

January 4, 2022

Will Seuffert
Executive Secretary
Minnesota Public Utilities Commission
121 7th Place East, Suite 350
Saint Paul, Minnesota 55101-2147

RE: Comments of the Minnesota Department of Commerce, Division of Energy Resources
Docket No. E999/M-21-111

Dear Mr. Seuffert:

Attached are the comments of the Minnesota Department of Commerce, Division of Energy Resources (Department) in the following matter:

2021 Biennial Transmission Projects Report.

The Report was filed on October 29, 2021, by the Minnesota Transmission Owners (American Transmission Company, LLC; Central Minnesota Municipal Power Agency; Dairyland Power Cooperative; East River Electric Power Cooperative; Great River Energy; ITC Midwest LLC; L&O Power Cooperative; Minnesota Power; Minnkota Power Cooperative; Missouri River Energy Services; Northern States Power Company; Otter Tail Power Company; Rochester Public Utilities; and Southern Minnesota Municipal Power Agency).

The Department recommends that the Minnesota Public Utilities Commission accept the Report with reporting requirements. The Department is available to answer any questions the Minnesota Public Utilities Commission may have.

Sincerely,

/s/ MICHAEL N. ZAJICEK Rates Analyst

MNZ/ja Attachment



Before the Minnesota Public Utilities Commission

Comments of the Minnesota Department of Commerce Division of Energy Resources

Docket No. E999/M-21-111

I. INTRODUCTION

On October 29, 2021 the Minnesota Transmission Owners (MTO) submitted to the Minnesota Public Utilities Commission (Commission) the MTO's 2021 Biennial Transmission Projects Report (Report). The MTO is a coalition of fourteen electric utilities that own or operate high voltage transmission facilities in Minnesota. The Report provides a review of the MTO's transmission planning activities. Northwestern Wisconsin Electric Company (NWEC) did not file a biennial transmission report. 2

The Report does not seek certification of any high voltage transmission line. Therefore, pursuant to Minnesota Rules 7848.1800, subpart 3 and the Commission's November 10, 2021 *Notice of Comment Periods and Establishment of Service List,* comments on the Report's compliance with the filing requirements (Minnesota Rules 7848.1300) and procedural recommendations were due November 18, 2021 with initial comments on the merits of the Report due January 10, 2022, with reply commends due February 25, 2022. The Minnesota Department of Commerce, Division of Energy Resources (Department) notes that petitions to intervene³ and comments on the merits, including any procedural recommendation, are to be submitted by January 10, 2021.

On November 22, 2021, the Department requested an extension for completeness comments and filed comments on compliance with the filing requirements.

¹ The members of the MTO are: American Transmission Company, LLC; Central Minnesota Municipal Power Agency; Dairyland Power Cooperative; East River Electric Power Cooperative; Great River Energy; ITC Midwest LLC; L&O Power Cooperative; Minnesota Power; Minnkota Power Cooperative; Missouri River Energy Services; Northern States Power Company; Otter Tail Power Company; Rochester Public Utilities; and Southern Minnesota Municipal Power Agency. Hutchinson Utilities Commission, Marshall Municipal Utilities and Willmar Municipal Utilities are all served by Missouri River Energy Services, and thus Missouri River Energy Services does the reporting for them.

² On October 22, 2009 Northwestern Wisconsin Electric Company (NWEC) filed NWEC's *Transmission Projects Biennial Report (TPBR)*. The TPBR states "NWEC owns approximately three miles of 69kV transmission line and a portion of a 230kV substation."

³ Minnesota Rules 7848.1900, subpart 4.

⁴ Minnesota Rules 7848.1900, subpart 5.

⁵ Minnesota Rules 7848.1900, subpart 6.

⁶ Minnesota Rules 7848.1800, subpart 5.

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II. REQUIREMENTS OF THE COMMISSION'S ORDER IN DOCKET E999/M-19-205

The Commission's August 19, 2020 *Order Accepting Report, Granting Variance, and Setting Additional Requirements* contained the following Order Points:

- 1. The Commission accepts the 2019 Biennial Transmission Projects Report.
- 2. The Commission encourages the Minnesota Department of Commerce to collect information on mitigation costs in future Certificate of Need applications for energy projects, including transmission projects.
- 3. The MTO shall make a compliance filing by August 15, 2020, including initial discussion and recommendations for next steps for identifying gaps between the existing and currently planned transmission system and the transmission system that will be required to meet the companies' publicly stated clean energy goals.
- 4. MTO may publicize future Biennial Transmission Project Reports by posting a link to the report on the MTO website (www.minnelectrans.com) and directions for finding the report on the Commission's website via eDockets, in lieu of mailing compact discs (CDs) or jump drives with electronic copies of the report.
- 5. Regarding the 2021 Biennial Transmission Projects Report:
 - a. The Commission continues to vary the public participation requirements of Minnesota Rules, part 7848.0900, and forgoes any requirement to convene a webinar presentation on the report.
 - b. The MTO shall file the 2021 Report that meets the requirements of Minn. Stat. § 216B.2425, subd. 2, and content similar to the 2019 Report.
 - c. The MTO shall provide a full discussion and analysis of next steps for identifying gaps between the existing and currently planned transmission system and the transmission system that will be required to meet the companies' publicly stated clean energy goals. The MTO shall also address any need for new or expanded transmission to accommodate –
 - i. the public clean energy commitments of the MTO member utilities;
 - ii. the requirements in all approved Minnesota resource plan; and
 - iii. relevant Minnesota statutory goals.

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- d. The MTO shall describe its efforts to engage with MISO to ensure that Minnesota's transmission needs have been met, and shall provide an assessment of whether MISO has been responsive to Minnesota's identified and likely transmission needs.
- 6. This Order shall become effective immediately.

Below are the comments of the Department on the merits of the Report.

III. ANALYSIS OF PLANNING ACTIVITIES

A. NWEC

NWEC did not submit a biennial transmission plan. Given the limited nature of NWEC's Minnesota transmission system as referenced in footnote 2, the Department has no comments regarding NWEC.

B. THE MTO

1. Existing Transmission Issues

The first step in maintaining a reliable transmission system is to address areas where the current transmission system cannot provide reliable service. Department Information Request No. 1 requested the MTO to list the areas where historical demand has been greater than the supply capability after a single contingency occurs. In response, the MTO responded that no areas met those criteria. The Department notes, however, that the following 4 projects were listed in response to this question during the 2019 biennial transmission report, and it was indicated that they would not be addressed before 2022.

- 1. 2019-TC-N1: Red Rock Transformer Uprate
- 2. 2019-TC-N3: East Metro Area Upgrades
- 3. 2013-SW-N1: Heron Lake Capacitors
- 4. 2019-SE-N5: Thisius 161/69 kV Substation

In the list above, the year indicates when the issue first arose in the biennial plan. In the 2019 biennial transmission report the MTO indicated that these projects would be addressed in the following years.

• 2022: 2 issues (2013-SW-N1, 2019-TC-N1)

2023: 1 issue (2019-TC-N3)2027: 1 issue (2019-SE-N5)

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As indicated in the Department's comments in prior transmission planning dockets, the Department expects that transmission deficiencies will exist for a variety of reasons that are beyond the MTO members' control. In response to Department Information Request No. 3 the MTO indicated that 2019-TC-N1 and 2019-TC-N3 were cancelled due to the shutdown of Northstar Steel, 2013-SW-N1 changed in scope and it was determined that capacitor banks were no longer required for area voltage support and the project was reduced to an upgrade of existing equipment. Finally, the MTO indicated 2019-SE-N5: Thisius 161/69 kV Substation was overlooked and should have been included in response to Department Information Request No. 1. The response to Department Information Request No. 3 indicated that the Thisius 161/69 kv substation project is expected to be in service in June of 2023, well ahead of the estimate of 2027 from the 2019 biennial transmission report and within the next two years.

2. Forecasted Transmission Issues

An early step in addressing forecasted inadequacies is to obtain the necessary permits. In order to monitor the MTO's progress in terms of obtaining necessary permits, Department Information Request No. 2 requested the MTO to provide a schedule with estimated dates for the submission of certificate of need (CN) applications for situations in which the MTO has a potential solution and that potential solution may require a CN. The MTO's response is summarized below in Table 1. Table 1 shows the schedule of estimated filing dates for CN applications for future projects. Some projects reported by the MTO are dependent upon CNs already under review or already approved by the Commission. These projects are not included in Table 1.

Table 1: Schedule of Certificates of Need

| Tracking Number | Project | Estimated Filing Date | Responding Utility |
|--------------------|-----------------------------|------------------------------|--|
| 2007-NE-N1 | Duluth Area 230 kV | Late 2020s or early 2030s | MP |
| 2021-WC-N6 | Appleton-Benson 115 kV Line | Spring/Summer 2022 | Great River Energy, Otter Tail Power, Missouri River Energy Services |

Several projects were reported as potentially requiring a CN but not yet having a filing date estimated. These projects are shown in Table 2 below.

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Table 2: Potential Certificates of Need

| Tracking Project | | Estimated Filing Date | Responding Utility |
|------------------|-----------------------------|-----------------------|-----------------------|
| 2015-NE-N12 | Iron Range-Arrowhead 345 kV | No current need to | MP |
| | Project | construct the project | |

The Department briefly reviewed the MTO's discussion for the projects listed in Table 2. The table shows that there are relatively few projects planned at this time that potentially require CNs where the timeline is not yet known. The Department has no concerns with any of these projects or their estimated CN filing dates.

3. Other Transmission Studies

The Department also is aware of additionally studies being conducted currently. The first is the MISO-SPP Joint Targeted Interconnection Queue Study which is intending to issue its final report later this month. It is the Department's understanding that this study is likely to conclude that additional 345 kV projects may be nearing the point where they pass a cost benefit analysis.

The second study is the MISO Long Range Transmission Plan, which is mentioned by the MTOs on page 194 of the 2021 Biennial Transmission Report. The Long Range Transmission Plan identified similar needs for 345 kV projects in Minnesota in the future.

C. TRANSMISSION FOR RENEWABLES

The Report also contains a section regarding Minnesota's Renewable Energy Standard (RES Report) in compliance with Minnesota Statutes §216B.2425, subd. 7. The RES Report is a joint effort by a separate group from the MTO but containing many of the same utilities. Minnesota Statutes §216B.2425, subd. 7 governing the RES Report states:

⁷ The utilities sponsoring the RES Report are: Minnesota Power, Northern States Power Company, Otter Tail Power Company, Dairyland Power Cooperative, Basin Electric Power Cooperative, East River Electric Power Cooperative, Great River Energy, L&O Power Cooperative, Minnkota Power Cooperative, Central Minnesota Municipal Power Agency, Minnesota Municipal Power Agency, Southern Minnesota Municipal Power Agency, Western Minnesota Municipal Power Agency/Missouri River Energy Services, and Heartland Consumers Power District (jointly, the RES Utilities).

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Each entity subject to this section shall determine necessary transmission upgrades to support development of renewable energy resources required to meet objectives under section 216B.1691 and shall include those upgrades in its report under subdivision 2.

In compliance with this statute, the RES Report starts with a gap analysis which provides "an estimate of how many more megawatts of renewable generating capacity a utility expects to need beyond what is presently available to obtain the required amount of renewable energy." The RES Report shows that utilities subject to the Minnesota RES have sufficient capacity acquired to meet the Minnesota RES needs through 2030. According to the chart on page 185 of the Report, the Minnesota RES utilities also have enough capacity to meet the RES needs of other jurisdictions as well as Minnesota's RES needs through 2030. Thus, it appears that significant additional transmission investment for the purposes of the RES is not required.

D. SOLAR ENERGY STANDARD

In 2013, the Minnesota Legislature established a solar energy standard (SES) for public utilities, effective by the end of 2020. Minn. Laws 2013, Ch. 85, § 3, codified at Minnesota Statutes § 216B.1691, subd. 2f (Solar energy standard), establish a solar energy standard at 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 first reports were filed with the Commission in May and June of 2014, and accepted in an Order dated October 23, 2014. The second set of reports were filed in the summer of 2015 and were approved by the Commission in an October 28, 2015 Order. The third set of reports were filed in the summer of 2016 and were approved by the Commission in its November 28, 2016 Order. The fourth set of reports were filed in the summer of 2017 and were approved by the Commission in its October 20, 2017 Order. The fifth set of reports were filed in the summer of 2018 and were approved by the Commission in its September 21, 2018 Order. The Sixth set of reports were filed in the summer of 2019 and were approved by the Commission in its September 11, 2019 Order. The Seventh set of reports was filed in the summer of 2020 and were approved by the Commission in its January 6, 2021 Order. In the January 6, 2021

⁸ Docket No. E999/M-14-321

⁹ Docket No. E999/M-15-462

¹⁰ Docket No. E999-M-16-342

¹¹ Docket No. E999-M-17-283

¹² Docket No. E999-M-18-205

¹³ Docket No. E999-M-19-276

¹⁴ Docket No. E999-M-20-464

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Order the Commission moved reporting requirements to various other dockets for the future, as the Solar Energy Standard had a 2020 target, and thus that was the final year of required reporting.

More information is provided on the utilities' progress toward meeting the upcoming SES in those dockets. The MTO briefly discussed the SES in the Report and presented data that indicates that the MTO utilities subject to the SES are on pace to meet the 2020, 2025 and 2030 SES requirements.

E. MITIGATION COSTS

As utilities have been building more infrastructure and more significantly sized infrastructure, it has become increasingly necessary to ensure that utilities use cost discipline as they construct new resources. To encourage cost discipline and prevent ratepayers from paying more than is reasonable for new utility infrastructure, the Department and Commission have been holding utilities accountable by comparing the utilities' estimated costs of a project as proposed in a CN proceeding to the actual cost of the project requested in a rate recovery proceeding. Utilities are not allowed to recover any cost overruns through riders and at a minimum, must justify in a general rate case any cost recovery above the amount the utility originally indicated that the project would cost. This requirement is an important tool to ensure that cost discipline is maintained throughout the regulatory process. The presence of cost discipline is important to ensure the accuracy of cost estimates used in planning proceedings such as resource plans and the biennial transmission plan. Such cost estimates are used to make significant decisions so it is important to minimize errors in estimation to avoid poor decisions and higher system costs.

Due to significant additions in infrastructure expected now and in the future, the Department concludes that additional measures are necessary to help ensure that 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 reasonably consider cost implications, and that 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. So long as the costs of such measures are reasonable, prudent and relatively small in size, it is generally reasonable 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. An example of such a mitigation measure is undergrounding transmission facilities for aesthetic reasons. Because such options increase costs not only of installation but also ongoing maintenance of the facilities, and because the beneficiaries of such designs can be limited to local

¹⁵ It would not be administratively feasible or desirable to tailor rates in each area of Minnesota to reflect incremental costs of all optional mitigation measures in the area.

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ratepayers, careful consideration should be given to proposals to charge the incremental costs of optional undergrounding to all ratepayers. Decisions on such proposals should be made with all participants and affected ratepayers fully cognizant of the cost implications of the mitigation measures. Application of cost-causation principles are important because, if such optional mitigation costs are consistently allocated to the entire rate base, the incentive to prudently control costs throughout the permitting processes is reduced.

As in previous comments on biennial transmission reports, the Department continues to recommend that the Commission require the rate-regulated electric utilities – 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.

This list should include data regarding mitigation measures that the utilities undertook voluntarily. Such data will enable cost allocations to be considered in ratemaking as appropriate and in a more accurate and consistent manner. The Department also notes that these recommended reporting requirements do not in any way limit the Commission's decision-making authority but instead would better inform the Commission's decision-making process.

F. ASSESSMENT OF NON-WIRE ALTERNATIVES AND DISCUSSION OF DER AND DISTRIBUTION PLANNING

The Commission's Order on the 2017 Report required the MTO to provide an assessment of non-wire alternatives and a discussion of relevant actions by the Federal Regulatory Commission (FERC), the Midcontinent Independent System Operator (MISO), and the Commission related to distributed energy resources (DER) and distribution planning. The Report includes a discussion of non-wires alternatives to transmission projects, and a table summarizing the options and describing the benefits and challenges of each alternative. The MTO indicated that non-wires alternatives are considered when evaluating solutions to a transmission inadequacy.

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¹⁶ Report, pages 11-15.

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The MTO also summarized the activities that the Commission, FERC, MISO and the Institute of Electrical and Electronics Engineers (IEEE) have initiated and continue to pursue related to DER and distribution planning.¹⁷ Highlights include the work the Commission has undertaken to update the generic DER interconnection standards (Docket No. E999/CI-16-521), FERC Order No. 2222, which removes barriers for DER aggregations to participate in wholesale markets, MISO's efforts to develop a DER participation model and started a DER Task Force, various efforts related to CapX2050, and the IEEE's DER interconnection and interoperability standard (IEEE 1547-2018).

III. DEPARTMENT RECOMMENDATION

The Department recommends that the Commission accept the Report.

Additionally, the Department recommends that 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.

This list should include data regarding mitigation measures that the utilities undertook voluntarily.

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¹⁷ Report, pages 15-21.

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Minnesota Transmission Owners Information Request No.

Docket No.: E999/M-21-111

Response To: Minnesota Department of Commerce

Requestor: Michael Zajicek
Date Received: December 3, 2021

Question:

Topic: 2021 Biennial Transmission Projects Report

A. Please list all areas where historical demand has been greater than the supply capability after a single contingency occurs.

B. For each of these areas please provide an estimated data by which reliability would be restored.

Response:

ATC

- A. None. ATC is a transmission-only organization.
- B. Not applicable.

Dairyland Power Cooperative

- A. None.
- B. Not applicable.

East River Electric Power Cooperative

- A. None.
- B. Not applicable.

Great River Energy

- A. None.
- B. Not applicable.

ITC Midwest

- A. None. ITC Midwest is a transmission-only organization.
- B. Not applicable.

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L&O Power Cooperative

- A. None.
- B. Not applicable.

Minnesota Power

- A. None.
- B. Not applicable.

Minnkota Power Cooperative, Inc.

- A. None.
- B. Not applicable.

Missouri River Energy Services

- A. None.
- B. Not applicable.

Northern States Power Company

- A. None.
- B. Not applicable.

Otter Tail Power Company

- A. None.
- B. Not applicable.

SMMPA

- A. None.
- B. Not applicable.

Date: December 9, 2021

Preparer: ATC-John Sealy

Title: Senior Transmission Planning Engineer

Department: Transmission Planning

Telephone 608-642-0240

Preparer: Dairyland Power Cooperative-Chase Lakowske

Title: Planning Engineer
Department: Transmission Planning

Telephone 608-787-1265

Department Attachment 1 Docket No. E999/M-21-111 Page 3 of 4

Preparer: East River Electric Power Cooperative

Title: Transmission Policy Administrator

Department: System Planning Telephone: 605-256-8035

Preparer: Great River Energy-Wayne Roelofs
Title: Transmission System Planning Analyst

Department: Transmission System Planning

Telephone 763-445-5952

Preparer: ITC Midwest-Josh Grindeland

Title: Senior Engineer

Department: Transmission Planning

Telephone: 319-297-6828

Preparer: L&O Power Cooperative-Troy Metzger

Title: Manager

Department: Engineering & Operations

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Preparer: Minnesota Power-Christian Winter

Title: Supervising Engineer

Department: Transmission & Distribution Planning

Telephone: 218-355-2908

Preparer: Minnkota Power Cooperative-Will Lovelace

Title: Engineer III – Lead

Department: Power Delivery Planning

Telephone: 701-795-4351

Preparer: Missouri River Energy Services-Brian Zavesky, P.E.

Title: Senior Transmission Engineer

Department: Transmission Planning

Telephone: 605-330-6986

Department Attachment 1 Docket No. E999/M-21-111 Page 4 of 4

Preparer: Northern States Power Company-Jason Standing

Title: Manager

Department: Transmission Planning

Telephone: 612-330-7768

Preparer: Otter Tail Power Company-Aaron Demuth

Title: T&D Studies Engineer
Department: Transmission Planning

Telephone: 218-739-8501

Preparer: SMMPA-Seth Koneczny
Title: Manager of Powe Delivery

Department: Transmission Telephone: 507-292-6456

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Minnesota Transmission Owners

Information Request No.

2

Docket No.:

E999/M-21-111

Response To:

Minnesota Department of Commerce

Requestor:

Michael Zajicek

Date Received: December 3, 2021

Question:

Topic: 2021 Biennial Transmission Projects Report

Please provide a schedule with estimated dates for the submission of certificate of need (CN) applications for situations where the Minnesota Transmission Owners have a potential solution and that potential solution may require a CN.

Response:

ATC

None known.

Dairyland Power Cooperative

Dairyland Power Cooperative does not have any new projects that will require a CN.

East River Electric Power Cooperative

East River has no proposed projects that will require a CN.

Great River Energy/Otter Tail Power/Missouri River Energy 2021-WC-N6: Appleton – Benson 115 kV Line

- a. To be submitted by Great River Energy, Otter Tail Power Company and Missouri River Energy Services.
- b. A Certificate of Need Application is expected to be filed in spring/summer 2022.

ITC Midwest

No proposed project requires a CN.

L&O Power Cooperative

No projects with CNs proposed.

Minnesota Power

2007-NE-N1 – Duluth Area 230 kV

- a. Based on recent studies indicating a need for improved reliability and capacity of the Duluth-area 230/115 kV transformers in the first half of the 2020s, Minnesota Power has included incremental improvements at the Arrowhead and Hilltop Substations as part of the Duluth Loop Reliability Project (2019-NE-N12). These incremental improvements will shift the primary need drivers for the Duluth 230 kV Project, likely delaying the need for the project to the late 2020s or even into the 2030s. If a CN or Route Permit is required, those applications would likely not be submitted until the second half of the 2020s.
- b. Construction would be expected to start approximately 2-3 years after CN submitted, subject to coordination with other projects under construction in the area.

2015-NE-N12 – Iron Range-Arrowhead 345 kV Project

- a. Minnesota Power has no current plans to construct the Iron Range Arrowhead 345 kV Project. Should the project become necessary in the future due to additional Manitoba United States transmission service requests or other system reliability needs, it will be advanced at that time. Because there is no current need for the project, there is no relevant timeline for filing a Certificate of Need Application.
- b. See response to a.

2019-NE-N12 – Duluth Loop Reliability Project

- a. Minnesota Power submitted a combined CN and Route Permit Application for the Duluth Loop Reliability Project to the Commission on October 21, 2021 (Docket Nos. E015/CN-21-140 and E015/TL-21-141)
- b. Following permitting and engineering activities, preliminary plans are for project construction to take place in 2023-25.

Minnkota Power Cooperative, Inc.

None known.

Northern States Power Company

Northern States Power Company does not have any new projects that will require a CN.

SMMPA

SMMPA has no projects that need a CN.

Date: December 9, 2021

Preparer: ATC-John Sealy

Title: Senior Transmission Planning Engineer

Department: Transmission Planning

Telephone: 608-642-0240

Preparer: Dairyland Power Cooperative-Chase Lakowske

Title: Planning Engineer

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Department Attachment 2 Docket No. E999/M-21-111 Page 4 of 4

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Preparer: SMMPA-Seth Koneczny
Title: Manager of Power Delivery

Department: Transmission Telephone: 507-292-6456 □ Not Public Document – Not For Public Disclosure
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Minnesota Transmission Owners Information Request No. 3

Docket No.: E999/M-21-111

Response To: Minnesota Department of Commerce

Requestor: Michael Zajicek
Date Received: December 16, 2021

Question:

Topic: 2021 Biennial Transmission Projects Report

Reference(s): Information Request 1

Request:

In response to Department information request 1, the MTO indicated that there were no areas where historical demand has been greater than the supply capability after a single contingency occurs. In the 2019 Biennial Transmission report it was indicated that the following 4 areas met these criteria, and would not be addressed until 2022 or later:

- 1. 2019-TC-N1: Red Rock Transformer Uprate
- 2. 2019-TC-N3: East Metro Area Upgrades
- 3. 2013-SW-N1: Heron Lake Capacitors
- 4. 2019-SE-N5: Thisius 161/69 kV Substation

Please indicate whether these areas were inadvertently omitted from the MTO's response to Department information request 1, or discuss why these areas no longer have issues where demand has been greater than the supply capability after a single contingency occurs.

Response:

- 1. 2019-TC-N1: Project cancelled due to shutdown of Northstar Steel.
- 2. 2019-TC-N3: Project cancelled due to shutdown of Northstar Steel.

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- 3. 2013-SW-N1: Heron Lake Capacitors, the scope of the project changed as part of a joint study with GRE and MRES. Due to support from Worthington Area Projects in 2021-SW-N2, it was determined that the capacitor banks at Heron Lake were no longer required for area voltage support. The Heron Lake Capacitor project's scope was reduced to upgrade of existing equipment and reconfiguration of the Heron Lake substation to a four position ring bus. The revised plan provides better electrical performance at a reduced cost.
- 4. 2019-SE-N5: Thisius 161/69 kV Substation project was overlooked and should have been included in the information request response. The response below should have been provided.
 - A. The 69 kV system in the Albert Lea area experiences low voltage under NERC P2 contingencies. The Thisus 161/69 kV project with MPUC Tracking Number 2019-SE-N5 is to address the issue.
 - B. The Thisius 161/69 kV substation is expected to be in service in June of 2023.

Date: December 17, 2021

Preparer: ITC Midwest-Daniel Barr

Title: Manager

Department: Transmission Planning

Telephone: 563-239-2366

Preparer: Northern States Power Company-Jason Standing

Title: Manager

Department: Transmission Planning

Telephone: 612-330-7768

CERTIFICATE OF SERVICE

I, Marcella Emeott, hereby certify that I have this day served copies of the following document on the attached list of persons by electronic filing, e-mail, or by depositing a true and correct copy thereof properly enveloped with postage paid in the United States Mail at St. Paul, Minnesota.

MINNESOTA DEPARTMENT OF COMMERCE – COMMENTS

Docket No. E999/M-21-111

Dated this 4th day of January 2022

/s/Marcella Emeott

| First Name | Last Name | Email | Company Name | Address | Delivery Method | View Trade Secret | Service List Name |
|----------------|--------------------|---------------------------------------|---|---|--------------------|-------------------|------------------------------------|
| James J. | Bertrand | james.bertrand@stinson.co m | STINSON LLP | 50 S 6th St Ste 2600 Minneapolis, MN 55402 | Electronic Service | No | OFF_SL_21-111_M-21-11 ⁻ |
| Derek | Bertsch | derek.bertsch@mrenergy.c om | Missouri River Energy Services | 3724 West Avera Drive PO Box 88920 Sioux Falls, SD 57109-8920 | Electronic Service | No | OFF_SL_21-111_M-21-111 |
| Jon | Brekke | jbrekke@grenergy.com | Great River Energy | 12300 Elm Creek Boulevard Maple Grove, MN 553694718 | Electronic Service | No | OFF_SL_21-111_M-21-111 |
| Christina | Brusven | cbrusven@fredlaw.com | Fredrikson Byron | 200 S 6th St Ste 4000 Minneapolis, MN 554021425 | Electronic Service | No | OFF_SL_21-111_M-21-111 |
| Generic Notice | Commerce Attorneys | commerce.attorneys@ag.st ate.mn.us | Office of the Attorney General-DOC | 445 Minnesota Street Suite 1400 St. Paul, MN 55101 | Electronic Service | Yes | OFF_SL_21-111_M-21-111 |
| Regulatory | Contact | N/A | Exergy Minnesota Holding, LLC | 802 W Banock, 12th Boise, ID 83702 | Paper Service | No | OFF_SL_21-111_M-21-111 |
| Regulatory | Contact | N/A | Western Minnesota Municipal Power Agency | 720 Center St Ortonville, MN 56278 | Paper Service | No | OFF_SL_21-111_M-21-111 |
| Brooke | Cooper | bcooper@allete.com | Minnesota Power | 30 W Superior St Duluth, MN 558022191 | Electronic Service | No | OFF_SL_21-111_M-21-111 |
| Stacy | Dahl | sdahl@minnkota.com | Minnkota Power Cooperative, Inc. | 5301 32nd Ave S Grand Forks, ND 58201 | Electronic Service | No | OFF_SL_21-111_M-21-111 |
| Lorene | Damsits | lorened@cmpasgroup.org | Central MN MPA | 459 S Grove St Blue Earth, MN 56013 | Electronic Service | No | OFF_SL_21-111_M-21-111 |

| First Name | Last Name | Email | Company Name | Address | Delivery Method | View Trade Secret | Service List Name |
|------------|---------------|--|------------------------------|--|--------------------|-------------------|------------------------|
| Curt | Dieren | curt.dieren@dgr.com | L&O Power Cooperative | 1302 S Union St Rock Rapids, IA 51246 | Electronic Service | No | OFF_SL_21-111_M-21-111 |
| Oncu | Er | oncu.er@avantenergy.com | Avant Energy, Agent for MMPA | 220 S. Sixth St. Ste. 1300 Minneapolis, MN 55402 | Electronic Service | No | OFF_SL_21-111_M-21-111 |
| Sharon | Ferguson | sharon.ferguson@state.mn .us | Department of Commerce | 85 7th Place E Ste 280 Saint Paul, MN 551012198 | Electronic Service | No | OFF_SL_21-111_M-21-111 |
| Jessica | Fyhrie | jfyhrie@otpco.com | Otter Tail Power Company | PO Box 496 Fergus Falls, MN 56538-0496 | Electronic Service | No | OFF_SL_21-111_M-21-111 |
| Michael | Greiveldinger | MichaelGreiveldinger@allia ntenergy.com | Wisconsin Power and Light | 4902 North Biltmore Lane Madison, WI 53718 | Electronic Service | No | OFF_SL_21-111_M-21-111 |
| David | Grover | dgrover@itctransco.com | ITC Midwest | 5615 Clinton Avenue So Minneapolis, MN 55419 | Electronic Service | No | OFF_SL_21-111_M-21-111 |
| Adam | Heinen | aheinen@dakotaelectric.co m | Dakota Electric Association | 4300 220th St W Farmington, MN 55024 | Electronic Service | No | OFF_SL_21-111_M-21-111 |
| Michael | Норре | lu23@ibew23.org | Local Union 23, I.B.E.W. | 445 Etna Street Ste. 61 St. Paul, MN 55106 | Electronic Service | No | OFF_SL_21-111_M-21-111 |
| Alan | Jenkins | aj@jenkinsatlaw.com | Jenkins at Law | 2950 Yellowtail Ave. Marathon, FL 33050 | Electronic Service | No | OFF_SL_21-111_M-21-111 |
| Richard | Johnson | Rick.Johnson@lawmoss.co m | Moss & Barnett | 150 S. 5th Street Suite 1200 Minneapolis, MN 55402 | Electronic Service | No | OFF_SL_21-111_M-21-111 |

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|------------|------------|--|---------------------------------------|---|--------------------|-------------------|------------------------|
| Thomas | Koehler | TGK@IBEW160.org | Local Union #160, IBEW | 2909 Anthony Ln St Anthony Village, MN 55418-3238 | Electronic Service | No | OFF_SL_21-111_M-21-111 |
| Mark | Kotschevar | mkotschevar@rpu.org | Rochester Public Utilities | 4000 East River Road NE Rochester, MN 55906 | Electronic Service | No | OFF_SL_21-111_M-21-111 |
| James D. | Larson | james.larson@avantenergy .com | Avant Energy Services | 220 S 6th St Ste 1300 Minneapolis, MN 55402 | Electronic Service | No | OFF_SL_21-111_M-21-111 |
| Robert | Lunder | Robert.Lunder@mdu.com | Montana-Dakota Utilities (ET) | 400 N 4th St Bismark, ND 58501 | Electronic Service | No | OFF_SL_21-111_M-21-111 |
| Mike | Malone | mmalone@hcpd.com | Heartland Consumer Power District | P.O. Box 248 Madison, SD 570420248 | Electronic Service | No | OFF_SL_21-111_M-21-111 |
| Pam | Marshall | pam@energycents.org | Energy CENTS Coalition | 823 7th St E St. Paul, MN 55106 | Electronic Service | No | OFF_SL_21-111_M-21-111 |
| Robert | McKee | rmckee@atcllc.com | American Transmission Company, LLC | 5303 Fen Oak Dr Madison, WI 53718 | Electronic Service | No | OFF_SL_21-111_M-21-111 |
| John | McWilliams | John.McWilliams@Dairylan dPower.com | Dairyland Power Cooperative | 3200 East Ave SPO Box 817 La Crosse, WI 54601-7227 | Electronic Service | No | OFF_SL_21-111_M-21-111 |
| Samuel | Meersman | sam.meersman@avantene rgy.com | Avant Energy, Inc. | 220 South Sixth Street, Suite 1300 Minneapolis, Minnesota 55402 | Electronic Service | No | OFF_SL_21-111_M-21-111 |

| First Name | Last Name | Email | Company Name | Address | Delivery Method | View Trade Secret | Service List Name |
|----------------|--------------------------------|--|---------------------------------------|--|--------------------|-------------------|------------------------|
| David | Moeller | dmoeller@allete.com | Minnesota Power | 30 W Superior St Duluth, MN 558022093 | Electronic Service | No | OFF_SL_21-111_M-21-111 |
| Dalene | Monsebroten | dalene.monsebroten@nmp agency.com | Northern Municipal Power Agency | 123 2nd St W Thief River Falls, MN 56701 | Electronic Service | No | OFF_SL_21-111_M-21-111 |
| Andrew | Moratzka | andrew.moratzka@stoel.co m | Stoel Rives LLP | 33 South Sixth St Ste 4200 Minneapolis, MN 55402 | Electronic Service | No | OFF_SL_21-111_M-21-111 |
| Mark | Nibaur | markn@austinutilities.com | Austin Utilities | 400 Fourth Street NE Austin, MN 55912 | Electronic Service | No | OFF_SL_21-111_M-21-111 |
| David | Niles | david.niles@avantenergy.c om | Minnesota Municipal Power Agency | 220 South Sixth Street Suite 1300 Minneapolis, Minnesota 55402 | Electronic Service | No | OFF_SL_21-111_M-21-111 |
| Matthew | Olsen | molsen@otpco.com | Otter Tail Power Company | 215 South Cascade Street Fergus Falls, MN 56537 | Electronic Service | No | OFF_SL_21-111_M-21-111 |
| Carol A. | Overland | overland@legalectric.org | Legalectric - Overland Law Office | 1110 West Avenue Red Wing, MN 55066 | Electronic Service | No | OFF_SL_21-111_M-21-111 |
| David | Raatz | draatz@bepc.com | Basin Electric Power Cooperative | 1717 East Interstate Avenue Bismarck, ND 58501 | Electronic Service | No | OFF_SL_21-111_M-21-111 |
| Stephen | Rakow | stephen.rakow@state.mn.u s | Department of Commerce | Suite 280 85 Seventh Place Eas St. Paul, MN 551012198 | Electronic Service | No | OFF_SL_21-111_M-21-111 |
| Generic Notice | Residential Utilities Division | residential.utilities@ag.stat e.mn.us | Office of the Attorney General-RUD | 1400 BRM Tower 445 Minnesota St St. Paul, MN 551012131 | Electronic Service | Yes | OFF_SL_21-111_M-21-111 |

| First Name | Last Name | Email | Company Name | Address | Delivery Method | View Trade Secret | Service List Name |
|------------|------------|----------------------------------|---------------------------------------|--|--------------------|-------------------|------------------------|
| Laura | Sandwick | Im.sandwick@smmpa.org | Southern MN Municipal Power Agency | 500 1st Ave SW Rochester, MN 55902-3303 | Paper Service | No | OFF_SL_21-111_M-21-111 |
| Richard | Savelkoul | rsavelkoul@martinsquires.com | Martin & Squires, P.A. | 332 Minnesota Street Ste W2750 St. Paul, MN 55101 | Electronic Service | No | OFF_SL_21-111_M-21-111 |
| Kay | Schraeder | kschraeder@minnkota.com | Minnkota Power | 5301 32nd Ave S Grand Forks, ND 58201 | Electronic Service | No | OFF_SL_21-111_M-21-111 |
| Will | Seuffert | Will.Seuffert@state.mn.us | Public Utilities Commission | 121 7th PI E Ste 350 Saint Paul, MN 55101 | Electronic Service | Yes | OFF_SL_21-111_M-21-111 |
| Bria | Shea | bria.e.shea@xcelenergy.co m | Xcel Energy | 414 Nicollet Mall Minneapolis, MN 55401 | Electronic Service | No | OFF_SL_21-111_M-21-111 |
| Ken | Smith | ken.smith@districtenergy.com | District Energy St. Paul Inc. | 76 W Kellogg Blvd St. Paul, MN 55102 | Electronic Service | No | OFF_SL_21-111_M-21-111 |
| Trevor | Smith | trevor.smith@avantenergy. | Avant Energy, Inc. | 220 South Sixth Street Suite 1300 Minneapolis, Minnesota 55402 | Electronic Service | No | OFF_SL_21-111_M-21-111 |
| Byron E. | Starns | byron.starns@stinson.com | STINSON LLP | 50 S 6th St Ste 2600 Minneapolis, MN 55402 | Electronic Service | No | OFF_SL_21-111_M-21-111 |
| Cary | Stephenson | cStephenson@otpco.com | Otter Tail Power Company | 215 South Cascade Street Fergus Falls, MN 56537 | Electronic Service | No | OFF_SL_21-111_M-21-111 |
| James M | Strommen | jstrommen@kennedy- graven.com | Kennedy & Graven, Chartered | 150 S 5th St Ste 700 Minneapolis, MN 55402 | Electronic Service | No | OFF_SL_21-111_M-21-111 |

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|------------|------------|------------------------------------|--|--|--------------------|-------------------|------------------------|
| Eric | Swanson | eswanson@winthrop.com | Winthrop & Weinstine | 225 S 6th St Ste 3500 Capella Tower Minneapolis, MN 554024629 | Electronic Service | No | OFF_SL_21-111_M-21-111 |
| Lynnette | Sweet | Regulatory.records@xcele nergy.com | Xcel Energy | 414 Nicollet Mall FL 7 Minneapolis, MN 554011993 | Electronic Service | No | OFF_SL_21-111_M-21-111 |
| Todd | Tadych | ttadych@atclic.com | American Transmission Company LLC | 5303 Fen Oak Dr Madison, WI 53718 | Electronic Service | No | OFF_SL_21-111_M-21-111 |
| Carolyn | Tanchester | ctanchester@atcllc.com | American Transmission Company | W234 N2000 Ridgeview Parkway Court Waukesha, WI 53188 | Electronic Service | No | OFF_SL_21-111_M-21-111 |
| Jesse | Tomford | jtomford@otpco.com | Otter Tail Power Company | 215 S Cascade St PO Box 496 Fergus Falls, MN 56538-0496 | Electronic Service | No | OFF_SL_21-111_M-21-111 |
| Stuart | Tommerdahl | stommerdahl@otpco.com | Otter Tail Power Company | 215 S Cascade St PO Box 496 Fergus Falls, MN 56537 | Electronic Service | No | OFF_SL_21-111_M-21-111 |
| Lisa | Veith | lisa.veith@ci.stpaul.mn.us | City of St. Paul | 400 City Hall and Courthouse 15 West Kellogg Blvd. St. Paul, MN 55102 | Electronic Service | No | OFF_SL_21-111_M-21-111 |
| Michael | Volker | mvolker@eastriver.coop | East River Electric Power Coop | 211 S. Harth Ave Madison, SD 57042 | Electronic Service | No | OFF_SL_21-111_M-21-111 |
| Jason | Walker | jasonw@swrdc.org | Southwest Regional Development Commission | 2401 Broadway Ave., Ste 1 Slayton, MN 56172 | Electronic Service | No | OFF_SL_21-111_M-21-111 |

| First Name | Last Name | Email | Company Name | Address | Delivery Method | View Trade Secret | Service List Name |
|-------------|-----------|---------------------------------|--|--|--------------------|-------------------|------------------------|
| Jason | Weiers | jweiers@otpco.com | Otter Tail Power Company | 215 South Cascade Street PO Box 496 Fergus Falls, MN 56538 | Electronic Service | No | OFF_SL_21-111_M-21-111 |
| Jessica | Welu | jessicaw@swrdc.org | Southwest Regional Development Commission | 2401 Broadway Ave., Ste 1 Slayton, MN 56172 | Electronic Service | No | OFF_SL_21-111_M-21-111 |
| Michael | Zajicek | Michael.Zajicek@state.mn. us | Department of Commerce | 85 East Seventh Place Suite 500 St. Paul, Minnesota 55101 | Electronic Service | No | OFF_SL_21-111_M-21-111 |
| Christopher | Zibart | czibart@atcllc.com | American Transmission Company LLC | W234 N2000 Ridgeview Pkwy Court Waukesha, WI 53188-1022 | Electronic Service | No | OFF_SL_21-111_M-21-111 |