BEFORE THE MINNESOTA PUBLIC UTILITIES COMMISSION

Beverly Jones Heydinger	Chair
David C. Boyd	Commissioner
Nancy Lange	Commissioner
J. Dennis O'Brien	Commissioner
Betsy Wergin	Commissioner

In the Matter of the Application of Northern States Power Company d/b/a Xcel Energy for Authority to Increase Rates for Electric Service in Minnesota

In the Matter of a Petition by Xcel Energy for Approval of Revisions to the Solar*Rewards Program

In the Matter of a Rate for Large Solar Photovoltaic Installations

ISSUE DATE: May 13, 2013

DOCKET NO. E-002/GR-10-971

DOCKET NO. E-002/M-10-1278

DOCKET NO. E-002/CI-13-315

ORDER SETTING INTERIM RATE AND ESTABLISHING NEW SOLAR RATE DOCKET

PROCEDURAL HISTORY

On November 14, 2011, Northern States Power Company d/b/a Xcel Energy (Xcel or the Company) filed a Stipulation and Settlement Agreement between the Company and several parties to its then pending rate case. Among the terms of the agreement, Xcel agreed to study the load profile of larger solar facilities to determine the applicability of a solar facility's unique load characteristics to the standby and supplemental rate tariff.

On May 14, 2012, the Commission issued its Findings of Fact, Conclusions, and Order in Xcel's rate case. The Commission adopted the Stipulation and Settlement Agreement, and directed Xcel to "file with the Commission and supply to the Department of Commerce the results of the study of the load profiles of Large Solar Facilities."

On August 24, 2012, Xcel filed a Solar Load Profile Study, which it re-filed on September 14 to include previously redacted information after customers consented to the public release of their solar load profile data.

On November 12, 2012, Best Power International filed comments critical of the study.

On December 3, 2012, the Minnesota Center for Environmental Advocacy, the Izaak Walton League of America – Midwest Office, and Fresh Energy (the Environmental Groups), the Minnesota Department of Commerce Division of Energy Resources (the Department), and four

 $^{^{1}}$ Unless otherwise specified, filings can be found in Docket No. E-002/GR-10-971.

large Xcel customers interested in large solar installations (the Solar Rate Reform Group), filed comments.

Initial comments reflected agreement that Solar Load Profile Study was preliminary and insufficient for establishing a solar facility rate. In particular, the Department recommended that the Commission require Xcel to perform a more detailed Effective Load Carrying Capacity study and to propose revised solar capacity credits for Xcel customers on Standby Service.

On January 18, Xcel, the Department, the Environmental Groups, and the Solar Rate Reform Group filed reply comments. The parties largely agreed that solar facilities contribute to meeting Xcel's peak capacity requirements and that the existing Standby Service tariff does not reflect this contribution.

Xcel contended that its Solar Load Profile Study satisfied its obligations under the Stipulation and Settlement Agreement as well as the Commission's May 14 order. However, Xcel agreed with the parties that further analysis would be justified.

On April 25, the matter came before the Commission.

FINDINGS AND CONCLUSIONS

I. Background

As part of a settlement in its 2010 rate case, Xcel agreed to study the load profile of larger solar facilities to facilitate reexamination of the standby and supplemental rate tariffs for those facilities. The Commission directed that the study be filed with the Commission and provided to the Department of Commerce.

Xcel has filed a Solar Load Profile Study, which it characterized as an "initial attempt to estimate the contribution of solar photovoltaic (PV) facilities² to system reliability and, thus, better understand the value of solar on the [Xcel] electric system." The study used one year of metering data to approximate the contribution of solar PV facilities to the system.

As a result of the study, Xcel concluded that "solar contributes to capacity requirements during peak periods" but also that "further analysis would be needed to support decision making."

II. Positions of the Parties

The Department, the Environmental Groups, and the Solar Rate Reform Group all agree with Xcel's conclusion that solar PV systems help Xcel meet system capacity needs. They also agree that the existing Standby Tariff does not incorporate this contribution. And all commenters agree that a more detailed examination of the contributions of PV facilities is needed.

² As distinct from solar thermal facilities, which produce thermal energy by heating a liquid.

³ Xcel Compliance Filing — Solar Load Profile Study, at 6 (August 24, 2012).

The Department recommends, and Xcel has agreed, to perform an Effective Load Carrying Capacity study, which the Department describes as an industry best practice for determining the capacity value of variable generation resources, including solar PV facilities. Xcel agreed to complete the study by May 1, in order to allow for comment and Commission action on the study by January 1, 2014.

The parties disagree about whether the Commission should establish an interim rate while the study is reviewed and a proposal developed. At the Commission meeting, the Department, the Environmental Groups, and the Solar Rate Reform Group advocated a capacity credit of \$5.15 per kW per month. Xcel expressed a preference that no interim rate be established, but suggested in its initial filing that the study could support a \$2 credit.

III. Commission Action

The Commission will accept Xcel's Solar Load Profile Study as fulfilling Xcel's obligation under paragraph 16 of the Commission's May 14, 2012 order. However, Xcel must take further steps to complete its obligation under the November 11, 2011, Stipulation and Settlement Agreement. More detailed analysis is needed to support a final Commission determination of a just and reasonable rate for solar PV facilities.

The Commission will therefore establish a new docket and a procedural schedule to allow Xcel and interested parties to review Xcel's Effective Load Carrying Capacity study and to develop and comment on a solar rate proposal for large solar PV customers. The Commission establishes this schedule with the intention that the Commission approve a final solar rate by January 1, 2014, and that Xcel will implement the rate within 30 days thereafter.

However, it is clear from the record that solar PV facilities contribute to Xcel's capacity requirements and that the existing Standby Service tariff does not reflect that contribution. The Commission agrees with the Department, the Environmental Groups, and the Solar Rate Reform Group that \$5.15 per kW per month is a reasonable, conservative interim rate.

The record is incomplete; an interim rate in this case is not intended to prejudge data and analysis not yet before the Commission. Action by the legislature may also alter this analysis. As the record currently stands, however, it appears likely that a final solar PV capacity credit in this case will be no less than \$5.15 per kW per month.

The Commission will therefore require Xcel to immediately implement an interim solar PV capacity credit of \$5.15 per kW per month.

ORDER

- 1. Xcel shall immediately modify its Standby Service tariff to provide an interim photovoltaic capacity credit of \$5.15 per kW per month. Large photovoltaic customers on the Standby Service tariff should receive this credit beginning with bills issued on or after June 1, 2013.
- 2. Xcel's study filed on September 14, 2012 meets the requirements of paragraph 16 in the Commission's May 14, 2012, Findings of Fact, Conclusions, and Order in Docket No. 10-971.

- 3. Docket No. E-002/CI-13-315, *In the Matter of a Rate for Large Solar Photovoltaic Installations*, is established for future submissions in this matter. Xcel's solar load profile data study, and all filings related to the study in Dockets No. 10-971 and 10-1278 filed on or after August 24, 2012 are hereby incorporated into Docket 13-315 by reference. Filings described in the paragraphs below shall be filed in Docket No. 13-315.
- 4. On or before May 1, 2013, Xcel shall file preliminary results of its Effective Load Carrying Capacity study, including as much supporting data as possible.
- 5. Xcel shall hold a meeting with stakeholders to explain and discuss the preliminary inputs, assumptions, and results of the study, and shall encourage stakeholders to file information requests, to which Xcel shall respond.
- 6. Xcel shall re-run the ProSym analysis used in the Effective Load Carrying Capacity study in response to stakeholder requests and file the revised results.
- 7. On or before July 1, 2013, Xcel shall (and stakeholders may) file with the Commission a report on progress on the Large Customer Photovoltaic Rate proposal, and agreement or disagreement over results of the Effective Load Carrying Capacity Study.
- 8. On or before October 1, 2013, Xcel shall file a large customer photovoltaic rate proposal that appropriately reflects the value of solar resources on Xcel's system. As part of the Company's proposal, Xcel shall also re-evaluate the interim Standby Service tariff capacity credit established in paragraph 1, above.
- 9. Xcel shall work with stakeholders to explore and develop the solar rate proposal. The proposal should address concerns raised by interested parties and stakeholders, including responses to the Company's Solar Load Profile Study (filed September 14, 2012 in Docket No. 10-917) and the ELCC study, as well as any legislation enacted by the Legislature.
- 10. This Order shall become effective immediately.

BY ORDER OF THE COMMISSION

Burl W. Haar Executive Secretary



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