

**Minnesota Public Utilities Commission**  
*Staff Briefing Papers*

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Meeting Date: **February 19, 2016** ..... Agenda Item # 3b

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Company: Great River Energy and Minnesota Power

Docket No.: ET-2, E-15/TL-15-204

**In the Matter of the Joint Application of Great River Energy and Minnesota Power for a Route Permit for the Motley Area 115 kV Transmission Line Project in Morrison, Cass and Todd Counties**

Issue(s): Should the Commission find that the Environmental Assessment and the record on this project adequately address the issues identified in the Scoping Decision? Should the Commission issue a route permit identifying a specific route and permit conditions for the proposed 115 kV transmission line and associated facilities?

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**Relevant Documents**

Application for a Certificate of Need and Route Permit..... March 19, 2015  
DNR Comments Re: Application and Scoping ..... June 3, 2015  
DOC EERA Environmental Assessment (4 parts).....November 16, 2015  
DNR Comments on Routes and Permit Conditions.....November 30, 2015  
Applicant Response Comments to Public Hearing.....November 30, 2015  
Applicant Proposed Findings of Fact.....December 18, 2015  
ALJ Summary Report ..... December 29, 2015  
DOC EERA – Comments and Recommendation ..... January 13, 2016

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

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## **I. Statement of the Issues**

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Should the Commission find that the Environmental Assessment and the record on this project adequately address the issues identified in the scoping decision? Should the Commission issue a route permit identifying a specific route and permit conditions for the proposed 115 kV transmission line project and associated facilities?

## **II. Project Description**

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Great River Energy and Minnesota Power (the Applicants), are proposing to construct an approximately 16-mile, 115 kilovolt (kV) transmission line and construct and modify substations in Morrison, Cass, and Todd counties (the Motley Project, or the Project). The Project is required to serve a proposed new Minnesota Pipe Line Company pumping station and to address load-serving needs in the project area.<sup>1</sup>

Applicants propose to:

- Construct a new 16 mile single circuit 115 kV transmission line between the existing Minnesota Power “24 Line” transmission line and the new Crow Wing Power (CWP) Fish Trap Lake Substation. Some segments of the transmission line will carry distribution line underbuild.
- Convert the existing 34.5 kV Motley Substation to 115 kV service and add a three-way switch.
- Construct the new CWP Fish Trap Lake Substation to serve the new Minnesota Pipe Line Company (MPL) Fish Trap pump station.
- Add breakers to the existing Minnesota Power Dog Lake Substation using a more reliable ring bus design and construct a one-half mile transmission line between the substation and the “24 Line” 115 kV transmission line.
- Install a three-way switch to allow for the construction of a future CWP Shamineau Substation.

Applicants are requesting a variable route width between 250 to 995 feet, depending on the existing land use on the adjacent properties. Applicants indicate that the new 115 kV line will require a permanent right-of-way (easement) of 100 feet. Transmission line structures for the new 115 kV line will be 60 to 90 feet in height, with the spans between structures in the range of 500 to 900 feet. The majority of the 115 kV line will consist of single-pole wood structures (some sections with distribution underbuild), some H-Frame design structures may be used as needed in areas with rugged topography or where longer spans between poles are necessary. H-Frame structures will be used for the 24-Line segment.

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<sup>1</sup> Docket No. PL-5/CN-14-320

Applicants indicate that construction on the project is anticipated to commence in fall 2016, and line energization is anticipated to occur in the summer of 2017.

### **III. Regulatory Review Process**

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In accordance with Minnesota Rule 7850.1300, subpart 2, “No person may construct a high voltage transmission line without a route permit from the commission. A high voltage transmission line may be constructed only within a route approved by the commission.”

In this case Minnesota Rule 7850.1000, subpart 9, defines a high voltage transmission line as:

“...a conductor of electric energy and associated facilities designed for and capable of operating at a nominal voltage of 100 kilovolts or more either immediately or without significant modification. Associated facilities shall include, but not be limited to, insulators, towers, substations, and terminals.”

The route application has been reviewed under the alternative permitting process (Minnesota Rules 7850.2900) of the Power Plant Siting Act (Minnesota Statutes Chapter 216E.04). The alternative permitting process is shorter than the full permitting procedures and does not require the applicant to propose alternative routes to the preferred route, but does require the applicant to disclose rejected route alternatives and an explanation of why they were rejected.

Under the alternative process, Commission staff, in coordination with the Department of Commerce Energy Environmental Review and Analysis division (EERA) staff holds a public information and environmental assessment (EA) scoping meeting. The EERA then develops the scope of the environmental assessment and prepares the environmental document or analysis.

After the release of the EA, the Office of Administrative Hearings (OAH) holds a public hearing on behalf of the Commission. In this docket, the Commission requested a summary report from the OAH – which included only a summary of public comments provided at the hearing and during the subsequent comment period – no recommendations were made by the Administrative Law Judge (ALJ).

#### **A. Application and Acceptance**

On March 5, 2015 the Applicants submitted a letter to the Commission providing notice of its intent to submit a Route Permit Application under the Alternative Permitting Process set forth in Minnesota Rules 7850.2800-7850.3900. On March 19, 2015, the Applicants filed a Route Permit Application for a 115 kV HVTL and other associated facilities to be constructed in the Motley area. The Commission issued the Order Accepting Application as Complete, Directing

Use of Alternative Process, and Granting Variance on May 27, 2015 (Completeness Order).

### **B. Public Information and Environmental Assessment Scoping Meeting**

A Public Information and EA Scoping meeting was held on May 19, 2015, in Motley, Minnesota, in accordance with Minnesota Rules 7850.3700. Approximately 50 people attended the public meeting. Commission and EERA staff received comments and questions regarding the Project's effect on natural resource concerns, property values, aesthetics, wildlife and preferences on the differing route options. EERA staff received comments regarding three *route* alternatives and three (later, four) *alignment* alternatives.

EERA evaluated the proposals and rejected the three *route* alternatives for consideration in the EA for differing reasons (too vague, not meeting project's stated need, etc.) The Commission evaluated routes midway through the review process and did not add any routes for consideration.<sup>2</sup> Four alignment alternatives, along with the typical line routing impacts, were incorporated into the EA Scoping Decision and are addressed in the EA prepared for the Project. Those four alignment alternatives are known as:

- 1) East of Highway 10 from Ridge Road
- 2) East of Highway 10 from Azalea Road
- 3) MP Land East River Crossing Alternative
- 4) Old Tree Avoidance Alternative

The EA was filed with the PUC and made available on November 16, 2015.

### **C. Public Hearing**

Pursuant to the Commission's May 27, 2015 Completeness Order, the OAH appointed the Honorable Jeff Oxley to preside over the public hearing held in Motley, MN on November 19, 2015 and provide a summary of testimony.

The Honorable Judge Oxley presided over the public hearing conducted on November 19, 2015, in Motley, Minnesota. Thirty-seven members of the public attended the public hearing.

The ALJ provided an opportunity for members of the public to ask questions or comment on the proposed project verbally and/or to submit question/comments in writing. Oral comments received at the hearing indicated support for both the Applicants' proposed route and the alternate routes and opposition to the project.

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<sup>2</sup> See Commission Agenda Meeting Minutes from July 1, 2015, Doc. ID [201511-115672-02](#)

The ALJ filed the Summary of Public Comments on December 29, 2015. The main issues or concerns discussed at the public hearing or were regarding a decline in property values, aesthetics, tree removal, cultural resource concerns, impacts to residences, impacts to businesses and comments on the EA. Both residents and business owners along 1) the West and East of Highway 10 alternatives (Common Route) and 2) the West or East Options provided comments. Additionally, members of the public commented on suggested route alignment options that had the effect of creating system alternatives that the Applicant and Crow Wing Power indicated would not fulfill the project's needs. Those routes were not discussed during the scoping meeting, proposed by the Applicants in their initial filing or evaluated in the EA.

Additionally, the Applicants clarified that the cost difference between the West and East route options is approximately \$498,000, two different amounts were noted in the EA at different sections due to consideration of whether the Motely Substation upgrade costs were considered.

In responsive comments dated November 30, 2015 (included as a relevant document to this brief), the Applicants further addressed alternatives suggested by the public at the hearing. The Applicants indicated that the proposed route (the use of the MPL pipeline right-of-way to reach the Fish Lake Pump Station) was not a feasible or reasonable alternative for the project in that the suggested routes would not meet project needs. The proposed route would not provide connections at the (future) Shamineau or (existing) Motley substation. The Applicants provided that even if the route alternative could be supplemented to meet project needs, the resulting route(s) would have a greater environmental impact than the proposals evaluated in the EA. The Applicants provided a high-level comparative analysis on the environmental effects of the pipeline right-of-way proposal. The Applicants asserted that the pipeline right-of-way proposal would increase the amount of new right-of-way, increased impacts to sites of high biodiversity, use of more forested land, increased wetland crossings, and an additional river crossing. Furthermore, the Applicants noted that those property owners had not received notice of the proposal and the route has not been evaluated in the EA.

#### **D. Standards for Permit Issuance**

The Power Plant Siting Act sets standards and criteria and outlines the factors to be considered in determining whether to issue a permit for a high voltage transmission line (Minnesota Statute § 216E and Minnesota Rules 7850.4100). The law also allows the Commission to place conditions on high voltage transmission line permits (Minnesota Statute § 216E.04, Subd. 9(a) and (b) and Minnesota Rule 7850.4600).

### **IV. Party Recommendations**

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#### *A. Great River Energy and Minnesota Power*

As requested by Commission staff, Great River Energy and Minnesota Power submitted proposed Findings of Fact into the record on December 18, 2015. The proposed Findings of Fact concluded (in part) that the Commission should: 1) find that the applicable statutory and rule requirements have been met, 2) that the record shows that the Preferred Route (West side of Highway 10 alignment, Old Tree Avoidance Alignment, and the East Route Option) best satisfies the route permit factors, 3) issue a route permit to the Applicants along the Preferred Route, and 4) include special conditions including requirements for the applicants to: conduct a Phase I archeological survey, develop an avian mitigation plan, and develop a vegetation management plan.

*B. Department of Commerce Energy Environmental Review and Analysis*

EERA staff reviewed the Applicant's proposed Finding of Fact and provided technical corrections as outlined in their January 13, 2015 comments. Staff has reviewed those corrections and takes no issue with the amendments. EERA also provided an analysis of each comment or concern voiced by the public in regard to the EA. EERA recommended an additional route permit condition at Conclusion 12, which requires the Applicants to conduct eagle nest surveys prior to project construction and submit the results to the Commission and the US Fish and Wildlife Service.

EERA did not provide an explicit recommendation regarding the proposed route, but did not otherwise object to the recommendation provided by the Applicant to utilize the original Preferred Route (West side of Highway 10 alignment, Old Tree Avoidance Alignment, and the East Route Option).

**V. Staff Comments**

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Staff concludes that the alternative permitting process has been conducted in accordance with Minnesota Rules 7850.2900 to 7850.3900, that the EA (and the record) evaluated the required materials as outlined in the scope, and that the record supports issuing a permit with conditions to address specific concerns identified in the record.

The public comments received at the Public Hearing and the associated comment period establish that there is no clear route preference among members of the public living nearby the proposed route and alternative routes. The analysis of the route alternatives and alignments evaluated in the Environmental Assessment show that depending on the weight given to each routing factor, impacts vary between routes. Staff agrees with the Applicants that the Preferred Route proposed by the Applicants (with the Old Tree Avoidance Alignment) has overall lesser impacts when the routing factors are considered as a whole. A summary of the relative impacts of each route was provided in the EA. Staff has included the EERA's graphic representations of the

relative route impacts as an attachment to this brief. Additionally, it is staff's understanding that the Applicant does not object to the EERA's addition of the eagle nest survey requirement.

Staff has attached proposed Findings of Fact, Conclusions of Law and Order and a proposed Route Permit.

### *Proposed Finding of Fact*

The attached Proposed Finding of Fact summarize that the permitting process has been conducted in accordance with Minnesota Rules Chapter 7850, identify route impacts and mitigation measures, and make conclusions of law. Staff has made modifications to the Applicant/ EERA proposed findings to include:

1. Added a footnote on Finding 66 to include the March 30, 2015 DNR letter (eFiled June 3, 2015) as a reference to the finding;
2. Corrected the date the USFWS letter was filed with the Applicant in Finding 66;
3. Corrected formatting and numbering of all findings and footnotes where necessary;
4. Added Findings 75 and 76 to reflect the applicants' planned mitigation measures (alignment placement in the road ROW) regarding two homes on the (west side) of the Common Route to ensure the ability of the properties to qualify for Federal Housing Administration insured loans, as discussed in their November 30, 2015 responsive comments to the public hearing;
5. Added Finding 146 to reflect the mitigation measures proposed by the DNR in the November 30, 2015 public hearing comments which support the addition of a special permit condition regarding the Vegetation Management Plan;
6. Supplemented Finding 159 and added Finding 160 to include details on the Northern Long-eared bat which support the additional of a special permit condition regarding additional filing, if required, on the NLEB or required bat surveys;
7. Added Finding 163, 164 and 165 adding specifics on the DNR recommended mitigation measures for the noted rare and unique species. This finding provides support for the special permit condition regarding the Applicant's compliance with the DNR's recommendations; and,
8. Added conclusions 12 and 13 which require additional Special Permit Conditions, respectively, requiring the Applicants compliance with the DNR's recommendations for rare and unique natural resources and requiring the Applicants to file with the Commission any bat studies conducted and additional information if a take permit for the NLEB is required.

### *Site Permit Special Conditions*

The proposed Route Permit includes measures to ensure the line is constructed in a safe, reliable manner and that impacts are minimized or mitigated. In addition to the Special Permit Conditions proposed by the Applicants (Phase I Archeological Survey, Avian Mitigation Plan, Vegetation Management Plan) and the EERA (eagle survey), staff has included two additional Special Permit Conditions, first, a requirement that the Applicants implement the mitigation strategies recommended by the DNR in their filings for protection of rare and unique natural resources (Blanding's turtle, two mussel species) and second, the requirement that if additional coordination with the USFWS is required regarding the NLEB, that any surveys or take permits will be filed with the Commission.

## **VI. Commission Decision Alternatives**

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### **A. Findings of Fact**

1. Approve and adopt the Findings of Fact, Conclusions of Law and Order for the Great River Energy and Minnesota Power Motely Area 115 kV High Voltage Transmission Line Project.
2. Amend the Findings of Fact, Conclusion of Law and Order as deemed appropriate.
3. Take some other action.

### **B. Environmental Assessment**

1. Find that the environmental assessment and the record address the issues identified in the environmental assessment scoping decision;
2. Find the environmental assessment is inadequate, and request a supplement.
3. Take some other action.

### **C. Route Permit**




1. Issue the proposed HVTL route permit with appropriate conditions to Great River Energy and Minnesota Power.
2. Amend the proposed HVTL route power and issue to Great River Energy and Minnesota Power.
3. Take some other action.

**Staff recommends: A1, B1, C1**











**Attachment: Relative Merits/Impact Tables from the DOC EERA Environmental Assessment**

**Figure 16. Guide to Relative Merits of Routing /Siting Options**













Anticipated Impact or Consistency with Routing Factor	Color / Shape
Impacts are anticipated to be minimal with the general conditions in section 5.0 of the Commission’s generic route permit template –OR– routing/siting option is very consistent with routing factor.	
Impacts are anticipated to be minimal to moderate with general conditions in section 5.0 of the Commission’s generic route permit template; impacts may require special conditions or selection of a specific routing option to mitigate –OR– routing/siting option is consistent with routing factor but less so than other options in this area.	
Impacts are anticipated to be moderate and unable to be mitigated –OR– routing/siting option is not consistent with routing factor or consistent only in part.	










**Figure 17. West Route Option and East Route Option Comparison**

Routing Factor / Element	Applicants’ Proposed – West Route Option	Applicants’ Proposed – East Route Option	Summary
Factor C Land-based Economies/ Element Forestry			The West Route Option will impact approximately 10 more acres of forested lands.
Factor D Archaeological and Historic Resources			The West Route Option has a greater potential to impact non-recorded archaeological sites due to the new river crossing location.
Factor E Natural Environment/Element Flora			The West Route Option will impact approximately 10 more acres of forested lands. Additionally, the new Crow Wing River crossing will negatively impact the natural environment.
Factor F Rare and Unique Natural Resources			The West Route Option will impact approximately 1.9 acres of land identified as a Site of Biodiversity, and approximately 0.2 acres of lands with NPC. The East Route Option does not impact any lands identified as Sites of Biodiversity





Factor L Project Costs			The West Route Option costs an estimated \$498,000 less than the East Route Option.
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**Figure 18. Common Route - East of U.S. Highway 10 Alternative Alignments**

Routing Factor / Element	Preferred (West of U.S. Highway 10)	East of Hwy 10 Alt. (Azalea Road to Holt Road) Alignment	East of Hwy 10 Alt. (Ridge Road to Holt Road) Alignment	Summary
Factor A Human Settlement/ Element Aesthetics				The proposed anticipated alignment and the Alternative Alignments east of U.S. Highway 10 are likely to cause an aesthetic impact to a similar number of residence within the project
Factor A Human Settlement/ Element Displacement				The proposed anticipated alignment, on the west side of U.S. Highway 10 will have two residences within the ROW, so there is the potential for displacement. However, as proposed, the anticipated alignment can be constructed within NECS
Factor A Human Settlement/ Element Property Value				The proposed anticipated alignment would place two residences within the ROW. Potentially negatively affecting the property values, and eligibility in certain loan
Factor C Land-based Economies/ Elements Recreation and Tourism				The Alternative Alignments east of U.S. Highway 10 may result in the removal of approximately 6.4 acres of forested area on the Pine Ridge Golf Club property, which may potentially reduce the facility's attractiveness to customers.

Factor F Rare and Unique Natural Resources				East of U.S. Highway 10 (Azalea Road to Holt Road) Alternative will likely impact the most land identified as Sites of Biodiversity and Native Plant Communities (NPCs). East of U.S. Highway 10 (Ridge Road to Holt Road) will likely impact more Sites
Factor L Project Costs				The Alternative Alignments, east of U.S. Highway 10 from Azalea Road to Holt Road and from Ridge Road to Holt Road will cost an estimated \$172,000 and \$215,000, respectively,
Factor J Use of Existing ROW				The Alternative Alignments east of U.S. Highway 10 will use approximately one more mile of existing distribution power line ROW than the

**Figure 19. MP Land East River Crossing Alternative Alignment**

Routing Factor / Element	Applicants' Proposed Anticipated Alignment - East Route Option	Alternative Alignment – MP Land East River Crossing	Summary
Factor L Project Costs			The Alternative Alignment, MP Land East River Crossing will cost an estimated \$120,000 more than the Applicants' proposed anticipated alignment for the East Route Option.
Factor H Paralleling existing ROWs			MP Land East River Crossing Alternative alignment will create approximately 250 feet more utility ROW than the Applicants' proposed anticipate alignment for the East Route Option.