



414 Nicollet Mall
Minneapolis, MN 55401

July 8, 2020

—Via Electronic Filing—

Will Seuffert
Executive Secretary
Minnesota Public Utilities Commission
121 7th Place East, Suite 350
St. Paul, MN 55101

RE: REPLY COMMENTS
COMMISSION INVESTIGATION INTO SELF-COMMITMENT AND SELF-
SCHEDULING OF LARGE BASELOAD GENERATION FACILITIES
DOCKET NO. E999/CI-19-704

Dear Mr. Seuffert:

Northern States Power Company, doing business as Xcel Energy, submits to the Minnesota Public Utilities Commission's this Reply to the June 8, 2020 Comments of the Department of Comments – Division of Energy Resources and Fresh Energy in the above-noted docket.

We have electronically filed this document, and copies have been served on the parties on the attached service list.

Please contact Rebecca Eilers at rebecca.d.eilers@xcelenergy.com or 612-330-5570 or me at christopher.j.shaw@xcelenergy.com or 612- 330-7974 if you have any questions regarding this filing.

SINCERELY,

/s/

CHRISTOPHER SHAW
MANAGER, REGULATORY POLICY

Enclosures
c: Service List

STATE OF MINNESOTA
BEFORE THE
MINNESOTA PUBLIC UTILITIES COMMISSION

Katie J. Sieben	Chair
Valerie Means	Commissioner
Matthew Schuerger	Commissioner
Joseph K. Sullivan	Commissioner
John A. Tuma	Commissioner

IN THE MATTER OF AN INVESTIGATION
INTO SELF-COMMITMENT AND SELF-
SCHEDULING OF LARGE BASELOAD
GENERATION FACILITIES

DOCKET NO. E999/CI-19-704

REPLY COMMENTS

INTRODUCTION

Northern States Power Company, doing business as Xcel Energy, submits to the Minnesota Public Utilities Commission's this Reply to the June 8, 2020 Comments of the Department of Commerce – Division of Energy Resources and Fresh Energy in the above-noted docket.

The Company appreciates parties' thorough review of our annual report on the self-commitment and self-scheduling of large baseload generation facilities for the July 2018-December 2019 reporting period. We respond to several recommendations made by the Department and Fresh Energy (FE) below.

REPLY COMMENTS

A. DOC Data Analysis Results

The Department requested that utilities explain in Reply Comments its observation that dispatching above the minimum even when a unit was not economic appeared in the data for all units to varying degrees. In the case of Xcel Energy units, this observation is due to several factors. When evaluating the economics of a unit in a particular hour, it is critical to consider: 1) ancillary services; 2) periods of testing and other required periods of self-commitment and dispatch that should be removed from the analysis; and, most critically, 3) a holistic evaluation of generation unit economics, as the market was designed. Importantly, we note that when taken as a whole, total

revenues received from the market are higher than the Company's variable costs of operating the generating units analyzed for the period.

As background, MISO operates the market on the basis of a 24 hour optimization window, and settles in different time increments depending on charge type. Market Participants are given *hourly* day-ahead awards, but *5 minute* real time dispatch instructions and even 4 second instructions for units carrying regulating reserves. When MISO commits generating units, they look at the economics of a generator across the *entire operating day*. As required, our report provides the final settled hourly data by unit, but analyzing the economics of each market hour independently does not take into account the full picture that results from examining a full day.

In addition, instances of non-discretionary self-commitment or self-dispatch must be taken into consideration. For example, environmental testing is frequently conducted at specific generating levels to validate the accuracy of the EPA Continuous Emissions Monitoring System (CEMS) equipment. Also, a generating unit cannot be dispatched by the market when in startup mode – it has to (initially) raise output according to design specifications, clarity of water in boiler tubes, and other specifications without regard to locational marginal price (LMP). In addition, maintenance issues can arise which require a “raised minimum,” where a unit may not be able to reduce output, particularly issues with environmental controls. These isolated instances – of testing, unit startup, and maintenance constraints – necessitate dispatching a unit above minimum regardless of economics.

MISO recognizes that not all hours will be economic during a generator's minimum run by including “make whole payments” in their market design. If MISO has chosen to economically commit a unit (as opposed to utility self-commit), and if the generator has followed dispatch instructions and market rules, MISO will guarantee that the unit receives payment to cover its variable costs across the entire generating unit commit period with make whole payments. In other words, some isolated hours that appear to be uneconomic are considered within the settlement period, and therefore do not ultimately increase costs.

B. Fresh Energy Data Analysis Results

Fresh Energy concluded from their analysis that each of the Company's units operated at a loss in 2019 when considering a unit's fuel plus O&M costs (not including its long-term capital costs recovered in base rates) compared to the unit's energy market revenues. The Company does not believe this assessment is correct due to inclusion of our reported fixed O&M costs in Fresh Energy's calculation of “losses.”

The Company does not include fixed O&M in its offers to MISO because, by definition, fixed costs do not vary with generating unit output. The MISO market is designed to incent suppliers to offer at marginal cost. According to the MISO 2018 State of the Market Report,

Offering above marginal costs under competitive conditions could lead to resources not clearing the market, which would result in lost revenue contributions to cover fixed costs... Suppliers lacking market power maximize profits by offering resources at their marginal costs. A generator's marginal cost is its incremental cost of producing additional output. Marginal cost may include inter-temporal opportunity costs, risk associated with unit outages, fuel, variable operations and maintenance (O&M), and other costs attributable to the incremental output. For most fossil fuel-fired resources, marginal costs are closely approximated by variable production costs that primarily consist of fuel and variable O&M costs.¹

The MISO market correctly considers marginal costs in determining the Security Constrained Economic Dispatch of generation units. Fixed costs are not appropriately included in a determination of whether it is economic to dispatch a unit. However, fixed costs, and corresponding benefits such as accredited capacity, may be an appropriate consideration when determining whether to retire a unit. We have conducted that analysis in our recently filed Integrated Resource Plan (IRP) Supplement, where we proposed to retire our coal fleet by 2030.²

We believe we have appropriately categorized variable and fixed O&M costs per industry standards, and our units have not operated at a loss during the reporting period.

C. Additional Sherco Unit Analysis

As noted in Parties' Comments, the Company recently proposed a seasonal dispatch plan for Sherco Unit 2 and the King Plant, which the Commission recently voted to approve.³ Fresh Energy recommended that the Company provide further economic analysis of Sherco 3 in future compliance reports, and the Department recommended that the Company provide analysis of the overall benefits and costs of alternatives for both Sherco 1 and 3 in our next annual report. We agree to provide such additional analysis in the next annual report due on March 1, 2021, though we note that we

¹ https://www.potomaceconomics.com/wp-content/uploads/2019/06/2018-MISO-SOM_Report_Final2.pdf (page 153) and https://www.potomaceconomics.com/wp-content/uploads/2019/08/2018-SOM-Appendix_Final.pdf

² June 30, 2020; Docket No. E002/RP-19-368

³ Docket No. E002/M-19-809.

cannot commit to making dispatch changes at Sherco 3 unless SMMPA, the unit's co-owner, agrees.

D. Order Point 9

Fresh Energy recommended a change to the wording of Order Point 9 of the February 7, 2019 Order in Docket Nos. E999/AA-17-492 and E999/AA-18-373 which set the reporting requirements in this docket. Specifically, they recommend the following changes:

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 all production costs including fuel, cost variable O&M costs, matching the offer curve submitted to MISO energy markets, and any other variable costs associated with the plant.

As discussed in Fresh Energy's Comments, Xcel Energy provided two separate columns in order to differentiate the start-up costs, which we believe satisfies the issue Fresh Energy wishes to correct with this wording change. It is significantly less burdensome to pull the offer curve data that is already given to MISO than to extract adders from the data. We do not believe a change to the wording is needed at this time. The Department's recommended compliance filing, discussed below, can likely also address Fresh Energy's concern with the parameters of the data presented in the report.

E. Additional Compliance Filing

The Department would like to better ensure consistency of the data provided in this docket between the utilities, and recommends that utilities make a compliance filing 60 days from the Commission's Order containing an Excel spreadsheet of the required data, with formulas intact, that the utilities will fill out for each unit in future filings, including clear definitions of the inputs. The Company does not object to this recommendation.

CONCLUSION

Xcel Energy appreciates the opportunity to provide this Reply to Parties' Comments in this docket to clarify their analysis. We respectfully request that the Commission accept this filing in compliance with the November 13, 2019 ORDER ACCEPTING 2017-2018 ELECTRIC REPORTS AND SETTING ADDITIONAL REQUIREMENTS in Docket No. E999/AA-18-373 and Commission's February 7, 2019 ORDER ACCEPTING 2016-2017 REPORTS AND SETTING ADDITIONAL REQUIREMENTS in Docket Nos. E999/AA-17-492 and E999/AA-18-373.

Dated: July 8, 2020

Northern States Power Company

CERTIFICATE OF SERVICE

I, Lynnette Sweet, hereby certify that I have this day served copies of the foregoing document on the attached list of persons.

xx by depositing a true and correct copy thereof, properly enveloped with postage paid in the United States mail at Minneapolis, Minnesota

xx electronic filing

DOCKET No. E999/CI-19-704

Dated this 8th day of July 2020

/s/

Lynnette Sweet
Regulatory Administrator

First Name	Last Name	Email	Company Name	Address	Delivery Method	View Trade Secret	Service List Name
Christopher	Anderson	canderson@allete.com	Minnesota Power	30 W Superior St Duluth, MN 558022191	Electronic Service	No	OFF_SL_19-704_Official
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
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 220 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
Douglas	Larson	dlarson@dakotaelectric.com	Dakota Electric Association	4300 220th St W Farmington, MN 55024	Electronic Service	No	OFF_SL_19-704_Official
Leann	Oehlerking Boes	lboes@mnpower.com	Minnesota Power	30 W Superior St Duluth, MN 55802	Electronic Service	No	OFF_SL_19-704_Official
Randy	Olson	rolson@dakotaelectric.com	Dakota Electric Association	4300 220th Street W. Farmington, MN 55024-9583	Electronic Service	No	OFF_SL_19-704_Official

First Name	Last Name	Email	Company Name	Address	Delivery Method	View Trade Secret	Service List Name
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
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