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March 2, 2015

-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

RE: REPLY COMMENTS COMMUNITY SOLAR GARDENS PROGRAM DOCKET NO. E002/M-13-867

Dear Mr. Wolf:

Northern States Power Company, doing business as Xcel Energy, submits the attached Reply Comments in response to the Commission's October 9, 2014 Notice of Comment Period and its January 28, 2015 Notice of Second Extension of Comment Period.

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 Holly Hinman at <u>holly.r.hinman@xcelenergy.com</u> or 612-330-5941 if you have any questions regarding this filing.

Sincerely,

/s/

AAKASH H. CHANDARANA REGIONAL VICE PRESIDENT RATES AND REGULATORY AFFAIRS

Enclosures c: Service List

### STATE OF MINNESOTA BEFORE THE MINNESOTA PUBLIC UTILITIES COMMISSION

Beverly Jones Heydinger Nancy Lange Dan Lipschultz John Tuma Betsy Wergin Chair Commissioner Commissioner Commissioner

IN THE MATTER OF THE PETITION OF NORTHERN STATES POWER COMPANY FOR APPROVAL OF ITS PROPOSED COMMUNITY SOLAR GARDENS PROGRAM DOCKET NO. E002/M-13-867

### **Reply Comments**

#### INTRODUCTION

Northern States Power Company, doing business as Xcel Energy, submits the attached Reply Comments in response to the Commission's October 9, 2014 Notice of Reply Comment Period and its January 28, 2015 Notice of Second Extension of Comment Period. The Commission and parties have had the opportunity to observe the early market response to our program following its December 12<sup>th</sup> launch. In this Reply, we address the Solar\*Rewards Community bill credit rate and sub-topics identified in the Commission's Notices.

## A. Background

In our October 1, 2014 Comments in this Docket, we stated our belief that we had complied with the requirement of statute that the Company's community solar garden (CSG) program plan reasonably allows for the creation, finance, and accessibility of CSGs. We also noted the principles we believe should guide the Commission's consideration of an appropriate bill credit rate going forward: (1) the importance of leveraging the program to meet state energy goals at a cost-competitive rate which minimizes ratepayer impacts, (2) the bill credit rate should reflect market principles by endeavoring to find a "market price," and (3) the Commission should act in reliance on actual, observed response to the program. These Reply Comments build off of these core principles.

Since our October 1 comments, we have also filed supplemental updates to keep Commissioners abreast of the activity we are seeing in our new program.

On December 5, 2014, we filed a notice announcing our launch date. We launched the program one week later on December 12, 2014 and opened our online application system early, beating our statutory deadline by one month. More than 400 MW of applications were received on the first day of the application system's opening.

On January 2, we filed our Upper Midwest Resource Plan for 2016-2030<sup>1</sup>, and noted in the cover letter that the robust market response we were seeing following the December launch of the Solar\*Rewards Community program would require us to perform updates to our resource modeling assumptions.

We then filed a supplemental update with an overview of application data received on January 13, 2015. There, we noted the relative sizes and locations of the solar gardens that we were seeing, and we flagged a series of issues arising in the early stages of reviewing applications. We noted that we were seeing "utility-scale" projects being planned and the emergence of significant technical, legal, and regulatory questions.

On February 10, we filed further comments highlighting our concerns that program development appeared to be in conflict with the intent behind the CSGs enabling legislation, and we noted the degree to which we anticipated customer bills would rise as a result of the current bill credit rate coupled with the program rules for Solar\*Rewards Community. We noted that we would further address the bill credit rate and the Renewable Energy Credit (REC) incentive in our March 2 Reply Comments. We will file further comments in our March 4 Reply.

In these Reply Comments, we address the following topics:

- First, the fact record to support a determination on minimum bill credit rate that reasonably enables CSG development,
- Second, we offer ideas for revisiting the rate,
- Third, we propose rate update procedures, and
- Fourth, we discuss other considerations related to the Commission's rate review.

# B. Evidentiary Support for Conservative Minimum Rates Needed

The Commission's Notice requests evidence that \$.15/kWh is or is not "the conservative minimum needed to secure financing and make CSGs attractive to subscribers." We appreciate the Commission's request for this evidence, because we do not believe the record in this docket is sufficient on this question. To our

<sup>&</sup>lt;sup>1</sup> See Docket No. E002/RP-15-21, Initial Filing, January 2, 2015.

knowledge, solar developers have not submitted detailed *pro formas* or expert testimony to substantiate this claim. In fact, when questioned about what costs facilitated solar development in other states, developers claimed such information could not be shared with the Commission.

The specific financial analysis that supports third party community solar development is clearly available from developers, but has not been shared with the Commission. This information is not necessarily part of the scope of the Company's expertise as the program administrator. Given the absence of actual financing data from solar vendors, the best evidence we have to offer is the market response which clearly shows the current \$.15/kWh is not the "conservative minimum." Additionally, the comments of the Minnesota Rural Electric Association (MREA) suggest the \$.15/kWh is not the minimum necessary.

In the MREA October 1 Comments, they noted key learnings from the rollout of six community solar projects offered by their member cooperatives. Based on experience, MREA expects doubling or tripling of community solar among electric cooperatives within two years. They also state the "all-in" cost of producing community solar generation at installations smaller than one MW – much smaller than the projects we are seeing at Xcel Energy– is "less than half of what's being proposed with the existing VOS and incentives."<sup>2</sup> MREA's experience is instructive regarding what is necessary to support "reasonable creation" of CSGs.

We have recently received Commission approval to proceed with the development of utility-scale solar at a price point well below the current applicable retail rate (ARR).<sup>3</sup> Initially we did not believe that this information was representative of the same cost profile for developing community solar, however, given the scale of some projects proposed as CSGs in our service territory, the bids received in our solar acquisition docket are comparable. The Department suggested making such a comparison in its February 24 Comments in this Docket. Our March 4 comments will outline that CSGs should not be utility-scale projects and thus the pricing necessary for CSGs may be different than utility-scale projects. It is not clear, however, that the minimum pricing for CSGs needs to be \$.15/kWh. The overwhelming market response demonstrates \$.15/kWh is neither needed nor appropriate for utility-scale projects.

Some of the applications received to date are for systems sized less than one MW, so some vendors believe the current pricing is sufficient for these gardens. Accordingly,

<sup>&</sup>lt;sup>2</sup> Comments of MN Rural Electric Association, October 1, 2014. Docket No E002/M-13-867.

<sup>&</sup>lt;sup>3</sup> See Docket No. E002/M-14-162, *Petition for Approval of a Solar Portfolio to Meet Initial Solar Energy Standard Compliance*, Company's Petition, October 24, 2014.

we believe the market has signaled that the current ARR-plus-REC incentive is sufficient, and likely above, the minimum needed to reasonably create and finance CSGs.

In the absence of a more robust evidentiary record, the Commission has the opportunity to consider its rate construct from the perspective of achieving the goals of the statute while minimizing non-participant rate impacts. With this in mind, we offer suggestions to aid in the Commission's rate-setting deliberation.

# C. Suggestions for Revisiting the Rate

The CSG statute sets forth two rate constructs for use with CSGs: the value of solar (VOS), and unless and until the Company chooses to file an alternative tariff, the ARR. The Company offers some ideas about these two rate constructs for consideration.

1. Applicable Retail Rate

When the Company filed its initial Petition for approval of the CSG program on September 30, 2013, we proposed that the most appropriate rate for this program was one already established as an authorized compensation level for distributed generation. We proposed using the formula approved to calculate the rate for the Company's cogeneration customers (or "cogen rate," found at rate code A50 in the Company's Electric Rate Book), which is derived from the average retail utility energy rate.

In its April 7, 2014 Order, the Commission adopted a formula for the ARR for CSGs that built on the Company's A50 cogeneration rates and included customer and demand charge revenues, as well as a REC payment, to be factored into the bill credit rate for community solar. As we noted at the hearing, the customer charge is designed to recover the costs of a service to a house, for example. The Company does not believe including the customer charge in a bill credit rate for community solar is appropriate, as there is no one-to-one rate basis for the cost being avoided in this context. The Company is not aware of a grid-connected scenario where this cost would be avoided.

The Company suggests that the Commission consider options for revisiting the bill credit rate, and eliminate the customer charge from the formula. In addition to adjusting the underlying ARR formula, the Commission should adjust the REC value to reflect market values.

2. Reviewing the REC Incentive

The Company believes the Commission should take into consideration the principles noted above: (1) the importance of leveraging the program to meet state energy goals at a cost-competitive rate which minimizes ratepayer impacts,<sup>4</sup> (2) the bill credit rate should reflect market principles by endeavoring to find a "market price," and (3) the Commission should act in reliance on actual, observed response to the program.

The Company has provided the rate impacts it forecasts based on the current rates and the actual market response observed to date. We will provide further detail on our analysis and assumptions in our March 4 Reply. Based on the anticipated customer bill impact from increased fuel costs and on market signals that \$.15/kWh is likely well above the minimum pricing threshold, the Company believes the Commission should reduce the REC incentive to reflect market values and eliminate the current \$.02 or \$.03/kWh placeholder values from its previous Order.

The Commission did not provide guidance in its April 7, 2014 Order on how it would evaluate the REC payment over time. Instead, it stated:

The Commission does not intend that this solar REC compensation rate would reflect a market rate or have any precedential effect beyond the specific facts of this case. Rather, the REC payment will simply bring the total compensation in line with what solar developers in this docket have said is the minimum rate they would need to reasonably finance solar gardens.

If the Commission were to continue this approach, it should first adjust the underlying rate in accordance with its approved formula, and second, adjust the REC incentive levels to cause the overall "Enhanced" rates to remain constant with currently approved rates.

In this way, today's approved rates would become the ceiling for next year's rates, and the REC price would be flexed to maintain the rate approved by the Commission.

Instead, however, we favor the Commission establishing a REC price through competitive bidding or other market data. The Company discussed mechanisms for competitive bidding in its October 1, 2014 Comments. The Company believes

<sup>&</sup>lt;sup>4</sup> We note the December 4, 2014 Comments of the "Solar Interveners" and their preference that the Company and the Commission not factor in the Company's obligations under the RES or SES when considering compensation rates for energy delivered from CSGs. While we agree that the SES and CSG statutes are distinct, we note that the Company must always consider how to achieve the state's policy goals from a perspective that includes the cost effectiveness of the resource on behalf of our customers. As the RECs generated from Solar\*Rewards Community are eligible for application toward the Standards, considerations of cost effectiveness and customer rate impact are appropriate.

developing a true market price which minimizes customer impacts is in the overall best interest of both participating and non-participating customers. Competitive bidding is one useful tool to enable market pricing determinations.

Given that the Commission's currently approved rates were developed through an initial record that did not have sufficient time to develop a complete evidentiary record, the Commission should now take the opportunity to develop an appropriately fact driven analysis affording the opportunity to review sufficiently detailed *pro formas,* expert testimony, evidence of actual financial terms of projects in other states and other relevant information. Should the Commission again elect to provide a "placeholder" for any perceived deficiency during the pendency of the establishment of such a record, we suggest that the REC payment values be reduced to determine if market response actually slows.

# D. Procedure for Annual Rate Updates

The Commission's Order makes clear that the Company will file annual updates to its ARR tariff, reflecting its calculation of new bill credit rates for subscribed energy. The Order does not set forth a procedural schedule for such updates. The Company proposes to file its annual updates to the Standard and Enhanced bill credit rates on February 1 annually. This will allow the Company to calculate the rate, based on the Commission's approved formula with inputs from the prior year's January-December date range. The Company proposes that the rates would then be effective annually on April 1. We believe this timeframe would balance all parties' interests in certainty, efficiency, and in providing an opportunity for review.

In the absence of an approved procedural schedule for the current year, the Company proposes that the rates in the Company's March 2, 2015 ARR update filing become effective on April 1, 2015. In practice, this would mean any Solar\*Rewards Community applications which are deemed complete and have secured a reservation letter dated prior to April 1, 2015 and which opt for Enhanced rates would receive the currently approved REC pricing (\$.02 or \$.03/kWh) for the 25 year term of the contract. The remainder of the bill credit is calculated based on the rates approved at the time of generation, subject to annual updates.

We make our ARR update filing in tandem with this Reply in compliance with the Commission's Order. Absent any further guidance, we have updated the tariff to reflect an underlying "Standard Rate" using the Commission's ARR formula and made no adjustment to the currently approved REC prices.

# E. Other Rate Considerations

The Commission seeks comments addressing a range of additional topics, including the escalation of the bill credit rate in Solar\*Rewards Community. As there appears to be confusion among parties on this topic, we believe some clarifying detail may be helpful.

1. Applicable Retail Rate and Inflation

In its April 7, 2014 Order, the Commission defined the components of the ARR to be used in Solar\*Rewards Community. The ARR bill credit adjusts annually and directly reflects energy price increases on the NSP system. This approved rate mechanism naturally captures energy price increases throughout the 25-year contract period. In other words, under the ARR, inflation is already included in the rate and adding an escalation rate to the ARR would double count energy cost inflation. Adding an additional escalator onto the ARR is inappropriate given its approved rate design.

2. Value of Solar and Inflation

The VOS rate design is quite distinct from the ARR. Where a particular rate does not adjust over time and is instead fixed based upon the year of the CSG installation, such as under the VOS, it is appropriate to add an annual escalation rate to that initial fixed rate. The Department's VOS methodology calls for using the Urban Consumer Price Index (CPI) as identified by the U.S. Bureau of Labor Statistics as the measure of inflation.

In their October 1 comments, MnSEIA addressed a VOS escalator, and they proposed blending two escalation inputs together and establishing an escalation floor. The Company believes this escalation treatment is inconsistent with the Department's direction on the treatment of inflation in its VOS methodology and we do not support this method. SoCore Energy suggested an alternative treatment: to fix the illustrative values provided in the Company's June 19, 2014 Reply Comments as the actual VOS rates over time. The Company's illustrative VOS calculation relies on a long-term fixed escalation rate, and the Company does not oppose this suggestion.

The Department's June 19, 2014 Reply Comments signaled openness to establishing a fixed escalation rate. It wrote,

The VOS methodology directs utilities to use actual inflation data from the previous year in adjusting the VOS rate annually for inflation. However, the Department is open to the idea of establishing a set inflation adjustment rate for the purposes of adding rate certainty for CSGs. The Commission could set a fixed inflation adjustment rate for VOS rates used in

CSGs without reopening the VOS methodology used to calculate a VOS tariff in lieu of net metering. If the Commission does fix a VOS CSG inflation-adjustment rate, the Department recommends that the rate be the same as the general escalation rate used to calculate the VOS rate for CSGs.

The Company is indifferent as to whether a longer term fixed escalation rate or the CPI should be used to address inflation in the VOS.

3. Impact of Public Programs

In our October 1 comments, we highlighted the availability of nearly \$100 million in incentives available to PV system owners (including smaller CSG Operators) through the Solar\*Rewards and Made in Minnesota programs over five years. These programs provide incentives at a level ranging from \$.08 to \$.39 per kWh for qualifying solar production. We expect the number of CSGs which meet the incentive program thresholds (under 20 kW and under 40 kW, respectively) to be limited. At present, there are eight applications for small CSGs that are incented through the Made in Minnesota program, and zero CSG applications have been submitted for projects receiving the Solar\*Rewards incentive. These programs will make new funds available each year for the term designated by law, and the overall impact of the programs is unknown at this time.

Similarly, there are significant unknowns with respect to the impact of sunsetting the federal Investment Tax Credit (ITC) which provides tax benefits for qualifying solar projects. Some experts suggest that even if the ITC declines on its current schedule, there are other emerging finance tools available to solar developers which could mitigate the impact of the decline.<sup>5</sup>

4. Subscriber Expectations

We look forward to the final results of the customer survey sponsored by the Solar Interveners, and particularly its findings regarding a customer's expectations around the payback period for the costs of a CSG subscription.<sup>6</sup> We note that we have offered a successful first generation Solar\*Rewards program since 2010 where customers have chosen to participate with a simple payback period greater than 15 years.

<sup>&</sup>lt;sup>5</sup> See An Analysis of the Costs, Benefits, and Implications of Different Approaches to Capturing the Value of Renewable Energy Tax Incentives, Mark Bolinger, Lawrence Berkeley National Laboratory, May 2014.

<sup>&</sup>lt;sup>6</sup> See Comments of Fresh Energy, Environmental Law & Policy Center, Institute for Local Self-Reliance, and Izaak Walton League of America (Solar Interveners), October 1, 2014. Docket No. E002/M-13-867.

We believe that customers, particularly those interested in CSG, may be motivated by reasons outside of cost alone. We note that customers may choose to become subscribers to support the environmental benefits of the project, as the Solar Interveners' survey instrument highlights. We expect some customers will make decisions about solar participation based on non-economic factors, and we believe Solar\*Rewards Community is intended to serve such customers. Community solar developers should expect to attract certain customers with motivations that do not include short term financial returns.

5. Project Costs and Financing

Gains in technology and manufacturing have driven a declining price curve for installed PV, and most sources show the trend persisting. We appreciate the list of research sources highlighted in the Department's October 1 comments. We, too, have made note of these published materials and in particular the work of the federal SunShot initiative on declining soft costs, or non-hardware costs, in solar development. We noted an additional source of data on declining costs for solar in the Solar Resource Acquisition Docket.<sup>7</sup> We stated,

The countervailing trend in the solar generation market is continuing technology improvements that are bringing the cost of production lower and lower. Over time, the cost of solar generation is predicted to continue to decline. In fact one industry source predicts technology improvements over the next 5-8 years will more than compensate for the reduction in federal incentives.\* If that prediction turns out to be true, we can provide even greater value to our customers by delaying some portion of our solar resource acquisitions. \*Outlook for US Solar PV Capital Costs and Prices, 2014-2030 (Market Brief), October 7, 2014, IHS Energy.

Beyond acknowledging a generally declining set of costs, we do not comment on a number of the Commission's question prompts, as information about project financing for community solar for non-utility CSG Operators is outside the scope of the utility's experience.

6. Unsubscribed Energy

As we noted in our January 13, 2015 Supplement, there remains an open question about the intent of the Commission with respect to its approved bill credit rates for unsubscribed energy. The Company does not find support in the Commission's April 7, 2014 Order for a requirement that the Company pay to CSG Operators a

<sup>&</sup>lt;sup>7</sup> See Docket No. E002/M-14-162, *Petition for Approval of a Solar Portfolio to Meet Initial Solar Energy Standard Compliance*, Company's Petition, October 24, 2014, page 18.

\$.02/kWh or \$.03/kWh REC payment for unsubscribed energy production, where the CSG Operator has opted for the "Enhanced" rate option for its subscribed energy production. Currently, the tariff provides the CSG Operator the option to claim unsubscribed energy RECs within six months of production, which we believe is reasonable.

We note that when the Commission made its determination about crediting CSG Operators directly for energy produced but not allocated to a subscriber, it did so with consideration of the public's interest in seeing CSGs fully subscribed. Accordingly, it set the unsubscribed rates well below the rates for subscribed energy. If the Commission orders the Company to make REC payments to CSG Operators for unsubscribed energy, this will require an update to the Company's billing system which we expect to be able to complete prior to the first CSG achieving commercial operation.

7. "Differentiated Financial Adder"

Parties have advocated for incentives based on a variety of attributes of solar development throughout this Docket. We believe there are three key questions that should inform any consideration of additional incentives: 1) what policy objective is being served by a further incentive?; 2) what market data supports the need for a further incentive?; and 3) what is the impact of further incentives to non-participating customers?

The Company does not believe additional incentives are warranted at this time. As we previously noted, we believe the Legislature's standard for "reasonableness" does not include ensuring profitability for all competitors, for all subscribers, or at all costs.

If the Commission is today concerned that CSGs will not be reasonably created under a future VOS, it might wait to observe actual market experience under a VOS and then determine whether additional incentives driven by its stated policy objectives are warranted.

8. Budget

We believe that if the Commission is considering any further incentive, it should do so only in the context of a defined maximum budget. An unlimited incentive pool would be unreasonable and could cause customers to overpay based on current market conditions. An unlimited approach to further incentives would also send artificial price signals, further distort the market, and ultimately be destructive to a fast-growing industry eager to bring a resource to market at cost parity with other generation sources. For these reasons, we believe if the Commission orders the use of an additional incentive in Solar\*Rewards Community, prudence requires a maximum incentive budget be set forth.

### CONCLUSION

We appreciate the opportunity to address the current bill credit rate for use in CSGs, including the sufficiency of the record, the procedure for annually updating the rate, and to offer some ideas for Commission consideration regarding the rate and further incentives. We reiterate our fundamental position on the need to ground decisions related to the ratepayer-funded community solar credit on actual, observed market experience, to focus on achieving a market rate for this program, and to minimize the impact of program costs on non-participants.

Dated: March 2, 2015

Northern States Power Company

## **CERTIFICATE OF SERVICE**

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

- <u>xx</u> by depositing a true and correct copy thereof, properly enveloped with postage paid in the United States mail at Minneapolis, Minnesota
- $\underline{xx}$  electronic filing

## Docket No. E002/M-13-867

Dated this 2nd day of March 2015

/s/

Tiffany Hughes Records Analyst

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First Name	Last Name	Email	Company Name	Address	Delivery Method	View Trade Secret	Service List Name
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Doug	Shoemaker	dougs@mnRenewables.or g	MRES	2928 5th Ave S Minneapolis, MN 55408	Electronic Service	No	SPL_SL_13- 867_Community Solar Garden - Xcel
Eric	Swanson	eswanson@winthrop.com	Winthrop Weinstine	225 S 6th St Ste 3500 Capella Tower Minneapolis, MN 554024629	Electronic Service	No	SPL_SL_13- 867_Community Solar Garden - Xcel
Thomas P.	Sweeney III	tom.sweeney@easycleane nergy.com	Clean Energy Collective	P O Box 1828 Boulder, CO 80306-1828	Electronic Service	No	SPL_SL_13- 867_Community Solar Garden - Xcel
Pat	Treseler	pat.jcplaw@comcast.net	Paulson Law Office LTD	Suite 325 7301 Ohms Lane Edina, MN 55439	Electronic Service	No	SPL_SL_13- 867_Community Solar Garden - Xcel
Daniel	Williams	DanWilliams.mg@gmail.co m	Powerfully Green	11451 Oregon Avenue N Champlin, MN 55316	Electronic Service	No	SPL_SL_13- 867_Community Solar Garden - Xcel