

Minnesota Public Utilities Commission
Staff Briefing Papers

Meeting Date: **August 10, 2017***Agenda Item #12

Companies: Minnesota Power

Docket No. E015/M-16-268 and E015/M-17-252

In the Matter of Minnesota Power's 2015/2016 Annual Safety, Reliability, Service Quality Report, and Proposed Annual Reliability Standards for 2017.

Issues: Should the Commission Accept Minnesota Power's Safety, Reliability, service Quality Reports for 2015 and 2016?

Should the Commission accept Minnesota Power's proposed annual reliability standards for 2017?

Staff: Marc Fournier651-201-2214

Relevant Documents

Commission Order Accepting Report and Setting 2015 Reliability Standards, Docket No. E015/M-15-323 December 22, 2015

Minnesota Power Initial Filing 2015 Safety, Reliability and Service Quality Standards Report. E015/M-16-268 April 1, 2016

Minnesota Power Initial Filing 2016 Safety, Reliability and Service Quality Standards Report. E015/M-17-252 March 31, 2017

Comments of the Minnesota Department of Commerce Division of Energy Resources. May 31, 2017

Reply Comments of Minnesota Power. June 12, 2017

The attached materials are workpapers of the Commission Staff. They are intended for use by the Public Utilities Commission and are based upon information already in the record unless noted otherwise.

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Statement of the Issues

Should the Commission accept MP's Safety, Reliability, and Service Quality Reports for 2015 and 2016?

Should the Commission accept Minnesota Power's proposed annual reliability standards for 2017?

Background

On April 1, 2016, Minnesota Power filed its 2015 annual safety, reliability, and service quality reports pursuant to Minnesota Rules, Chapter 7826. On April 14, 2016, the DOC informed the Commission that it lacked adequate resources to ensure careful review and analysis of the utilities' reports and requested an extension to file comments on the reports. . The utilities were allowed to maintain, through 2016, the reliability goals set for 2015. When the utilities filed their 2016 reports in April of 2017, the DOC's workload was anticipated to return to a more manageable level. As such, the DOC determined it would be able to analyze both the 2015 and 2016 reports in 2017. The Commission granted the DOC's request that the comment deadlines be extended to coincide with the comment deadlines that will be set for the utilities' 2016 reports that will be filed by April 1, 2017.

Reliability Report

Minnesota Rules part 7826.0500 require MP's reliability report to include, among other requirements:

- A. the utility's SAIDI for the calendar year, by work center and for its assigned service area as a whole;
- B. the utility's SAIFI for the calendar year, by work center and for its assigned service area as a whole;
- C. the utility's CAIDI for the calendar year, by work center and for its assigned service area as a whole;
- D. an explanation of how the utility normalizes its reliability data to account for major storms; and
- E. an action plan for remedying any failure to comply with the reliability standards set forth in part 7826.0600 or an explanation as to why noncompliance was unavoidable under the circumstances.

Recognizing that not all utilities would have the complete information required by the rules available for the first year the reports were due on April 1, 2003, the rules allowed for more limited initial reporting requirements. Utilities were required to file historical data and proposed

reliability standards for SAIDI, SAIFI, and CAIDI, and the Commission established performance standards based on those initial reports.

Reliability Definitions:

SAIDI means the System Average Interruption Duration Index and measures the average customer minutes of interruptions per customer. It is derived by dividing the annual sum of customer minutes of interruption by the average number of customers served during the year.

$$\text{SAIDI} = \text{Total Customer Minutes of Sustained Outages} \div \text{Number of Customers}$$

SAIFI means the System Average Interruption Frequency Index and measures the average number of interruptions per customer per year. It is derived by dividing the total annual number of customer interruptions by the average number of customers served during the year.

$$\text{SAIFI} = \text{Total Number of Sustained Customer Interruptions} \div \text{Number of Customers}$$

CAIDI means Customer Average Interruption Duration Index and is measured by the average customer minutes of interruption per customer interruption. It approximates the average length of time required to complete service restoration.

$$\text{CAIDI} = \text{Total Customer Minutes of Sustained Outages} \div \text{Total number of Sustained Customer Interruptions} = \text{SAIDI} \div \text{SAIFI}$$

Interruption means an interruption of electricity service to a customer greater than five minutes in duration.

Major Service Interruption means an interruption of service at the feeder level or above and affecting 500 or more customers for one or more hours.

Parties

DOC: The Department recommends that the Commission accept Minnesota Power's filing in fulfillment of the requirements of Minnesota Rules, Chapter 7826 and the Commission's December 12, 2014 Order, pending the submission of a discussion regarding the nature and occurrence of "work procedure" damages and efforts that have, or are, being taken to limit work procedure claims.

Additionally, the Department recommends that the Commission set the Company's reliability standards for 2017 as proposed by the Company:

- SAIDI = 104.61
- SAIFI = 1.10
- CAIDI = 95.10

MP: MP responded to the DOC's request regarding the nature and occurrence of "work procedure" damages and efforts that have, or are, being taken to limit work procedure claims.

Staff Recommendation

Staff agrees with the recommendations of the DOC at page 17 of its May 31, 2017 comments and accept MP's filings.