

**STATE OF NORTH DAKOTA**

**PUBLIC SERVICE COMMISSION**

**Public Service Commission  
Standards of Service - Electric  
Rulemaking**

**Case No. PU-21-360**

**ORDER SUBMITTING RULES TO ATTORNEY GENERAL**

**October 21, 2021**

**Appearances**

Commissioners Julie Fedorchak, Brian Kroshus, and Randy Christmann.

**Preliminary Statement**

On August 18, 2021, the North Dakota Public Service Commission (Commission) issued a formal Notice of Intent to Adopt and Amend Administrative Rules and Notice of Public Hearing and an Abbreviated Notice of Intent to Adopt and Amend Administrative Rules and Notice of Public Hearing, proposing to create a proposed amendment to Article 69-09-02 of the North Dakota Administrative Code.

On August 18, 2021, Commission Staff (Staff) filed statements regarding the required regulatory analysis, small entity analysis, and takings assessments for the captioned cases.

Also on August 18, 2021, the Commission forwarded the notices to the North Dakota Newspaper Association for publication at least 20 days in advance of the hearing and a copy of the Notices and proposed Rules were sent to the Legislative Council.

The Abbreviated Notice was published in each of the 51 official county newspapers in the state during the weeks of August 25 through August 31, 2021.

On September 22, 2021, the Commission held the public hearing as noticed, beginning at 1:30 p.m. in the Commission Hearing Room, 12th floor, State Capitol, Bismarck, North Dakota.

The Commission allowed a comment period until October 4, 2021, during which the Commission received and considered data, views, or written and oral comments concerning the proposed rulemaking as part of the rulemaking record.

The proposed rules and amendments are summarized as follows:

**Case No. PU-21-360 - proposed amendment to Article 69-09-02 – Standards of Service- Electric**

The purpose of the proposed amended article 69-09-02 is to address reporting requirements and criteria for a public utility's reliable service obligation pursuant to the passage of Senate Bill 2313 of the Sixty-seventh Legislative Assembly. The proposed chapter is not expected to have an impact on the regulated community in excess of \$50,000.

**Public Hearing and Comments**

The Commission reviewed and considered all comments. The written and oral comments that were received are summarized and discussed below by case number.

**Case No. PU-21-360 - proposed amendment to Article 69-09-02 – Standards of Service- Electric**

The Commission proposed changes to N.D. Admin. Code Ch. 69-09-02-06, amending the section. The amended section adopts reliability measurements established by the Institute of Electrical and Electronics Engineers, Inc.

Victor Schock, a Public Utility Analyst with the Public Utilities Division, testified on behalf of Staff to the effect of this amendment.

Sheila Harris and Patrick Kuretich from Xcel Energy, Travis Jacobson and Rebecca Naasland from MDU, Matt Olson from Otter Tail, and Carlee McLeod President of Utility Shareholders of North Dakota provided oral comment at the hearing.

Xcel Energy, MDU, Otter Tail and Utility Shareholders also provided written comments that incorporated their oral comments and provided what metrics are currently reported and which metrics the proposed rules would be difficult and costly to provide at this time.

Xcel Energy recommends the following for reporting reliability Metric and Statistics based on their current data collection:

- System Average Interruption Duration Index (SAIDI)
- System Average Interruption Frequency Index (SAIFI)
- Customer Average Interruption Duration Index (CAIDI)

- Average Service Availability Index (ASAI)
- Top Ten Outage Causes
- Customers Experiencing Multiple Interruptions (CEMI) at 4, 5, and 6+ outage thresholds
- Underground Cable Failures
- Top 10 Worst Performing Feeder List (69 feeders total in North Dakota)
- Major Event Days (MEDs) and Details

Xcel does not recommend the following reliability metrics for reporting based on their current data collection:

- Customer Total Average Interruption Duration Index (CTAIDI)
- Customer Average interruption frequency index (CAIFI)
- Average system interruption frequency index (ASIFI)
- Average system interruption duration index (ASIDI)
- Momentary average interruption frequency index (MAIFI)
- Customers experiencing multiple sustained interruption and momentary interruption events (CEMSMI)

MDU first comments on the proposed penalty section and recommends the following:

- (1) the Commission further define the amount of the penalty and the parameters or circumstances of when a penalty may be assessed
- (2) the Commission establish a reliability record on which to base any penalties prior to the first assessment of such penalties; and
- (3) the Commission establish timelines for the implementation of any changes under Section 69-09-02-06.

MDU states that they currently report SAIFI, SAIDI, and CAIDI is also available to be reported if required. MASIFI is another index that MDU believes they could calculate with modest cost and effort. Any other indices that would be required would likely cause MDU to implement a computerized system with hardware and software costs of \$4 million dollars and an annual cost of \$100,000.00 for annual maintenance. The implementation would require an additional 10 full time employees at a cost of \$1.5 million annually. MDU further states that significant additional cost and effort would be required to determine an individual community-based IEEE defined Major Event Day (MED) manually, and manually produce additional indices for each individual community. This process would likely necessitate hiring additional full-time employees.

Otter Tail Power states they currently track and report or could report in North Dakota:

- system average interruption frequency index (SAIFI)
- system average interruption duration index (SAIDI)
- customer average interruption duration index (CAIDI)
- customer total average interruption duration index (CTAIDI)
- customer average interruption frequency index (CAIFI)
- momentary average interruption frequency index (MAIFI)
- average service availability index (ASAI)
- customers experiencing multiple interruptions (CEMI-5, which would report
- percentage of customers experiencing 5 or more sustained interruptions)
- customers experiencing long interruption durations (CELID-s60, which would report the percentage of customers experiencing interruption >60 minutes)
- customers experiencing multiple sustained and momentary interruptions (CEMSMI-5, reports customers experiencing 5 or more sustained or momentary interruptions)
- Otter Tail also assesses Major Event Days to exclude such events from reliability metrics utilizing the IEEE 2.5 Beta Methodology.

Otter Tail Power states the following metrics are currently beyond the company's current reporting abilities:

- customers experiencing multiple interruptions CEMI at levels other than 5 would have to be calculated manually.
- customers experiencing multiple sustained interruption and momentary interruption events (CEMSMI) at levels other than 5 would have to be calculated manually.
- average system interruption frequency index (ASIFI), is not possible based our company's available data collection systems.
- average system interruption duration index (ASIDI), is not possible based our company's available data collection systems.

The above items would require additional labor for manual calculations, the Company estimates 20 hours by an engineer for each additional metric.

Otter Tail Power discussed their new advanced metering infrastructure and its ability to enhance granularity in reliability reports as power-off information will come directly from the meter.

Xcel, MDU, and Otter tail all expressed a reporting date of May 1 would be beneficial to either eliminate extra reporting or to give extra time to compile any additional data they may need to compile above what is already collected and reported.

Utility Shareholders expressed concern with the clarity of the penalty provision as it does not proscribe the method in which a penalty might be assessed and asks that it be amended to clarify major event days fall outside of the outage events which could prompt a penalty, disallowance, or requirement.

Amendments to the rules were made based on the comments. The filing date was changed to May 1 as all utilities requested that be changed, and it does not have any major impacts or effects to have the reporting date as May 1.

Required reporting indices were changed based on the comments provided and what could be reported by all the utilities. Remaining reported indices are SAIFI, SAIDI, and CAIDI. These were consistent with all utilities in their ability to report them as the information is currently collected and can be reported without excess time and costs. Indices which were removed were done so because of the utilities comments and inability to report them or the time and money that it would cost to collect and report the data.

The penalty provision was not amended based on the comments of MDU and Utility Shareholders. To eliminate MED days would be inconsistent with what the rules are trying to accomplish and limit the commission as to what it can consider when assessing disallowances, fines, or penalties. The clarity of the penalty provision is clear in what will be considered when requiring action, assessing disallowances, fines, or penalties.

The Commission adopts N.D. Admin. Code § 69-09-02-06 as amended.

### **Discussion**

Having reviewed the proposed rules, and considered the testimony and comments received, the Commission finds good cause for submitting the proposed rule in Case No. PU-21-360 as revised after comment, attached to and made a part of this order, to the Attorney General for an opinion as to legality.

**ORDER**

The Commission orders that the proposed rules and amendments in Case No. PU-21-360, attached and made part of this order, be submitted to the Attorney General for an opinion that the rules are approved as to their legality.

**PUBLIC SERVICE COMMISSION**

  
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**Randy Christmann**  
Commissioner

  
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**Julie Fedorchak**  
Chair

  
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**Brian Kroshus**  
Commissioner

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**Case No. PU-21-360**

**69-09-02-06. Continuity of Service.**

1. An electric public utility is responsible for ensuring reliable service.
- 1.2. Each utility shall make every reasonable effort to prevent interruptions of service, and when such interruptions occur shall endeavor to reestablish service within the shortest possible time. Whenever the service is necessarily interrupted or curtailed for the purpose of working on equipment, it shall be done at a time which, if at all practicable, will cause the least inconvenience to customers, except in cases of emergency.
- 2.3. Each utility shall keep a record of all interruptions to service affecting the entire distribution system of any single community or an important division of a community, and include in the record the date and time of interruption, the date and time service was restored, and, if known, the cause of each interruption. Service interruption records shall be kept for a period of six years
4. If an electric public utility fails to meet its obligation to provide reliable service to customers, the commission may require action, assess disallowances or fines, or provide a penalty. A penalty, disallowance or fine, or action will take into consideration the nature, circumstances, and gravity of the violation, degree of culpability, history of prior service interruptions, and good faith attempts to ensure reliability.
5. By May 1 each year, each electric public utility shall file with the Commission the records required by this section. The commission may at any time, upon notice to the electric public utility, require a filing of the records required by this section for a specified time period or specific interruption.
6. Each electric public utility shall include in its annual May 1 filing, reliability statistics for the previous calendar year including Institute of Electrical and Electronics Engineers Standard 1366 indices system average interruption frequency index (SAIFI), system average interruption duration index (SAIDI), Customer average interruption duration index (CAIDI), Each utility shall include with this filing the datapoints used to calculate each of the above indices and a detailed breakdown of

each major event day (MED). These statistics will be compiled by each electric public utility for its North Dakota distribution system.