

Minnesota Public Utilities Commission
Staff Briefing Papers

Meeting Date: **April 17, 2014***Agenda Item #2

Company: Minnesota Transmission Owners

Docket No. E999/M-13-402

In the Matter of the 2013 Minnesota Biennial Transmission Projects Report

Issues: Should the Commission accept the 2013 Biennial Report?

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Relevant Documents

2013 Biennial Transmission Projects Report.....November 1, 2013
Completeness Comments by the Department of Commerce..... November 21, 2013
Supplemental Data by the Minnesota Transmission Owners..... December 9, 2013
Comments by the Department of Commerce..... January 14, 2014
Reply Comments by the Minnesota Transmission Owners..... March 3, 2014
Supplemental Comments by the Department of Commerce..... March 20, 2014

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Statement of the Issues

Should the Commission accept the 2013 Biennial Transmission Projects Report?

Procedural History

On November 1, 2013 the Minnesota Transmission Owners (MTO) filed the 2013 Biennial Transmission Projects Report.

On November 21, 2013 the Department of Commerce Division of Energy Resources (Department) filed completeness review comments identifying the need for additional information.

On December 9, 2013 MTO filed supplemental data.

On January 14, 2014 Department filed comments.

On March 3, 2014 MTO filed reply comments

On March 20, 2014 Department filed supplemental 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) present 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 utilities 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 utilities 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. 2011 Minnesota Biennial Transmission Projects Report

The Commission's May 18, 2012 Order approving the 2011 Biennial Transmission Projects Report included provisions that pertained to the 2013 filing. The provisions include:

1. Acceptance of the 2011 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. The MTO shall continue to improve its transmission planning webpage.
4. In the 2013 biennial transmission projects report, the MTO shall provide:
 - A. A separate section which discusses MTO's outreach to and continued efforts to secure input on transmission planning issues from local governments.
 - B. An update on the Corridor Upgrade Project.

2013 Biennial Transmission Projects Report

A. Minnesota Transmission Owners¹

The 2013 Biennial Transmission Projects Report (2013 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

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, Rochester Public Utilities and Willmar Municipal Utilities are not members of Midcontinent Independent System Operator (MISO); all the others are member of MISO. Northwestern Wisconsin Electric Company (NWEC) 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. NWEC'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.

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 2013 Report is a joint effort on the part of utilities that own transmission in the state and is the seventh 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 37 of the 2013 Report. The 2013 Report lists 125 separate transmission inadequacies by Midcontinent Independent System Operator (MISO) utilities across the state and one inadequacy by a non-MISO utility in the Northwest zone of the state.

B. Minnesota Department of Commerce, Division of Energy Resources

On November 21, 2013, 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 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 2012 Long-Term Reliability Assessment (NERC LTRA). The Department claimed that the MRO section of NERC LTRA more closely complies with the statute requirement² that a regional load and capability report be submitted.

On January 14, 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 (NVEC) did not submit a biennial transmission plan. Given the limited nature of NVEC's Minnesota transmission system, the Department had no comments regarding NVEC.

Transmission Inadequacies

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.

The Department identified seven 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 seven areas based on MTO's response to the Department Information Request No. 3³. Also, the Department identified seven projects which require a certificate of need (CN) based on MTO's response to the Department Information Request No. 2. Among the seven, MTO's members plan to submit four CN petitions by the end of 2015. In addition to the seven CN projects, the Department identified ten projects as potentially requiring a CN but not yet having a filing date estimated. Among the ten projects, Great River Energy's (GRE) six projects are indefinitely delayed due to a decline in demand. The Department requested MTO to provide load data showing the claims and to discuss how quickly GRE can complete each of the projects once load growth returns.

Transmission for Renewables

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

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 past the 2016-2018 timeframe previously assumed. The Department agreed with the RES Utilities 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 recommended that the MTO utilities subject to the SES describe in reply comments how they plan to integrate the increasing number of solar energy projects that are anticipated to be developed to comply with the SES.

Renewable Energy Integration Study

³ In this case five of the seven issues will be fixed by year-end 2015. The other two will be fixed by 2018 and 2020.

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 will provide 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.

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, 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, an incentive is created to increase project costs through the permitting processes.

Recommendations

The Department recommended that the Commission approve the 2013 Report, but requested the following additional information in reply comments:

- Minnesota Power provide an explanation for the two year delay in resolving deficiency 2003-NE-N3: Savanna Project deficiency (2003-NE-N3); and
- GRE provide a chart showing the critical load level and the drop in load growth for the six projects discussed above; and
- Utilities subject to the Solar Energy Standard describe their plans to efficiently integrate new solar projects on their distribution and transmission systems.

In addition, the Department recommended the Commission 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.

The Department recommended that the Commission require ITC Midwest (ITC) to submit the same information as Interstate Power and Light Company (IPL), and that IPL provide the information in future rate requests.

C. Minnesota Transmission Owners Reply to the Department

On December 9, 2013, in response to the Department's completeness comments, the MTO filed the load and capability report (pages 129-134) from the 2012 NERC Assessment and the load and capability report (pages 77-79) from the 2013 NERC Long-Term Assessment.

On March 3, 2014, MTO filed reply comments in response to the Department's January 14, 2014 comments.

Timing of the Savanna Project (Tracking Number 2003-NE-N2)⁴

Minnesota Power's portion of the Savanna Project (the Savanna 115 kV Switching Station) was completed and placed in-service in the fall 2013. GRE's Savanna to Cedar Valley section of the 115kV line project was completed at the same time as Minnesota Power's Savanna Substation. What remains to be completed are the Savanna Substation to Cromwell 115 kV line and the addition of a breaker to GRE's Cromwell substation. Construction of the Savanna to Cromwell Breaker Station section of the 115kV line project was started in December of 2013 and is expected to be completed in May of 2015. Delay was due to the need to build the transmission line over multiple winter seasons due to lowland areas.

Information Regarding Six Great River Energy Projects

⁴ A Certificate of Need and a Route Permit was issued on March 12, 2012. PUC Docket Nos. ET-2/E-015/CN-10-973, ET-2/E-015/TL-10-1307.

GRE provided four charts for Taconite Harbor-Grand Marais 69 kV rebuild to 115 kV (2003-NE-N6), Macville-Blind Lake 115 kV line and Macville 230/115 kV substation (2009-NE-N4), Rush City-Milaca 230 kV line and Dalbo 230/690 kV source (2009-NE-N11), and Alexandria-West St. Cloud 115 kV line (2003-WC-N8) and showed the declining load growth. One of the remaining two, Shamineau Lake 115 kV substation and 115 kV line (2009-NE-N6)'s critical loading is based on Crow Wing Power distribution needs and Crow Wing Power has not indicated to GRE that it is moving forward with the project. Glendale-Lake Marion-Helena 115 kV project (Tracking No. 2009-TC-N2)⁵ may delay the last of the six projects, Carver County-Belle Plaine 115 kV line (2009-TC-N5), until 2024.

Solar Standard

MTO provided 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, 2014 on their progress in achieving the standard, as required by the new law.

Mitigation Costs in Future Rate Hearings

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 Biennial Report docket. MTO further stated that the Commission apparently also determined that it was not necessary to include such a directive in this docket, since the Order approving the 2011 Biennial Report, did not mention the Department's recommendation. MTO recommended that the Commission decline the Department's suggestion again this year.

The 2015 Biennial Report

The MTO requested that the Commission, in its final order on the 2013 Biennial Report, describe the following procedures for the 2015 Report.

- Continue the variance from the zonal public meetings in part 7848.0900 and not require that a webinar be scheduled.
- Eliminate the requirement for a separate biennial report and require instead that the utilities simply reference the latest MTEP Report only. Those utilities that are not part of MISO can refer to the Midcontinent Area Power Pool (MAPP)

⁵ PUC Docket No. ET2/CN-12-1235, ET2/TL-12-1245.

Regional Plan, which comprises only a small part of the transmission inadequacies that have been identified.

- Require those utilities that are required to report on transmission upgrades to support compliance with renewable energy standards to still file an RES report including a gap analysis.
- Require the MTO to continue to maintain the minnelectrans webpage with information about transmission planning activities.

Also, MTO stated that if the Commission indicates in its Order that it could support or remain neutral to changes in the statute, the MTO could propose changes in the statute to reflect recent developments and realities of transmission planning with the Legislature.

D. Supplemental Comments by the Department

The Department was generally satisfied with the responses by the MTO. However, the Department provided an in-depth discussion about MTO's reply on mitigation costs in future rate hearings and MTO's recommendation on 2015 Biennial Report.

Mitigation Costs in Future Rate Hearings

The Department disagreed with the MTO investor owned utilities' (IOU) assertion that the Biennial Docket is an inappropriate forum to establish reporting requirements on mitigation measures, and continued to recommend the Commission require information on mitigation measures in all rate recovery filings.

Additionally, the Department provided the following revised recommendations:

All MTO utilities – IOUs, cooperatives, and municipal utilities – provide the following information related to mitigation measures in future transmission reports:

- A summary of all mitigation measures that have been added at any step in the permitting process, including a list of all voluntary measures;
- 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.

The 2015 Biennial Report

The Department agreed with MTO's recommendation that the Commission approve the following for the 2015 Biennial Report:

- Continue the variance from the zonal public meetings in part 7848.0900 and no longer require a webinar presentation be scheduled.⁶
- Require the MTO to continue to maintain the minnelectrans webpage with information about transmission planning activities.

In addition to the above recommendations, the Department indicated that it would not oppose the MTO's proposal to eliminate the requirement for a separate Biennial Report, if the MTO can demonstrate that the information on specific Minnesota utilities' transmission inadequacies, including information on substation locations, line voltage, CN and construction timelines, can all be found and understood by the public in the MTEP Report or MAPP Regional Plan. Also, if the Commission decides to eliminate the requirement for a separate Biennial Report, the Department agreed with MTO's recommendation that the Commission require those utilities that are required to report on transmission upgrades to support compliance with renewable energy standards to still file an RES report including a gap analysis.

E. Staff Discussion

Transmission Inadequacies

Commission staff is satisfied with the MTO responses to the Department's inquiries, and is confident MTO is making adequate progress toward resolving inadequacies. However, staff is uncertain whether MTO met the statutory requirement of Minn. Stat. § 216B.2425 Subd. 2(c)(3)⁷ by simply providing reference to MTEP projects in Chapter 6 of the Report. Staff agrees with MTO that MTEP is a great resource to be used as a part of the Report since it is a well vetted transmission plan. However, as a standalone product, MTEP is not qualified to fulfill all the statutory requirements of Minn. Stat. § 216B.2425. The MTEP does not discuss social or environmental issues of projects. Instead, MTEP uses a cost-benefit analysis to decide which project is the most suitable project to meet the claimed need or inadequacy. MTO should have supplemented its discussion of social or environmental issues associated with identified alternatives in the 2013 Report.

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 needs through 2025.

⁶ According to MTO's Reply comments, one person from public participated Webinar.

⁷ 216B.2425 Subd. 2(c)(3) states that the report must identify general economic, environmental, and social issues associated with each alternative.

Mitigation Costs in Future Rate Hearings

Staff notes that the Commission considered the issue of mitigation costs in future rate hearings in 2012 and didn't act on it. However, staff agrees with the Department that the mitigation costs are a significant issue for rate payers. Unfortunately the Department's comments and MTO's reply didn't mention any case(s) which reviewed the mitigation cost in any rate proceeding or transmission cost rider since May 2012⁸. In staff's opinion, the information would aid the Commission's decision whether to act on the issue at this time. Therefore, staff recommends that instead of acting on the issue, the Commission should encourage the Department to collect the amount of mitigation costs included in future certificate of need proposals to find out the magnitude of the issue.

The 2015 Biennial Report

In reply comments, MTO asked the Commission to allow it to replace future report with MTEP or other relevant regional transmission planning documents with the exception of the RES report.

As discussed above, staff does not recommend the Commission allow MTO to replace the Biennial Report with MTEP or relevant regional planning documents. Instead, staff recommends the Commission require MTO to provide information similar to the 2013 Biennial Report in the 2015 Biennial Report unless there is a change to the statute prior to its next filing. In addition, staff recommends the Commission require MTO to properly address Minn. Stat. § 216B.2425 Subd. 2(c)(3) in its 2015 Report unless there is a change to the statute prior to its next filing.

As a separate discussion, MTO asked for Commission's guidance on whether the current statutory requirement for the Report is up-to-date to reflect the current transmission planning process. Staff agrees with MTO that since 2001, there have been significant changes in transmission planning process. MISO's MTEP now plays a significant role in Minnesota transmission planning. However, it is not clear whether MTEP is comprehensive enough to meet the intention of the statute requiring the Report. Therefore it is premature to discuss a change to the statute. Instead MTO should do fact finding that can assist the Commission in deciding whether to support change. Staff recommends the Commission take no action on this item and instead, encourage MTO to provide more specific facts about how the existing regional planning document can address the intentions of the statute.

Service list

⁸ The Commission issued its Order *Accepting Report, Granting Variance, and Setting Additional Requirements* on May 18, 2012.

In supplemental comments, the Department recommended that the process with service lists for Biennial Report docket be revised. The initial service list MTO used to send out its report is subject to Minn. Rules 7848.1300. Therefore, all counties and other government entities receive the Report. Subsequent filings in the docket can be served to the Commission's official service list developed to reflect only those who have specifically indicated an interest in receiving subsequent filings. Staff can manage this process without an order provision.

Public Participation

In the May 18, 2012 *Order Accepting Reports, Granting Variance, and Setting Additional Requirements* for the 2011 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.

Staff notes that the criteria for granting a rule variance are located in Minnesota Rules 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 MTO to spend money and divert engineers and other experts to holding meetings that have 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. 2013 Biennial Transmission Projects Report
 - a. Accept the 2013 Projects Report
 - b. Reject the 2013 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. 2015 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 2015 Report with the content similar to 2013 Report along with the discussion that can address Minn. Stat. § 216B.2425 Subd 2. (c)(3).
 - c. Require some other action

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