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May 8, 2019

**—Via Electronic Filing—**

Daniel P. Wolf  
Executive Secretary  
Minnesota Public Utilities Commission  
121 7<sup>th</sup> Place East, Suite 350  
St. Paul, MN 55101-2147

RE: COMPLIANCE FILING  
2017 AND 2018 ANNUAL AUTOMATIC ADJUSTMENT OF CHARGES REPORTS -  
ELECTRIC  
DOCKET Nos. E999/AA-17-492 AND E999/AA-18-373

Dear Mr. Wolf:

Northern States Power Company, doing business as Xcel Energy, submits this report in compliance with Order Point 4 of the February 7, 2019 ORDER ACCEPTING 2016-2017 REPORTS AND SETTING ADDITIONAL REQUIREMENTS in the above-referenced dockets.

Attachment A to this Compliance Filing contains information the Company considers to be trade secret data as defined by Minn. Stat. § 13.37. The information derives independent economic value, actual or potential, from not being generally known to, and not being readily ascertainable by proper means by, other persons who can obtain economic value from its disclosure or use. Thus, Xcel Energy maintains this information to be considered non-public and has marked it as PROTECTED DATA.

We have electronically filed this document with the Minnesota Public Utilities Commission, and copies have been served on the parties on the attached service list. Please contact Rebecca Eilers at [rebecca.d.eilers@xcelenergy.com](mailto:rebecca.d.eilers@xcelenergy.com) or 612-330-5570 or

me at [amy.a.liberkowski@xcelenergy.com](mailto:amy.a.liberkowski@xcelenergy.com) or 612-330-6613 if you have any questions regarding this filing.

Sincerely,

/s/

AMY A. LIBERKOWSKI  
DIRECTOR, REGULATORY PRICING & PLANNING

c: Service List

STATE OF MINNESOTA  
BEFORE THE  
MINNESOTA PUBLIC UTILITIES COMMISSION

Katie J. Sieben	Chair
Dan Lipschultz	Commissioner
Valerie Means	Commissioner
Matthew Schuerger	Commissioner
John A. Tuma	Commissioner

IN THE MATTER OF THE REVIEW OF THE  
2016-2017 ANNUAL AUTOMATIC  
ADJUSTMENT REPORTS FOR ALL  
ELECTRIC UTILITIES

DOCKET No. E999/AA-17-492

IN THE MATTER OF THE REVIEW OF THE  
2017-2018 ANNUAL AUTOMATIC  
ADJUSTMENT REPORTS FOR ALL  
ELECTRIC UTILITIES

DOCKET No. E999/AA-18-373

**COMPLIANCE FILING**

**OVERVIEW**

Northern States Power Company, doing business as Xcel Energy, provides this filing in compliance with Order Point No. 4 of the Minnesota Public Utilities Commission's February 7, 2019 ORDER ACCEPTING 2016-2017 REPORTS AND SETTING ADDITIONAL REQUIREMENTS in the above-noted dockets.

Order Point No. 4 states:

*Within 90 days, Minnesota Power, Otter Tail Power, and Xcel shall each make a compliance filing containing an initial analysis of the consequences of self-commitment and self-scheduling of their generators, including the annual difference between production costs and corresponding prevailing market prices for both FYE17 and FYE18.*

We provide the requested analysis for both the 2016-2017 and 2017-2018 Electric AAA periods.

## COMPLIANCE

### A. Consequence of Xcel Energy's Self-Commitment and Self-Scheduling Decisions for the AAA Years 2017 and 2018 (July 2016-June 2018)

The Company analyzed the economic impact of its self-commit actions for the period July 2016 to June 2018 by comparing the MISO day-ahead and real-time (DART) revenues and charges that Xcel Energy received from its self-commit approach for certain resources to the production costs of those resources to determine margin. While we cannot perform a what-if margin analysis of allowing MISO to commit and dispatch the Xcel Energy units, as only MISO could model the market costs of the path not taken, the Company did analyze the total DART margins of the actions it did take to self-commit these resources.

The analysis evaluates actions taken for Xcel Energy's baseload units, exclusive of its Refuse Derived Fuel units. These baseload units also comprise a large part of the Company's MISO settlement and are the bulk of our strategic self-commit decisions. In evaluating instances of self-commit of these units, we also excluded hours when Xcel Energy's self-commit action in the MISO market was unavoidable (*e.g.*, mandatory generating resource testing, fuel and steam offtake contract requirements, and generating resource maintenance outages). We note that the combined cycle and simple cycle combustion turbines are not included in the analysis because these generating resources are offered to MISO as economic units unless testing or operating directives (*i.e.* MISO or transmission operations directives) require otherwise.

The resulting DART margin by resource is shown in Figure 1. The DART margin during the strategic self-commit for the period was \$500,838,931, which means that market revenues during these self-commitment periods exceeded the production costs of the units.

**Figure 1 - DART Margin by Year for Self-Commit of Baseload Units**

Day Ahead and Real Time Margins for NSP Base Load Resources								
	King_G1	Monticello_1	PR_ISLD_1	PR_ISLD_2	SHERC3	SHERCO_G1	SHERCO_G2	Grand Total
FYE17	4,918,177	66,520,748	57,462,797	65,705,959	5,794,592	6,248,859	7,481,650	214,132,783
FYE18	7,679,971	90,662,870	73,785,058	67,162,466	12,846,525	14,933,780	19,635,477	286,706,149
Total	12,598,148	157,183,618	131,247,855	132,868,425	18,641,118	21,182,640	27,117,127	500,838,931

We believe this DART margin data represents an appropriate metric for determining whether the Company's self-commitment decisions were beneficial, and the data provided in Figure 1 demonstrates that the Company's customers received value as a result of its decision to self-commit the baseload resources.

The Company's detailed analysis of the consequences of self-commitment of its generators is included in Attachment A. We note that, when the Company submits a commit status of "Must-Run" for a unit (self-commits), it designates a resource as committed to MISO per Xcel Energy's request and makes the resource available for dispatch by MISO. To self-schedule for energy, Xcel Energy would have to submit a resource to operate at a specific MW value or operating level for energy and set the energy dispatch status to "Self-Schedule." For FYE 17 and FYE 18, Xcel Energy did not find any instances of self-scheduling of resources for energy; therefore, Attachment A does not capture the consequences of self-scheduling. The Attachment does, however, present the impact of self-commitment.

As stated above, the analysis only includes instances when Xcel Energy strategically self-commits select baseload units. There are circumstances when self-commit is unavoidable, such as testing, operating directives from MISO or Transmission Operations, or third party contractual requirements. Strategic decisions to self-commit units are based on a number of considerations, including MISO model limitations, contractual obligations, and system reliability.

Self-commitment is better suited for Xcel Energy units that have longer minimum downtimes or are slow to come online. MISO's 24-hour commitment model provides no assurance that units will be cycled economically across multiple days. MISO's current day-ahead market construct is not designed to forecast economic commitment beyond the next day, leading to potential uneconomic cycling of units with long lead times or high startup costs. Until MISO develops the market design for a Multi-day Financial Commitment Model, self-committing the units with long lead periods ensures that their operational parameters are met and emissions output managed.

In addition to the economic value received from these self-commitment actions, there are other reasons why the Company self-commits generation resources. Xcel Energy participates in a joint operating agreement with SMMPA at Sherco 3 that divides the unit output between the two parties. This agreement limits Xcel Energy's ability to offer the unit economically.

Xcel Energy strongly considers reliability when making decisions about self-committing units. Extreme weather conditions, elevated MISO conditions, high load

days, tight capacity conditions, and transmission requirements increase reliability risks and are factored into our decisions to self-commit units.

Xcel Energy constantly monitors system conditions, looking for opportunities to lower customer costs. At times when we believe system reliability risks are low, as when renewable generation is forecasted to be high, loads are forecasted to be low, and plant availability is high, we have offered baseload units into MISO as economic, making them available to be de-committed. In several instances coal units offered with an “Economic” status have been de-committed by MISO.

In addition, Xcel Energy continually evaluates opportunities to provide resource flexibility to MISO, which may lessen the need to self-commit and self-schedule units. Widening unit dispatch ranges, improving unit start capabilities, reducing cycling times, and exploring nuclear flexible operations gives MISO more opportunities to commit and dispatch our units economically.

Xcel Energy also seeks market changes that will accommodate better economic commit and dispatch opportunities. The development of a multi-day financial commitment market design in MISO will optimize these long lead resources, such as coal units, across multiple days while still honoring their operating parameters. A multi-day commitment process is able to evaluate reliability risks and minimize total production costs over a longer time horizon, making it a superior process and better suited to also optimize baseload resources with slower start-up times and longer minimum down times. Without a multi-day commitment there is less assurance that the market will commit and de-commit these units in an optimal manner on behalf of customers. Xcel Energy has been and remains an advocate for a multi-day commitment process for multiple years. At this time, MISO anticipates that the multi-day commitment process enhancement for the market will be delayed until the fourth quarter of 2021.

## **B. Future Compliance**

Order Point No. 5 of the February 7, 2019 Order states:

*In future AAA Reports, Minnesota Power, Otter Tail Power, and Xcel shall each provide a complete analysis and discussion of the consequences of self-commitment and self-scheduling of their generators, including the annual difference between production costs and corresponding prevailing market prices.*

In light of the FCA Reform process approved by the Commission's Orders in Docket No. E999/CI-03-802, we note that we will comply with this future reporting requirement in our annual March 1 True-Up filings.

### **CONCLUSION**

We appreciate the opportunity to provide this filing in compliance with the Commission's February 7, 2019 ORDER ACCEPTING 2016-2017 REPORTS AND SETTING ADDITIONAL REQUIREMENTS in the above-noted dockets.

Dated: May 8, 2019

Northern States Power Company

Sum of DART Revenue								
Row Labels	King_G1	Monticello_1	PR_ISLD_1	PR_ISLD_2	SHERC3	SHERCO_G1	SHERCO_G2	Grand Total
[PROTECTED DATA BEGINS]								
<b>2016</b>								
Jul								
Aug								
Sep								
Oct								
Nov								
Dec								
<b>2017</b>								
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Jun								
Jul								
Aug								
Sep								
Oct								
Nov								
Dec								
<b>2018</b>								
Jan								
Feb								
Mar								
Apr								
May								
Jun								
<b>Grand Total</b>								
PROTECTED DATA ENDS]								

Sum of As-Offered Production Cost								
Row Labels	King_G1	Monticello_1	PR_ISLD_1	PR_ISLD_2	SHERC3	SHERCO_G1	SHERCO_G2	Grand Total
[PROTECTED DATA BEGINS]								
<b>2016</b>								
Jul								
Aug								
Sep								
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Nov								
Dec								
<b>2017</b>								
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<b>2018</b>								
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Feb								
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May								
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<b>Grand Total</b>								
PROTECTED DATA ENDS]								

Day Ahead and Real Time Margins for NSP Base Load Resources								
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Day Ahead and Real Time Margins for NSP Base Load Resources								
Row Labels	King_G1	Monticello_1	PR_ISLD_1	PR_ISLD_2	SHERC3	SHERCO_G1	SHERCO_G2	Grand Total
2016 (July - December)	3,500,746	32,725,618	26,910,511	33,175,980	3,913,654	1,663,950	2,035,900	103,926,358
2017	3,921,562	74,619,109	64,386,607	59,110,949	7,173,085	12,710,936	14,433,058	236,355,305
2018 (January - June)	5,175,841	49,838,891	39,950,738	40,581,496	7,554,379	6,807,754	10,648,170	160,557,268
Grand Total	12,598,148	157,183,618	131,247,855	132,868,425	18,641,118	21,182,640	27,117,127	500,838,931



## 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 NOS.      E999/AA-17-492**  
**E999/AA-18-373**

Dated this 8<sup>th</sup> day of May 2019

/s/

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Lynnette Sweet  
Regulatory Administrator

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Generic Notice	Commerce Attorneys	commerce.attorneys@ag.state.mn.us	Office of the Attorney General-DOC	445 Minnesota Street Suite 1800  St. Paul, MN 55101	Electronic Service	Yes	OFF_SL_18-373_AA-18-373
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Marie	Doyle	marie.doyle@centerpointenergy.com	CenterPoint Energy	505 Nicollet Mall P O Box 59038 Minneapolis, MN 554590038	Electronic Service	No	OFF_SL_18-373_AA-18-373
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Samantha	Norris	samanthanorris@alliantenergy.com	Interstate Power and Light Company	200 1st Street SE PO Box 351  Cedar Rapids, IA 524060351	Electronic Service	No	OFF_SL_18-373_AA-18-373

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Daniel P	Wolf	dan.wolf@state.mn.us	Public Utilities Commission	121 7th Place East Suite 350 St. Paul, MN 551012147	Electronic Service	Yes	OFF_SL_18-373_AA-18-373
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