

**STATE OF MINNESOTA
PUBLIC UTILITIES COMMISSION**

Beverly Jones Heydinger	Chair
John Tuma	Commissioner
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Daniel Lipschultz	Commissioner
Matt Schuerger	Commissioner

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

MINNESOTA SOLAR ENERGY INDUSTRY ASSOCIATION'S COMMENTS ON XCEL ENERGY'S CSG PROGRAM

April 1, 2016

Docket No. E-002/M-13-867

**COMMENTS OF THE MINNESOTA
SOLAR ENERGY INDUSTRY ASSOCIATION**

I. BACKGROUND

On September 17, 2014, the Minnesota Public Utilities Commission (the "Commission") published an Order allowing for colocated Community Solar Gardens (CSG).¹ The Commission also determined that the Applicable Retail Rate (ARR) was the better rate choice than the Value of Solar (VOS) rate for the program launch.²

On January 22, 2015, Xcel Energy ("Xcel") published a letter in this docket outlining their concerns over the number of applications received, and the impact that colocated gardens were having on the interconnection queue.³

¹ ORDER APPROVING SOLAR GARDEN PLAN WITH MODIFICATIONS, MINNESOTA PUBLIC UTILITIES COMMISSION, Docket No. E-002/M-13-867 Doc. ID. 20149-103114-01 at 15 (Sept. 17, 2014).

² *Id.*

³ LETTER -COMMUNITY SOLAR GARDENS, XCEL ENERGY, Docket No. E-002/M-13-867 Doc. ID. 20151-106519-01 (Jan. 22, 2015).

On April 28, 2015, Xcel Energy filed Reply Comments and a Notice that they would stop processing gardens that it felt the statute does not authorize.⁴

Over the next several weeks various stakeholders met to hold “settlement” discussions. After the discussions a partial settlement agreement was drafted between some solar developers and Xcel Energy to address the more pertinent issues. The partial settlement agreement was designed to reduce the amount of colocated gardens for a one-year period.⁵

On August 6, 2015, the Commission published an Order that approved and modified the partial settlement agreement.⁶

On November 16, 2015, the Commission published an Order that denied a contested case hearing for several of the issues not touched upon in the partial settlement agreement, including whether the ARR or VOS should be modified, whether a transition should occur from the ARR to the VOS, and to what extent the Commission should encourage low-income, residential and minority participation in the CSG program. The Commission set a date of April 1, 2016 to provide commentary on those issues.⁷

On February 26, 2015, the Commission’s Executive Secretary, Daniel Wolf, published a Notice of Comment Period that requested feedback on the issues listed in the November 16, 2015 Order, as well as, additional feedback on whether co-location over 1MW should be permitted after September 15, 2016.⁸

⁴ SUPPLEMENTAL COMMENTS AND NOTICE, XCEL ENERGY, Docket No. E-002/M-13-867 Doc. ID. 20154-109756-01 at 3 (Apr. 28, 2015).

⁵ *See* CSG SETTLEMENT AGREEMENT, XCEL ENERGY, Docket No. E-002/M-13-867 Doc. ID. 20156-111673-01 at 2 (Jun. 22, 2015) (stating “Starting for one year on September 25, 2015, applications will be accepted only for 1 MW gardens on an aggregated or co-located basis.”).

⁶ ORDER ADOPTING PARTIAL SETTLEMENT AGREEMENT AS MODIFIED, MINNESOTA PUBLIC UTILITIES COMMISSION, Docket No. E-002/M-13-867 Doc. ID. 20158-113077-01 (Aug. 8, 2015).

⁷ ORDER DENYING PETITION FOR CONTESTED CASE AND ESTABLISHING PROCEDURES FOR FURTHER COMMENTS, MINNESOTA PUBLIC UTILITIES COMMISSION, Docket No. E-002/M-13-867 Doc. ID. 201511-115725-01 at 4-5 (Nov. 16, 2015).

⁸ NOTICE OF COMMENT PERIOD, MINNEOTA PUBLIC UTILITIES COMMISSION, Docket No. E-002/M-13-867 Doc. ID. 20163-119029-01 (Mar. 10 2015).

COMMENTS

We, the Minnesota Solar Energy Industries Association (MnSEIA), are happy to have an opportunity to comment on the aforementioned issues, and we appreciate the Commission's willingness to hear our opinions.

The three components of 1) rate, 2) colocation, and 3) subscriber make-up are challenging elements to balance, but today we provide our opinions on the best approach to doing so. While we discuss how to best manipulate various rates, we primarily suggest moving to the VOS.

i. Discussion Of The Applicable Retail Rate

1) The Applicable Retail Rate At Its Current Price And Renewable Energy Certificate Amounts Does Not Allow for the Creation, Financing and Accessibility of Community Solar Gardens when Colocation is only permitted at 1MW, as Opposed to Colocation at 5MW.

We contend that the ARR requires no additional modification, except that the colocation limit should be returned to 5MW. The program was progressing at a reasonable pace after the settlement agreement was adopted, but the number of garden applications effectively halted once the colocation limit was set at 1MW.⁹ Given the current enhanced ARR, the 1MW colocation cap has been a practical moratorium on program applications.

The number of applications dropped from 651 in September to 3 in October.¹⁰ We have yet to see a significant resurgence in application amounts. Only 18 gardens have been applied for in the last six months.¹¹

Historically, over 50% of the applications applied for are withdrawn.¹² That number is likely to increase as some projects nearing construction get back unfinanceable final-cost estimates, hit material upgrade limits, etc. We can approximate that only 9 of those projects will actually be

⁹ See Table 1. Timing of Application Submissions, MONTHLY PROGRAM APPLICATION STATUS COMPLIANCE, XCEL ENERGY, Docket No. E-002/M-13-867 Doc. ID. 20163-119022-01 at 2 (Mar. 9, 2016).

¹⁰ *Id.*

¹¹ *Id.*

¹² See Table 2. Active Applications, MONTHLY PROGRAM APPLICATION STATUS COMPLIANCE, XCEL ENERGY, Docket No. E-002/M-13-867 Doc. ID. 20163-119022-01 at 2 (Mar. 9, 2016).

completed. This demonstrates that the ARR with a 1MW colocation cap is insufficient to create, finance or make CSGs accessible at a level required by Minn. Stat. § 216B.1641.¹³

Fortunately, the fix is relatively easy. If the Commission seeks to continue the CSG program under the ARR, then the Colocation limit should be increased. Because of the higher volume of applications filed between when the settlement agreement was Ordered into law and the September 25, 2015 filing date, we already know that expanding the colocation amount will yield successful programmatic results.

But increasing the rate should work as well.

When this docket first opened we, in conjunction with several of our members, posited that based on our early models the conservative minimum needed to create and finance CSGs was \$.15/kWh.¹⁴ At that time all of our members' modeling assumed high rates of residential subscribers – so there would be a lot of additional management costs – and we failed to incorporate the concept of colocation – which provides better economies of scale.

After our initial filings, the program shifted. Colocating gardens became an expressly available option, and developers created new CSG models that sought to limit their sales, managerial, and transactional costs by retaining several large, corporate subscribers.¹⁵ With those modifications and evolutions in design, the conservative minimum required to finance some forms of CSGs dropped. We believe the amount is still \$.15/kWh for a 1MW non-located garden with high rates of residential subscribers.¹⁶

¹³ See Minn. Stat. § 216B.1641(e)1 (stating “(e) The commission may approve, disapprove, or modify a community solar garden program. Any plan approved by the commission must: (1) reasonably allow for the creation, financing, and accessibility of community solar gardens.”).

¹⁴ See COMMENTS, MINNESOTA SOLAR ENERGY INDUSTRIES ASSOCIATION, Docket No. E-002/M-13-867 Doc. ID. 201410-103498-01 at 5 (Oct. 1, 2014) (articulating “Clearly, \$.15/kWh will allow out of state solar companies to build in-state CSGs, but more importantly, it will also ensure that some of the CSG program’s economic benefit will stay in Minnesota.”).

¹⁵ ORDER APPROVING SOLAR GARDEN PLAN WITH MODIFICATIONS, MINNESOTA PUBLIC UTILITIES COMMISSION, Docket No. E-002/M-13-867 Doc. ID. 20149-103114-01 at 15 (Sept. 17, 2014).

¹⁶ This is part of why we have not seen many applications filed after September 25, 2015.

Colocation increases garden application amounts, because it is a cost saving measure that allows developers to capture economies of scale and share distribution infrastructure.¹⁷ This in turn provides them with the rate of return necessary to finance the projects. A rate increase would have a similar effect. If the Commission wants to retain a 1MW colocation cap and also follow its legislative mandates, then raising the rate would work too.

2) The Basis For Increasing the Colocation Cap Is There Has Never Been A Permanent Limit On Colocation And It Is Unclear What Happens After September 15, 2016.

The basis for increasing colocation from 1MW to 5MW is that colocation has always been permitted. In fact it appears that if the Commission does not make a determination about colocation shortly, then the program will revert back to permitting co-location *ad-infinitum*.¹⁸ The Commission has never expressly ruled on what happens to the colocation cap after September 15, 2016.

The only Orders that have gone to colocation directly was the 2014 Order, which did not limit colocation, and some dictum from the Commission’s 2015 Order that articulates “The Commission agrees that large groups of co-located 1 MW solar gardens are inconsistent with the statute’s clear community-focused purpose.”¹⁹

The settlement agreement also did not state that colocation is not permitted by statute, but only that “Xcel Energy has indicated it believes such co-location is not consistent with the plain language of Minn. Stat. § 216B.1641(b) or legislative intent.”²⁰ In many ways, the settlement

¹⁷ See ORDER APPROVING SOLAR GARDEN PLAN WITH MODIFICATIONS, MINNESOTA PUBLIC UTILITIES COMMISSION, Docket No. E-002/M-13-867 Doc. ID. 20149-103114-01 at 14 (Sept. 17, 2014).

¹⁸ See ORDER ADOPTING PARTIAL SETTLEMENT AGREEMENT AS MODIFIED, MINNESOTA PUBLIC UTILITIES COMMISSION, Docket No. E-002/M-13-867 Doc. ID. 20158-113077-01 (Aug. 8, 2015); See also CSG SETTLEMENT AGREEMENT, XCEL ENERGY, Docket No. E-002/M-13-867 Doc. ID. 20156-111673-01 at 2 (Jun. 22, 2015)

¹⁹ ORDER ADOPTING PARTIAL SETTLEMENT AGREEMENT AS MODIFIED, MINNESOTA PUBLIC UTILITIES COMMISSION, Docket No. E-002/M-13-867 Doc. ID. 20158-113077-01 at 13 (Aug. 8, 2015).

²⁰ CSG SETTLEMENT AGREEMENT, XCEL ENERGY, Docket No. E-002/M-13-867 Doc. ID. 20156-111673-01 at 1 (Jun. 22, 2015)

agreement was really a way to temporarily slow the influx of CSG applications for a limited duration of time.

Even today colocation is still permitted. The current program allows colocation up to 1MW in size. So two 500kW systems could be colocated next to each other.

Colocation in some manner has been permitted since the September 2014 Order. The only distinction throughout the last year and a half has been how many kW can be colocated together. So the ultimate question of “how much co-location is too much?” has never been answered. But it is clear that Xcel, the Commission and some developers believe that some policy limitation on CSG colocation is a necessary program attribute.

Now with all of this stated, we do not mean to imply that colocation is a necessary factor in the CSG program, because rates and colocation are inextricably linked. So if the Commission wants to avoid increasing the colocation limit, the rate could be further raised to encourage CSG deployment. We are interested in ensuring the CSG program is sustainable and successful and we believe either adjustment will accomplish those goals.

3) Renewable Energy Certification Prices Should Remain The Same.

Consistent with the conversation around rates is the issue of Renewable Energy Certificate (REC) prices. The Commission should also retain the same REC pricing. Dropping the REC pricing further exacerbates the problem of insufficient financing under the ARR and would necessitate other rate increases or an extension of the colocation limit.

For developers, having a strong financial model is more important than having colocation. This is important, because developers all need predictable rates. Allowing colocation cuts costs, but without a sturdy rate and well-priced RECs, cutting costs can only get the program so far.

So we would caution the Commission against making any changes that may lower the financeability of gardens to levels not yet experienced through the duration of this program. Specifically, the Commission should avoid reducing any REC prices.

ii. Discussion On The Value Of Solar

1) We support switching from the Applicable Retail Rate to the Value of Solar

- a. Because the statute requires an eventual transition to VOS, Now is as good a time as any to switch rates.**

The primary reason we suggest moving to the VOS is that rate appears to be the Legislature’s intention for this program, and now is as good as any time to transition.

Minn. Stat. § 216B.1641 (the “CSG Statute”) articulates that “The purchase shall be at the rate calculated under section 216B.164, subdivision 10, or, until that rate for the public utility has been approved by the commission, the applicable retail rate.”²¹ Minn. Stat. § 216B.164, subdivision 10 is the VOS. The above language suggests that the rate must be the VOS once the Commission approves it, and the Commission approved the VOS in 2014.

But the CSG Statute also requires that “Any plan approved by the commission must: (1) reasonably allow for the creation, financing, and accessibility of community solar gardens;”²² so there is a competing interest between the statutory requirement to transition to the VOS after it is approved and making sure the program works.

Up until this point this Commission has made the program viable through retaining the ARR as it is currently. After all, the ARR seems to work, so there doesn’t seem to be much value in moving from one rate to another.

But as stated above, the ARR *as is* only works at the level the Legislature intended, if colocation over 1MW is allowed, which it currently is not.

So some form of reconfiguring the rate, subscriber base, or colocation allowances will have to occur. We believe now is the time for the Commission to make the statutorily required transition to the VOS and ensure the program is successful. The transition to VOS, however, must include an additional program adjustment, like it would if the program stayed under the ARR.

b. The VOS rate structure is better for Financiers, Subscribers, Developers and Ratepayers

Financiers prefer the VOS rate structure, because it is more transparent than the ARR. It has a fixed escalator, which provides more certainty. The ARR could conceivably go down, and this possibility is a deterrent to some investors.

Subscribers will benefit from the transition to VOS because the fixed escalator’s predictability allows for more financing options to more people. For instance, currently financiers are comfortable with providing people “pay-as-you-go models” for individuals with high credit scores. But if there was more rate certainty, this model would be easier to extend to people with lower FICO scores, thereby increasing low income subscribership rates. Thanks to its fixed escalator, the VOS rate structure also allows for shorter contracts, further lowering customer risk and contractual obligations and making subscriptions more accessible to a wider range of subscribers.

Developers benefit from a transition to VOS, simply because their financiers and their subscribers benefit. And anything that makes those two groups happy automatically makes developers happy.

²¹ Minn. Stat. § 216B.1641, subd. (d).

²² *Id.* at subd. (e)1.

But a transition to VOS also helps ratepayers. The VOS was designed to illustrate the effect that solar has on the grid. If calculated correctly it appropriately captures most of the ratepayer harm, because the ratepayer will benefit from a stack of quantifiable avoided costs.

2) Adder Discussion

a. A General Adder is Necessary

Currently, the VOS is designed to incorporate the true value of solar energy's costs and benefits. It seems at this time that utility-scale projects could likely proceed at an unadjusted VOS rate. But CSGs are different than utility-scale projects, because they have additional costs, like more fencing, subscriber management and transactional costs, etc. So inherently the VOS will likely remain too low to finance projects on its own, unless technology continues to drive down solar's costs.

Furthermore, there is a stark difference between the current ARR's first year "Enhanced – Solar Gardens ≤ 250 KW (AC)" rate of \$.15596/kWh and the VOS's general rate of \$.0995/kWh. Of the ARR's nine different rate tiers, only the general service rate of \$.0974/kWh is lower than the VOS, and they are nearly equal in price. Since the ARR currently isn't providing the necessary financeability under a 1MW colocation cap, the same or a lower VOS will similarly be unable to create projects.

A general financial adder - or at least a colocation cap increase to 5MW - is necessary to make the VOS a viable rate.

b. A Residential Subscriber Adder is Also Appropriate

We also suggest that the adder have a "tiered" element similar to the ARR's structure, or at least a specific adder for Residential projects. The VOS is one, flat rate, whereas the ARR is a nine rate system. The ARR provides more financing to residential projects and it incentivizes their creation. The VOS, on the other hand, would encourage developers to create CSGs with few, if any, residential subscribers, because the rate of return is maximized if subscribership is low.

We believe the public interest is best served by ensuring various subscriber types are able to engage with the program, and a tiered system or a residential specific adder could accomplish that. Going with a single tiered VOS would push Minnesota in the opposite direction. We would have a single subscriber class, and it would be more difficult for residents to access CSGs.

When we first postulated a VOS adder in 2014, we suggested a rate increase.²³ But since that time, it is clear that colocation is another incentive available for developers. A "residential" adder could

²³ See COMMENTS, MINNESOTA SOLAR ENERGY INDUSTRIES ASSOCIATION, Docket No. E-002/M-13-867 Doc. ID. 201410-103498-01 at 5 (Oct. 1, 2014).

come in the form of increased colocation amounts. The Commission could include in the adder a residential subscriber threshold. The threshold would be a way to ensure that the gardens include some number of residential subscribers. If that threshold is met, then the developer is allowed to colocate additional 1MW gardens together.²⁴

The system could also include a series of percentage based thresholds, each allowing additional MW of colocated gardens. For instance, maybe a developer is allowed to colocate an additional 1MW for every 20% of their garden that is filled with residential subscribers. Some form of residential financial or colocation bonus would ensure that all community sectors are being incorporated into the CSG program.

c. If the Commission Wants to Incentivize Rooftop CSGs, then a Rooftop Adder is Necessary.

The one issue to consider with applying a colocation bonus for residential customers is it does not incentivize CSGs located on residential or commercial rooftops. Colocation doesn't help a developer who has no additional space to colocate on. Thus, if the Commission wants to incentivize Rooftop CSGs, we would recommend some form of direct financial assistance for these types of programs, because they are significantly more expensive to build.

d. If the Commission Wants to Incentivize CSGs Located Near Subscribers then Community Solar Array Adder is Necessary.

We believe that it would be in everyone's interest to encourage solar gardens to be built in or nearby the communities they serve. These gardens would have higher site acquisition costs and would likely be smaller, more expensive, projects, so a financial adder for locating in or near the subscriber base is necessary. Some limitations could be placed on such an incentive to encourage these developments. For instance, it could be that 90% of the subscribers must all be within 10 miles of the CSG site for it to qualify for this additional incentive, and it can be no bigger than 250kW.

iii. Other Approaches To Increasing Low Income, Residential And Minority Subscribers

We endorse the Joint Commenters' proposal regarding low-and-moderate-income (LMI) participants and have signed on to their comments. Fresh Energy has worked with several LMI subscriber organizations on addressing these issues around CSG access. The group invited us to participate in their process, and we feel they did a great job handling a complex array of issues.

²⁴ We contend that the Commission has the authority to implement an adder of this nature because of Minn. Stat. 216B.1641's requirements to transition to the VOS and to implement a program creates CSGs makes them financeable and allows communities to access them.

The Joint Commenters' suggestions will further allow our developer members to pursue effective pay-as-you-go models, as well as, other innovative approaches to residential subscriber procurement.

In addition to the LMI proposal we signed on to, another thing the commission can do to help increase access to CSGs is increase the 24-month Commercial Operation Date (COD), because this may cripple projects serving residential subscribers. Because this CSG program has had a slow roll-out, our members are concerned that the 24-month deadline is too short of a window to successfully commission a project. Originally the tariffs outlined a program that would have processed applications in a reasonable period, however, with initial program delays that 24-month period is getting increasingly more difficult to attain.

Although the 24-month COD will impact gardens with all different subscriber types, it will have a disproportionate impact on LMI and residential subscribers. Gardens with large amounts of subscriptions require more work to upload the subscribers into the system, and it takes more time to procure those subscribers. We believe the purpose of the 24-month COD is to ensure developers are not stalling and that their projects are real. But it is having the unintended consequence of potentially precluding some legitimate projects that were delayed, in part because they chose to solicit to the residential markets.

The COD should be extended to 30 months to ensure that projects - which are entirely legitimate at the construction point - are able to proceed without fear of their project being terminated. This COD extension will benefit all subscribers, because the more projects we have the more accessible gardens are generally.

We believe a 30-month COD will mitigate the issue. But this may require revisiting. Our developers are concerned that the COD could be used as an artificial cutoff date that will limit the number of gardens. Similar to how our members were previously concerned about the Investment Tax Credit deadline being a cutoff, our members are now equally worried about the COD.

The COD should limit projects that are not proceeding at the appropriate pace, because of developer inaction or slowness. But it currently restricts projects based only in part on developer conduct. Because the COD includes time the project was in Xcel's hands, a viable project could be quashed that was not caused (in part or in total) by a developer's inaction or delay.

Because we have yet to commission a substantial amount of projects, it is difficult to say how many months a project ultimately sits with Xcel staff, and so the COD may need to be further extended if the utility's processing speed makes garden development unduly challenging.

iv. When The Changes Should Occur

With the exception of immediately extending the 24-month COD, we believe all changes should be implemented on September 16, 2016. This will ensure a smooth transition from the settlement agreement's end-date to a new policy framework.

We also request that no retroactive rulemaking transpires. All CSG applications that are submitted prior to the date that a rate change takes effect should be treated as if they were filed under the original rate. This provides certainty for financiers and promotes a successful program.

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