

**STATE OF MINNESOTA
PUBLIC UTILITIES COMMISSION**

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

May 18, 2015

**In the Matter of the Petition of Northern States
Power Company, dba Xcel Energy, for Approval of
its Proposed Community Solar Garden Program**

Docket No. E002/M-13-867

**COMMENTS IN RESPONSE TO THE COMMISSION'S MAY 1, 2015 NOTICE BY
FRESH ENERGY, ENVIRONMENTAL LAW & POLICY CENTER AND INSTITUTE FOR LOCAL SELF-RELIANCE**

Fresh Energy, Environmental Law & Policy Center and Institute for Local Self-Reliance submit these Comments in response to the Commission's May 1, 2015 Notice Seeking Comments. We appreciate the Commission's decision to take up the items in this docket at its June 25, 2015 meeting. With a diminishing amount of time before the federal Investment Tax Credit (ITC) step-down at the end of 2016, it is important for the Commission to clearly set the Solar*Rewards Community (S*RC) program rules and limit uncertainty as much as possible. Transparent program rules are especially important for projects that have been in development for months, have complete or near complete applications and are facing the 24 month completion deadline under Xcel Energy's (Xcel or the Company) Section 9 tariff.

While there is urgency to create certainty around pending issues in the docket and move existing applications through the interconnection process according to tariff schedules, many of the 'significant policy issues' raised by Xcel in its February 10, 2015 Comments and April 28, 2015 Supplemental Comments that spurred the Company's decision to abruptly change the S*RC program administration are overblown and do not require the extraordinary measures Xcel has proposed. Still, as we have repeatedly stated in our comments, the S*RC program is a new and innovative program that will be improved as we all learn from its implementation and make adjustments accordingly. To that end, we propose a number of program modifications for new projects that we feel strike a reasonable middle-ground for the issues raised in the docket.

I. Summary of Middle Ground Recommendations

For the reasons described herein, drastic program changes and/or retroactive changes based on Xcel's unilateral action are not needed and would be damaging to the program and the State. We offer the following set of recommendations in the spirit of compromise in an attempt to find a middle ground where

the Commission can make changes to the program to address concerns raised so far in the docket while making sure that the program continues to function.

- **Interconnection:** We recommend that the Commission evaluate an interconnection target goal based on Department of Commerce analysis of how many existing applications could reasonably and realistically complete Step 10 of the Section 10 tariff process for interconnection by December 31, 2015.¹
- **Co-Location:** If the Commission wishes to limit the size of cumulative co-located projects in the program, we recommend that the Commission find that the Section 10 Tariff's 10MW limit apply to co-located S*RC applications. We recommend this co-location limit apply for S*RC applications deemed complete 60 business days after the Commission's updated Order.
- **Bill Credit:** We recommend the Commission set the following subscription bill credit rate structure for applications deemed complete 60 business days after the Commission's updated Order:
 - **For new solar gardens cumulatively less than or equal to 1 MW at a given site:** maintain the current Applicable Retail Rate (ARR) and REC prices as defined in the Commission's April 7, 2014 Order. As no material concerns have been raised regarding non-co-located 1MW gardens, we do not believe a bill credit adjustment for those projects is necessary.
 - **For new solar gardens cumulatively over 1 MW at a given site:** set the bill credit at Xcel's calculated Value of Solar (VOS) rate, with a financing adder for residential and small business subscribers. We recommend that the residential/small business adder be set to preserve the difference in customer class bill credits under the current ARR plus large project REC price. That difference is \$0.02829 per kWh for residential customers and \$0.02517 per kWh for small business customers.²

We describe these recommendations and provide our analysis in the sections below.

II. Xcel's Rationale for Retroactive Program Changes is Flawed

a. *Xcel's Retroactive S*RC Changes Would Set A Harmful Precedent for Minnesota Public Policy*

Our recommendations apply to new applications and not retroactively to projects already in the approval process. Retroactive changes to established program rules or rates would constitute a drastic step undermining this program and creating damaging precedent for Minnesota. On top of the direct impacts to the S*RC program, retroactive changes based on unilateral action by Xcel would send the signal that

¹ Of course even with an interconnection target, Xcel should be expected to meet all Section 9 and Section 10 timing requirements.

² We use "small business customers" to refer to small general service customers.

Minnesota is not a stable regulatory environment. As non-financially interested public interest organizations, we agree with the Clean Energy Organizations' thorough explanation of this point.³ Moreover, beyond the general harm of retroactive changes, retroactive changes aren't necessary in this program as the concerns raised by Xcel to justify such action are overblown and oversimplified.

b. Xcel Relies on Unrealistic Assumptions for Ultimate Project Completions

First, out of the large number of applications filed in the program to date⁴ it is still very uncertain as to how many will result in actual constructed projects. Filing an application and submitting deposits is only one piece of the puzzle to reach construction:

That assumption [that all applications will be built] is unrealistic considering that, to be successful, each of the applied for projects will need 1) financing, 2) enough customer load in adjacent counties to off-take bill credits, 3) interconnection with affordable upgrades, 4) capital for fees, and 5) sufficient customers agreeing to subscribe.⁵

c. The Lack of Distribution System Information Has Led to More Applications

In the absence of any transparency into Xcel's distribution system, it is very likely that many developers applied for projects with capacity greater than can be technically interconnected without expensive upgrades that make the additional project capacity uneconomic.⁶ This interconnection constraint serves as a natural limiting factor as to how many projects can ultimately be built. For example, if a developer applies to put two 1MW gardens at the same interconnection point and, because of distribution system constraints at that part of the grid interconnecting the second garden would require expensive upgrades, the developer would likely only proceed with the single garden. However, since the developer doesn't have system information to know this upfront, there is an additional 1MW garden application that won't ultimately be constructed.

Moreover, since there is no public interconnection queue, there is a real possibility that multiple developers have filed applications at the same interconnection point. Indeed, there is information in the record suggesting that there are multiple projects in various interconnection queues within the initial cohort of applications.⁷ Continuing the example, if three developers all file applications for two 1MW

³ May 18, 2015 Comments at 2-3.

⁴ We anticipate that the number of applications submitted by the Commission's June hearing could be higher than the latest reported 560MWs. If this is true, a significant driver of an increase – in addition to the factors noted here – is Xcel's April 28, 2015 Supplemental Comments, which created immediate uncertainty for nascent projects so that many likely rushed their applications.

⁵ See our April 30, 2015 Reply Comments & February 24, 2015 Reply Comments.

⁶ Developers bear the costs for any upgrades required to interconnect their projects.

⁷ See Staff Briefing Papers – Part A, January 15, 2015.

gardens at this same point, but only 1MW can be interconnected without requiring unaffordable upgrades, only 1MW out of 6MWs of applications would be constructed.⁸

*d. Xcel's Rate Impact Analysis Assumes all S*RC applications will be Built – An Unreasonable Assumption*

We strongly disagree with Xcel's overstated and unsupported cost projections in the Company's rate impact analysis.⁹ First, Xcel's rate impact analysis assumes that 100% of applications will be constructed, which is an unrealistic assumption for the reasons above. Second, Xcel's analysis ignores the benefits of distributed clean energy¹⁰, assigning an avoided-cost value to S*RC projects' energy – the same rate for which fossil fuel projects are also eligible. Further, comparisons to existing rates will not capture the economic development benefits to the State from the program or the benefits from the distribution system upgrades expected as a result of community solar projects. These distribution system updates will be funded by developers, yet will benefit the whole utility system and all utility ratepayers.

III. Interconnection

The success of the S*RC program hinges on clear interconnection requirements and transparency. Xcel's S*RC program has been accepting applications for five months. It appears from information requests in this docket that Xcel is requiring additional data for interconnection beyond what is enumerated in the Company's Section 10 tariff.¹¹ It is understandable that Xcel, now processing the first significant amounts of distributed solar in Minnesota, may need to adjust the data requirements. However, with the ITC step-down approaching at the end of 2016, solar developers are not in the position to challenge Xcel's requirements, nor is there adequate time for stakeholders to evaluate the right interconnection steps to incorporate any new data needs.

In lieu of a lengthy investigation into Xcel's compliance with the Company's Section 10 tariff, we are interested in the Office of the Attorney General's (OAG) suggestion of a minimum interconnection target goal for Xcel to process S*RC interconnection applications.¹² We support the OAG's recommendation in concept as a tool to motivate Xcel to process S*RC applications in a timely manner while the Company continues to pursue S*RC program changes in the regulatory arena. Of course, even if a target is put in place, Xcel should be expected to adhere to all Section 9 and Section 10 timing requirements.

⁸ This example assumes Xcel meets Section 10 timelines. As pointed out by MnSEIA's 4-28-15 Reply Comments, if there are any significant interconnection delays, there is a good chance that economically interconnected projects may not be constructed at all if they get pushed past the ITC step-down at the end of 2016.

⁹ See e.g., Xcel February 10, 2015 Comments.

¹⁰ We commented in more detail regarding Xcel's cost projections in February 24, 2015 Comments, noting the various benefits of distributed solar energy established in the State's Value of Solar Methodology.

¹¹ See Xcel's response to Department of Commerce IR 25.

¹² See OAG-RUD April 30, 2015 Reply Comments at 23-25.

However, the key to making an interconnection target work is to develop a reasonable number of MWs in the target based on an analysis of the current set of S*RC applications, where they are in the Section 10 tariff process and a reasonable amount that could complete Step 10 of the Section 10 tariff Process for Interconnection. The Department of Commerce (Department) is in the best position to develop an interconnection target goal number of MWs with the Department's technical expertise and access to trade secret information on the current status of all S*RC applications. It is our understanding that such an analysis by the Department is feasible by the Commission's June 25, 2015 meeting. We ask the Department to evaluate the current status of S*RC projects in the Section 10 tariff process and develop a recommended minimum interconnection target for the Commission to consider.

We continue to recommend the interconnection reporting and other suggestions from our and other party's previous comments, as described in our April 30, 2015 Reply Comments¹³, and as outlined in the Interstate Renewable Energy Council's (IREC) May 18, 2015 Comments. However, an interconnection target goal seems to be the most effective Commission action to address the growing concerns that – at the current interconnection pace – few community solar gardens if any will be operating by the end of 2015.

IV. Co-Location

A few, large co-located projects have grabbed media attention, but the majority of co-located projects are well within what would commonly be considered “distributed generation”.¹⁴ With the lack of public information on available distribution grid capacity by substation and the lack of a transparent interconnection queue, we believe that many developers have submitted more applications than they can realistically build to ensure some projects can be completed. Nevertheless, we agree that differences in economies of scale mean that, for the foreseeable future of the program, large co-located community solar projects should not be eligible for the same rates as smaller gardens (see bill credit recommendations). Therefore, we understand that the Commission may seek to limit the size of co-located gardens that are eligible for tariffed rates moving forward.

S*RC applications are filed under Xcel's Section 9 tariff. Once the applications are deemed complete as defined by the Section 9 tariff, S*RC projects enter the Section 10 interconnection queue. The transition timing between the Section 9 and Section 10 tariffs was the focus of the Commission's February 13, 2015 Order *Clarifying Solar-Garden Application Process*. However, the Section 10 tariff does not detail how different S*RC project applications filed independently in Section 9 that are part of a larger, co-located project will be studied in Section 10. If the Commission desires to limit the size of co-located gardens, we recommend that the Commission find that that co-located gardens are subject to the same

¹³ At 4-5.

¹⁴ See Xcel's January 13, 2015 Supplemental Comments at 4.

rules as one project within the Section 10 tariff, and that the Section 10 tariff's 10 MW limit apply to new co-located S*RC applications deemed complete after 60 days of the Commission's new Order in this docket.

We note that Xcel has proposed how it will determine whether a set of projects are considered co-located in its response to the OAG's information request number 121. If the Commission adopts a co-location limit, it should not allow Xcel to use the "totality of the circumstance" approach it proposes. This approach allows Xcel almost universal discretion to determine if a set of projects should qualify as co-located. A lack of parameters guiding a definition of co-location will inevitably lead to arbitrary determinations and disputes.

V. Bill Credits

We continue to support the Commission moving S*RC bill credits to a Value of Solar (VOS)-based rate with limited adders in the form of capacity step-downs targeted at particular policy outcomes. While we continue to believe a targeted rate structure is a viable option for the Commission to consider, we recognize that such a structure is complex and parties would likely need more time and consideration to develop a targeted rate structure for the Commission to consider.¹⁵

Therefore, we offer a simpler, middle-ground bill credit modification that can be implemented now. We recommend that the Commission change the bill credit for new projects co-locating multiple 1MW gardens to a VOS-based rate for General Service customers. Under our proposal the rate for these customers subscribing to new gardens would be \$0.1075 in year 1, as compared to the existing the year 1 bill credit for these subscribers of \$0.11914.¹⁶ It would also change the economics throughout the 25-year contract as the VOS rate is adjusted at a modest inflation rate, while the ARR tracks Xcel's rate increases over 25 years.

Under our proposal residential and small business customers subscribing to new co-located projects would also receive a VOS-based rate, but we recommend a financial adder that would preserve the rate differentials between customer classes under the ARR plus large project REC structure. Structuring the adder this way preserves an incentive for developers to seek residential and small business subscribers and helps cover the additional customer acquisition cost, while creating a lower rate for those customers in co-located gardens, reflecting the economies of scale. Our recommendation yields an adder of \$0.02829 for residential customers and \$0.02517 for small business customers.¹⁷

¹⁵ We are also open to considering other parties' proposals if they are transparent and prospective.

¹⁶ See Xcel Section 9 Tariff, 1st Revised Sheet No. 64.

¹⁷ *Id.*

It is not in dispute that attracting residential and small business customers is a goal of this program. Similarly, our recommendation would leave the bill credit for non-co-located gardens under the current structure for simplicity and because the concerns raised in Xcel's February 10, 2015 Comments and April 28, 2015 Supplemental Comments were not related to non-co-located gardens.

Our bill credit recommendation is a reasonable future program modification that addresses the main concern raised by Xcel and others: namely, the economics of multiple co-located 1MW gardens and large customer subscribers. Moreover, by using a VOS-based rate, any non-participant impacts from residential and small business customer adders are explicit and transparent. For general service customers receiving the VOS rate, no general ratepayer harm exists because the VOS rate by design quantifies the benefits solar provides and eliminates cross-subsidization concerns. This is further described in the Commission-approved VOS methodology when describing the similar net energy metering and VOS rate relationship:

While NEM [net energy metering] effectively values PV-generated electricity at the consumer retail rate, a VOS tariff seeks to quantify the value of distributed PV electricity. If the VOS is set correctly, it will account for the real value of the PV-generated electricity, and the utility and its ratepayer would be indifferent to whether the electricity is supplied from customer-owned PV or from comparable conventional means. Thus, a VOS tariff eliminates the NEM cross-subsidization concerns.¹⁸

We recommend that the Commission order this bill credit change for new projects to be effective for any application deemed complete 60 business days after the Commission's new Order. This proposed bill credit and timing will provide certainty while providing projects with pending applications that were developed and submitted under current rules a sufficient buffer for the completeness determination. We think this amount of time is fair considering the amount of applications submitted in December 2014 that still have not received a completeness determination and because Xcel appears to have added project applications requirements beyond the completeness requirements listed in the Section 9 tariff, adding to the timelines for completeness determinations¹⁹

¹⁸ At 1.

¹⁹ Department of Commerce 4-30-15 Reply Comments at 5-7.

VI. Recommendations

Fresh Energy, Environmental Law & Policy Center and Institute for Local Self-Reliance recommend that the Commission:

1. If the Commission wishes to limit the size of cumulative co-located projects in the program, we recommend that the Commission find that Section 10 Tariff's 10MW limit applies to co-located S*RC applications as they interconnect through the Section 10 tariff. We recommend this co-location limit apply for S*RC applications deemed complete 60 days after the Commission's updated Order.
2. Evaluate an interconnection target for Xcel to reach by December 31, 2015, based on Department of Commerce analysis of the current interconnection status of applications and how many could reasonably complete Step 10 of the Section 10 tariff process for interconnection. In addition, require more frequent and thorough interconnection reporting to enable the Commission and stakeholders to track Xcel's progress meeting Section 10 timing requirements as detailed in our previous Comments, including April 30, 2015 Reply Comments (at 4-5) and IREC's May 18, 2015 Comments.
3. Modify the subscriber bill credit rates for S*RC applications deemed complete after 60 days of the Commission's Order as follows:
 - a. For applications solar gardens cumulatively less than or equal to 1 MW at a given site: maintain the current Applicable Retail Rate (ARR) and REC prices as defined in the Commission's September 17, 2014 Order.
 - b. For new solar gardens cumulatively over 1 MW at a given site: set the bill credit at Xcel's calculated Value of Solar (VOS) rate, with the following financing adders:
 - i. \$0.02829 per kWh residential customer financing adder, and
 - ii. \$0.02517 per kWh small general service customer financing adder.

/s/ Holly Lahd

Holly Lahd
Director of Electricity Markets
Fresh Energy
408 St. Peter Street, Suite 220
St. Paul, MN 55102
(651) 726-7141
lahd@fresh-energy.org

/s/ Allen Gleckner

Allen Gleckner
Senior Policy Associate
Fresh Energy
408 St. Peter Street, Suite 220
St. Paul, MN 55102
(651) 726-7570
gleckner@fresh-energy.org

/s/ Bradley Klein

Bradley Klein
Senior Attorney
Environmental Law & Policy Center
35 E Wacker Drive, suite 1600
Chicago, IL 60601
(312) 795-3746
bklein@elpc.org

/s/ John Farrell

John Farrell
Institute for Local Self Reliance
jfarrell@ilsr.org