

June 15, 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 Commerce Department, Division of Energy Resources**
Docket No. E999/CI-19-704

Dear Mr. Seuffert:

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

In the Matter of an Investigation into Self-Commitment and Self-Scheduling of Large
Baseload Generation Facilities.

The Department recommends that the Minnesota Public Utilities Commission (Commission) **take certain actions on a going forward basis**. The Department is available to answer any questions that the Commission may have in this matter.

Sincerely,

/s/ ADWAY DE, PH.D.
Public Utilities Rates Analyst

AD/ja
Attachment



Before the Minnesota Public Utilities Commission

Comments of the Minnesota Commerce Department Division of Energy Resources

Docket No. E999/CI-19-704

I. INTRODUCTION

A. PROCEDURAL HISTORY

On November 13, 2019, the Minnesota Public Utilities Commission (Commission) issued its *Order Accepting 2017-2018 Electric Reports and Setting Additional Requirements* (2019 Order) in Docket No. E999/AA-18-373. In the 2019 Order the Commission included the following Order Points:

8. Minnesota Power, Otter Tail, and Xcel shall submit an annual compliance filing analyzing the potential options for seasonal dispatch generally, and potential options and strategies for utilizing “Economic” commitments for specific coal-fired generating plants. The utilities shall include a specific explanation of barriers or limitations to each of these potential options, including but not limited to technical limits of the units and contract requirements (shared ownership, steam offtake contracts, minimum fuel supply requirements, [sic] (shared ownership, steam offtake contracts, minimum fuel supply requirements, etc.) as relevant, on March 1, 2020, and each year thereafter.
9. The Commission will open an investigation in a separate docket and require Minnesota Power, Otter Tail, and Xcel to report their future self-commitment and self-scheduling analyses using a consistent methodology by including fuel cost and variable O&M costs, matching the offer curve submitted to MISO [Midcontinent Independent System Operator, Inc.] energy markets.
10. In the investigation docket, Minnesota Power, Otter Tail, and Xcel shall provide stakeholders with the underlying data (work papers) used to complete their analyses, in a live Excel spreadsheet, including, at a minimum, the data points listed below for each generating unit, with the understanding that this may include protected data.

On October 14, 2021, the Commission issued its Order approving the March 1, 2021 filings by Northern States Power Company doing business as Xcel Energy (Xcel), Minnesota Power, an operating division of ALLETE, Inc. (Minnesota Power or MP) and Otter Tail Power Company (Otter Tail or OTP) covering January 1, 2020 to December 31, 2020. The Commission also included the following additional order points:

2. Direct Xcel Energy to include in their next annual report in this docket to update the Commission and stakeholders when milestones in the Sherburne County Generating Station auxiliary boiler project are reached, including completion of boiler construction; approval, denial, or delay of the Air Emission Permit Amendment; decisions made by Xcel Energy and/or Liberty Paper, Inc. relating to the sources of steam used by Liberty Paper Inc.; and updates to the feasibility and use of economic commitment at Sherburne County Generating Station Unit I.
5. Direct Minnesota Power to make a compliance filing within 10 days of the order in this matter to provide more information about the system strength study that Minnesota Power has commissioned a consultant to complete; this filing should include, at minimum, the request for proposal or solicitation used to select a consultant and the scope of work for the study.
6. Direct Minnesota Power to file the system strength study in this docket when completed
8. Carry forward all the requirements from prior orders in Docket Nos. E-999/AA-18-373 and E-999/CI-19-704 and requires inclusion of the following in future reports:
 - a. Information on annual carbon dioxide emissions;
 - b. Reasons for unavoidable self-commit status designations;
 - c. Plant startup conditions (e.g. cold, warm, or hot);
 - d. Equivalent Forced Outage Rate (EFOR) information to be tracked over time; and
 - e. Descriptions of changes to operating procedures and physical modifications to units to ensure plants are becoming more flexible to meet upcoming challenges as applicable.
9. Direct Minnesota Power, Otter Tail Power, and Xcel Energy to develop a methodology, that is consistent to the extent possible, for splitting fuel costs such that one part depends on the MWh production (i.e. variable cost) and the other part is independent of the MWh generated (i.e. fixed cost) and update the reporting template accordingly.
10. Require the utilities to work together to develop a consistent method for estimating the best-case and worst-case potential for economic commitment for each plant.

On March 1, 2022, Xcel, Otter Tail and Minnesota Power filed their third annual compliance filings covering January 1, 2021 to December 31, 2021. Xcel's report provided data regarding Allen S. King Generating Station (King), Monticello Nuclear Generating Station (Monticello), Prairie Island Nuclear Generating Station (Prairie Island) units 1 and 2; and Sherburne County Generating Station (Sherco)

units 1, 2, and 3.¹ Minnesota Power’s report provided data regarding Boswell Energy Center (Boswell) units 3 and 4.² Also, Otter Tail’s report provided data regarding the Big Stone Plant (Big Stone) and Coyote Station (Coyote).

Table 1 below shows the ownership arrangements for Big Stone and Coyote.

Table 1. OTP Unit Ownership Arrangements³

Utility	Big Stone Ownership Share	Coyote Ownership Share	ISO Membership
Otter Tail Power Company	53.9%	35.0%	MISO
Montana Dakota Utilities	22.7%	25.0%	MISO
NorthWestern Energy	23.4%	10.0%	SPP
Minnkota Power Cooperative	0.0%	30.0%	MISO

On March 22, 2022, the Commission issued its Notice of Extended Comment Period which laid out the timeline for initial comments (May 2, 2022), reply comments (June 1, 2022) and response comments (June 15, 2022).

On May 2, 2022, comments were filed by Minnesota Department of Commerce, Division of Energy Resources (Department).

On May 3, 2022, comments were filed by Fresh Energy.

On May 10, 2022, public comments by Mary Connolly were filed.

On May 27, 2022, reply comments were filed by Minnesota Power.

On June 1, 2022, reply comments were filed by Xcel Energy (Xcel), Otter Tail Power Company (OTP).

Below are the Department’s response comments to the utilities’ reply comments.

¹ Regarding Sherco unit 3, Southern Minnesota Municipal Power Agency (SMMPA) owns 41 percent and Xcel owns the remainder. SMMPA serves 18 municipal electric utilities in Minnesota.

² Regarding Boswell unit 4, WPPI Energy owns 20 percent and Minnesota Power owns the remainder. WPPI Energy serves 51 cooperative and municipal electric utilities.

³ Note that NorthWestern Energy provides electric and/or natural gas services to 349 cities in the western two-thirds of Montana, eastern South Dakota and central Nebraska. Montana-Dakota Utilities is a subsidiary of MDU Resources Group, Inc., a company providing retail natural gas and/or electric service to parts of Montana, North Dakota, South Dakota and Wyoming. Minnkota Power Cooperative serves as operating agent for the Northern Municipal Power Agency; Northern Municipal Power Agency actually owns the share of Coyote and serves 12 municipal electric utilities in eastern North Dakota and northwestern Minnesota.

II. DEPARTMENT ANALYSIS

Below, the Department summarizes the utilities' reply comments, and then provides a suggested additional reporting requirement to help the Commission and the stakeholders better understand the full financial consequences of unit dispatch.

A. MINNESOTA POWER REPLY

First, regarding best- and worst-case scenario for Boswell 3, Minnesota Power completed additional analysis and submitted it in Attachment 1. The worst-case scenario for Boswell 3 was set to must run all year round and the best-case scenario involved setting the unit to an economic dispatch year-round. According to Minnesota Power's analysis, based on current forecasts of market prices for 2022 and 2023, the best- and worst-case outcomes are not significantly different while there is a significant benefit to economic dispatch in 2024 from economic dispatch. The Department found this analysis useful and shows that the policy to transition coal plants to greater economic dispatch can benefit ratepayers.

Second, regarding future reporting recommendations, Minnesota Power is supportive of the Department's suggestion to include carbon dioxide emission reductions that arise from coal plants as they transition to greater Economic Commitment. Regarding the potential for lost revenues, the Department agrees that such outcomes are more likely with seasonal dispatch. As the Boswell units are not put on seasonal dispatch, the current analysis provided by Minnesota Power in terms of comparison between must run and economic dispatch should be adequate. Minnesota Power agreed to include monthly EFOR data in their filings which can be combined with plant start conditions to understand performance of these units. The Department will include its analysis using the monthly EFOR data in subsequent years and does not see the need for creation of any additional reporting template at this time. Minnesota Power agreed to include the energy (MWh) produced and curtailed from owned and contracted wind facilities on a monthly basis for each facility in subsequent filings.

B. OTTER TAIL REPLY

First, regarding best- and worst-case scenario, Otter Tail provided additional charts in their reply comments. The charts will help stakeholders get a clear visual of the magnitude of annual net benefits that flexible dispatch of large coal plants can provide.

Second, regarding the issue of divergence in co-owner incentives, Otter Tail explained that wholesale market pricing differences across MISO and SPP are the primary reason for divergent co-owner decisions. Co-owners develop their commitment strategies to optimize their financial performance for their individual shares. Since market revenues are not shared, it is sensible that this would lead to co-owners making different decisions. The Department appreciates Otter Tail's response and its effort to increase the time when the units are committed and dispatched based on MISO market signals.

Third, since Otter Tail's units are affected by MISO and SPP market conditions, the Department recommended Otter Tail include SPP LMP data. Otter Tail agreed to this recommendation and the Department will work with them to analyze impact of SPP market conditions on dispatch of the units.

Fourth, the Department asked Otter Tail to point out if there were instances where greater economic dispatch led to lost revenues. This was motivated by the results shared by Xcel which showed seasonal dispatch of its units led to lost revenues. Otter Tail did not support this recommendation and said that this would require complex and iterative optimization analysis. The Department notes that such instances might be rare as Otter Tail's units are committed economically less often than Xcel's. As economic dispatch of these units increases, this might become more relevant.

Fifth, regarding EFOR data, Otter Tail was not opposed to including it in subsequent filings. Otter Tail had included annual data for the last ten years. The Department recommends Otter Tail include monthly EFOR data for the current year only in subsequent filings along with hot/warm start up events.

Sixth, Otter Tail did not oppose including data on energy produced and curtailed from utility owned and contracted wind facilities on a monthly basis for each facility in subsequent filings in this docket.

C. XCEL REPLY

Firstly, regarding best- and worst-case scenario, Xcel provided additional charts in their reply comments. The charts will help stakeholders get a clear visual of the magnitude of annual net benefits that flexible dispatch of large coal plants can provide. The Department agrees with Xcel that Figure 1 (on Page 3 of Xcel's reply comments) is more user friendly and requests Xcel include similar visual representations in future filings.

Second, the Department asked how Xcel weighs the lost margin with the environmental benefits of lower emissions in light of the loss of \$4 million in margins, but reduction in CO₂ emissions of 1.9 billion pounds or 950,000 tons at Sherco 3 as a result of economic dispatch compared to self-commitment.

Xcel explained that carbon costs or other externality costs are not included in offers to the MISO market. MISO will dispatch units based on its Security Constrained Economic Dispatch (SCED) which minimizes production and operating reserve costs subject to reliability constraints. The environmental benefits associated with lower emissions are directly considered in Xcel's resource planning process, including decisions to retire units, but are not currently directly considered in offers to MISO.

Third, regarding the increase in wind curtailment in 2021, Xcel explained that factors impacting 2021 curtailment were wind generation going into service prior to the completion of transmission upgrades required for the generation to interconnect along with a number of significant transmission outages.

Effectively, more wind generation was installed in the western subregion of MISO than could be delivered to meet customer demand throughout the MISO footprint. Xcel mentioned that they are working on increasing the operational flexibility of their units so that they can ramp down the plants during periods of high transmission congestion and low prices, such as times when abundant renewable resources are available on the system.

Fourth, regarding the additional reporting requirements, Xcel was in general supportive of the Department's comments. Regarding reporting EFOR data, the Department would like Xcel to continue reporting monthly data as it did this year in subsequent annual filings. The Department is aware of utilities filings in the fuel true up dockets and has included the reported values from those dockets in comments in this docket. However, as the fuel true up docket numbers keep changing each year, the Department proposes all utilities report this data in the instant docket for stakeholders to easily track this information.

III. CONCLUSION AND RECOMMENDATION

The Department offers the following revised recommendations.

A. *RECOMMENDATIONS FOR COMPLIANCE FILING*

Based on the reply comments from the utilities, the Department concludes that there is no need for additional compliance filing in the instant docket for 2021.

B. *RECOMMENDATIONS FOR NEXT YEAR'S FILING*

Based on the reply comments from the utilities, the Department would like to modify its fourth recommendation for next year's filing as follows: The Department recommends utilities include monthly EFOR data for the current reporting year in subsequent annual filings.

CERTIFICATE OF SERVICE

I, Sharon Ferguson, hereby certify that I have this day, served copies of the following document on the attached list of persons by electronic filing, certified mail, 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
Response Comments**

Docket No. E999/CI-19-704

Dated this 14th day of **June 2022**

/s/Sharon Ferguson

First Name	Last Name	Email	Company Name	Address	Delivery Method	View Trade Secret	Service List Name
Alison C	Archer	aarcher@misoenergy.org	MISO	2985 Ames Crossing Rd Eagan, MN 55121	Electronic Service	No	OFF_SL_19-704_Official
Generic Notice	Commerce Attorneys	commerce.attorneys@ag.state.mn.us	Office of the Attorney General-DOC	445 Minnesota Street Suite 1400 St. Paul, MN 55101	Electronic Service	Yes	OFF_SL_19-704_Official
Brooke	Cooper	bcooper@allete.com	Minnesota Power	30 W Superior St Duluth, MN 558022191	Electronic Service	No	OFF_SL_19-704_Official
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_19-704_Official
Bruce	Gerhardson	bgerhardson@otpc.com	Otter Tail Power Company	PO Box 496 215 S Cascade St Fergus Falls, MN 565380496	Electronic Service	No	OFF_SL_19-704_Official
Allen	Gleckner	gleckner@fresh-energy.org	Fresh Energy	408 St. Peter Street Ste 350 Saint Paul, Minnesota 55102	Electronic Service	Yes	OFF_SL_19-704_Official
Kim	Havey	kim.havey@minneapolismn.gov	City of Minneapolis	350 South 5th Street, Suite 315M Minneapolis, MN 55415	Electronic Service	No	OFF_SL_19-704_Official
Adam	Heinen	aheinen@dakotaelectric.com	Dakota Electric Association	4300 220th St W Farmington, MN 55024	Electronic Service	No	OFF_SL_19-704_Official
Kristin	Henry	kristin.henry@sierraclub.org	Sierra Club	2101 Webster St Ste 1300 Oakland, CA 94612	Electronic Service	No	OFF_SL_19-704_Official
Holly	Lahd	holly.lahd@target.com	Target Corporation	33 South 6th St CC-28662 Minneapolis, MN 55402	Electronic Service	No	OFF_SL_19-704_Official

First Name	Last Name	Email	Company Name	Address	Delivery Method	View Trade Secret	Service List Name
Leann	Oehlerking Boes	lboes@mnpower.com	Minnesota Power	30 W Superior St Duluth, MN 55802	Electronic Service	No	OFF_SL_19-704_Official
Generic Notice	Residential Utilities Division	residential.utilities@ag.state.mn.us	Office of the Attorney General-RUD	1400 BRM Tower 445 Minnesota St St. Paul, MN 551012131	Electronic Service	Yes	OFF_SL_19-704_Official
Isabel	Ricker	ricker@fresh-energy.org	Fresh Energy	408 Saint Peter Street Suite 220 Saint Paul, MN 55102	Electronic Service	Yes	OFF_SL_19-704_Official
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_19-704_Official
Shane	Stennes	stennes@umn.edu	University of Minnesota	319 15th Avenue SE Minneapolis, MN 55455	Electronic Service	No	OFF_SL_19-704_Official
Lynnette	Sweet	Regulatory.records@xcelenergy.com	Xcel Energy	414 Nicollet Mall FL 7 Minneapolis, MN 554011993	Electronic Service	No	OFF_SL_19-704_Official
Stuart	Tommerdahl	stommerdahl@otpc.com	Otter Tail Power Company	215 S Cascade St PO Box 496 Fergus Falls, MN 56537	Electronic Service	No	OFF_SL_19-704_Official
Brian	Tulloh	btulloh@misoenergy.org	MISO	2985 Ames Crossing Rd Eagan, MN 55121-2498	Electronic Service	No	OFF_SL_19-704_Official
Laurie	Williams	laurie.williams@sierraclub.org	Sierra Club	Environmental Law Program 1536 Wynkoop St Ste 200 Denver, CO 80202	Electronic Service	No	OFF_SL_19-704_Official