Appendix A. Environmental Assessment Scoping Decision

In the Matter of the Route Permit Application by Great River Energy for the Parkers Prairie 115 kV Transmission Line Project in Otter Tail County, Minnesota

ENVIRONMENTAL ASSESSMENT SCOPING DECISION
PUC DOCKET NO. ET2/TL-11-867

The above matter has come before the deputy commissioner of the Department of Commerce (Department) for a decision on the scope of the environmental assessment (EA) to be prepared for the Parkers Prairie 115 kV transmission line project proposed by Great River Energy.

Project Description

Great River Energy (GRE) proposes to replace approximately 2.1 miles of an existing 41.6 kilovolt (kV) transmission line in Otter Tail County, Minn., with a new line at a voltage of 115 kV. The existing transmission line runs parallel to and on the south side of Otter Tail County Road 6 (CSAH 6). GRE is requesting a 300 ft. route width for the new line, centered on CSAH 6, with a right-of-way of 100 feet. GRE proposes that the new line utilize (and expand upon) existing easements for the 41.6 kV line, but has requested a route width that encompasses both side of CSAH 6 to mitigate potential impacts of the new line, e.g., conflicts with agricultural operations along CSAH 6.

The new line will feed an expanded and updated Parkers Prairie substation. The substation's fenced area will be expanded 40 ft. to the south to accommodate a new 115 kV transformer. The substation and new 115 kV line will be connected to GRE's existing Inman – Alexandria 115 kV line (LR-IA) through a switch structure. This switch connection may require adaptation of the existing line (e.g., use of taller poles). GRE is requesting a 300 ft. route width along its existing LR-IA line to accommodate this connection.

In its route permit application, GRE notes that it did not consider alternative routes for the project. The project is a replacement of an existing transmission line; therefore, GRE concludes that there are no "readily apparent alternative routes" to consider.[1]

Purpose

GRE indicates in its route permit application that the proposed project will address potential low voltage issues in the rural areas immediately west of Parkers Prairie, Minn. These areas are currently served out of the Parkers Prairie substation, which is fed by an older, high impedance 41.6 kV transmission line. This line introduces a substantial voltage drop in the regional electrical system. The voltage drop is such that during non-normal operations electrical appliances and lighting may not perform as expected and could be damaged.

[1] Application to the Minnesota Public Utilities Commission for a Route Permit, Parkers Prairie 115 kV Project, Section 4.4, Great River Energy, October 24, 2011 | Route Permit Application.

Regulatory Background

A route permit application for the project was filed by GRE on October 24, 2011, and accepted by the Minnesota Public Utilities Commission (Commission) on December 7, 2011. The route permit application will be reviewed under the alternative permitting process, pursuant to the Power Plant Siting Act (Minnesota Statues 216E) and Minnesota Rules 7850.2800 to 7850.3900. Under the alternative permitting process the Commission has six months from the date the application is accepted as complete to make a decision on the route permit.

Scoping Process

Scoping is the first step in the alternative permitting process after application acceptance. The scoping process has two primary purposes: (1) to ensure that the public has a chance to participate in determining what routes and issues are studied in the EA, and (2) to help focus the EA on impacts and issues important to a reasoned route permit decision. This scope identifies potential human and environmental issues that will be addressed in the EA. The scope also presents an anticipated schedule of the environmental review process.

Public Scoping Meeting

Energy Facility Permitting (EFP) staff held a public information and environmental assessment scoping meeting on December 13, 2011, in Parkers Prairie, Minn. The meeting provided members of the public an opportunity to learn about the proposed project and the state's permitting process, review the applicant's route permit application, ask questions, provide comments, and identify potential impacts and route alternatives to be considered in the scope of the environmental assessment. Approximately 15 members of the public attended the meeting.

A court reporter was present at the public meeting and transcribed questions asked and comments made by the public, as well as responses from EFP staff and GRE. Two persons provided oral comments and/or asked questions about the proposed project. Mr. Froemming noted that the Otter Tail County Highway Department is requesting a 120 ft. road right-of-way be reserved for CSAH 6 to accommodate future road reconstruction. Mr. Peterson asked whether it would be possible to meet the goals of the project without building a new 115 kV line, e.g., by moving the existing Parkers Prairie substation or building a new substation near GRE's existing LR-IA 115 kV line such that the current 41.6 kV distribution system could remain in place.

Public Comments

A public comment period, ending on December 30, 2011, provided the public an opportunity to submit comments to EFP staff on issues and route alternatives for consideration in the scope of the EA. Five comment letters were received by the close of the comment period

Two citizen comment letters expressed concern for the potential loss of trees due to the proposed project. The Otter Tail County Highway Department commented that it would like to reserve a 120 ft. road right-of-way for CSAH 6 to accommodate future road reconstruction, and noted the potential need for a county utility permit for the project.

The Minnesota Pollution Control Agency (MPCA) commented that the project will very likely require a National Pollution Discharge Elimination System (NPDES) stormwater permit. The

MPCA also requested clarification as to the existence of wetlands within the proposed route. The Minnesota Department of Transportation (MnDOT) commented that a road crossing permit, consistent with MnDOT's utility accommodation policy, would be required for crossing Minnesota State Highway 29. MnDOT also requested that GRE coordinate project construction activities with MnDOT District 4 staff.

Scoping meeting comments and public comment letters are available for viewing on the Commission's energy facilities permitting website at: http://energyfacilities.puc.state.mn.us/Docket.html?Id=32307 and on the eDockets website at: https://edockets.state.mn.us/EFiling/search.jsp (enter "11" for year and "867" for number).

HAVING REVIEWED THE MATTER, consulted with EFP staff, and in accordance with Minnesota Rule 7850.3700, I hereby make the following scoping decision:

MATTERS TO BE ADDRESSED

The issues outlined below will be identified and described in the environmental assessment (EA) for the proposed Parkers Prairie project. The EA will describe the project and current setting of the proposed project area. It will also provide information on the potential impacts the proposed project could have as they relate to the topics outlined in this scoping decision, including possible mitigation for identified impacts, identification of irretrievable commitment of resources and permits from other government entities that may be required.

I. **GENERAL DESCRIPTION OF THE PROJECT**
   A. Project Description
   B. Project Purpose
   C. Route Description
      1. Route Width
      2. Right-of-Way
   D. Project Cost

II. **REGULATORY FRAMEWORK**
   A. Certificate of Need
   B. High Voltage Transmission Line Route Permits
   C. Environmental Review Process

III. **ENGINEERING AND DESIGN**
   A. Transmission Line Structures
   B. Transmission Line Conductors
   C. Substations

IV. **CONSTRUCTION**
   A. Right-of-Way Acquisition

B. Construction
   1. Transmission Line
   2. Substation
C. Restoration
D. Operation and Maintenance

V. AFFECTED ENVIRONMENT, POTENTIAL IMPACTS, AND MITIGATIVE MEASURES

A. Environmental Setting
B. Socioeconomics
C. Human Settlement
   1. Noise
   2. Aesthetics
   3. Displacement
   4. Property Values
D. Public Health and Safety
   1. Electric and Magnetic Fields
   2. Implantable Medical Devices
   3. Stray Voltage
   4. Induced Voltage
   5. Air Quality
E. Transportation and Public Services
   1. Roads and Highways
   2. Utilities
   3. Emergency Services
F. Electronic Interference
   1. Radio
   2. Television
   3. Global Positioning Devices
   4. Cellular Phone
   5. Internet Services
G. Archaeological and Historic Resources
H. Land Based Economies
   1. Agriculture
   2. Forestry
   3. Mining
   4. Commercial
I. Zoning and Land Use Compatibility
J. Water Resources
   1. Rivers, Lakes, Streams
   2. Wetlands
K. Soil and Groundwater
L. Flora
   1. Vegetation and Tree Removal
M. Fauna
N. Threatened/Endangered/Rare and Unique Natural Resources

VI. ALTERNATIVE ROUTES TO BE EVALUATED IN THE ENVIRONMENTAL ASSESSMENT

The route proposed by GRE in its route permit application will be evaluated in the EA (see attached map). Additionally, the EA will evaluate alternative alignments within GRE's proposed route, including alignments (1) within the right-of-way (ROW) of Otter Tail County Road 6 (CSAH 6), (2) outside the current ROW of CSAH 6, and (3) outside the potential future ROW of CSAH 6.

No alternative routes will be evaluated in the EA.

VII. IDENTIFICATION OF PERMITS

The EA will include a list and description of permits from other government entities that may be required for the proposed project.

ISSUES OUTSIDE THE SCOPE OF THE ENVIRONMENTAL ASSESSMENT

The EA for the Parkers Prairie project will not consider the following:

A. No-build alternative.
B. Issues related to project need, size, type, or timing.
C. Any route or substation siting alternative not specifically identified in this scoping decision.
D. Policy issues surrounding whether utilities or local governments should be liable for the cost to relocate utility poles when roadways are widened.
E. The manner in which land owners are paid for transmission right-of-way easements, as that is outside the jurisdiction of the Commission.

ALTERNATIVE ROUTES NOT SELECTED FOR FURTHER EVALUATION

The project alternatives suggested by Mr. Peterson at the December 13, 2011, public meeting will not be evaluated in the EA. Mr. Peterson asked whether it would be possible to meet the goals of the project without building a new 115 kV line. One possible alternative was suggested by Mr. Peterson – moving the existing Parkers Prairie substation to a new location east of Minnesota State Highway 29. A second alternative would be to construct a new substation near GRE's existing LR-IA 115 kV line (in lieu of a switch) such that the current 41.6 kV distribution system could remain in place.

<u>Move Existing Parkers Prairie Substation</u>
Moving the existing Parkers Prairie substation would require that a new substation be built on a new site (about one acre) with new equipment. New equipment would be necessary to maintain electrical service during construction, i.e., the equipment at the existing substation site could not be swapped over to a new site without significant outages. Once the new substation was operational, the existing Parkers Prairie substation would be dismantled and the site refurbished.

The existing Parkers Prairie substation is geographically centered on the load that it serves. Moving the substation would increase line losses, as a new substation would be two miles (or more) to the east, and service from the substation would be at distribution voltage levels (12.5 kV). Thus, relative to the existing Parkers Prairie substation, a new location would exacerbate the current load and voltage challenges in the Parkers Prairie area, not resolve them.

In general, 115 kV lines are more efficient, more reliable, and are able to transmit more power than lower voltage lines. Relative to a 115 kV feed to the existing Parkers Prairie substation (GRE's proposed project), a new substation location would create a less efficient and less reliable electrical system in the Parkers Prairie area.

Building a New Substation

Building a new substation would require that a new substation be built on a new site (one to five acres) with new equipment. A new substation (without removal of the existing Parkers Prairie substation) would introduce new human and environmental impacts. If the substation were located near GRE's proposed switch, there could be significant impacts and siting constraints, e.g., wetlands, Cora Lake, railroad tracks.

The new substation could be a 115/41.6 kV bulk substation fed from GRE's existing LR-IA 115 kV line. Alternately, it could be a 115/12.5 kV distribution substation. A distribution substation would directly serve loads in the Parkers Prairie area, i.e., it would complement the existing Parkers Prairie substation.

Adding a new substation would decrease electrical system reliability and increase maintenance costs, i.e., two substations would have to be maintained, rather than one. A new 115/41.6 kV bulk substation would cost approximately twice the proposed Parkers Prairie project. A new 115/12.5 kV distribution substation would have initial costs similar to the Parkers Prairie project but would have higher maintenance costs.

With either substation, the feed for the Parkers Prairie substation would remain a 41.6 kV line. This 41.6 kV line, and its inability to adequately serve load and maintain service voltages, is the primary issue being addressed by the Parkers Prairie project. Maintaining this line at its current voltage will not resolve the load and voltage challenges in the Parkers Prairie area.

For the reasons noted above, the Department has concluded that further evaluation of these project alternatives would not assist in the Commission's final decision on the route permit application.

SCHEDULE

The environmental assessment is anticipated to be completed and available in March 2012. A public hearing will be held in the project area after the environmental assessment has been issued and notice served.

Signed this 13th day of January, 2012

STATE OF MINNESOTA
DEPARTMENT OF COMMERCE

William Grant, Deputy Commissioner

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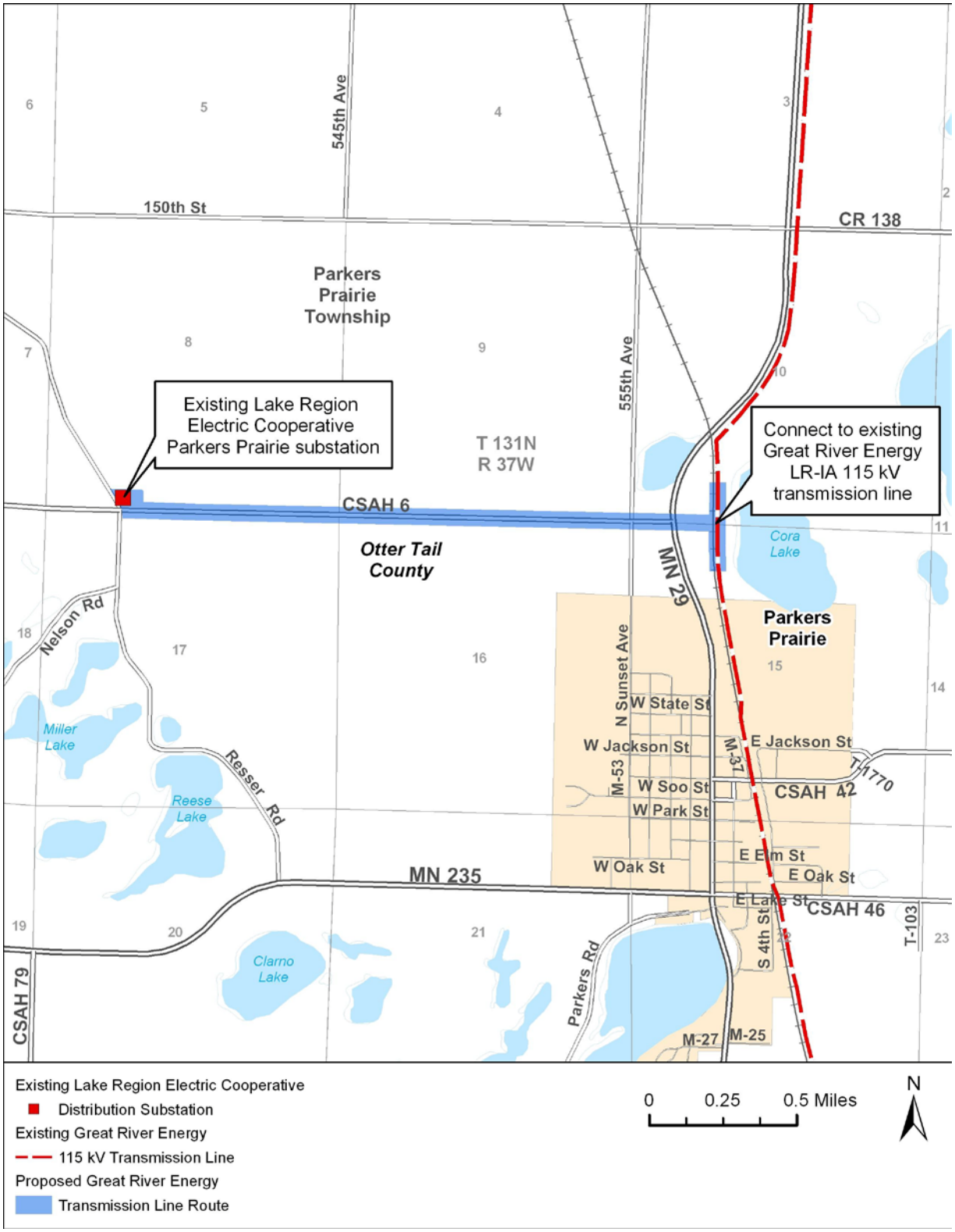
Parkers Prairie 115 kV Transmission Line Project
Route to be Evaluated in Environmental Assessment