

GREAT RIVER ENERGY

MINNESOTA PUBLIC UTILITIES COMMISSION

MPUC DOCKET NO. ET-2/TL-22-235
OAH DOCKET NO. 23-2500-38942

DIRECT TESTIMONY OF MARK STROHFUS

May 3, 2023

1 **I. INTRODUCTION AND QUALIFICATIONS**

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Q. Please state your name, employer, and business address.

A. My name is Mark Strohfus. I am a Transmission Permitting, Project Manager, with Great River Energy. My business address is 12300 Elm Creek Boulevard, Maple Grove, Minnesota 55369.

Q. Please briefly describe your educational and professional background and experience.

A. I have a BS in Pulp & Paper Science and Engineering from the University of Minnesota. I have worked for Great River Energy as an environmental policy analyst, an environmental project lead, and currently as a project manager in the transmission permitting and land rights department. In my role as environmental project lead, I was responsible for managing and obtaining all environmental permits, including permits from the Minnesota Public Utilities Commission (“Commission”) for large electric generating facilities. In my current role as project manager, I am responsible for managing all aspects of environmental permitting, including Commission route permits for transmission projects, and advising Great River Energy staff on environmental and permitting implications during the early project planning phases. I had 12 years of experience as an environmental consultant prior to joining Great River Energy.

Q. What is your role with respect to the proposed rebuild of the existing 69-kilovolt (“kV”) ST-WW transmission line to 115- kV in Stearns County (the “Project”)?

A. My role is to assist in selecting the Project route; assist with stakeholder outreach and community relations for the Project; obtain all necessary permits, licenses, and approvals for the construction and operation of the Project; and ensure compliance with permit and license conditions through the construction and energization of the Project.

32 **Q. What schedules are attached to your Direct Testimony?**

33 A. My Statement of Qualifications is attached as **Schedule A** to my Direct Testimony.

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II. PROJECT DESCRIPTION

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37 **Q. Please provide a summary of the Project, including the proposed location**
38 **and proposed route.**

39 A. The Project is being proposed in St. Joseph Township, the City of St. Joseph, and
40 St. Wendell Township in Stearns County, Minnesota. The Project includes:

41 • Removing approximately 3.2 miles of the existing 69-kV transmission
42 line and structures between the existing West St. Cloud and
43 Westwood substations and extending to the last structure near the
44 intersection of Mullen Road and County Road 133, and replacing
45 those facilities with an overhead 115-kV transmission line and
46 structures. The new 115-kV transmission line is proposed in large
47 part to follow the alignment of the existing 69-kV transmission line to
48 the extent possible.

49 • Extending the transmission line approximately 170 feet northwest
50 across Mullen Road and County Road 133 to tap into a new switch
51 to be added on Great River Energy's existing 115-kV transmission
52 line.

53 • Installing an additional 115-kV breaker and associated equipment at
54 the existing West St. Cloud Substation, which will require an
55 approximately 6,500-square-foot expansion of that substation.

56 • Installing two 115-kV line switches: one for the tap feeding the
57 existing Westwood Substation, and one north of the existing Le Sauk
58 Substation.
59
60

61 **Q. Why has Great River Energy proposed the Project?**

62 A. Over the last decade, Great River Energy has been upgrading the St. Joseph area
63 to a 115-kV transmission system to improve reliability and resiliency. This Project
64 will complete the area upgrade and loop the 115-kV system by allowing power to
65 the Westwood Substation to be provided either through the West St. Cloud

66 Substation to the south or the Le Sauk Substation to the north. Additional detail is
67 provided in Section 1.6 of the Project’s Route Permit Application (“Application”).
68

69 **Q. What route width is Great River Energy requesting for the Project?**

70 A. Great River Energy is requesting approval of the following route widths for the
71 Project:

72 • The entire parcel upon which the expanded West St. Cloud Substation is
73 proposed to be located.

74 • Along the south side of Ridgewood Road, a 100-foot-wide route extending
75 southerly and perpendicular from the road right-of-way.

76 • An approximately 2.75-acre area around the existing Westwood Substation
77 to enable design and construction options for the Project to cross over
78 Ridgewood Road and railroad tracks, under the existing Xcel Energy 115-
79 kV transmission line, over 304th Street, and to accommodate redesign
80 options at the Westwood Substation.

81 • Along the north side of 304th Street, a 100-foot-wide route width extending
82 northerly and perpendicular from the road right-of-way.

83 • Along the north-to-south parcel/section lines, a 100-foot-wide route
84 extending westerly and perpendicular from the north-to-south parcel/section
85 lines, except that starting at the northeast corner of the Project at the
86 intersection of 73rd Avenue and Mullen Road, a route width of 450 feet west
87 of the City of St. Cloud boundary, extending 1,480 feet south of the Mullen
88 Road centerline. From this point, the route width decreases to 250 feet west
89 of the City of St. Cloud boundary, extending 2,650 feet further to the south.
90 From this point south to 304th Street, the route width returns to 100 feet
91 west of the City of St. Cloud boundary.

92 • Along the easterly-to-westerly Mullen Road, a 220-foot-wide route that
93 extends 110 feet perpendicular from each side of the road centerline.

94 • Along the final 115-kV transmission line segment connected to the new
95 switch on Great River Energy’s existing ST-FPT 115-kV transmission line,
96 a 200-foot-wide route width that extends perpendicular from the proposed
97 transmission line centerline.
98

99 **Q. Why is Great River Energy requesting a wider route width west of 73rd**
100 **Avenue?**

101 A. The Cities of St. Joseph and St. Cloud (“Cities”) have identified potential plans for
102 future road expansion in the vicinity of the Project. Great River Energy’s expanded
103 route width represents its best effort at this time to understand the Cities’ potential
104 future road expansion plans, and Great River Energy has shared this route width
105 with the Cities. However, the Cities’ potential future road expansion plans are not
106 sufficiently defined to allow Great River Energy to determine whether shifting the
107 Project’s proposed alignment and using the expanded route width would be
108 appropriate, given that it will result in additional tree clearing,¹ potential agricultural
109 impacts, and would require a new right-of-way.

110

111 **Q. Under what circumstances would Great River Energy seek to use the**
112 **expanded route width south of Mullen Road?**

113 A. With respect to the northern portion of the expanded route width, to the extent the
114 Cities are able to provide a road expansion design prior to the time Great River
115 Energy commences final design for the Project, Great River Energy could seek to
116 use the expanded route width. However, the road expansion design would need
117 to also reflect an agreement to relocate the existing natural gas compressor station
118 (which would also be affected by a road expansion in this area) and landowner
119 agreement. Great River Energy will commence final design after a route permit is
120 issued for the Project.

121

122 With respect to the southern portion of the expanded route width, where there are
123 residential parcels roughly north of Black Spruce Street and immediately east of
124 73rd Avenue, Great River Energy is amenable to moving the Project sufficiently
125 west without the Cities having a complete design, funding, or schedule for that
126 portion of the road; however, landowner agreement would be needed. Specifically,
127 the Project would be shifted west of the existing 69-kV transmission line to where

¹ The Environmental Assessment (“EA”) prepared by the Department of Commerce, Energy Environmental Review and Analysis (“DOC-EERA”) also refers to the additional tree clearing that would be required were the Project alignment shifted to use the expanded route width in this area. See EA at p. 35.

128 there are no existing residential properties immediately east of 73rd Avenue,
129 provided that the impacted landowners are willing to negotiate new easements for
130 the Project. The expanded route to the south is less likely to be used if the
131 impacted landowners are not willing to negotiate new easements.

132
133 Great River Energy is continuing to engage with the Cities on this issue, but at this
134 time does not have further updates beyond what was provided in its November 22,
135 2022 filing.

136

137 **Q. What permanent right-of-way will be required for the Project?**

138 A. Great River Energy is requesting a 100-foot right-of-way for the Project, consistent
139 with other 115-kV lines, but, given the existing development in the area, ultimately
140 anticipates that the Project easements will allow for a right-of-way width that is at
141 least 70-foot-wide (35 feet on each side of the transmission line centerline). A 70-
142 foot-wide right-of-way is needed to maintain proper clearances from objects within
143 the right-of-way, and to ensure that the conductor will not blow out past the right-
144 of-way during high wind events and that vegetation is sufficiently cleared to safely
145 operate and maintain the line.

146

147 **Q. How much will the Project cost?**

148 A. Construction of the Project is anticipated to cost approximately \$6.4 million.

149

150 **Q. What is the schedule for the Project?**

151 A. Great River Energy plans to commence construction of the Project in the summer
152 of 2024 once required permits and approvals are obtained. Great River Energy
153 anticipates construction will take approximately six months and the Project will be
154 energized in early 2025.

155

156 **III. ENVIRONMENTAL ASSESSMENT**

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158 **Q. Have you reviewed the EA prepared by DOC-EERA for the Project?**

159 A. Yes. DOC-EERA filed the EA on May 1, 2023. Included with the EA was a draft
 160 route permit prepared by DOC-EERA. I have reviewed both the EA and the draft
 161 route permit.

162

163 **Q. Do you have any comments on the EA?**

164 A. Yes. Great River Energy appreciates DOC-EERA’s thorough review of the Project,
 165 and the EA generally captures the potential impacts of the Project. The table below
 166 notes several minor corrections or clarifications. These are not material items, and
 167 I include them in my testimony solely for the purposes of assisting the
 168 Administrative Law Judge.

169

Reference	Great River Energy Comment / Clarification
Page 6 (first paragraph)	The Project addresses issues in the central and northern regions of Great River Energy’s service territory
Page 17	Clarification that the Commission will not make a need determination related to this route permit because no certificate of need is required.
Page 26 (Right-of-Way Preparation, first paragraph)	Consistent with safe construction practices, the right-of-way will be cleared of woody vegetation for construction. During operation, vegetation that does not interfere with the safe and reliable operation of the line will be allowed to re-grow. Great River Energy generally employs the wire/border zone vegetation management methodology.
Pages 28-29 (Restoration, first paragraph)	Restoration will occur after Project construction is complete; some restoration may occur in phases before Project construction is complete, but Great River Energy clarifies that construction across multiple parcels may be completed before restoration activities commence, and that restoration activities will need to be seasonally appropriate.
Page 34, Table 4	The column titled “Number of Acres within Existing Route” identifies the acreage within the route originally proposed in the Application.
Page 41 (Transmission Line Noise, second paragraph)	Noise levels are presented in Table 7-4 of the Application.

170

171 **Q. Do you have any comments on the draft route permit filed by DOC-EERA?**

172 A. Yes. I note that the draft route permit filed by DOC-EERA is largely consistent with
 173 the sample route permit filed by the Commission in this docket on December 5,

174 2022, with a few exceptions. Because of the size and scope of this Project and its
175 limited potential impacts, Great River Energy believes that largely following the
176 Commission's typical route permit is appropriate and supported by the record here.
177 More specifically, I note that the draft route permit included with the EA omits
178 Section 4.1; this is a standard route permit condition, and Great River Energy
179 proposes to include the condition here, too. The draft route permit filed by DOC-
180 EERA also includes proposed special conditions. Great River Energy subject
181 matter experts are currently reviewing these conditions, and given the short
182 timeframe between the issuance of the EA and the submission of this direct
183 testimony, Great River Energy will submit supplemental testimony prior to the
184 hearing regarding the EA and the draft route permit, including the Project
185 description and proposed conditions.

186

187 **Q. Do you have further comments on the EA, including the draft route permit?**

188 A. Not at this time. However, as I noted, Great River Energy's review of the EA and
189 draft route permit is ongoing. Given the short timeframe, Great River Energy will
190 submit further supplemental testimony after applicable subject matter experts have
191 sufficiently reviewed the documents. Great River Energy anticipates that the
192 supplemental testimony will include proposed revisions to the draft route permit
193 filed by DOC-EERA.

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195 **IV. CONCLUSION**

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197 **Q. Does this conclude your Direct Testimony?**

198 A. Yes.

199

200



Statement of Qualifications for:

Mark Strohfus

Project Manager, Transmission Permitting

Great River Energy

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MStrohfus@GREnergy.com

Direct: 763-445-5210; Mobile: 612-961-9820

PROFESSIONAL EXPERIENCE

Mark has worked at Great River Energy for the past 21 years successfully focusing in the areas of environmental policy, compliance and permitting. He has been an integral team member on evaluating, siting, permitting and regulatory analyses for: new transmission lines; power generating plants including gas combustion turbines, coal-fired combined heat and power, and coal gasification. He has served on the corporate strategic planning committee for three years.

07/99 – Present: **Great River Energy, Maple Grove, Minnesota**

Responsibilities

Support transmission and generation capital projects by guiding them through local, state and federal permitting and approval processes, and collaborating with the project team on selecting project sites or routes that minimize environmental and socioeconomic impacts, avoid permitting constraints and unnecessary costs.

Lead the preparation of applications for all environmental permits and approvals needed for timely implementation of generation and transmission projects. Such permits and approvals include Minnesota Public Utilities Commission Certificate of Need, Site and Route Permits; local governmental conditional use permits; air emissions permits; wastewater discharge permits; state and federal wetland impact permits; construction stormwater permits; and Department of Natural Resources License to Cross.

Conduct stakeholder outreach to enhance public relations with local and state governments, agencies, landowners and other interested parties, with an ultimate goal of gaining stakeholder acceptance of the particular project Great River Energy is attempting to complete.

Respond to landowner questions and concerns regarding electric fields, magnetic fields and stray voltage associated with high voltage transmission lines.

Ensure that all permit conditions are met during and after successful construction of transmission and generations projects by overseeing project staff and preparing and submitting requisite reports to the various regulatory agencies.

Accomplishment Highlights

Obtained all necessary permits and approvals for the Enterprise Park 115-kV transmission line and substation project through the heart of the City of Anoka, a project through one of the more developed areas of Great River Energy's transmission area.

Successfully obtained and negotiated all necessary permits to allow the construction and operation of one of the few coal-fired power plants proposed to be constructed in the last 10 years.

Lead the company's analysis of the federal Clean Power Plan (CPP) including preparing comments on the draft CPP and its associated Federal Plan and Model Trading Rule, developing a project team to evaluate the cost impacts of the rule, and collaborating with other Minnesota utilities to develop a Minnesota State Implementation Plan that is in the best interest of the rate payers.

Leveraged corporate funds by a factor of four to accomplish over \$1 million in research and development efforts to control mercury emissions from coal-fired power plants.

03/87 – 07/99: Environmental Consultant, Minneapolis, Minnesota

Before joining Great River Energy, Mark worked a total of 12 years for three different environmental consulting companies in the Minneapolis area. During this time frame, he performed environmental sampling and analyses, assisted clients with interpreting environmental requirements applicable to their operation, prepared environmental permit applications, audited facilities for compliance with environmental requirements, and served as an on-site environmental compliance manager for an aerospace equipment manager.

EDUCATION

Bachelor of Science, Pulp & Paper Science and Engineering
University of Minnesota, 1986