



414 Nicollet Mall  
Minneapolis, MN 55401

July 15, 2013

—Via Electronic Filing—

Burl W. Haar  
Executive Secretary  
Minnesota Public Utilities Commission  
121 7<sup>th</sup> Place East, Suite 350  
St. Paul, MN 55101

RE: REPLY COMMENTS  
RATE FOR LARGE SOLAR PHOTOVOLTAIC INSTALLATIONS  
DOCKET NO. E002/CI-13-315

Dear Dr. Haar:

Northern States Power Company, doing business as Xcel Energy, submits the following brief Reply Comments in response to Comments received by the Department of Commerce and the Solar Rate Reform Group (SRRG) on our Effective Load Carrying Capability (ELCC) Study.

We appreciate parties' review of our Study and their participation at our June 11 stakeholder meeting. Based on our initial review of the recommendations offered in Comments, we believe we can accommodate most of the requests. Specifically, as recommended by the Department and SRRG, we believe we can rerun the analysis with a data set that better synchronizes photovoltaic (PV) and load data. We also agree to analyze multiple PV plant orientations, as recommended by both parties. Similarly, as recommended by the Department, we will analyze the effect of multiple smaller plants over more diverse geographical locations on the study results.

The Department also recommended that we calculate the value of avoided capacity using the method put forth by the Department. We agree to provide this calculation with the updated ELCC results. Because there is not consensus on the methodology to calculate the value of avoided capacity, we will continue to provide the value based on avoided embedded costs, as well as the current values established for our interruptible programs. The appropriateness of using a nameplate capacity rating in place of a measured peak capacity contribution is another issue for consideration.

Additionally, the Department requested that we address in Reply Comments the basis for the Company's interpretation that we would not apply the interim solar standby service capacity credit until after the grace period is exhausted each year. The grace period was not eliminated with the implementation of the standby service interim solar capacity credit. In the grace period months, solar standby customers are not assessed the standby usage demand charge from their base tariff that the credit is intended to offset. Outside of the grace period, the customer is billed the corresponding standby demand usage rates per kW of \$12.14 for the months of June through September and \$8.34 during other months. The interim solar standby capacity credit of \$5.15 per kW is appropriately credited to those charges. Attachment A provides a high-level hypothetical example that highlights the mechanics of the standby service relative to the demand usage portion of the customer's bill and the newly-approved standby service credit associated with the applicable base tariff.

SRRG requested that we establish a website to post responses to information requests and questions from parties. As an alternative to developing a website, we have provided electronic copies of all information requests to those that have elected to receive them. We will continue this process with all new information requests to ensure the information is available to all interested parties.

SRRG also recommends two additional benchmark dates prior to October 1. We have agreed to host a second stakeholder meeting to share the results of the updated ELCC study and discuss how to use the study results in future ratemaking. The stakeholder meeting is scheduled for August 14 and a meeting announcement has been sent to parties in this docket.

We look forward to continuing the discussion with parties on the ELCC study and other solar rate matters. Please contact me at amy.a.liberkowski@xcelenergy.com or 612-330-6613 if you have any questions regarding this filing.

Sincerely,

/s/

AMY LIBERKOWSKI  
MANAGER  
REGULATORY ANALYSIS

Enclosures  
c: Service List

### **Standby Service Example**

Customer A has a total site load of 300 kW. This load is served as follows:

1. 200 kW by the Company from the base tariff (General Service), and
2. 100 kW by the customer's photovoltaic solar system peak capacity, backed up by 100 kW from the Company's Standby Service Rider.

Figure 1 illustrates the mechanics for the demand billing of the customer's 300 kW site load. This example shows billing difference from grace period months (typically two months each year for PV solar generators) and the remaining non-grace period billing months.

In all months the customer is billed for the first 200 kW of demand. For the 100 kW Standby Service portion of the bill, the calculation is different for grace and non-grace period months. In the grace month, the Standby Service reservation rate of \$3.00 per kW is applied to the 100 kW of contracted standby capacity for the solar system for a charge of \$300.

Next, the demand charge component of the standby usage rates is calculated. For the winter month used in the example, this demand charge per kW is the General Service base tariff demand charge of \$8.34 less the Interim PV Solar Credit of \$5.15, which equals a net standby demand usage rate of \$3.19 per kW. In grace period months that have no billed kW standby demand usage, the result is always no demand usage charge ( $\$3.19 \times 0 \text{ kW}$ ).

In non-grace period months, billed kW standby demand usage is the actual measured peak demand of the customers site load above 200 kW. In this example month, we assume this amount is 100 kW and when the resulting standby demand usage charge of \$3.19 is multiplied by 100 kW the result is \$319. If actual standby demand usage is less than 100 kW, the resulting billed charge would be proportionally lower.

Figure 1. Bill Calculation Examples for Grace Period Month and Non-Grace Period Month

**Grace Period - Bill Calculation Example**

**Non-Grace Period - Bill Calculation Example**

**General Service Demand**

*200kW*

Total Usage Demand	300	
Standby Service Contracted Demand kW	<u>(100)</u>	
Net Billed Demand kW	200	
Winter Demand kW Charge	<u>\$8.34</u>	
Total Demand Charges		\$1,668

**General Service Demand**

*200kW*

Total Usage Demand	300	
Standby Service Contracted Demand kW	<u>(100)</u>	
Net Billed Demand kW	200	
Winter Demand kW Charge	<u>\$8.34</u>	
Total Demand Charges		\$1,668

**Standby Service**

*100kW*

Reservation Rate	\$3.00	
Standby Service Contracted Demand kW	<u>100</u>	
Reservation Charge		\$300

**Standby Service**

*100kW*

Reservation Rate	\$3.00	
Standby Service Contracted Demand kW	<u>0</u>	
Reservation Charge		\$0

Winter Demand kW Charge Rate	\$8.34	
Interim Photovoltaic Solar Credit	<u>(5.15)</u>	
Adjusted Winter Demand Charge Rate	\$3.19	
Actual Usage Demand (Grace Period)	<u>0</u>	
Usage Demand Charges		<u>\$0</u>

Winter Demand kW Charge	\$8.34	
Interim Photovoltaic Solar Credit	<u>(5.15)</u>	
Adjusted Winter Demand Charge Rate	\$3.19	
Actual Usage Demand	<u>100</u>	
Usage Demand Charges		<u>\$319</u>

Grace Period Demand Bill - Customer A \$1,968

Non-Grace Period Demand Bill - Customer A \$1,987

## CERTIFICATE OF SERVICE

I, SaGonna Thompson, hereby certify that I have this day served copies of the foregoing document or a summary thereof on the attached lists of persons:

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

xx via electronic filing

**DOCKET No. E002/CI-13-315**

Dated this 15<sup>th</sup> day of July, 2013

/s/

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SaGonna Thompson

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