Environmental Assessment

Proposed 115 kV Transmission Line - Redwood Falls Area
PUC Docket No. ET9,E298/LR-10-1272

Redwood County, Minnesota

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BARR

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1.0 Introduction

1.1 Proposed Project and Project Need

Southern Minnesota Municipal Power Agency (SMMPA) and Redwood Falls Public Utilities (RFPU) are proposing to construct a new transmission line and substation in southeastern Minnesota (the "Project"). RFPU is planning to construct an electric distribution substation (East Substation) on the east side of the city of Redwood Falls along County Road 1 (Figure 1.2-1). The electrical power for RFPU's new East Substation would be supplied by SMMPA, by constructing a new 115 kV transmission line from RFPU's existing West Substation to the new East Substation. The proposed Project will provide infrastructure to meet the increasing electrical demand of Redwood Falls and to maintain the reliability of the electrical system for Redwood Falls.

1.2 Project Description and Location

SMMPA's transmission line project will consist of approximately 5.0 miles of overhead 115 kV transmission line in parts of Paxton Township, Redwood Falls Township, and the City of Redwood Falls. The proposed Project will utilize existing road right-of-ways (ROWs) or utility-easement corridors for the entire length of the route to minimize the need for additional ROW. The proposed route would be located in Sections 5, 6, 7 and 8, T112N, R35W; Sections 1, 2, 11 and 12, T112N, R36W; and Section 36, T113N, R36W in Redwood County (Figure 1.2-1).

The proposed route begins at RFPU's West Substation near the intersection of State Highway 19 and Westfalls Drive, parallels State Highway 19 west to Laser Avenue, continues south along Laser Avenue to the south side of the Redwood River, then turns east to Ramsey Street, turns south along Ramsey Street to 327th Street, continues east and north along 327th Street to Normandale Road. From Normandale Road, the proposed route continues east for approximately 1.5 miles, and then north for 0.5 miles and terminated at the new East substation site.

The infrastructure will primarily be wood single-pole structures with H-frame wooden structures required at the Redwood River crossing to support the distribution. Some structures may require the use of guy wires and anchors for additional stability, but their use will be minimized as possible in order to reduce the impact on agricultural activities. The transmission line will require four wires that include three electrical transmission lines and one uncharged line for lightning protection. In certain areas, the distribution lines for RFPU may be underbuilt on the new structures.

Proposed 115 kV Alignment

Existing Distribution Line

Existing Distribution Line - To Be Buried

Existing Distribution Line - To Be Double-Circuited

1 Mile Buffer of Proposed Alignment

PLS Section Boundaries Within 1 Mile

Municipal Boundary

Imagery Source: FSA, 2010

N

0 1,000 2,000 4,000

Feet

Figure 1.2-1

Overview Map
SMMPA 115 kV Transmission Line Project
Redwood Falls Area
Redwood County, MN

I:\Projects\23\641\008\Maps\Reports\Draft_Ea\Figure 1_2-1 - Overview Map.mxd

SMPPA will coordinate with landowners to develop easements and negotiate compensation regarding structure, transmission line overhang, or other equipment that would be located on their property. The easement will provide access for construction and maintenance, vegetation control, and determine structure placement limitations within the easement area. Once the easement is finalized, the landowner will still be able to utilize the area for farming activities, drainage systems, underground utilities, and access drives. Restrictions would include placement of structures and vegetation height within the easement area.

1.3 Project Cost Estimate

The estimated costs for the projects are:

Transmission facilities cost ..... $2.4 million
Substation cost..... $5.1 million
Total Cost ..... $7.5 million

1.4 Project Schedule

Project easement acquisition started in fall 2010 and will continue through winter 2011. Project permitting began in fall 2010 and will continue into spring 2011. Project construction would be scheduled to begin in late summer/early fall 2011.