

GREAT RIVER ENERGY

MINNESOTA PUBLIC UTILITIES COMMISSION

MPUC DOCKET NO. ET-2/TL-23-410
OAH DOCKET NO. 5-2500-39898

DIRECT TESTIMONY OF MARK STROHFUS

August 7, 2024

1 I. INTRODUCTIONS AND QUALIFICATIONS

2

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

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

7

8 **Q. Please briefly describe your educational and professional background and
9 experience.**

10 A. I have a BS in Pulp & Paper Science and Engineering from the University of
11 Minnesota. In my 25 years at Great River Energy, I have worked as an
12 environmental policy analyst, an environmental project lead, and currently as a
13 project manager in the transmission permitting and land rights department. In my
14 role as environmental project lead, I was responsible for managing and obtaining
15 all environmental permits, including permits from the Minnesota Public Utilities
16 Commission (“Commission”) for large electric generating facilities. In my current
17 role as project manager, I am responsible for managing all aspects of
18 environmental permitting, including Commission route permits for transmission
19 projects, and advising Great River Energy staff on environmental and permitting
20 implications during the early project planning phases. I had 12 years of experience
21 as an environmental consultant prior to joining Great River Energy.

22

23 **Q. What is your role with respect to the Pilot Knob to Burnsville 115 kilovolt
24 (“kV”) transmission line project (“Project”)?**

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

1 **Q. What is the purpose of your Direct Testimony?**

2 A. The purpose of my Direct Testimony is to: describe the Project; discuss the Project
3 schedule; provide updates regarding the Project; and describe Great River
4 Energy's coordination and consultation with the Minnesota State Historic
5 Preservation Office ("SHPO").

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7

II. THE PROJECT

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9 **Q. Please provide a summary of the Project.**

10 A. Great River Energy is proposing to rebuild and upgrade portions of its existing 69-
11 kV lines within the cities of Eagan, Burnsville, and Apple Valley, in Dakota County,
12 Minnesota, with approximately 8.75 miles of 115-kV high voltage transmission line.
13 The Project includes rebuilding and upgrading three sections of the transmission
14 lines between the following existing substations: (1) between the Pilot Knob and
15 Deerwood substations; (2) between the Deerwood and River Hills substations; and
16 (3) between the River Hills and Burnsville substations. The Project would also
17 involve upgrades and modifications at the Burnsville Substation.

18

19 **Q. Will the Project generally follow existing transmission line right-of-way?**

20 A. Yes. Great River Energy proposes that the Project generally follow the existing
21 transmission line rights-of-way and alignment, with realignments proposed on
22 Blackhawk Road near its intersection with Interstate Highway 35E and at the
23 connections to the Pilot Knob Substation and the Burnsville Substation.

24

25

III. PROJECT SCHEDULE

26

27 **Q. Section 3.4 of the Route Permit Application states that the Project is
28 expected to be constructed in three phases. Is that still the plan?**

29 A. Yes. Great River Energy plans to construct the Project in three phases to avoid
30 extended outages on the distribution systems. The construction schedule was

1 included in Table 3.4-1 of the Application and is reproduced for convenience
2 below.

3
4 **Table 3.4-1. Estimated Construction Phase Timelines**

5

Construction Phase		Line Name	Start Construction	Finish Construction
1	Deerwood Substation to Pilot Knob Road	DA-PD	Jan 2026	Jul 2026
	Double circuit line on Pilot Knob Road to Pilot Knob Substation	DA-PLX	Apr 2026	Dec 2026
2	Deerwood Substation to River Hills Substation	DA-DE, DA-RE	Mar 2027	Oct 2027
3	River Hills Substation to Burnsville Substation	DA-BR	Oct 2027	Apr 2028

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11 **Q. Is Great River Energy requesting that a route permit issued by the
12 Commission for the Project reflect the planned phased construction?**

13 A. Yes. Great River Energy requests discrete updates to the typical route permit to
14 account for the planned phased construction. I will discuss these requests further
15 in Section VII below.

16
17 **IV. PROJECT UPDATES**

18
19 **Q. Do you have any updates on the Project?**

20 A. Yes. Great River Energy plans to use bundled conductors for the Project. Great
21 River Energy is also continuing its coordination with the City of Burnsville regarding
22 the planned expansion of the existing Burnsville Substation.

23
24 **Q. What is a bundled conductor?**

25 A. Bundled conductor refers to the use of multiple conductors for each of the three
26 phases of the transmission line. For the Project, Great River Energy plans to use
27 two conductors for each of the three phases. Bundled conductors increase the
28 current carrying capacity, or ampacity, of the Project, and can improve voltage
29 efficiency.

1 **Q. Why is Great River Energy now planning to use bundled conductors for the**
2 **Project?**

3 A. Great River Energy is now planning to use bundled conductors for the Project for
4 consistency with other facilities on the regional 115 kV system.

5
6 **Q. Please describe structures with bundled conductors.**

7 A. The use of bundled conductors does not change the structure types that Great
8 River Energy intends to use for the Project. See Section 4.1.1 of the Application.
9 Because the use of bundled conductors does increase the weight that must be
10 supported by each structure, it is anticipated that the tangent structures will be
11 approximately 65 to 100 feet tall and 22 to 40 inches in diameter, and that dead-
12 end structures will be approximately 65 to 100 feet tall set on concrete foundations
13 60 to 82 inches in diameter. There will be six conductors for the Project instead of
14 three conductors, and dead-end structures will also require the use of two
15 insulators for each of the three phases. Overall, although there are some visual
16 differences between bundled and non-bundled conductors, the overall visual
17 impact of the Project is generally anticipated to remain the same.

18
19 **Q. Please provide an update regarding Great River Energy’s coordination with**
20 **the City of Burnsville regarding the expansion of the Burnsville Substation.**

21 A. As described in Section 3.2 of the Application, Great River Energy is proposing to
22 expand the existing Burnsville Substation to accommodate upgrades that are
23 needed to connect the Project to that substation when it will be operated at 115
24 kV. As discussed in Section 3.1.4 of the Application and shown in page 14 of
25 Appendix A. Great River Energy has requested that the route width in this area
26 include the entire 5.4-acre parcel where the Burnsville Substation is located and is
27 coordinating with the City of Burnsville regarding the footprint for the substation’s
28 expansion and connection points into the substation.

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1 **V. SHPO STATUS UPDATE**

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3 **Q. The Commission authorized Great River Energy to initiate consultation with**
4 **SHPO related to the Project and directed Great River Energy to inform the**
5 **Commission of the status of that consultation with pre-filed testimony. Are**
6 **you aware of that authorization?**

7 A. Yes. In this section of my Direct Testimony, I provide an update regarding the
8 status of Great River Energy’s coordination with SHPO regarding the Project.

9

10 **Q. Please summarize Great River Energy’s coordination and consultation with**
11 **SHPO.**

12 A. As described in Section 7.5 of the Application, Merjent, Inc. (“Merjent”) conducted
13 a cultural resource literature review for features within a one-mile buffer of the
14 Proposed Alignment (the “Study Area”). This literature review and Merjent’s
15 evaluation of the possible effects of the proposed Project on archaeological and
16 historic properties in the Project area was provided to the Minnesota SHPO in a
17 letter dated August 8, 2023. SHPO responded to Merjent’ s letter on September
18 25, 2023.

19

20 **Q. As a result of this consultation, has SHPO indicated whether the proposed**
21 **Project will affect designated properties?**

22 A. Yes. On September 25, 2023, the SHPO responded to Merjent’s evaluation of the
23 possible effects of the proposed Project on archaeological and historic properties
24 in the Project indicating that “based on the information available, the SHPO has
25 determined that there are no properties listed in the National or State Registers of
26 Historic Places and no known or suspected archaeological properties in the area
27 that will be affected by this Project.” This correspondence is included in Appendix
28 D of the Route Permit Application.

1 **Q. Will Great River Energy implement any construction measures to avoid and**
2 **minimize impacts to cultural resources during Project construction?**

3 A. Yes. Merjent recommended that Great River Energy hire a qualified archaeologist
4 to monitor the construction activity at the pole location northeast of St. John’s
5 Cemetery,¹ and Great River Energy will implement this recommendation. In
6 addition, if human remains are encountered during construction activities, Great
7 River Energy will follow its Unanticipated Discoveries Plan (“UDP”), which includes
8 ceasing all ground disturbing activity, and immediately notifying local law
9 enforcement per Minn. Stat. § 307.08. The UDP was filed as Appendix H of the
10 Route Permit Application.

11
12 **VI. ENVIRONMENTAL ASSESSMENT & DRAFT ROUTE PERMIT**

13
14 **Q. Have you reviewed the EA and Draft Route Permit prepared by the Minnesota**
15 **Department of Commerce Energy Environmental Review and Analysis**
16 **(“DOC-EERA”) unit for the Project?**

17 A. Yes, I have reviewed the documents. Great River Energy appreciates DOC-
18 EERA’s thorough review of the Project, and I anticipate that Great River Energy
19 will have comments on the documents. Great River Energy will submit those
20 consistent with the comment period established by the Commission, and will
21 continue coordination with DOC-EERA, as applicable.

22
23 **VII. CONCLUSION**

24
25 **Q. Does this conclude your Direct Testimony?**

26 A. Yes.
27

¹ The literature review included in Appendix D of the Application refers to Mount Calvary Cemetery, but St. John’s Cemetery is the correct reference, as reflected in Section 7.5 of the Application.