



Minnesota Solar Energy Industries Association

January 13, 2017
Ms. Sue Pierce
Rates Analyst
Minnesota Department of Commerce
85 7th Place East
Suite 500
St. Paul, MN 55101 – 2198

Re: Comments on Proposed Community Solar Garden Adders

Dear Ms. Pierce,

Please find the enclosed comments from the Minnesota Solar Energy Industries Association for your consideration.

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CSG Adder Comments
Enclosed

**THE MINNESOTA SOLAR ENERGY INDUSTRIES ASSOCIATION'S
COMMENTARY ON XCEL SOLAR REWARD COMMUNITY SOLAR INCENTIVES**

I. INTRODUCTION

We, the Minnesota Solar Energy Industries Association (MnSEIA), appreciate the Minnesota Department of Commerce's (DOC) willingness to hear our commentary on the Community Solar Garden (CSG) incentive development. MnSEIA is a 501(c)6 nonprofit membership association comprised of one-hundred and two different solar industry businesses and thirteen individual industry participants. Our organization's goal is to further the growth of all solar energy industry market segments, and to maximize the amount of high quality solar installations throughout Minnesota.

MnSEIA comments today to discuss the importance of a holistic adder and to highlight the various needs associated with the enumerated adder types.

II. COMMENTS

i. A GENERAL ADDER IS IMPORTANT TO ENSURE A ROBUST AND HEALTHY COMMUNITY SOLAR MARKET

As has been highlighted in our comments throughout the last year in this docket, MnSEIA is in support of a general positive adder for community solar. We believe that the Value of Solar (VOS) rate, in and of itself, is insufficient to create, develop and make CSGs accessible across Xcel Energy's service territory so long as no colocation above 1MW is permitted.

The primary evidence for this is the dramatic slowdown in applications since the shift to 1MW of colocated gardens at the Applicable Retail Rate (ARR). Now it is true that some developers are able to make 1MW of CSGs work with the ARR, but we have not seen anywhere near the level of applications that we saw at this program's inception.¹ This is problematic for both the industry and the consumer, because fewer gardens, generally equates to fewer market participants. Fewer market participants, results in less consumer choice.

This problem is further exacerbated by the transition away from the ARR to the VOS. Recently there has been an uptick to about 181 MW of application for CSGs in December.² This was the last month that gardens could use the ARR, and for many customer classes, it is the last month they have to enroll in a CSG. Prior to the phase out of the ARR, applications were averaging approximately 5-6 per month.³ We expect a return to these prior levels – if not a total collapse – of CSG applications once we fully transition to the VOS.

¹ See COMPLIANCE FILING – MONTHLY COMPLIANCE FILING, XCEL ENERGY, DOCKET NO. E002/M-13-867, Doc Id. 20171-127993-01 at 2 (Jan 11, 2017).

² See *Id.*

³ See *Id.* (taking Table 1's January through September numbers and averaging them).

The switch to a VOS financed CSG limited to 1MW forces developers to market to and manage fewer customer per garden. This will inevitably result in more corporate based solar gardens, which is something we'd prefer the market correct on its own by having a higher general incentive amount. If the margins are high enough then developers will seek out residential customers, because that will be easier than competing for the large subscriber base.

ii. IF A GENERAL ADDER IS NOT SOMETHING DOC WOULD LIKE TO SUGGEST, THEN WE ALSO SUPPORT INDIVIDUAL INCENTIVE AMOUNTS FOR EACH OF THE ENUMERATED CATEGORIES ON DOC'S DECEMBER 15, 2016 NOTE FILED IN DOCKET 13-867.

In the December 15, 2016 note DOC sought commentary on the following potential incentive categories: 1) Brownfield sites or landfills; 2) Public facilities; 3) Commercial or industrial rooftops; 4) Prime agricultural land; 5) Directly in the communities the solar gardens serve; 6) Residential Subscribers; 7) Low-income residential subscribers; 8) others the department identifies as warranting modification or an adder.⁴ We believe a *positive* incentive is appropriate in all of the above categories.

We will address those categories that have similar attributes simultaneously to avoid replicating arguments.

In that vein of brevity, we only believe that placing solar on “prime agricultural land” should receive the general incentive discussed in the prior section. It should not, however, be subjected to a negative adder, since it is the right of the landowner to sell or lease their land to a solar developer at fair market value, which should contain the agricultural value. Furthermore, most CSGs are leased for a 25-year period, so the land isn't being permanently removed from agricultural use anyway, and several developers are engaging in the pollinator pledge to ensure that the soils are enriched during the lease term. There is no need to penalize developers for finding land that is “prime” for both agriculture and solar.

A. Public Facilities, Commercial Or Industrial Rooftops, Gardens Directly In The Communities The Solar Gardens Serve, And To A Lesser Extent Brownfields/Landfills, All Require An Incentive To Make Financeable Because Of Land Acquisition Prices.

As we and our members have spoken to in this proceeding and elsewhere, the primary reason that solar gardens are currently being installed at the fringe of Xcel's service territory is that the price of land decreases the further one gets away from the metropolitan area. Thus, those feeders that have the most load (i.e. ones in urban areas with high demand) are not seeing distributed solar deployment, because the cost to do a CSG is incredibly more expensive.

Furthermore, typically it is harder to find land that is 5 – 8 acres in size, which is the equivalent acreage of a 1MW site. Because of economies of scale, the more solar you deploy the cheaper it

⁴ LETTER, DOC DER, DOCKET NO. E002/M-13-867, Doc Id. 201612-127334-01 at 1 (Dec. 28, 2016).

gets. Having smaller sites, means that the benefits of building big go away, which is further cutting into a developer's margins.

In some of the above categories, like rooftop and brownfields, labor and engineering costs also increase. Getting panels up onto a rooftop is significantly more challenging than simply setting them on a ground mount. Moreover, retaining a structural or environmental engineer for a rooftop or brownfield project is a cost over-and-above the CSGs we've seen built in rural farmland.

The developer themselves, for the most part, are agnostic about where the garden is deployed. So when given the choice of a cheaper garden far away from Xcel's load or a more expensive garden that is more beneficial to Xcel, the developer will always choose to deploy further away from the load.

As the useable rural land is increasingly covered by CSGs and the farm-based substations are filled up with capacity, developers will choose one of two options, either 1) they will start to build more towards the urban area and accept the slimmer profit margins; or 2) they will seek out different market segments or different markets entirely. From what we're hearing, both will likely happen, which will slow the pace of CSG deployment and shrink the number of available developers for consumers.

The best way to mitigate this would be to provide some sort of incentive to encourage CSG deployment closer to Xcel's load. We believe there are two ways of doing this. First, the DOC could take an estimate of land prices in rural areas and urban areas and base an incentive amount on that differential.

Second, it could be based on the additional value that Xcel receives from urban gardens. Xcel currently gains several benefits simply from the current CSG deployment, including environmentally friendly publicity, capacity during peak times, and others. But, Xcel has argued, that to-date the gardens are not providing much in the form of locational benefits, because the gardens are located so far from their urban load centers.⁵

If the CSGs are closer to Xcel's load there are additional locational benefits that Xcel receives. This would include further line loss reductions and a more substantial capacity benefit. The Commission has found that the VOS is currently suitable for all gardens, whether they are in

⁵ COMMENTS – SUBSCRIBER RATE COMMENTS, XCEL ENERGY, DOCKET NO. E002/M-13-867, Doc Id. 20164-119714-01 at 3 (Apr. 1, 2016).

rural or urban areas, and the VOS does include some values for line-losses.⁶ But perhaps an adder could factor in the additional value that gardens provide that are closer to their load.⁷

B. Solar Gardens For Residential And Low-Income Subscribers Should Receive An Adder Predicated On The Need For Additional Subscriber Acquisition And Service Costs, As Well As, Credit Score Requirements.

In many ways, this program is currently suffering from an “if it ain’t broke don’t fix it” problem. The ARR worked quite well for the program, especially with multiple colocated gardens permitted, because it allowed different developers to work with different subscriber types. The CSG statute (Minn. Stat. § 216B.1641), however, required a shift to the VOS, and in their most recent Order, the Commission made that shift.⁸ Now we need to make sure that the VOS will work for all subscriber market segments. This is the only way to remain compliant with the statute’s accessibility clause.

The CSG statute states “any plan approved by the commission must: [...] reasonably allow for the creation, financing, and accessibility of community solar gardens.”⁹ Part of the challenge of the transition to the value of solar rate is that it reduces access without additional adders, because it heavily encourages developers to only subscribe the fewest number of subscribers authorized under statute. This is five subscribers.¹⁰ As such, we will see a stark shift towards larger, more corporate subscribers, thereby reducing access for residential customers.

Often this shift will occur simply because each subscriber has an additional financial burden upon the garden developer. Every subscriber has a cost associated with their acquisition, with their uploading into Xcel’s system, and with servicing their account. Having a multi-tiered rate

⁶ ORDER – APPROVING VALUE-OF-SOLAR RATE FOR XCELS SOLAR GARDEN PROGRAM, CLARIFYING PROGRAM PARAMETERS, AND REQUIRING FURTHER FILINGS, DOCKET NO. E002/M-13-867, Doc. Id. 20169-124627-01 at 23 (Sept. 6, 2016).

⁷ Xcel’s recent Hosting Capacity Study submission that includes anticipated load growth highlights a number of feeders across a significant number of its substations that could benefit from solar deployment. We understand that the Commission has ordered the completion of locational value computation for inclusion in the 2018 VOS calculation, but there is no reason to delay computations that could have nearer term benefits to all the parties engaged in CSG development.

⁸ See Minn. Stat. § 216B.1641, subd.(d); See also ORDER – APPROVING VALUE-OF-SOLAR RATE FOR XCELS SOLAR GARDEN PROGRAM, CLARIFYING PROGRAM PARAMETERS, AND REQUIRING FURTHER FILINGS, DOCKET NO. E002/M-13-867, Doc. Id. 20169-124627-01 at 23 (Sept. 6, 2016).

⁹ Minn. Stat. § 216B.1641, subd. (e)-(e)(1).

¹⁰ *Id.* at subd. (a).

structure encourages developers to work in different subscriber market segments by offsetting some of those costs. Furthermore, our members have informed us that while the VOS rate may be feasible for some low-subscriber gardens, it simply is not enough to do a residential CSG even if they wanted to.

The statute's "accessibility" clause directly forbids the Commission from authorizing a plan that doesn't allow for different subscriber classes. It seems that a single flat rate will do that. It will result in a statutorily impermissible program.

Therefore, we suggest that the DOC investigate an incentive approach that is predicated upon the pre-existing ARR. In April, 2016, Xcel filed its most recent ARR compliance filing. In it their General Service Rate was listed at \$.09740/kWh, and their Standard Residential Service Rate was \$.12596/kWh.¹¹ This is a difference of \$.02856/kWh. Conversely on March 1, 2016, Xcel filed its VOS rate for the year, which was \$.0995/kWh.¹² This number is slightly higher than the ARR General Service Rate, thereby making General Service projects easier, but it is \$.02646/kWh lower than the ARR Standard Residential Service Rate. This difference is too much for most residential oriented developers to consume with their already modest margins.

This number **also does not** include the \$.02/kWh Renewable Energy Credit (REC) adder for residential projects. The VOS has no accompanied REC value, so the VOS rate for residential projects is actually \$.04646/kWh lower than the current ARR Standard Residential Service Rate.

To normalize the VOS rate with the expiring ARR rate, we would encourage the DOC to consider an incentive in the **amount of \$.04646/kWh for a Residential Adder**. This would encapsulate the difference between the ARR Standard Residential Service Rate and the REC loss. The DOC could then scale the incentive amount down to the \$.02856/kWh differential as the residential CSG market grows.

Low-and-moderate income (LMI) subscribers have an additional challenge. Namely, they typically have lower credit scores, which make financiers uncomfortable. One solution to this challenge is to provide enough of an incentive to LMI subscribed gardens that it makes the credit risk more palatable to financiers. With very few financiers within our membership, we cannot opine as to how much that incentive amount would need to be, but perhaps a trial and error approach would work for the DOC.

The LMI incentive could be done as a pilot program, limiting the number of garden participants to a certain threshold. Then several gardens would be commissioned with increasing adders, until the DOC was comfortable with the outcome. For instance, maybe the first garden would get an additional \$.01/kWh incentive on-top of the General Residential adder, and if that didn't have a suitable number of LMI subscribers then another garden could be commissioned with a

¹¹ COMPLIANCE FILING – 2016 ARR TARIFF, XCEL ENERGY, DOCKET NO. E002/M-13-867, Doc. Id. 20164-119746-01 at 3 (Apr. 1, 2016).

¹² COMPLIANCE FILING – VOS CALCULATION FILING, XCEL ENERGY, DOCKET NO. E002/M-13-867, Doc. Id.20163-118829-01 at 1 (Mar. 1, 2016).

\$.02/kWh adder, and so on and so forth. Then when subscriber blend reaches a point where the DOC feels that they have sufficiently encouraged LMI participation, DOC could recommend that the Commission adopt the incentive amount more broadly and move the incentive from a pilot to a real incentive available for developers at large.

iii. The DOC And The Commission Should Have The Ability To Control The Adder To Regulate Garden Deployment As They Deem Fit.

One of the primary attributes about the CSG program is that there is no cap. There is no limit on the number of gardens that developers can build. There is no threshold on how much generation Xcel needs to purchase. The CSG statute even states “There shall be no limitation on the number or cumulative generating capacity of community solar garden facilities other than the limitations imposed under section 216B.164, subdivision 4c, or other limitations provided in law or regulations.”¹³ This is fairly strong language to suggest the Legislature does not want a cap or limitations on the program.

An incentive, however, would not be a limitation on the program itself, because the VOS will deliver some solar gardens without any further subsidization. An additional adder would function as a way to further increase the number of gardens that would already exist without the adder. It wouldn't be a limitation; it would be a supplement.

For that reason, it doesn't seem problematic to allow the DOC or the Commission to set some upward goals for how many MW of CSGs of a certain type (i.e. rooftop, residential, LMI, etc.) the state wants to see in order to comply with the CSG statute's mandate to create financeable and accessible gardens. This is especially true for CSG market segments that may not exist but for an incentive, such as those discussed above. Once the yearly or programmatic goals are met, DOC or the Commission can start scaling back the incentive amounts or eliminate it altogether.

The statute does not permit limitations on the number of gardens, but if the incentive is removed at a time when the incentivized market segments can stand on their own, then there should be no statutory impediment to the adder's revocation.

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¹³ Minn. Stat. 216B.1641, subd. (a).