has been disrupted twice in the last five years, once because of the construction of a power line that was constructed along County Road 104.<sup>121</sup>

## Undergrounding

116. The ALJ received comments that the transmission line should be placed underground at river crossings and other environmentally sensitive locations.<sup>122</sup>

## **Criteria for Route Permit**

117. The Power Plant Siting Act (PPSA) 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>123</sup>

118. Under the PPSA, the Commission and ALJ must be guided by the following responsibilities, procedures and considerations:

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<sup>117</sup> See e.g., Comment, Julie and Brent Neisch, Mar. 16, 2010.

<sup>118</sup> See e.g., Jerry Finch, Mar. 8, afternoon, at 124.

<sup>119</sup> See e.g., Comment, Meridith Kjelberg, Mar. 17, 2010; Comment, Julie Blomberg and Brett Admixtures, Mar. 10, 2010; Comment, Kent Kjellberg, Mar. 19, 2010; Comment, Gene and Judy Post, Mar. 12, 2010.

<sup>120</sup> Paul Schwinghammer, Mar. 8, afternoon, at 76.

<sup>121</sup> Comment, Mar. 11, 2010.

<sup>122</sup> Mark Conroy, Tran. Mar. 8, afternoon, at 80-81; Rose Thelen, Trans. Mar. 8, evening, at 41, and Ex. 138; Comment, Charles Guill, Mar. 18, 2010.

<sup>123</sup> Minn. Stat. § 216E.03, subd. 7.

- (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>124</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;
- (7) evaluation of alternatives to the Applicants' proposed site or route proposed pursuant to Section 216E.03, 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>125</sup>

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<sup>124</sup> This subfactor is inapplicable because Applicants have not applied for a route permit for a large electric generating plant.

119. In addition to the PPSA, Minn. R. 7850.4000 provides that no route permit may be issued in violation of site selection criteria and standards found in Minnesota Statutes or Public Utilities Commission Rules. Power line permits must be consistent with state goals to minimize environmental impacts and conflicts with human settlement and other land use. The Commission and ALJ are governed by Minn. R. 7850.4100, which provides for the following factors to be considered 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;<sup>126</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>127</sup>

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<sup>125</sup> Minn. Stat. § 216E.03, subd. 7.

<sup>126</sup> This criterion is inapplicable because Applicants have not applied for a permit for a large electric generating plant.



120. There is sufficient evidence in the record for the ALJ to assess the proposed routes and alternatives using the criteria set out above.

### **Application Of Statutory And Rule Criteria**

#### A. Effects on Human Settlement

121. Minnesota statutory and rule criteria require consideration of the proposed transmission line routes' effect on human settlement, including displacement of residences and businesses, noise created during construction and by operation of the Project, and the routes' impact on aesthetics, cultural values, recreation and public services.<sup>128</sup>

#### Displacement

122. The Applicants have provided information on alignments at varying distances outside the MnDOT right-of-way. Thus, a "5-foot alignment" is 5 feet outside the MnDOT right-of-way.

123. For purposes of this proceeding, displacement of a residence or business was defined to occur when a structure is within 75 feet of a proposed alignment.<sup>129</sup>

124. The construction of the 345 kV line along the Preferred Route, or Alternate Routes A or B would not displace any residence.<sup>130</sup>

125. The Applicants will use a 150-foot right-of-way; 75 feet on either side of the alignment. For the Preferred Route's 5-foot alignment, there are 0 homes within 75 feet from the alignment; 3 homes are within 75-150 feet from the alignment; 22 homes are within 150-300 feet from the alignment; and 37 homes are within 300-500 feet from the alignment. In total, 62 homes are within 500 feet of the alignment.<sup>131</sup>

126. For the Preferred Route's 25-foot alignment, there are 0 homes within 75 feet from the alignment; 5 homes are within 75-150 feet from the alignment; 22 homes are within 150-300 feet from the alignment; and 36 homes within 300-500 feet from the alignment. In total, 63 homes are within 500 feet of the alignment.<sup>132</sup>

127. For the Preferred Route's 75-foot alignment, there are 0 homes within 75 feet from the alignment; 5 homes are within 75-150 feet from the alignment; 30 homes are within 150-300 feet from the alignment; and 31 homes within 300-500 feet from the alignment. In total, 66 homes are within 500 feet of the alignment.<sup>133</sup>

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<sup>127</sup> Minn. R. 7850.4100.

<sup>128</sup> Minn. Stat. § 216E.03, subd. 7(b); Minn. R. 7850.4100(A).

<sup>129</sup> Ex. 1A at § 7.2.2.3.

<sup>130</sup> Ex. 1A at 6-2, 7-22, 7-60, 7-72.

<sup>131</sup> Ex. 1A at 7-22; Ex. 1B at Appendix E.

<sup>132</sup> Ex. 1A at 7-22; Ex. 1B at Appendix E.

<sup>133</sup> Ex. 1B at Appendix E.

128. For the Preferred Route's 5-foot alignment, there are 22 non-residential structures within the right-of-way (150 feet). For the Preferred Route's 25-foot alignment, there are 12 non-residential structures within the right-of-way. For the Preferred Route's 75-foot alignment, there are 12 non-residential structures within the right-of-way.<sup>134</sup>

129. For Route A's 5-foot alignment, there are 0 homes within 75 feet from the alignment; 21 homes are within 75-150 feet from the alignment; 38 homes are within 150-300 feet of the alignment; and 26 homes are within 300-500 feet from the alignment. In total, 85 homes are within 500 feet of the alignment.<sup>135</sup>

130. For Route A's 25-foot alignment, there are 0 homes within 75 feet from the alignment; 21 homes are within 75-150 feet from the alignment; 39 homes are within 150-300 feet of the alignment; and 26 homes are within 300-500 feet from the alignment. In total, 86 homes are within 500 feet of the alignment.<sup>136</sup>

131. For Route A's 75-foot alignment, there are 0 homes within 75 feet from the alignment; 22 homes are within 75-150 feet from the alignment; 43 homes are within 150-300 feet of the alignment; and 30 homes are within 300-500 feet from the alignment. In total, 95 homes are within 0-500 feet of the alignment.<sup>137</sup>

132. For Route A's 5-foot alignment, there are 15 non-residential structures within the right-of-way. For Route A's 25-foot alignment, there are 5 non-residential structures within the right-of-way. For Route A's 75-foot alignment, there are 8 nonresidential structures within the right-of-way.<sup>138</sup>

133. For Route B, there are 0 homes within 75 feet from the alignment; 30 homes are 75-150 feet from the alignment; 51 homes are 150-300 feet from the alignment; and 39 homes are 300-500 feet from the alignment. In total, 120 homes are within 500 feet from the alignment.<sup>139</sup>

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<sup>134</sup> Ex. 22 at p. 1; Ex. 1B at Appendix E, p. 6.

<sup>135</sup> Ex. 1A at 7-60; Ex. 1B at Appendix E.

<sup>136</sup> Ex. 1B at Appendix E.

<sup>137</sup> Ex. 1B at Appendix E.

<sup>138</sup> Ex. 22 at 1.

<sup>139</sup> Ex. 1A at 7-73; Ex. 1B at Appendix E.

134. For Route B, there are 4 non-residential structures within the right-of-way.<sup>140</sup>

Summary of Residential and Non-Residential Structures

Route/ Alignment	Homes Within 0 to 75' of Alignment	Homes Within 75 to 150' of Alignment	Homes Within 150 to 300' of Alignment	Homes Within 300 to 500' of Alignment	Homes Within 0 to 500' of Alignment	Number of Non- Residential Structures Within Right-of-Way
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**Preferred Route**

5-Foot Alignment	0	3	22	37	62	22
25-Foot Alignment	0	5	22	36	63	12
75-Foot Alignment	0	5	30	31	66	12

**Route A**

5-Foot Alignment	0	21	38	26	85	15
25-Foot Alignment	0	21	39	26	86	5
75-Foot Alignment	0	22	43	30	95	8

**Route B**

	0	30	51	39	120	4
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135. The Preferred Route has fewer homes within 500 feet from any of the three proposed alignment compared to any of the proposed alignments of Route A or Route B.

136. Alternate Routes A, B or C could affect the City of Clearwater, which plans to annex land for high and low-density development.<sup>141</sup>

Noise

137. The MPCA has established standards for the regulation of noise levels. For residential, commercial and industrial land, the MPCA noise limits are 60-65 A-weighted decibel (dBA) during the day and 50-55 dBA during the night.<sup>142</sup>

<sup>140</sup> Ex. 22 at 1.

<sup>141</sup> Walters, Trans. Mar. 8 (afternoon) at 120.

138. The audible noise levels for the proposed transmission line are not predicted to exceed the MPCA Noise Limits outside the right-of-way.<sup>143</sup>

### Aesthetics

139. Construction of the facilities along the Preferred Route and Alternate Routes A and B will likely affect visual quality and area aesthetics within proximity of the transmission line. The Preferred and Alternate Routes parallel the Mississippi River and the Great River Road scenic byway for a portion of each route and are located within a State Wild and Scenic River District for a portion of each route. Recreational resources are also located near each route.<sup>144</sup>

140. The aesthetic impacts differ among the Preferred Route, Route A and Route B. The Preferred Route is shorter and as a result will use fewer poles. There are fewer residences within 500 feet of the proposed alignments for the Preferred Route than for the alignments for the Alternate Routes.<sup>145</sup>

141. The Preferred Route parallels I-94 for the greatest distance.<sup>146</sup>

142. The Applicants evaluated route and alignment alternatives to avoid the Great River Road (CSAH 75), including an alignment on the south/west side of I-94. There are a number of constraints that would prevent the use of an alignment on the south/west side of I-94, including the Enfield Rest Area, numerous residences, Locke Lake, Fish Lake and associated wetlands, and significant wooded area.<sup>147</sup>

143. Where feasible, the proposed alignment along the north/east side of I-94 locates the transmission line on the south/west side of CSAH 75 between I-94 and the Great River Road rather than on the north/east side of CSAH 75 between the Great River Road and the Mississippi River.<sup>148</sup>

144. The Mississippi River was designated as part of the Minnesota Wild and Scenic Rivers Program in 1976. The river is designated as “scenic” from St. Cloud to Clearwater, and “recreational” from Clearwater to Monticello.<sup>149</sup>

145. Opponents of the Preferred Route and Route A stated concerns about the potential for the Great River Road’s loss of designation as a National Scenic Byway but no scenic byway has ever been involuntarily delisted.<sup>150</sup>

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<sup>142</sup> Minn. R. 7030.0040-7303.0050; Ex. 1A at 7-24.

<sup>143</sup> Ex. 1A at 7-25; Ex. 14 at 5-140 (DEIS).

<sup>144</sup> Ex. 1A at 6-2.

<sup>145</sup> Ex. 1A at 6-6, 6-2; Ex. 1B at Appendix E.

<sup>146</sup> Exs. 7A, 7B and 7C (Maps).

<sup>147</sup> Ex. 3 at 2-3; Trans. Vol. 1 at 18, 70-71 (Lahr).

<sup>148</sup> Ex. 14 at 5-43 (DEIS); FEIS at 2-4.

<sup>149</sup> Trans. Vol. 2 at 60-61 (Kline); Ex. 14 at 5-32; FEIS at Appendix C.

<sup>150</sup> Trans. Vol. 2 at 17 (Lahr).

146. The Great River Road management plan does not restrict placement of transmission lines, and transmission lines exist at other points along it.<sup>151</sup>

147. Mitigation measures may be employed to minimize the visual impacts of utility facilities near the Great River Road. The Great River Road parallels I-94 along the Preferred Route and therefore the visual impact of the proposed Project should not be materially greater than the present conditions created by the existence of the interstate.<sup>152</sup>

148. MnDOT does not have jurisdiction over the Great River Road and it would not be the permitting authority for utility facilities that occupy any portion of the CSAH 75 right-of-way.<sup>153</sup>

149. The Preferred Route creates less aesthetic impact than Routes A or B.

#### Cultural Values

150. The communities in the vicinity of the Project value their pioneer roots, the history of their settlement, and their predominately agricultural economy. Manufacturing, retail, and service industries are also a commercial strength in the region.<sup>154</sup>

151. The proposed transmission lines are intended to serve the region with a stable power supply without compromising the area's cultural values. The proposed Project should not impact the cultural values of the nearby communities, regardless of the route selected.

#### Recreation

152. Recreational resources near the Preferred Route and Alternate Routes A and B include a State Wild and Scenic River District, several parks, a county trail and a scenic byway.<sup>155</sup>

153. There are two Scientific and Natural Areas (SNAs) within one mile of the Preferred Route. There are no Wildlife Management Areas (WMAs) or Waterfowl Protection Areas (WPAs) within one mile of the Preferred Route.<sup>156</sup>

154. There are two SNAs and one WMA but no WPAs within one mile of Route A. There are two SNAs and one WMA but no WPAs within one mile of Route B.<sup>157</sup>

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<sup>151</sup> Trans. Vol. 2 at 67-68 (Birkholz).

<sup>152</sup> Trans. Vol. 2 at 17 (Lahr).

<sup>153</sup> Trans. Vol. 3 at 38-39 (Seykora).

<sup>154</sup> Ex. 1A at 7-33.

<sup>155</sup> Ex. 1A at 6-2.

<sup>156</sup> Ex. 1A at 6-2.

<sup>157</sup> Ex. 1A at 6-2.

155. The Preferred Route has fewer impacts to recreation resources compared to Routes A or B.

#### Public Services

156. Construction or operation of the Project along any route is not expected to impact the operation of any existing public services in the vicinity of the Project area.<sup>158</sup>

157. The Proposed HVTL will not impact public services, regardless of which route is chosen.

#### B. Effects on Public Health and Safety

158. The Commission must consider effects of the Proposed HVTL on public health and safety.<sup>159</sup>

#### Electromagnetic Fields

159. The maximum electric field associated with Applicants' proposal, measured at one meter above the ground, is calculated to be 3.76 kV/m.<sup>160</sup> The Commission has imposed a maximum electric field limit of 8 kV/m measured at one meter above the ground.<sup>161</sup>

160. The highest projected magnetic field level during peak operation at the edge of the right-of-way is 23.79 mG. These levels are considerably less than one percent of the recommended exposure guidelines.<sup>162</sup>

161. There is no indication that any significant impact on human health and safety from EMFs will arise from the Proposed HVTL, regardless of which route is chosen.

#### HVTL Design and Construction

162. Applicants will ensure that all safety requirements are met during the construction and operation of the proposed transmission line and associated facilities. The Project will be designed and constructed according to local, State and National Electric Safety Code (NESC) standards regarding ground clearance, crossing utilities clearance, building clearance, strength of materials, and right-of-way widths.<sup>163</sup>

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<sup>158</sup> Ex. 1A at 7-37, 7-64, 7-76.

<sup>159</sup> Minn. Stat. § 216E.03, subd. 7(b)(1); Minn. R. 7850.4100(B).

<sup>160</sup> Ex. 1A at 3-22.

<sup>161</sup> Ex. 14 at 5-142 (DEIS).

<sup>162</sup> Ex. 14 at 5-143 (DEIS); Ex. 2 at Schedule 2 (Lahr Direct).

<sup>163</sup> Ex. 1A at 6-2, 7-17.

163. The proposed transmission lines will be equipped with protective devices breakers and relays to safeguard the public in the event of an accident or if the structure or conductor falls to the ground.<sup>164</sup>

164. Applicants' Proposed HVTL design and construction will comply with all applicable standards to minimize the possibility of human safety hazards.

### C. Effects on Land-Based Economies

165. The Commission must consider the effect of the Project on land-based economies, including agriculture, forestry, tourism and mining.<sup>165</sup>

#### Agriculture

166. The Project will have permanent and temporary impacts on farmland. Structure placement along the route centerline will have a permanent impact, affecting 1,000 square feet per pole.<sup>166</sup>

167. There will be a temporary impact, such as soil compaction and crop damage, during construction. Applicants estimate that the temporary impact in agricultural fields will be one acre per pole. MNDOA and Applicants developed an AIMP to address the temporary impact to farmland caused during construction.<sup>167</sup>

168. The Preferred Route's alignment 5 feet from the MnDOT right-of-way will permanently impact 195,000 square feet (4.48 acres) and temporarily impact 195 acres of farmland. The Preferred Route's 25-foot alignment will permanently impact 188,000 square feet (4.32 acres) and temporarily impact 188 acres of farmland. The Preferred Routes' 75-foot alignment would permanently impact 195,000 square feet (4.48 acres) and temporarily impact 195 acres of farmland.<sup>168</sup>

169. Route A's 5-foot alignment will permanently impact 235,000 square feet (5.40 acres) and temporarily impact 235 acres of farmland. Route A's 25-foot alignment will permanently impact 238,000 square feet (5.47 acres) and temporarily impact 238 acres of farmland. Route A's 75-foot alignment would permanently impact 237,000 (5.44 acres) square feet and temporarily impact 237 acres of farmland.<sup>169</sup>

170. Route B would permanently impact 254,000 square feet (5.84 acres) and temporarily impact 254 acres of farmland.<sup>170</sup>

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<sup>164</sup> Ex. 1A at 7-17.

<sup>165</sup> Minn. Stat. § 216E.03, subd. 7(b)(5); Minn. R. 7850.4100(C).

<sup>166</sup> Ex. 1A at 7-38.

<sup>167</sup> Ex. 1A at 7-38; Ex. 2 at 26-27.

<sup>168</sup> Ex. 22 at 7-8

<sup>169</sup> Ex. 22 at 7-8.

<sup>170</sup> Ex. 22 at 7-8.

## Forestry

171. The Project is not expected to impact any economically important forestry resources.<sup>171</sup>

## Tourism

172. The Project is not expected to impact tourism. Potential impact to the Great River Road will be mitigated and is not expected to materially affect tourism.<sup>172</sup>

## Mining

173. Mining resources have been identified along the Preferred Route, Route A and Route B.

174. There are two aggregate mines located within .25 miles of the Preferred Route. One of these is inactive. There are also bedrock quarries located near where the Preferred Route approaches the proposed Quarry Substation Site 2.<sup>173</sup>

175. There are four aggregate mines located within .25 miles of Route A. Two of the mines are the same ones located within .25 miles of the Preferred Route. The two other mines consist of a prospected pit and an inactive pit mine.<sup>174</sup>

176. There are three aggregate mines located within .25 miles of Route B. One of these is an inactive pit and the other two are prospected pits.<sup>175</sup>

## D. Effects on Archaeological and Historical Resources

177. The Commission must consider the proposed route's effect on archaeological and historic resources.<sup>176</sup>

178. Based on the Preferred Route's 5-foot alignment, there are four known archaeological sites and two historic sites within 500 feet of the alignment. Based on the Preferred Route's 25-foot alignment, there are three known archaeological sites and two historic sites within 500 feet of the alignment. Based on the Preferred Route's 75-foot alignment, there are two known archaeological sites and two historic sites within 500 feet of the alignment.<sup>177</sup> Though these numbers were not challenged during the proceeding, there is no explanation as to why there are more archaeological sites within the 5-foot alignment than the 25-foot or 75-foot alignments.

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<sup>171</sup> Ex. 1A at 6-3.

<sup>172</sup> Ex. 1A at 6-3, 7-39.

<sup>173</sup> Ex. 1A at 6-3, 7-40; Trans. Mar. 8, 2010, afternoon, at 24 (Lahr).

<sup>174</sup> Ex. 1A at 6-3, 7-65.

<sup>175</sup> Ex. 1A at 6-3, 7-77.

<sup>176</sup> Minn. Stat. § 216E.03, subd. 7(b)(1); Minn. R. 7850.4100(D).

<sup>177</sup> Ex. 1A at 7-40; Ex. 22 at 4-5.



179. Based on Route A's 5-foot alignment, there are three known archaeological sites and four known historic sites within 500 feet of the alignment. Based on Route A's 25-foot alignment, there are three known archaeological sites and four known historic sites within 500 feet of the alignment. Based on Route A's 75-foot alignment, there are two known archaeological sites and four known historic sites within 500 feet of the alignment.<sup>178</sup>

180. For Route B, there is one known archaeological site and two known historic sites within 500 feet of the alignment.<sup>179</sup>

181. There are a greater number of known archaeological sites associated with the Preferred Route and Route A than with Route B, but there is an increased potential for impact to the archaeological site associated with Route B because of its location within the Route. The known sites associated with the Preferred Route and Route A are mostly located near the exterior portions of the routes.<sup>180</sup>

182. The Proposed HVTL is not expected to have a significant impact on archaeological and historic resources. In the event an impact occurs, Applicants will determine, in consultation with the State Historic Preservation Officer (SHPO), whether the resource is eligible for listing in the National Register of Historic Places.<sup>181</sup>

183. Route B has the potential to affect the fewest number of known historic sites.<sup>182</sup>

#### E. Effects on Natural Environment

184. The Commission is required to consider the proposed route's effect on the natural environment, including effects on air and water quality resources and flora and fauna.<sup>183</sup>

##### Air Quality

185. During construction, construction vehicle emissions and dust created by right-of-way clearing will have a temporary impact on air quality. The operation of the Project will not cause any long-term impact to air quality.<sup>184</sup>

##### Water Quality and Resources

186. Numerous surface water resources including lakes, rivers, streams, wetlands and floodplains will be crossed by or located in the right-of-way of the proposed routes.<sup>185</sup>

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<sup>178</sup> Ex. 22 at 4-5.

<sup>179</sup> Ex. 22 at 4-5.

<sup>180</sup> Ex. 1A at 6-4.

<sup>181</sup> Ex. 1A at 7-43.

<sup>182</sup> Ex. 1A at 6-4.

<sup>183</sup> Minn. Stat. § 216E.03, subd. 7(b)(1) and (2); Minn. R. 7850.4100(E).

<sup>184</sup> Ex. 1A at 6-4, 7-44.

187. Sedimentation could reach these surface waters during construction because of ground disturbance caused by excavation, grading, construction traffic, and dewatering of holes drilled for transmission structures. Water quality could be temporarily degraded because of turbidity. Applicants will avoid and minimize these impacts using appropriate sediment control practices and construction practices.<sup>186</sup>

188. Using the 5-foot alignment, there are 59 acres of wetlands within the Preferred Route's right-of-way. There are 65 acres of wetland within the 25-foot alignment and 72 acres of wetlands within the Preferred Route's 75-foot alignment. There are approximately 47 acres of wetlands within Route A's alignment and 57 acres of wetlands within Route B's alignment.<sup>187</sup>

189. The Applicants estimate that the Preferred Route will require the placement of 28-30 poles within wetland acres. Route A will require approximately 19 poles within wetland acres and Route B would require the placement of 24 poles within wetland acres.<sup>188</sup>

190. The DNR noted that much public concern has been generated by the proposed crossing of the Fish Lake area and surrounding wetlands. The DNR notes that public waters and wetlands should generally be avoided when choosing transmission routes, and that alternatives such as underground routing and spanning of these areas should be considered.<sup>189</sup>

191. Fish Lake is a 98-acre lake located just south of the I-94 corridor approximately 2.5 miles southeast of the City of Clearwater. Fish Lake drains to the northeast to the Mississippi River and its backwaters. This area has been significantly altered by the I-94 and County Highway 75 corridors that run on the northeast shore of Fish Lake. Before the roads were constructed, the lake and the Mississippi River were broadly connected through a large wetland area. Now the surface water connection between Fish Lake and the Mississippi River has been constricted to a channel running beneath I-94 and Highway 75. A large wetland area is still present on the northeast side of I-94. Fish Lake is listed on the MPCA impaired waters list because of its excessive levels of nutrients.<sup>190</sup>

192. Of the routes under consideration, only the Preferred Route overlaps Fish Lake. Construction of a transmission line adjacent to the Fish Lake area would be conducted under the requirements of the Clean Water Act, which would require the Applicants to obtain a National Pollutant Discharge Elimination System (NPDES) construction stormwater permit. This permit includes a stormwater pollution prevention plan that specifies best management practices to limit or eliminate the discharge of sediment to adjacent water bodies. It is not anticipated that the project would have a

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<sup>185</sup> Ex. 1A at 7-45.

<sup>186</sup> Ex. 1A at 7-47.

<sup>187</sup> Ex. 1B, Appendix E, at 4.

<sup>188</sup> Ex. 1B, Appendix E, at 4.

<sup>189</sup> DNR Comment, Feb. 26, 2010; DNR Comment, Mar. 19, 2010.

<sup>190</sup> FEIS at 3-20.

direct impact on the impaired status of Fish Lake, since neither construction nor operation activities would affect the discharge of nutrients to the lake.<sup>191</sup>

193. One option to minimize impacts to Fish Lake itself would be to construct the transmission line on the northeast side of I-94, but this would potentially increase impact to the wetlands, and would increase the potential for impact to the Great River Road.<sup>192</sup>

194. Applicants will try to avoid disturbance of individual wetlands and drainage systems during construction by spanning wetlands and drainage systems where possible. There will be a permanent impact on wetlands where structures must be located within wetland boundaries. Permanent structure placement will result in approximately 55 square feet of wetland loss per standard single-pole structure. The temporary impact to wetlands will be about 20 feet in width per span across a wetland. The Applicants will attempt to use appropriate sediment control and construction practices to minimize temporarily degrading water quality during construction. Once the Project is completed, there will be no significant impact on surface water quality because wetland impact will be minimized and mitigated, disturbed soil will be restored to previous conditions or better, and the amount of land area converted to an impervious surface will be small.<sup>193</sup>

195. The Preferred Route's 5-foot alignment will permanently impact approximately 1,540 square feet of wetlands, temporarily impact an approximate total of 8.3 acres of wetlands, impact two acres of forested wetlands, cross 11 streams, and permanently impact 220 square feet of FEMA-designated floodplains.<sup>194</sup>

196. The Preferred Route's 25-foot alignment will permanently impact approximately 1,650 square feet of wetlands, temporarily impact an approximate total of 8.7 acres of wetlands, impact three acres of forested wetlands, cross 11 streams, and permanently impact 165 square feet of FEMA-designated floodplains.<sup>195</sup>

197. The Preferred Route's 75-foot alignment will permanently impact approximately 1,650 square feet of wetlands, temporarily impact an approximate total of 9.1 acres of wetlands, impact five acres of forested wetlands, cross 11 streams, and permanently impact 165 square feet of FEMA-designated floodplains.<sup>196</sup>

198. 201. Route A's 5-foot alignment will permanently impact approximately 1,045 square feet of wetlands, temporarily impact 5.8 acres of wetlands, impact three acres of forested wetlands, cross 14 streams, and have no permanent structure impact on FEMA-designated floodplains.<sup>197</sup>

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<sup>191</sup> FEIS at 3-20.

<sup>192</sup> FEIS at 3-21.

<sup>193</sup> Ex. 1A at 7-47, 7-48; Ex. 1B at Appendix E, at 4.

<sup>194</sup> Ex. 1B, Appendix E, at 4; Ex. 22 at 2-3, 9.

<sup>195</sup> Ex. 1B, Appendix E, at 4; Ex. 22 at 2-3, 9.

<sup>196</sup> Ex. 1B, Appendix E, at 4; Ex. 22 at 2-3, 9.

<sup>197</sup> Ex. 1B, Appendix E, at 4; Ex. 22 at 2-3, 9.

199. Route A's 25-foot alignment will permanently impact approximately 1,100 square feet of wetlands, temporarily impact 5.9 acres of wetlands, impact three acres of forested wetlands, cross 14 streams, and have no permanent structure impact on FEMA-designated floodplains.<sup>198</sup>

200. Route A's 75-foot alignment will permanently impact approximately 990 square feet of wetlands, temporarily impact 5.7 acres of wetlands, impact three acres of forested wetlands, cross 14 streams, and have no permanent structure impact on FEMA-designated floodplains.<sup>199</sup>

201. Route B will permanently impact approximately 1,320 square feet of wetlands, temporarily impact 7.3 acres of wetlands, impact approximately three acres of forested wetlands, cross 15 streams, and have no permanent structure impact on FEMA-designated floodplains.<sup>200</sup>

202. Several commenting parties raised concerns regarding the Preferred Route's potential impact on the Fish Lake/Fish Creek basin, including Fish Lake's designation as an impaired waterbody.<sup>201</sup>

203. Within the Preferred Route, the Applicants intend to place the poles as close to CSAH 75 as possible in areas that are already disturbed, thereby mitigating to the greatest extent possible impact on any wetlands in this area. In addition, Applicants confirmed that the potential impact is limited to the placement of the 55-square-foot concrete base for each utility pole. Operation of the aerial transmission lines will not affect the wetlands or water quality.<sup>202</sup>

204. The Applicants' alignment would also place the transmission line behind a natural tree line that has grown up along an abandoned elevated rail bed, which would provide a natural visual buffer from the oxbow of the Mississippi River in this area. In addition, the elevation of some of the homes along Fish Lake to the south/west side of I-94 is generally lower than the highway. To the extent the homes are lower than the interstate, the interstate would somewhat block the view of the transmission line.<sup>203</sup>

205. Design and construction techniques can be employed to minimize silting and runoff during construction and to minimize wetland impact through efforts to span the wetlands and place pole foundations in previously disturbed areas to the extent possible.<sup>204</sup>

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<sup>198</sup> Ex. 1B, Appendix E, at 4; Ex. 22 at 2-3, 9.

<sup>199</sup> Ex. 1B, Appendix E, at 4; Ex. 22 at 2-3, 9.

<sup>200</sup> Ex. 1B, Appendix E, at 4; Ex. 22 at 2-3, 9.

<sup>201</sup> See e.g., FEIS at 3-20 and Appendix D.

<sup>202</sup> Trans. Vol. 1 at 22-23 (Lahr); Trans. Vol. 2 at 29 (Lahr).

<sup>203</sup> Trans. Vol. 1 at 20-22 (Lahr).

<sup>204</sup> Trans. Vol. 2 at 28-30 (Lahr).

206. OES confirmed during the evidentiary hearing that it had not identified any environmental impediments that would prevent an alignment from being placed within the Applicants' Preferred Route in and around the Fish Lake/Fish Creek basin.<sup>205</sup>

207. MnDOT also confirmed that it does not foresee any impediment to permitting an alignment within the Applicants' Preferred Route in and around the Fish Lake/Fish Creek basin.<sup>206</sup>

208. The Preferred Route should not materially impact water quality or water resources.

#### Flora

209. Flora throughout most of the Project area is typical of that found in an agricultural setting. The Project is not anticipated to substantially disrupt vegetative community quality or function. Transmission lines will span areas containing native communities wherever possible. Applicants will work with DNR and USFWS to avoid and minimize the direct impact to habitat and conservation areas.<sup>207</sup>

210. There will be a temporary impact on flora at the structure locations where borings will take place and spoils will be stored. The temporary impact is estimated at one acre per span. The permanent impact is estimated at 55 square feet per pole.<sup>208</sup>

211. Staging areas and stringing areas will temporarily impact flora across the route. Grading could occur at the staging areas if they are not located in previously disturbed sites. In forested areas, these will be cleared for access roads and staging areas only as necessary to permit the passage of equipment. Temporary access roads will be removed and the area restored to its original condition following construction.<sup>209</sup>

212. There will be permanent vegetative changes in woodland areas within the right-of-way. Trees and shrubs that may interfere with maintenance and the safe operation of the transmission line will not be allowed to establish within the right-of-way. Following existing corridors through wooded areas will reduce the impact on trees and habitats they support. Vegetation is controlled mechanically or with herbicides on a regular maintenance schedule. Vegetation that does not interfere with the safe operation of the transmission line is allowed to reestablish within the right-of-way after construction.<sup>210</sup>

213. Applicants will work with the DNR and USFWS to avoid or minimize impact on sensitive flora along the route and will avoid and minimize impact on any areas known to contain native vegetation. DNR commented that the tubercled rein-orchid, a state-listed endangered plant, has been documented in the vicinity of the

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<sup>205</sup> Trans. Vol. 2 at 64 (Birkholz)

<sup>206</sup> Trans. Vol. 3 at 53-54 (Seykora).

<sup>207</sup> Ex. 1A at 7-51.

<sup>208</sup> Ex. 1A at 7-52.

<sup>209</sup> Ex. 1A at 7-52.

<sup>210</sup> Ex. 1A at 7-52.

proposed Project. Once the final route is selected, Applicants can coordinate with DNR to identify the presence of tubercled rein-orchid and minimize impact to its habitat.<sup>211</sup>

214. Areas disturbed due to construction activities are to be restored to pre-construction contours and will be reseeded with a seed mix that is certified to be free of noxious weeds, as recommended by local DNR management.<sup>212</sup>

215. There are no sections of the Preferred Route or Route A that cross WPAs, United States Fish and Wildlife Service (USFWS) easements, NWRs or WMA lands. Regardless of the selected alignment, the Preferred Route will cross three Minnesota County Biological Survey Sites of Biodiversity Significance and Route A will cross four such areas.<sup>213</sup>

216. Route B does not cross any WPAs, USFWS easements, or NWRs, but Route B does cross a small section of Hoglund WMA in Wright County. Route B will cross five Minnesota County Biological Survey Sites of Biodiversity Significance.<sup>214</sup>

217. The Preferred Route, which is the shortest route and parallels the most existing right-of-way, will have less impact on flora than Route A or Route B.

#### Fauna

218. Wildlife throughout the Project area consists of birds, mammals, fish, reptiles, amphibians, mussels, and insects, both resident and migratory, which use the area for forage, shelter, breeding, or stopover during migration.<sup>215</sup>

219. Throughout the Project area, there are several areas where high-quality wildlife habitat occurs naturally or is being managed.<sup>216</sup>

220. There is potential for the temporary displacement of wildlife and loss of habitat during construction of the Project. It is likely that affected species would only be displaced a short distance since there is similar habitat close by.<sup>217</sup>

221. Permanent impact to wildlife could take place at new Quarry Substation locations.<sup>218</sup>

222. To mitigate possible impact to wildlife, Applicants intend to span designated habitat or conservation areas wherever feasible. In areas where complete spanning is not possible, Applicants will minimize the number of structures placed in

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<sup>211</sup> Ex. 1A at 7-52; FEIS at 2-81.

<sup>212</sup> Ex. 1A at 7-52.

<sup>213</sup> Ex. 1A at 6-5, 7-50, 7-69; Ex. 22 at 10.

<sup>214</sup> Ex. 1A at 6-5, 7-81; Ex. 22 at 10.

<sup>215</sup> Ex. 1A at 7-52.

<sup>216</sup> Ex. 1A at 7-53.

<sup>217</sup> Ex. 1A at 6-5.

<sup>218</sup> Ex. 1A at 7-53.

high quality wildlife habitat and will work with the DNR and USFWS to determine appropriate mitigation.<sup>219</sup>

223. The Project will be constructed in a manner to minimize potential risk to avian species. Applicants will avoid areas known as major flyways or migratory resting spots. Raptors, waterfowl and other birds may be affected by the construction and placement of the transmission line. Avian collisions are a possibility but typically because of the large size of conductors associated with the transmission lines compared to distribution lines, transmission line conductors are more visible. The Applicants will address avian issues at waterbody crossings and other areas of concern by working with the DNR and USFWS to identify any areas that may require marking transmission line shield wires with bird flight diverters or using alternate structures to reduce the likelihood of collision and electrocution.<sup>220</sup>

224. In 2002, Xcel Energy entered into a Memorandum of Understanding with the USFWS to address avian issues.<sup>221</sup>

225. The Preferred Route, Route A and Route B will have a similar impact to fauna, but the Preferred Route, which is the shortest route, will likely have the least impact. By avoiding a Mississippi River crossing and other major river crossings, the Preferred Route will reduce the risk of avian collision.

#### F. Effects on Rare and Unique Natural Resources

226. The Commission must consider the proposed routes' effect on rare and unique natural resources.<sup>222</sup>

227. Many of the threatened and endangered species identified in the Project area are associated with wetlands and other habitats associated with water resources. River species of mussels are encountered in major rivers within the one-mile buffer, particularly the Mississippi River, which is not crossed by the Project.<sup>223</sup>

228. Applicants will span rivers, streams and wetlands where it is possible. Wherever it is not feasible to span, Applicants will conduct a survey to determine the presence of special status species or suitability of habitat for such species and coordinate with the appropriate agencies to avoid and minimize any impact.<sup>224</sup>

229. A total of 10 different threatened and endangered species were recorded within one mile of the Preferred Route.<sup>225</sup>

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<sup>219</sup> Ex. 1A at 7-54; Ex. 14 at 5-133 (DEIS); FEIS at 2-17.

<sup>220</sup> Ex. 14 at 7-54 (DEIS).

<sup>221</sup><sup>221</sup> Ex. 1A at 7-55 (Application). Xcel also submitted a draft Avian Protection Plan in 2009. Ex. 14 at 5-133 (DEIS).

<sup>222</sup> Minn. Stat. § 216E.03, subd. 7(b)(1); Minn. R. 7850.4100(F).

<sup>223</sup> Ex. 1A at 7-56.

<sup>224</sup> Ex. 1A at 7-57.

<sup>225</sup> Ex. 1A at 6-5, 7-56; Ex. 1B at Appendix E, p. 5.

230. A total of 11 threatened and endangered species were recorded within one mile of Route A.<sup>226</sup>

231. A total of 11 threatened and endangered species were recorded within one mile of Route B.<sup>227</sup>

232. The Preferred Route will have less of an impact on rare and unique natural resources than Route A or Route B.

#### G. Application of Various Design Considerations

233. The Commission must consider the Project's applied design options that maximize energy efficiency, mitigate adverse environmental effects, and accommodate expansion of transmission or generating capacity.<sup>228</sup>

234. The entire length of the 345 kV transmission line will be constructed with double circuit capable poles so a second circuit can be strung if expansion is approved by the Commission. This will allow for maximizing the use of existing right-of-way and minimizing the construction time for a new circuit when circumstances merit expansion.<sup>229</sup>

235. The Applicants also propose to install six conductors at interstate crossings and interchanges to facilitate the addition of a second circuit. The six conductors will be tied together in pairs and will act as a single circuit until addition of a second circuit is approved. Installation of six conductors during initial construction will avoid construction-related conflicts and disruptions to highway facilities at the time the second circuit is added.<sup>230</sup>

236. The Applicants plan to acquire at least 40 acres for the new Quarry Substation to create a buffer around the substation and to provide for future expansion.<sup>231</sup>

237. The new Quarry Substation will be configured to accommodate a second circuit, the future addition of the Monticello to St. Cloud 345 kV line, and other future high voltage transmission lines.<sup>232</sup>

238. The Project along the Preferred Route, Route A and Route B is designed to maximize energy efficiencies and mitigate adverse environmental effects.

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<sup>226</sup> Ex. 1A at 6-5, 7-70; Ex. 1B at Appendix E, p. 5.

<sup>227</sup> Ex. 1A at 6-5, 7-82; Ex. 1B at Appendix E, p. 5.

<sup>228</sup> Minn. Stat. § 216E.03, subd. 7(b)(3) and (10); Minn. R. 7850.4100(G).

<sup>229</sup> Ex. 1A at 3-6.

<sup>230</sup> Trans. Vol. 2 at 43-53; Exs. 24, 25, and 26 (Chezik Drawings).

<sup>231</sup> Ex. 2 at 7.

<sup>232</sup> Ex. 1A at 3-5.



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

239. The Commission is required to consider the proposed routes' use or paralleling of existing rights-of-way, survey lines, natural division lines, and agricultural field boundaries.<sup>233</sup>

240. Approximately 97 percent of the Preferred Route, at the 5-foot or 25-foot alignments and 96 percent at the 75-foot alignment, uses or parallels existing right-of-way, survey lines, natural division lines, or agricultural field lines. Approximately 320 acres of new right-of-way would be required for the Preferred Route's 5-foot alignment. Approximately 327 acres of new right-of-way would be required for the Preferred Route's 25-foot alignment. Approximately 452 acres of new right-of-way would be required for the Preferred Route's 75-foot alignment.<sup>234</sup>

241. Approximately 94 percent of Route A, regardless of which alignment, uses or parallels existing right-of-way, survey lines, natural division lines, or agricultural field lines. Approximately 406 acres of new right-of-way would be required for Alternate Route's A 5-foot alignment. Approximately 422 acres of new right-of-way would be required for Route A's 25-foot alignment. Approximately 458 acres of new right-of-way would be required for Route A's 75-foot alignment.<sup>235</sup>

242. Approximately 94 percent of Route B uses or parallels existing right-of-way, survey lines, natural division lines, or agricultural field lines. Approximately 458 acres of new right-of-way would be required for Route B.<sup>236</sup>

243. The Preferred Route uses or parallels the greatest length of existing right-of-way, survey lines, natural division lines, and agricultural field boundaries. The Preferred Route will also require the least amount of new right-of-way.

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

244. The Commission must consider the proposed routes' use of existing transportation, pipeline and electrical transmission system right-of-way.<sup>237</sup>

245. Approximately 83 percent of the Preferred Route's 5-foot alignment follows existing transportation, pipeline, and electrical transmission system rights-of-way (ROWs). Approximately 83 percent of the Preferred Route's 25-foot alignment follows existing transportation, pipeline, and electrical transmission system ROWs.

<sup>233</sup> Minn. Stat. § 216E.03, subd. 7(b)(9); Minn. R. 7850.4100(H).

<sup>234</sup> Ex. 1B at Appendix E, p. 2 and Appendix H; Ex. 1A at 6-6 and § 3.2.

<sup>235</sup> Ex. 1B at Appendix E, p. 2 and Appendix H; Ex. 1A at 6-6 and § 3.2.

<sup>236</sup> Ex. 1A at 6-6 and § 3.2; Ex. 1B at Appendix H.

<sup>237</sup> Minn. Stat. § 216E.03, subd. 7(b)(8); Minn. R. 7850.4100(J).

Approximately 30 percent of the Preferred Route's 75-foot alignment follows existing transportation, pipeline, and electrical transmission system ROWs.<sup>238</sup>

246. Approximately 70 percent of Route A's 5-foot alignment follows existing transportation, pipeline and electrical transmission system ROWs. Approximately 70 percent of Route A's 25-foot alignment follows existing transportation, pipeline and electrical transmission system ROWs. Approximately 50 percent of Route A's 75-foot alignment follows existing transportation, pipeline and electrical transmission system ROWs.<sup>239</sup>

247. Approximately 60 percent of Route B follows existing transportation, pipeline and electrical transmission system ROWs.<sup>240</sup>

248. The Preferred Route's 5-foot and 25-foot alignment make the greatest use of existing transportation, pipeline and electrical transmission system right-of-way.

#### J. Electrical System Reliability

249. The Commission is required to consider the Project's impact on electrical system reliability.<sup>241</sup>

250. The Project is proposed to be constructed with double-circuit-capable structures. The Preferred Route, Route A, and Route B will support the reliable operation of the transmission system.

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

251. The Commission is required to consider each proposed route's cost of construction, operation and maintenance.<sup>242</sup>

252. Construction of the Project along the approximately 28-mile Preferred Route is estimated to cost \$76.2 million to construct and \$300 to \$500 per mile to operate and maintain.<sup>243</sup>

253. Construction of the Project along Route A, which is approximately 32 miles in length, is estimated to cost \$87.4 million to construct and \$300 to \$500 per mile to operate and maintain.<sup>244</sup>

254. Construction of the Project along Route B, which is approximately 35 miles in length, is estimated to cost \$93.5 million to construct and \$300 to \$500 per mile to operate and maintain.<sup>245</sup>

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<sup>238</sup> Ex. 1A at § 3.2, 6-6; Ex. 1B at Appendix H.

<sup>239</sup> Ex. 1A at § 3.2, 6-6; Ex. 1B at Appendix H.

<sup>240</sup> Ex. 1A at § 3.2, 6-6.

<sup>241</sup> Minn. Stat. § 216E.03, subd. 7(b)(10); Minn. R. 7850.4100(K).

<sup>242</sup> Minn. R. 7850.4100(L).

<sup>243</sup> Ex. 1A at § 2.6; Ex. 5 at 1-2.

<sup>244</sup> Ex. 1A at § 2.6; Ex. 5 at 1-2.

255. The Preferred Route will have a lower cost of construction than Route A or Route B.

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

256. The Commission is required to consider the adverse human and natural environmental effects that cannot be avoided, for each proposed route.<sup>246</sup>

257. Unavoidable adverse impacts include the physical impact on the land, primarily agricultural land, due to the construction of the Project.<sup>247</sup>

258. For the Preferred Route, approximately 195,000 square feet of permanent agricultural land impact is anticipated for the 5-foot alignment; approximately 188,000 square feet of permanent agricultural land impact is anticipated for the 25-foot alignment; and approximately 195,000 square feet of permanent agricultural land impact is anticipated for the 75-foot alignment.<sup>248</sup>

259. For Route A, approximately 235,000 square feet of permanent agricultural land impact is anticipated for the 5-foot alignment; approximately 238,000 square feet of permanent agricultural land impact is anticipated for the 25-foot alignment; and approximately 237,000 square feet of permanent agricultural land impact is anticipated for the 75-foot alignment.<sup>249</sup>

260. Approximately 254,000 square feet of permanent agricultural land impact is anticipated for Route B.<sup>250</sup> There will also be a temporary impact, such as soil compaction and crop damage, during construction. The damage is estimated to effect one acre per pole.<sup>251</sup>

261. The Preferred Route will have fewer unavoidable adverse human and natural environmental effects than Route A or Route B.

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<sup>245</sup> Ex. 1A at § 2.6; Ex. 5 at 1-2.

<sup>246</sup> Minn. Stat. § 216E.03, subd. 7(b)(5) and (6); Minn. R. 7850.4100(M).

<sup>247</sup> Ex. 1A at 6-6, 6-7.

<sup>248</sup> Ex. 22 at 7.

<sup>249</sup> Ex. 22 at 7.

<sup>250</sup> Ex. 22 at 7.

<sup>251</sup> Ex. 22 at 8; Ex. 1B Appendix E, p. 1.

#### M. Irreversible and Irretrievable Commitments of Resources

262. The Commission must consider the irreversible and irretrievable commitments of resources that are necessary for each proposed route.<sup>252</sup>

263. 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. Only construction resources, such as concrete, steel and hydrocarbon fuels, will be irreversibly and irretrievably committed to this Project. The irretrievable resources for the Project are the same, regardless of which route or substation site is chosen.<sup>253</sup>

264. The Preferred Route, which is the shortest route, will require less commitment of resources than Routes A or B, because it requires fewer poles.

#### N. Consideration of Issues Presented by State and Federal Agencies

265. The Commission must consider issues raised by state and federal agencies when appropriate.<sup>254</sup>

266. MnDOT has stated a number of concerns with the proposed routes. Applicants must obtain a MnDOT permit for each location where the proposed transmission lines cross or occupy trunk highway right-of-way. Longitudinal installations that parallel I-94 right-of-way also require separate FHWA approval in those locations where there is permanent physical encroachment. MnDOT confirmed that FHWA concurrence is not required where there will be only the potential for intermittent encroachment from conductor blow-out. Applicants' proposed 25-foot alignment is intended to avoid permanent physical occupation of the I-94 right-of-way.<sup>255</sup>

267. Some members of the public questioned the relative impact of the transmission line to travelers briefly stopping at the Rest Area as compared to the aesthetic effect on those who live or work near them. Their view was that less consideration should be given to the travelers' sensibilities.<sup>256</sup>

268. It is not clear whether the transmission line could cross the rest area in a safe location where the only concern with placement is aesthetic.

269. MnDOT has confirmed that the Preferred Route presents no insurmountable obstacle to permitting, provided there is enough flexibility within the route to accommodate particular site-specific MnDOT concerns with the final alignment such as the Fuller Lake Rest Area.<sup>257</sup>

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<sup>252</sup> Minn. Stat. § 216E.03, subd. 7(b)(11); Minn. R. 7850.4100(N).

<sup>253</sup> Ex. 1A at 6-7.

<sup>254</sup> Minn. Stat. § 216E.03, subd. 7(b)(12).

<sup>255</sup> Ex. 2 at 22; Trans. Vol. 1 at 69 (Lahr); Trans. Vol. 3 at 46-47 (Seykora).

<sup>256</sup> See e.g., Jerry Finch, Mar. 8, afternoon, at 124.

<sup>257</sup> Ex. 3 at Schedule 15, p. 11-12; Trans. Vol. 3 at 48-51 (Seykora).

## O. Evaluation of Additional Alternatives

270. The Commission must consider alternatives to the proposed route.<sup>258</sup>

271. In the draft EIS, the OES studied and one segment alternative to Applicants' proposed route Alternate B, one route alternative and one Quarry Substation site alternative. These alternatives are referred to as Route C, Route D, and Quarry Substation Site 3, respectively.<sup>259</sup>

### Route C

272. Route C is the same as Applicants' proposed Route B with one segment modification. Route C, which is approximately 30 miles long, commences at the Applicants' Route B in Silver Creek Township and travels west for approximately six miles. Route C then turns north for approximately 1.5 miles and reconnects with Route B.<sup>260</sup>

273. Applicants estimate Project costs for construction along Route C at approximately \$65.5 million.<sup>261</sup>

274. Construction along Route C would have greater impacts to residences than the Preferred Route. Along the entire Route C there are 36 residences within 75-150 feet of the route centerline. In contrast, along the Preferred Route, regardless of which of the three alignments is analyzed, at the most there are five residences between 75-150 feet of the route centerline. Also, where Route C makes a 90 degree turn near the intersection of 127th Street NW and County Road 8, there are several homes within the route that create a constrained area and would require deviation to avoid displacement of residences. Additionally, Route C has more residences and non-residential structures within the proposed 1,000-foot route width than does the Preferred Route.<sup>262</sup>

275. Route C would permanently and temporarily impact agricultural lands but no measurable impact would occur on prime farmlands. The proposed 150-foot right-of-way would impact six center-pivot irrigation systems.<sup>263</sup>

276. Under the Route C option, no impact to forested areas or economically important forestry would occur. Forest resources, notably existing tree stands, along Route C are similar to Route B. Route C would impact 29 acres of wooded areas.<sup>264</sup>

277. Aesthetic resources and potential impacts associated with Route C are the same as Route B except at the eastern end of the route in Silver Creek Township where

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<sup>258</sup> Minn. Stat. § 216E.03, subd. 7(b)(7).

<sup>259</sup> Ex. 14 at 1-2.

<sup>260</sup> Ex. 2 at 12.

<sup>261</sup> Ex. 5 at 2.

<sup>262</sup> Ex. 2 at 12-13; Ex. 14 at 5-17, 5-111 (DEIS).

<sup>263</sup> Ex. 14 at 5-27 (DEIS).

<sup>264</sup> Ex. 14 at 5-27 (DEIS).

the route diverges to the south. A greater number of residential properties would be impacted along Route C as compared to Route B because of the higher density of residential population where the right-of-way deviates from Route B. In addition, the route travels across the southern border of the Harry Larson Memorial Wright County Forest in Silver Creek Township. There would be a permanent impact of approximately twelve acres or five percent of the forest due to vegetation removal.<sup>265</sup>

278. Route C's impact on recreation is similar to that of Route B. One WMA would be impacted by the right-of-way. Route C also encompasses a parcel of land owned by the DNR on the south side of 127th Street NW. The land, approximately 12 acres, is part of the Reinvest in Minnesota (RIM) program, by which the DNR purchases and develops important areas for fish and wildlife. There would be a permanent impact to the RIM parcel due to vegetation removal and dissection if the route traveled on the south side of the roadway.<sup>266</sup>

279. Route C impacts no facilities open to public use.<sup>267</sup>

280. No archaeological or historic facility resources have been found within 500 feet of the centerline of Route C.<sup>268</sup>

281. A total of 12 state-protected species have been identified within one mile of Route C – one state-listed endangered species, three state-listed threatened species, and eight different species of special concern. No critical habitat occurs within one mile of the route.<sup>269</sup>

282. Route C requires two more crossings of Public Waters Inventory ("PWI") streams (both crossings of Johnson Creek) than the Preferred Route.<sup>270</sup>

283. Route C crosses fewer wetland acres than the Preferred Route.<sup>271</sup>

284. Route C's impact on flora would be the same as the impact for Route B. A total of six MCBS sites of biodiversity significance would be crossed by the route.<sup>272</sup>

285. Route C's impact on air and water quality would be the same as the impact for the Preferred Route or any of the Alternative Routes.<sup>273</sup> Similarly, Route C would pose the same EMF considerations as the other routes.<sup>274</sup>

286. There was no public support for Route C.

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<sup>265</sup> Ex. 14 at 5-40 (DEIS).

<sup>266</sup> Ex. 14 at 5-55 (DEIS).

<sup>267</sup> Ex. 14 at 5-67 (DEIS).

<sup>268</sup> Ex. 14 at 5-91 (DEIS).

<sup>269</sup> Ex. 14 at 5-100 (DEIS).

<sup>270</sup> Ex. 14 at 5-111 (DEIS).

<sup>271</sup> Ex. 14 at 5-116 (DEIS).

<sup>272</sup> Ex. 14 at 5-126 (DEIS).

<sup>273</sup> See Ex. 14 at 5-134 (DEIS).

<sup>274</sup> See Ex. 14 at 5-141 (DEIS).

## Route D

287. Route D is a route alternative from the Monticello Substation to the new Quarry Substation site and is also approximately 30 miles long. It exits the Monticello Substation adjacent to an existing 115 kV line and crosses the Mississippi River in an area designated as a recreational river district.<sup>275</sup>

288. The Mississippi River was designated as part of the Minnesota Wild and Scenic Rivers Program in 1976. The Mississippi River is designated as “scenic” from St. Cloud to Clearwater, and “recreational” from Clearwater to Monticello. Sherburne County adopted its Wild and Scenic River ordinance in 1979 to further protect the Mississippi River in this area. The existing 115 kV line was installed in approximately 1971, or approximately five years prior to this portion of the Mississippi River’s designation as a recreational area.<sup>276</sup>

289. Route D continues to parallel the existing 115 kV transmission line and road right-of-way for approximately 15 miles where it turns southwesterly and crosses the Mississippi River for a second time in an area designated as a Scenic River District and then generally follows the Preferred Route to any one of the proposed Quarry Substation Sites (1, 2, 3, or 4).<sup>277</sup>

290. Applicants estimate Project costs for Route D at approximately \$53.6 million. However, Route D’s actual costs may be higher because it is unclear whether this alignment can be constructed on the Monticello Nuclear Generating Plant property or if multiple transmission line crossings of the existing transmission lines can be avoided. If the line had to be located off plant property or in another location on the property, it would be longer and overall costs would increase. Similarly, the crossing or reconfiguration of existing transmission lines in the corridor could cause additional costs. The estimate does not account for any requirements that may be imposed by the DNR, U.S. Army Corps of Engineers (USACE), or the USFWS because of the river crossings. The cost estimate also does not consider any special construction techniques for the river crossings.<sup>278</sup>

291. Route D has a greater impact on various resources than Applicants’ Preferred Route. Route D crosses the Mississippi River twice, resulting in a greater impact on the river than the Preferred Route, which does not cross the Mississippi River. One of the Route D crossing locations is within a designated Scenic River District and the other is within a designated Recreational River District. At a minimum, each of the crossings would require a license to cross PWI waters and a Utility Permit for crossing public lands (wild and scenic river district) from the DNR, and a USACE Nationwide Permit to cross a Section 10 Navigable Water. No Section 10 permit would

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<sup>275</sup> Ex. 2 at 12; FEIS at Appendix C.

<sup>276</sup> Trans. Vol. 2 at 60-61; Ex. 14 at 5-32 (DEIS); Trans. Vol. 1 at 71; FEIS at Appendix C; Comment, Waytashek, Mar. 8, 2010 (afternoon), at 108.

<sup>277</sup> Ex. 14 at 1-14 (DEIS); Ex. 2 at 12.

<sup>278</sup> Ex. 5 at 2; Trans. Vol. 2 at 22.

be required for Applicants' Preferred Route. Route D would also require additional state and federal permits.<sup>279</sup>

292. Approximately 5.67 acres of vegetation would need to be permanently removed at the Mississippi River crossing in Monticello and approximately 1.1 acres of vegetation would have to be permanently removed at the Mississippi River crossing near St. Augusta.<sup>280</sup>

293. The Route D proposed Mississippi River crossings have existing transmission facilities, but these facilities are 115 kV and utilize shorter poles and a right-of-way of 80 feet. If the new 345 kV line were built on a separate 150-foot right-of-way, the poles would be 130 to 175-feet tall. Electrical reliability would be reduced if the facilities were existing conductors and new conductors were strung on the same poles or next to existing facilities at the crossings of the Mississippi River because if there were a natural event strong enough to cause damage to one line, all lines would likely be affected.<sup>281</sup>

294. The additional regulatory review required for the two Route D crossings of the Mississippi River could require a minimum of six months to complete and could potentially delay construction of the Project. If Route D were selected, the in-service date could be significantly delayed. Applicants estimate that the selection of Route D could cause up to a one-year delay in the second quarter of 2012 in-service date for the Project due to the uncertainty about the length of time required to acquire the necessary permits.<sup>282</sup>

295. Although the river crossings would require special design considerations, it appears that the change in design and construction needed to span the river does not pose a major impediment to the selection of Route D.<sup>283</sup>

296. Applicants would likely be able to span the Mississippi River without placing a pole in the riverbed. Route D would cause no impact to water quality in the Mississippi River.<sup>284</sup>

297. There are several impediments to construction of Route D. Route D would traverse the Monticello Nuclear Generating Plant property to reach the Mississippi River. There is an existing 115 kV double-circuit transmission line from the plant to the Mississippi River and there is inadequate space between the existing buildings on the south of the line and the dry cask storage on the north of the line to construct a double circuit 345 kV transmission line. If the line were routed to the north,

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<sup>279</sup> Ex. 14 at 5-59, 5-60 (DEIS); Ex. 2 at 13-14.

<sup>280</sup> FEIS at 2-76.

<sup>281</sup> Ex. 2 at 13-14; Ex. 6 at 5; Ex. 14 at S-4 (DEIS).

<sup>282</sup> Ex. 2 at 13-14; Ex. 4 at 6.

<sup>283</sup> See e.g., Ex. 14 at Appendix B-7 (DEIS).

<sup>284</sup> See Ex. 14 at 1-14 (DEIS).



it would require clearing of a wooded area that would reduce the screening of the cask storage area.<sup>285</sup>

298. After crossing the Mississippi, Route D would cross over an existing double circuit 345 kV line and an existing 69 kV line. Co-location of lines in a confined area increases the likelihood that one natural event could adversely affect multiple lines, thus decreasing the overall system reliability. Also, the existing 345 kV lines and the proposed project will both flow north or south to supply St. Cloud or the Twin Cities, depending upon the time of year and load conditions. The close proximity of two large lines serving a similar load is not sound transmission planning. Route D also parallels the Sherburne County generation plant property, and in places the Proposed Project would be required to “jump” the existing 115 kV line to avoid residences or other conditions.<sup>286</sup> These effects would further diminish the reliability of the Proposed Project.

299. After crossing the existing double-circuit 345 kV line and 69 kV line, Route D would proceed to the northwest through an area that is currently pivot irrigated farmland, but which is planned to be an industrial reserve for future development, and where a large landfill is currently located. Public comments raised concerns about the impact to development in this area, as well as the potential loss of landfill disposal capacity if Route D is chosen.<sup>287</sup>

300. The existing 115 kV line right-of-way is only 80-foot wide, and Applicants anticipate that they would need to acquire an entirely new 150-foot wide right-of-way to parallel the existing 115 kV line. Efforts to parallel the existing 115 kV along Route D would require the span lengths of the new 345 kV line to be shortened to match the existing spans. As a result, Applicants would be unable to maximize span lengths on Route D.<sup>288</sup>

301. Route D would have a greater impact on agriculture than the other alternatives. Construction along Route D would impact 36 center pivot irrigation fields compared to three on the Preferred Route. It may be difficult to place towers and adjust span lengths to avoid disruption of the irrigation systems. Reconfiguration of some or all of the center pivots may be required, which would result in additional project costs.<sup>289</sup>

302. Route D also would impact more acres of wooded and forested land than the Preferred Route. Route D has approximately 292 acres of wooded areas within its route width and the Preferred Route has approximately 155 acres of wooded areas within its route width.<sup>290</sup>

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<sup>285</sup> Ex. 2 at 13-14; Trans. Vol. 1 at 44, 46-48 (Lahr).

<sup>286</sup> Trans. Vol. 1 at 48-50, 59-60, 61-62 (Lahr); Trans. Vol. 1 at 51-56 (Kline); Ex. 6 at 4-5.

<sup>287</sup> Trans. Vol. 1 at 56-57; Exs. 120, 121, 122, 123; Waytashek, Mar. 8, 2010, afternoon, at 108-109.

<sup>288</sup> Trans. Vol. 1 at 44-46, 58 (Lahr).

<sup>289</sup> Ex. 14 at 5-24, 5-28 (DEIS); Trans. Vol. 1 at 45-46, 57, 59 (Lahr).

<sup>290</sup> Ex. 14 at 5-23 (DEIS); Ex. 2 at 14.

303. Route D would have a greater impact on recreation than the Preferred Route. It would pass through or near three parks on the northeast side of the Mississippi River, including Snuffy's Landing, Riverwood Park and the West Mississippi Park. Route D is also within the Sherburne County proposed trail corridor, a two-mile wide area from the Mississippi eastward.<sup>291</sup>

304. Natural Heritage Information System records identify 15 species listed as special concern, threatened or endangered within on mile of Route D, which is higher than any of the proposed routes.<sup>292</sup> The additional crossings of the Mississippi River would also pose hazards to avian species.<sup>293</sup>

305. No facilities open to public use are expected to be impacted by Route D.<sup>294</sup>

306. Many people opposed the use of Route D. Fewer people supported the use of Route D, usually because it paralleled an existing 115 kv line. The DNR specifically objected to Route D because the increase in lines crossing the Mississippi River would pose hazards for migrating birds that use the Mississippi River as a flyway and wintering area. The DNR also opposed Route D because of the visual disturbance to the Scenic River District and Recreational River District.<sup>295</sup>

307. Route D's impact on air and water quality would be the same as the impact for the Preferred Route or any of the Alternative Routes.<sup>296</sup> Similarly, Route D would have pose the same EMF considerations as any of the other routes.<sup>297</sup>

308. In contrast to Route D, construction along the Preferred Route, Route A, Route B or Route C would better meet the purpose and need approved by the Commission by enhancing the geographic diversity of high voltage transmission lines in the area which reduces the risk that a single event would cause multiple lines to be out of service.<sup>298</sup>

### Undergrounding

309. Some members or the public suggested the transmission lines should be installed underground at sensitive locations.<sup>299</sup>

310. Applicants prepared a report in connection with the CAPX 2020 projects to estimate the cost of undergrounding. The study concluded that undergrounding a 345

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<sup>291</sup> FEIS at Appendix C; Ex. 14 at 5-51 (DEIS).

<sup>292</sup> Ex. 14 at 5-102 (DEIS).

<sup>293</sup> See DNR Comment, Feb. 26, 2010.

<sup>294</sup> Ex. 14 at 5-67 (DEIS).

<sup>295</sup> DNR Comment, Feb. 26, 2010.

<sup>296</sup> See Ex. 14 at 5-134 (DEIS).

<sup>297</sup> See Ex. 14 at 5-141 (DEIS).

<sup>298</sup> Ex. 2 at 14-15; Ex. 6 at 4-5; Ex. 14 at S-4 (DEIS).

<sup>299</sup> See, e.g., Conroy, March 8 (afternoon) at 80; Hammer, March 8 (afternoon) at 115; Phipps, March 8 (evening) at 26; Amhalt-Warner, March 8 at 33; Thelen, March 8 (evening) at 40-41.

kV double circuit capable transmission facility would cost approximately \$40 million per mile.<sup>300</sup>

311. Applicants estimate the cost of the entire 28-mile transmission line to cost \$53 million to \$71 million. The cost to place the facilities underground would thus exceed by several times the cost of Applicants' proposed aerial installation.<sup>301</sup>

312. The additional cost and difficulty associated with undergrounding does not warrant placing the transmission line underground.

313. The Applicants did not provide any estimate of the cost to underground the transmission lines for specific areas, such as the river crossings or the Fish Lake area.

P. Associated Facilities

314. The associated facilities for the Project include modifications at the existing Monticello Substation, construction of the proposed Quarry Substation, and the interconnection of the existing St. Cloud to Sauk River 115 kV transmission line at the new Quarry Substation.<sup>302</sup>

315. No additional land is required for modifications to be made at the Monticello Substation.<sup>303</sup>

316. Applicants seek to acquire up to 40 acres for the proposed Quarry Substation to ensure adequate space for planned facilities, future transmission line interconnections and an area surrounding the proposed facility to minimize immediate encroachment with other existing or new land uses. The existing St. Cloud to Sauk River 115 kV transmission line extends into the proposed Quarry Substation Sites 1, 2 and 4. Therefore, potential impacts were assessed for the larger substation siting areas, and there is no separate discussion of potential impacts specifically associated with interconnecting the existing line at the proposed Quarry Substation.<sup>304</sup>

317. With regard to human settlement, there are existing residences located within or near the proposed Quarry Substation Sites. Approximately 99% of Substation Site 1 is zoned agricultural, and there is one existing residence and two nonresidential buildings located within the siting area. The substation would ultimately be sited to avoid the displacement of these structures.<sup>305</sup>

318. Approximately 80% of Substation Site 2 is zoned agricultural and 20% is zoned residential. There is one existing residence and 10 non-residential buildings

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<sup>300</sup> Trans. Vol. 1 at 9 (Lahr); Ex. 21 (DEIS Comment Letter and Underground Report).

<sup>301</sup> Trans. Vol. 2 at 20-21 (Lahr).

<sup>302</sup> Ex. 1A at 2-19.

<sup>303</sup> Ex. 1A at 2-19.

<sup>304</sup> Ex. 1A at 2-19; Ex. 2 at 6; Ex. 1A at 2-19.

<sup>305</sup> Ex. 1A at 7-22.

located within the siting area. The substation could ultimately be located within the approved siting area to avoid the displacement of these structures.<sup>306</sup>

319. The evidence on the record demonstrates that there will be no impact associated with noise, cultural values and public services from any of the Substation Sites.<sup>307</sup>

320. Neither Substation Site 1 or 2 would significantly impact the viewshed. Site 1 is located approximately 1,000 feet west of an existing residential use area, but there is a stand of trees between the siting area and the residential area.<sup>308</sup>

321. Applicants have committed to implement appropriate safeguards during construction and operation to avoid any impact to human health and safety.<sup>309</sup>

322. With regard to land-based economies, the Quarry Substation will have a permanent impact on agricultural land because a minimum of six acres will be permanently removed from existing land uses, including agricultural use. There is no anticipated impact to any forest resources or tourism. Aggregate mining continues to occur within the area encompassed by the proposed Quarry Substation Site 2 and Quarry Substation Site 4, which could pose some constructability considerations. Based upon their review of soil borings provided by the property owner, however, Applicants do not anticipate problems with soil conditions at Quarry Substation Site 4. There is no anticipated impact to any active mining in Quarry Substation Site 1.<sup>310</sup>

323. With regard to impacts to archaeological and historical resources, there are no archaeological sites, architectural sites or historical landscapes within the proposed Quarry Substation Siting Areas.<sup>311</sup>

324. With regard to the natural environment, the construction of the proposed Quarry Substation will have the potential for impact air quality during construction. The Proposed Quarry Substation Siting Areas have NWI wetlands present within the boundaries, and Quarry Substation Site 2 also has two bodies of water flowing through the boundaries, one of which is included in the Minnesota PWI. Applicants will avoid all identified wetland and water features to the extent feasible and will install erosion control devices (e.g., silt fence, straw bales) to ensure that sediment does not enter the water feature. The Applicants will obtain all necessary permits from the MPCA and DNR. The Project will likely result in minimal impacts on wildlife at proposed substation locations because of the abundance of similar adjacent habitat. Permanent impacts on wildlife could take place at substation locations where 40 acres of land will be changed from existing land uses, most likely agricultural, to the developed substation area.<sup>312</sup>

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<sup>306</sup> Ex. 1A at 7-22; Ex. 14 at 5-117 (DEIS).

<sup>307</sup> Ex. 1A at 7-22, 7-25, 7-26, 7-33, 7-35, 7-37.

<sup>308</sup> Ex. 1A at 7-24; FEIS at 3-2.

<sup>309</sup> Ex. 1A at 7-1.

<sup>310</sup> Ex. 1A at 7-38; Trans. Vol. 1 at 41-42 (Lahr).

<sup>311</sup> Ex. 1A at 7-42.

<sup>312</sup> Ex. 1A at 7-42 to 7-53.

325. No impact to rare and unique resources is anticipated at any of the proposed substation sites.<sup>313</sup>

326. There are no significant differences between Quarry Substation Site 1 or 2.

#### Alternative Quarry Substation Site 4

327. On February 1, 2010, the Applicants asked to add evaluation of a new Quarry Substation site to the EIS. The request was made as a result of further review and discussion with affected landowners near proposed Quarry Substation Sites 1 and 2. Quarry Substation Site 4 is proposed to be located north of the intersection of State Highway 23 and 76th Avenue in St. Joseph Township.<sup>314</sup>

328. Approximately 60 percent of Substation Site 4 is zoned for agricultural uses and approximately 40 percent is zoned for industrial/municipal uses. There are no residential or non-residential structures in the area. Since industrial and commercial properties currently exist in this area, a substation would be consistent with existing and planned land use.<sup>315</sup>

329. Quarry Substation 4 has no prime farmland, center pivots or wooded acres within the substation site boundary.<sup>316</sup>

330. Quarry Substation 4 is a better site than Substation Sites 1 or 2 because there no residential or non-residential structures in the area and because Substation Site 4 is zoned for industrial use.

#### Alternative Quarry Substation Site 3

331. This alternative encompasses approximately 15 acres in the southeast corner of Section 36, T124N, R29W and the northeast corner of Section 1, T124N, R29W in Stearns County.<sup>317</sup>

332. Quarry Substation Site 3 has the minimum amount of space required for the Project but would not allow for any future expansion. Also, the narrow shape of the Quarry Substation Site 3 does not lend itself to efficient substation layout or design. In addition to having no significant buffer between the Quarry Substation and neighboring properties, the approach areas for the transmission lines are limited by the roads that border the property.<sup>318</sup>

333. In contrast to Quarry Substation Site 3, Quarry Substation Sites 1, 2 and 4 allow for sufficient space for the Project, as well as future expansion, and still have

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<sup>313</sup> Ex. 1A at 7-57.

<sup>314</sup> FEIS at 3-1.

<sup>315</sup> FEIS at 3-2.

<sup>316</sup> FEIS at 3-2.

<sup>317</sup> Ex. 14 at 1-8

<sup>318</sup> Ex. 2 at 16-17; Trans. Vol. 1 at 39, 72-73 (Lahr); Trans. Vol. 2 at 19-20 (Lahr).

enough space remaining to maintain a buffer area between the substation and surrounding properties.<sup>319</sup>

334. In addition, because the small Quarry Substation Site 3 is so small (15 acres), should additional transmission facilities be needed in the area, a new substation site would likely be required.<sup>320</sup>

335. Quarry Substation Site 3 is also far from the St. Cloud to Sauk River 115 kV line that must interconnect. If Quarry Substation Site 3 is selected, approximately 3.5 miles of new 115 kV line would need to be constructed to tie the new substation to the St. Cloud area 115 kV loop. In contrast, Quarry Substation Sites 1, 2 and 4 are located on the St. Cloud area 115 kV loop, so only a short connection would be required. To be a truly equivalent alternative to Quarry Substation Sites 1, 2 and 4, Site 3 would need to be looped "in and out" and two lines would have to be built on separate rights-of-way to connect the site back to the St. Cloud area loop. If the lines were built on the same structures, a single event could put both lines out of service, and thereby reduce the reliability of the electrical system serving the St. Cloud area.<sup>321</sup>

336. The DNR noted that Alternative Site 3 has the least impact from a natural resource perspective but that because the area between Site 3 and the Fargo-Moorhead segment is environmentally sensitive, Site 3 is not the best site.<sup>322</sup>

337. There was no public support for the selection of Quarry Substation Site 3.

338. OES similarly confirmed that it had identified no advantage in selecting Quarry Substation Site 3 over Applicants' proposed Quarry Substation Sites 1, 2 or 4.<sup>323</sup>

#### Q. Route Width

339. The Commission must locate transmission lines in a manner that minimizes adverse human and environmental impact while ensuring electric power system reliability and integrity. The PPSA further authorizes the Commission to designate a route with a variable width of up to 1.25 miles.<sup>324</sup>

340. Applicants have requested a route width of up to 1,000 feet for the 345 kV transmission line, and a route width of up to 1.25 miles in five areas along the proposed routes, particularly along the I-94 corridor, and at the Proposed Quarry Substation Siting Areas.<sup>325</sup>

341. Applicants note that in those locations where the Proposed Routes parallel a roadway, a large portion of the 1,000 foot route width is occupied by the road right-of-

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<sup>319</sup> Ex. 1A at 2-19; Ex. 2 at 6-7.

<sup>320</sup> Ex. 6 at 6.

<sup>321</sup> Ex. 14 at 1-8, 1-14 (DEIS); Ex. 6 at 5-6; Ex. 2 at 17.

<sup>322</sup> DNR Comment, Mar. 19, 2010.

<sup>323</sup> Trans. Vol. 2 at 69 (Birkholz).

<sup>324</sup> Minn. Stat. § 216E.01, subd. 8; Minn. Stat. § 216E.02, subd. 1.

<sup>325</sup> Ex. 1A at § 2.3, Figures 2-3 and 2-8; Ex. 2 at 10 and Schedule 4.

way, particularly within the control-of-access fence lines of I-94 along the Preferred Route. The I-94 corridor is approximately 300 feet wide, which would effectively reduce the usable amount of route width on either side of the road in which facilities could be placed.<sup>326</sup>

342. OES submitted comments on April 16, 2010, stating concerns about the route widths proposed by the Applicants, and expressing its view that the proposed route widths should be narrowed for most of the route.<sup>327</sup> Applicants and OES have agreed to evaluate whether the proposed route width can be narrowed further and appropriate permit language crafted that would ensure Applicants' need for flexibility and provide landowners and other stakeholders greater certainty and predictability regarding the potential location of a final alignment. These discussions may result in Applicants submitting proposed permit language to the Commission for consideration.<sup>328</sup>

#### R. Notice

343. Minnesota statute and rules require Applicants to provide certain notice to the public and local governments before and during the Application for a Route Permit process.<sup>329</sup>

344. In August 2008, Applicants mailed a letter to officials of local governments within the Project area in accordance with Minn. Stat. § 216E.03, subd. 3a.<sup>330</sup>

345. On April 8, 2009, Applicants mailed a notice to landowners whose property was within or adjacent to proposed or alternate routes and substation sites, the original list of citizens on the Certificate of Need mailing lists and to the list of persons requesting notice of submitted High Voltage Transmission Line Applications for Route Permits maintained by the Commission in accordance with Minn. Stat. § 216E.03, subd. 4, and Minn. R. 7850.2100, subp. 2.<sup>331</sup>

346. In April 2009, Applicants also mailed a copy of the Application by certified mail to any regional development commission, county, incorporated municipality, and town in which any part of the site or route is proposed, in accordance with Minn. Stat. § 216E.03, subd. 4, and Minn. R. 7850.2100, subp. 2, as well as to the commissioners of various state agencies.<sup>332</sup>

347. Between April 9, 2009 and April 17, 2009, Applicants published notice of the submission of the Route Permit Application in nine newspapers throughout the

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<sup>326</sup> Trans. Vol. 1 at 83-84.

<sup>327</sup> OES Comment, Apr. 16, 2010.

<sup>328</sup> Trans Vol. 2 at 7-9 (Lahr).

<sup>329</sup> Minn. Stat. § 216E.01, subs. 3a and 4; Minn. R. 7850.2100, subs. 2 and 4.

<sup>330</sup> Ex. 1B at 2-2 and Appendix H.

<sup>331</sup> Ex. 30 (Affidavits of Mailing and Publication).

<sup>332</sup> Ex. 30 (Affidavits of Mailing and Publication).

Project area in accordance with Minn. Stat. § 216E.03, subd. 4, and Minn. R. 7850.2100, subp. 4.<sup>333</sup>

348. Minnesota statute and rules also require OES to provide certain notice to the public throughout the Route Permit process.<sup>334</sup>

349. On June 15, 2009, the OES mailed the Notice of Public Information/Scoping Meetings in accordance with Minn. R. 7850.2300, subp. 2 and Minn. R. 7850.2500, subp. 2.<sup>335</sup>

350. Between June 18, 2009, and June 20, 2009, the OES published Notice of Public Information/Scoping Meetings in newspapers of general circulation in each county where the proposed project may be located in accordance with Minn. R. 7850.2300, subp. 2.<sup>336</sup>

351. On October 15, 2009, the OES mailed the Notice of Environmental Impact Statement Scoping Decision in accordance with Minn. R. 7850.2500, subp. 2.<sup>337</sup>

352. In addition to notice requirements imposed by Minnesota Statutes and Rules, on October 27, 2009, the OES mailed a notice to landowners affected by one or more of the route alternatives proposed for evaluation in the EIS.<sup>338</sup>

353. On January 11, 2010, the OES mailed Notice of DEIS Availability and Public Information Meetings in accordance with Minn. R. 7850.2500, subps. 7 and 8.<sup>339</sup>

354. On January 11, 2010, the OES published Notice of DEIS Availability and Public Information Meetings in the EQB Monitor in accordance with Minn. R. 7850.2500, subp. 7.<sup>340</sup>

355. By January 15, 2010, the OES had mailed paper copies of the DEIS to public libraries in each county where the proposed project may be located in accordance with Minn. R. 7850.2500, subp. 7.<sup>341</sup>

356. On February 11, 2010, the OES mailed Notice of public hearings in accordance with Minn. Stat. § 216E.03, subd. 6.<sup>342</sup>

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<sup>333</sup> Ex. 30 (Affidavits of Mailing and Publication).

<sup>334</sup> Minn. Stat. § 216E.03, subd. 6; Minn. R. 7850.2300, subp. 2; Minn. R. 7850.2500, subps. 2, 7-9.

<sup>335</sup> Ex. 9.

<sup>336</sup> Ex. 10.

<sup>337</sup> Ex. 13.

<sup>338</sup> OES Notice to Landowners on Alternative Routes, E-Docket Doc. No. 200910-43298-01 (filed Oct. 28, 2009).

<sup>339</sup> Ex. 15.

<sup>340</sup> Ex. 16.

<sup>341</sup> Ex. 15.

<sup>342</sup> Ex. 17.



357. Between February 24, 2010 and February 25, 2010, the OES published Notice of public hearings in newspapers of general circulation in each county where the proposed project may be located in accordance with Minn. Stat. § 216E.03, subd. 6.

358. On March 26, 2010, OES published the FEIS.

359. On March 29, 2010, OES issued a press release that the FEIS had been released.<sup>343</sup>

#### S. Adequacy of FEIS

360. The Commission is required to determine the adequacy of the FEIS. To be adequate, the FEIS must, among other things, address the issues and alternatives identified in the Scoping Decision “to a reasonable extent considering the availability of information and the time limitations for considering the permit application.”

361. The evidence on the record demonstrates that the FEIS is adequate because it addresses the issues and alternatives raised in the Scoping Decision, provides responses to the substantive comments received during the DEIS review process, and was prepared in compliance with Minnesota Rules 7850.1000 to 7850.5600.

Based on these Findings of Fact, the Administrative Law Judge makes the following:

### **CONCLUSIONS**

1. The Public Utilities Commission and Administrative Law Judge have jurisdiction to consider Applicants’ Application for a Route Permit.<sup>344</sup>

2. The Commission determined that the Application was substantially complete and accepted the Application on May 13, 2009.

3. OES has conducted an appropriate environmental analysis of the Project for purposes of this route permit proceeding and the FEIS satisfies Minn. R. 7850.2500.

4. Applicants gave notice as required by Minn. Stat. § 216E.03, subd. 3a; Minn. Stat. § 216E.03, subd. 4; Minn. R. 7850.2100, subp. 2, and Minn. R. 7850.2100, subp. 4.

5. OES gave notice as required in Minn. Stat. § 216E.03, subd. 6; 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.

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<sup>343</sup> E-Docket Doc. No. 20103-48564-01 (filed Mar. 30, 2010).

<sup>344</sup> Minn. Stat. §§ 14.57-.62 and 216E.02, subd. 2.

6. Public hearings were conducted in communities located along the proposed transmission line routes. Applicants and OES gave proper notice of the public hearings, 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 satisfied.

7. The Preferred Route satisfies the route permit criteria set forth in Minn. Stat. § 216E.03, subd. 7(a) and Minn. R. 7850.4100 based on the factors set forth in Minn. Stat. § 216E.03, subd. 7(b) and Minn. R. 7850.4000.

8. The Preferred Route does not present a potential for significant adverse environmental effects pursuant to the Minnesota Environmental Rights Act (MERA) and Minnesota Environmental Policy Act (MEPA).

9. The Preferred Route is the best alternative on the record for the 345 kV transmission line between the existing Monticello Substation and the new Quarry Substation.

10. The Route Permit should provide Applicants with a route width of up to 1,000 feet except for those locations identified on the record where Applicants have requested a route width up to 1.25 miles (as illustrated in Exhibits 7A, 7B and 7C).

11. The Route Permit should permit the Applicants to install six conductors at highway crossings and interchange locations to facilitate the addition of a second circuit at a later date, upon approval of the Commission.

12. Any of the Quarry Substation Sites proposed by Applicants (Quarry Substation Sites 1, 2 and 4) is suitable. However, based on the record, Substation Site 4 would have the least impact on residential and non-residential structures and agricultural land, and more consistent with current zoning.

13. It is appropriate for the Route Permit to require Applicants to obtain all required local, state, and federal permits and licenses, to comply with the terms of those permits and licenses, and to comply with all applicable rules and regulations.

14. Any findings more properly designated Conclusions are adopted as such.

Based upon these Conclusions, and for the reasons explained in the accompanying Memorandum, the Administrative Law Judge makes the following:

### **RECOMMENDATION**

The Commission issue to Applicants the following permit for the Proposed HVTL Route from Monticello to St. Cloud, Minnesota:

1. A route permit for a high voltage transmission line corridor up to 1,000 feet wide, except for those locations identified on the record where Applicants have requested a route width up to 1.25 miles, along Applicants' Preferred Route, which is

depicted in Figure 5-2 and Appendices B and C of the Route Permit Application. The Preferred Route extends southwest from the existing Monticello Substation until intersecting with County State Aid Highway 75 (CSAH 75) and I-94. The Preferred Route then follows CSAH 75 and I-94 until west of Fish Lake where the Preferred Route then follows I-94 to the intersection of I-94 and State Highway 23 to the proposed Quarry Substation.

2. The route permit shall include the Applicants' requested modifications to the Monticello Substation, a new Quarry Substation, and connection to the existing St. Cloud to Sauk River 115 kV transmission line at the Quarry Substation.

3. The route permit shall require the Applicants to seek approval from the Commissioner to place a portion of the transmission line underground if necessary to comply with restrictions imposed by the DNR or USFWS.

4. The route permit shall allow the Applicants to install six conductors at highway crossings and interchange locations.

Dated: May 18, 2010

s/Beverly Jones Heydinger  
BEVERLY JONES HEYDINGER  
Administrative Law Judge

Reported: Shaddix & Associates

### NOTICE

Under the PUC's Rules of Practice and Procedure, Minn. R. 7829.0100 to 7829.3200, exceptions to this Report, if any, by any party adversely affected must be filed within 15 days of the mailing date hereof with the Executive Secretary of the PUC, 350 Metro Square Building, 121 Seventh Place East, St. Paul, Minnesota 55101-2147. Exceptions must be specific, relevant to the matters at issue in this proceeding, and stated and numbered separately. Proposed Findings of Fact, Conclusions, and Order should be included, and copies thereof served upon all parties.

The PUC shall make its determination on the applications for the Certificate of Need and Route Permits after expiration of the period to file Exceptions as set forth above, or after oral argument, if such is requested and had in this matter. In accordance with Minn. R. 4400.1900, the PUC shall make a final decision on the Route Permits within 60 days after receipt of this Report.

Notice is hereby given that the PUC may accept, modify, condition, or reject this

Report of the Administrative Law Judges and that this Report has no legal effect unless expressly adopted by the PUC.



# MINNESOTA OFFICE OF ADMINISTRATIVE HEARINGS

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May 18, 2010

To All Parties Listed on the OAH E-Docket System Service List	
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**Re: *In the Matter of the Application for a Route Permit for the  
Monticello to St. Cloud 345 kV Transmission Line Project  
OAH 15-2500-20665-2; PUC No. E-002/TL-09-246***

Dear Parties:

The document listed below has been filed with the E-Docket system and served as specified on the OAH E-Docket service list.

Findings of Fact, Conclusions and Recommendation

The official record will be sent to the Commissioner under separate cover.

Sincerely,

s/Beverly Jones Heydinger  
BEVERLY JONES HEYDINGER  
Administrative Law Judge

Telephone: (651) 361-7838

BJH:nh

Encl.