

Minnesota Public Utilities Commission
Staff Briefing Papers

Meeting Date: **May 25, 2016**Agenda Item 3*

Company: Minnesota Transmission Owners

Docket No. E999/M-15-439

In the Matter of the 2015 Minnesota Biennial Transmission Projects Report

Issues: Should the Commission accept the 2015 Biennial Report?

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Relevant Documents

- 2015 Biennial Transmission Projects Report.....October 30, 2015
- Xcel Energy Biennial Distribution Grid Modernization Report.....October 30, 2015
- Supplemental Data by the Minnesota Transmission Owners..... December 7&16, 2015
- Comments by the Department of Commerce..... February 4, 2016
- Reply Comments by the Minnesota Transmission Owners..... February 29, 2016

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Statement of the Issues

Should the Commission accept the 2015 Biennial Transmission Projects Report?

Procedural History

On October 30, 2015 the Minnesota Transmission Owners (MTO) filed the 2015 Biennial Transmission Projects Report.

On December 7 and December 16, 2015 MTO filed supplemental data.

On February 4, 2016 Department filed comments.

On February 29, 2016 MTO filed reply comments.

Biennial Transmission Projects Report Overview

A. History of Biennial Transmission Projects Reports

In 2001, the Minnesota Legislature enacted Minn. Stat. § 216B.2425, requiring essentially all owners of electric transmission facilities within the state to file biennial reports on the state of their transmission systems. These reports, called biennial transmission projects reports, must identify: (a) any reasonably foreseeable future transmission inadequacies; (b) alternative means of addressing these inadequacies, and (c) the economic, environmental, and social issues associated with each alternative. Utilities may also use these biennial filings to request certification of high voltage transmission lines needed to remedy transmission inadequacies.

The statute requires TOs to report on the involvement of local government officials and other interested persons in identifying transmission inadequacies and analyzing alternative means of resolving them. It also requires TOs to report on the public input they have gathered on the transmission deficiencies identified.

The Legislature later amended the statute to require utilities to also file a report that examines what transmission infrastructure improvements would be necessary to meet the renewable energy objectives set forth in Minn. Stat. § 216B.1691.

B. 2013 Minnesota Biennial Transmission Projects Report

The Commission's May 12, 2014 Order approving the 2013 Biennial Transmission Projects Report included provisions that pertained to the 2013 filing. The provisions include:

1. Acceptance of the 2013 biennial transmission projects report filed under Minn. Stat. § 216B.2425.
2. Extension of the variance it granted to Minn. Rules, part 7848.0900, to eliminate the obligation to hold the public meetings described therein.
3. In the 2015 biennial transmission projects report, the MTO shall include content similar to the 2013 report, and shall include a discussion addressing Minn. Stat. § 216B.2425, subd. 2(c)(3).

2015 Biennial Transmission Projects Report

A. Minnesota Transmission Owners¹

The 2015 Biennial Transmission Projects Report (2015 Report) was filed in accordance with Minn. Stat. § 216B.2425. The statute requires utilities that own or operate electric transmission facilities in Minnesota to file a report by November 1st, of each odd numbered year, on the status of the transmission system, including present and foreseeable inadequacies and potential solutions. The process is also intended as a method to inform the public of transmission issues in the state and to track the development of solutions.

The 2015 Report is a joint effort on the part of utilities that own transmission in the state and is the eighth report to be filed by the MTO. As mentioned, the major purpose of the biennial report is to identify and present near-term transmission inadequacies and to examine possible alternatives for addressing those inadequacies. An inadequacy is generally defined as a situation where existing transmission facilities are unable, in the current or foreseeable future, to consistently and reliably provide electric service in compliance with regulatory standards.

The transmission assets in the state are divided into six geographical regions or planning zones, a map of which is provided as page 29 of the 2015 Report. The 2015 Report lists 70 separate transmission inadequacies by Midcontinent Independent System Operator (MISO) utilities across the state and 6 inadequacies by a non-MISO utility in the Northwest zone of the state.

B. Minnesota Department of Commerce, Division of Energy Resources

On November 20, 2015, the Department filed completeness comments. In its comments, the Department stated that most of the required information is located either in the Report or in the

¹ The Minnesota Transmission Owners membership includes American Transmission Company, LLC, Dairyland Power Cooperative, East River Electric Power Cooperative, Great River Energy (GRE), Hutchinson Utilities Commission, ITC Midwest LLC, L&O Power Cooperative, Marshall Municipal Utilities, Minnesota Power, Minnkota Power Cooperative, Missouri River Energy Services, Northern States Power Company, Otter Tail Power Company, Rochester Public Utilities, Southern Minnesota Municipal Power Agency, and Willmar Municipal Utilities. Among the above utilities, East River Electric Power Cooperative, L&O Power Cooperative, Marshall Municipal Utilities, Minnkota Power Cooperative and Rochester Public Utilities are not members of Midcontinent Independent System Operator (MISO); all the others are member of MISO. Northwestern Wisconsin Electric Company (NVEC) owns three miles of 69 kilovolt (kV) transmission line and a portion of a 230 kV substation in Minnesota, did not file a biennial transmission projects report. NVEC's last communication with the Commission was in 2009, and stated that it had no plans for the construction of transmission facilities in Minnesota in the reasonably foreseeable future.

referenced MISO Transmission Expansion Plans (MTEP). However, the Department recommended the Commission find the Report complete upon submission of the Midwest Reliability Organization (MRO) section of the North American Electric Reliability Corporation most recent regional load and capability report of the Mid-Continent Area Power Pool (MAPP) or other appropriate regional reliability council. The Department claimed that the MRO section of the NERC Long-Term Reliability Assessment (LTRA) more closely complies with the statutory requirement² that a regional load and capability report be submitted.

On February 4, 2014, the Department filed comments discussing its analysis of the Report and its recommendations.

Northwestern Wisconsin Electric Company

As mentioned in the footnote above, Northwestern Wisconsin Electric Company (NWEC) did not submit a biennial transmission plan. Given the limited size of NWEC's Minnesota transmission system, the Department had no comments regarding NWEC.

Transmission Inadequacies

The Department identified 12 areas where historical demand had been greater than the supply capability after a single transmission contingency occurs, and provided a date by which reliability would be restored to each of the 12 areas based on MTO's response to the Department Information Request No. 1³. Also, the Department identified three projects which require a certificate of need (CN) based on MTO's response to the Department Information Request No. 2. MTO's members plan to submit three CN petitions by the end of 2018. In addition to the three CN projects, the Department identified four projects as potentially requiring a CN but not yet having a filing date estimated. Among the four projects without a certain CN filing date, Xcel's Minnesota Valley-Panther-McLeod-Blue Lake 230 kV line project is indefinitely delayed due to a decline in load growth.

Transmission for Renewables

The Renewable Energy Standard (RES) Report shows that utilities subject to Minnesota RES have sufficient capacity acquired to meet their RES needs through 2025.

In an Order issued on May 18, 2012 the Commission directed the MTO to provide an update on the Corridor Upgrade Project in its 2013 Report because of the addition of the MISO Multi-Value Project (MVP) Group 1 portfolio of projects, which were approved by the MISO board of directors in December 2011. The RES Utilities concluded that the need for the Corridor Upgrade project has likely moved out beyond 2018 timeframe previously assumed. The

² Minnesota Rules 7848.1300 B requires "a copy of the most recent regional load and capability report of the Mid-Continent Area Power Pool or other appropriate regional reliability council." MRO is "appropriate regional reliability council" for Minnesota utilities.

³ In this case three of the twelve issues will be fixed by year-end 2016. The other nine will be fixed by 2021.

Department agreed with the MTO utilities subject to RES that immediate action regarding the Corridor Upgrade Project is not necessary.

Solar Energy Standard

In 2013, the Minnesota Legislature established a solar energy standard (SES) for public utilities, effective by the end of 2020. Minn. Stat. § 216B.1691, subd. 2f, established a solar energy standard of 1.5 percent of a utility's retail sales by the end of 2020. That statute requires public utilities subject to the SES to report to the Commission on July 1, 2014, and each July thereafter, on progress in achieving the standard.

The Department noted that utilities subject to SES requirement are on pace to meet the 2020 and 2025 SES goals.

Renewable Energy Integration Study

The 2013 Minnesota Legislature directed MTO to study the reliability and cost implications of increasing the renewable energy standard to 40 percent by 2030.

The Department stated that it met on September 13, 2013 with utility and MISO transmission engineers and management, along with all of those who had indicated an interest in this issue. On September 26, 2013, the Commissioner of Commerce appointed a technical review committee, which was tasked with providing an analysis on the reliability and cost implications of increasing the renewable energy standard to 40 percent by 2030 to the Commission by November 1, 2014. The technical review committee submitted the Final Report of the Minnesota Renewable Energy Integration and Transmission Study (MRITS Report) to the Legislature on October 31, 2014.

Mitigation costs

In its comments, the Department concluded that additional measures are necessary to help ensure that the costs charged to ratepayers for upgrades to the electric system are reasonable. Further, it is important to ensure that decisions made by a utility in response to local governments and others reasonably consider the cost implications and that the costs of upgrades are allocated appropriately to ratepayers, based on ratemaking principles such as cost-causation, cost minimization, and administrative feasibility.

When utilities install infrastructure in an area, there are always mitigation measures involved. As long as the costs of such measures are reasonable, prudent, and relatively small in size, it is generally appropriate to allow the costs to be borne by all ratepayers. However, when a mitigation measure is not needed for electrical purposes and is significant in size, it is important to consider whether the costs should be allocated to the entire rate base or to a smaller group of customers, based on the entity requesting such enhancement or optional mitigation. The Department asserted that the application of the cost-causation principle is important because, if optional mitigation costs are consistently allocated to the entire rate base, the incentive to

prudently control costs throughout the permitting processes is reduced.

Recommendations

Minn. Rule 7848.1800, subd. 5 establishes a deadline of January 15 for initial comments on the merits of the biennial transmission projects report. The Department's comments were filed on February 4. The Department requested the Commission vary Minnesota Rules 7848.1800, subd. 5 so as to allow the Department's analysis to be considered in the proceeding via Minn. Rules part 7829.3200.

The Department recommended that the Commission approve the 2015 Report, but recommended the Commission to require Otter Tail Power Company, Minnesota Power, and Xcel Energy to provide the following information in future rate requests to recover the costs of new energy facilities:

- a summary of all mitigation measures that have been added at any step in the permitting process,
- the general reason for the mitigation measure, including whether the measure was requested or required,
- the entity requesting or requiring the mitigation, and
- the cost of the mitigation measure.

C. Minnesota Transmission Owners Reply to the Department

On December 7 and 16, 2015, in response to the Department's completeness comments, the MTO filed the load and capability report (pages 45-46) from the 2014 NERC Long-Term Reliability Assessment and the load and capability report (pages 42-43) from the 2015 NERC Long-Term Reliability Assessment.

On February 29, 2016, MTO filed reply comments in response to the Department's February 4, 2016 comments.

The Department's Variance Request

The MTO had no objections to granting the Department a variance from the January 15 date to file comments.

Transmission Issues

In responding to an information request by the Department regarding the transmission projects that will or might require a certificate of need, the MTO realized that it had mistakenly failed to identify in its Biennial Report two projects for which a certificate of need would be required:

- Tracking Number 2007-NW-N3 (the Winger-Thief River Falls 230 kV Line), and

- Tracking Number 2015-NW-N1 (the Clearbrook West 115 kV Project).

Transmission for Renewables

In Chapter 8 of the 2015 Biennial Report, the MTO provided an analysis of transmission needs to meet the upcoming state renewable energy standards. The analysis concluded that those utilities subject to the Minnesota renewable energy standards have sufficient renewable energy to meet the standards through 2025.

Solar Energy Standard

MTO provided in the 2015 Biennial Report a high level description of Xcel Energy, Minnesota Power and Otter Tail Power Company's effort to meet the solar standard. MTO also indicated that the utilities subject to the solar standard will be filing a complete report with the Commission by July 1, 2016 on their progress in achieving the standard, as required by the new law.

Renewable Energy Integration Study

The MTO noted in their comments that the Biennial Transmission Report is not required to address this topic and noted that it is not necessary for the Commission to address the MRITS report in this docket.

Mitigation Costs

MTO asserted that the Department's recommendations related to the mitigation costs in future rate hearings are the same recommendations the Department made in the 2011 and 2013 Biennial Report dockets. MTO further stated that they do not object to the Commission considering mitigation costs in future transmission rider cost recovery filings and general rate cases, but it was not appropriate to establish such requirements in the biennial report docket.

Grid Modernization Report

The MTO members acknowledged the new 2015 law requiring a utility operating under an approved multiyear rate plan to conduct a distribution system study for small-scale generation resources, but noted that the biennial report docket is not the correct place to address the issues raised by the Department. That discussion should take place in either the docket on Xcel Energy's Grid Modernization Report (E002/M-15-962) or the general docket on grid modernization (E999/CI-15-556).

The 2015 Biennial Report Conclusion

The Minnesota Transmission Owners request that the Commission take action and issue an order regarding the 2015 Biennial Report that includes the following:

1. Find that the 2015 Biennial Report meets the requirements of Minn. Stat. § 216B.2425 and accept the report.
2. Find that since no party has requested certification for any of the projects listed in the report, it is unnecessary to certify, certify as modified, or deny certification of any projects.
3. Extend the variance from Minn. Rules part 7848.0900 that it has granted for the past several reports to relieve the utilities of the obligation to hold public meetings in each transmission planning zone. And further, determine that the MTO shall not be required to hold a webinar on the 2017 Biennial Report.
4. Find that any utility operating under an approved multiyear rate plan shall submit a Grid Modernization Report in the 2017 Biennial Report.
5. Direct the Transmission Owners to include content similar to the 2015 report in the 2017 Report.

D. Supplemental Comments by the Department

In its March 18, 2016 Supplemental Comments to the Commission, the Department discussed exclusively issues related to the Distribution Grid Modernization Report, which are covered in docket# 15-962. As such, these comments will not be addressed in this docket, 15-439, 2015 Minnesota Biennial Transmission Projects Report.

E. Staff Discussion

Transmission Inadequacies

Commission staff is satisfied with the MTO responses to the Department's inquiries to address the additional information regarding the projected inadequacies in the transmission system.

Transmission for Renewables

Staff agrees with the Department and RES utilities that utilities subject to Minnesota RES have sufficient capacity acquired to meet the RES and SES needs through 2025.

Mitigation Costs in Future Rate Hearings

Staff notes that the Commission considered the issue of mitigation costs in future certificate of need proposals in the 2013 Report Order⁴ and agreed with the Department's comments that mitigation-cost information is useful in evaluating the costs of such mitigation measures, but the Commission did not require the transmission owners to include this information in the any future Biennial Transmission Projects Report. Therefore, in accordance with the 2013 Order, staff recommends that the Commission make a similar finding the 2015 Report Order.

⁴ Docket 13-402; Commission Order *Accepting Report, Granting Variance, and Setting Additional Requirements* on May 12, 2014.

The 2015 Biennial Report

In reply comments, MTO asked the Commission to make certain determinations regarding the 2015 Report and to direct the transmission owners to include similar content to the 2015 Report in the future 2017 Report. MTO highlighted in their comments that the 2015 Report does not include any requests for certification from any party and as such, the Commission should not certify any projects using the 2015 Report as the approval mean.

Staff agrees with four of the five recommendations included in the MTO Reply Comments and recommends the Commission adopt the MTO's recommendations, with the exception of their recommendation to no longer require the MTO to include the requirements set out in Minn. Stat. 216B.2425, Subd. 2, (c)(3)

Public Participation

In the May 12, 2014 *Order Accepting Reports, Granting Variance, and Setting Additional Requirements* for the 2013 Biennial Transmission Projects Report the Commission extended the variance it granted to Minn. Rules, part 7849.0900, to eliminate the obligation to hold the public meetings described therein. Similar to the May 12, 2014 Order, staff recommends the Commission extend this rule variance for the 2017 Biennial Transmission Projects Report to not require the transmission owners to hold a webinar in lieu of the meetings.

Staff notes that the criteria for granting a rule variance are set out in Minnesota Rule 7829.3200 which specifies three criteria:

- A. enforcement of the rule would impose an excessive burden upon the applicant or others affected by the rule;
- B. granting the variance would not adversely affect the public interest; and
- C. granting the variance would not conflict with standards imposed by law.

Staff believes that the criteria are met as follows:

1. enforcement of the rule would require TOs to spend money unnecessarily and would divert the time and attention of several engineers and other experts to participate in meetings that have traditionally, not been well attended;
2. given the consistent lack of interest in transmission planning, granting the variance does not conflict with the public interest; and
3. staff is unaware of any standards imposed by law that would conflict with the variance.

Commission Decision Alternatives

1. 2015 Biennial Transmission Projects Report
 - a. Accept the 2015 Projects Report
 - b. Reject the 2015 Projects Report
 - c. Take some other action

2. Mitigation Measures Reporting Requirements
 - a. Require the MTO to meet with the Department to further develop the reporting requirements for mitigation measures to be provided in rate recovery proceedings.
 - b. Encourage the Department to collect the amount of mitigation costs included in future certificate of need proposals.
 - c. Take no action at this time.

3. 2017 Biennial Transmission Projects Report
 - a. Grant a variance to the public participation requirements of Minn. Rule 7848.0900 and no longer require a webinar presentation be scheduled.
 - b. Require MTO to file the 2017 Report with the content similar to 2015 Report.
 - c. Additionally, require MTO to include in the 2017 Report the requirements addressed in Minn. Stat. § 216B.2425 Subd 2. (c)(3).
 - d. Require some other action.

Staff Recommendation: 1a, 2b, and 3a, b & c