Transmission Cost Recovery Rider Descriptions of Projects Proposed to be Eligible Under SDCL 49-34A-25.1

The following projects were approved for recovery by the Commission in the Company's Transmission Cost Recovery Rider filing in Docket No. EL12-035 and reaffirmed for cost recovery most recently in Docket No. EL17-036:

- CapX2020 Brookings Twins Cities 345 kV transmission line
- CapX2020 Fargo Twin Cities 345 kV transmission line
- CapX2020 La Crosse-Local 345 kV transmission line
- CapX2020 La Crosse-MISO
- CapX2020 La Crosse-WI
- Glencoe Waconia
- Sioux Falls Northern

The following projects were approved for recovery by the Commission in the Company's Transmission Cost Recovery Rider filing in Docket No. EL13-006 and reaffirmed for cost recovery most recently in Docket No. EL17-036:

- Bluff Creek Westgate transmission line
- Chaska Area transmission line
- Minn Valley transmission line
- Big Stone Brookings 345 kV Line
- Lake Marion Burnsville
- Maple Lake Annandale

The following project was approved for recovery by the Commission in the Company's Transmission Cost Recovery Rider filing in Docket No. EL15-030 and reaffirmed for cost recovery most recently in Docket No. EL17-036:

• Minot Load Serving Transmission Line

Project Updates

There have not been any substantive changes to any project's scope since our last TCR filing. However, two projects' capital costs are now forecasted to be lower than presented in our last TCR filing. Below we describe these cost variances.

Big Stone –Brookings 345 kV Line

There are several reasons that our current cost estimate for the CapX2020 Big Stone – Brookings project at completion is less than initially submitted to the SDPUC. The lower cost is reflective of 1) value engineering, whereby we were able to substitute materials and methods with less expensive alternatives without sacrificing quality or functionality; 2) estimate refinement where our actual appropriation cost was less than as originally scoped for the cost estimates; and 3) lower material prices. For example, steel commodity prices were at a 5-year historic low when the structures for this project were purchased, which helped reduce the total project cost. In addition, pipeline induction mitigation requirements were not as extensive as originally anticipated, resulting in savings to the project budget. In addition construction was completed ahead of schedule, which allowed for vegetation restoration to commence under fall planting conditions. With favorable spring rainfall, there was no need for restoration in Spring 2018, which contributed to cost savings.

Minot Load Serving Transmission Line

There are several reasons that our current cost estimate for the Minot Load Serving Transmission Line project at completion is less than forecasted in our last TCR Petition. The lower cost is reflective of 1) value engineering, whereby we were able to substitute materials and methods with less expensive alternatives without sacrificing quality or functionality; 2) estimate refinement, whereby actual appropriation cost was less than original project estimates; 3) contractual terms were favorable where contractor provided a lump sum bid and accepted project risk for factors such as weather and schedule; 4) contractor pricing was less than original estimate; and 5) project risk register items did not develop – in other words, the project experienced favorable weather conditions, no line outage restrictions during construction, no significant necessary matting, and minimal condemnation.

New Projects

The Company seeks eligibility determination for the following project:

1. Huntley-Wilmarth 345 kV Transmission Line

Project Description and Context

The Huntley-Wilmarth project is proposed to be an approximately 50-mile 345 kV transmission line between Xcel Energy's existing Wilmarth Substation north of Mankato, Minnesota, and ITC Midwest's Huntley Substation south of Winnebago, Minnesota. Route alternatives for the proposed transmission line traverse Blue Earth,

Faribault, Martin, and Nicollet counties in Minnesota. The project includes necessary modifications to the existing Wilmarth and Huntley substations to accommodate this new 345 kV transmission line. Xcel Energy and ITC Midwest will own the transmission line jointly as tenants in common. The equipment and improvements inside the Wilmarth Substation will be owned solely by Xcel Energy. The equipment and improvements inside the Huntley Substation will be owned solely by ITC Midwest. Xcel Energy will be responsible for the construction and maintenance of the proposed 345 kV transmission line. Each party will be responsible for the construction and maintenance of its substation.

The Huntley-Wilmarth project was studied, reviewed, and approved by the MISO Board of Directors as a Market Efficiency Project (MEP) in December 2016 in its annual Transmission Expansion Plan (MTEP16) report. As an MEP, the primary need for this project is to reduce transmission system congestion which will improve the efficiency of MISO's energy market resulting in lower wholesale energy costs. The project is needed to relieve the transmission congestion on the Iowa/Minnesota border and increase market access to lower cost generation, thereby providing economic benefits through reduced wholesale energy costs. The project will also strengthen the resiliency of the regional grid and improve the deliverability of energy by reducing curtailments of wind generators. In addition, the regional transmission system will become more robust because, under a variety of future scenarios, it will increase deliverability of energy, improve the ability of the transmission system to respond to different contingencies, and provide economic benefits.

The final route decision will impact the final project's costs. The route/design options, as modified in the state permitting process, have total costs ranging from \$116.6 million to \$177.8 million (escalated\$) which corresponds to \$104.8 million to \$160.7 million (2016\$.) The Company is responsible for 50% of the project's costs.

Efforts to Ensure Lowest Cost to Ratepayers

All major materials (steel structures, switches, transformers, breakers and conductors) and construction labor for this project will take advantage of contracts that have been negotiated by the Company's sourcing group. These contracts were negotiated based on Xcel Energy system-wide use of materials and components resulting in lowest cost.