STATE OF MINNESOTA
PUBLIC UTILITIES COMMISSION

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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 INDUSTRIES ASSOCIATION'S (MnSEIA) COMMENTS ON DOC'S SUGGESTED ADDERS**
April 18, 2017	**Docket No. E-002/M-13-867**

COMMENTS OF THE MINNESOTA SOLAR ENERGY INDUSTRIES ASSOCIATION

I. BACKGROUND

On September 6, 2016 the Minnesota Public Utilities Commission (the Commission) issued its Order Approving Value-of-Solar (VOS) Rate For Xcel's Solar Garden Program, Clarifying Program Parameters, And Requiring Further Filings in the current docket. The Commission directed the Department of Commerce (DOC) to submit a report on March 1, 2017 addressing whether the VOS rate required any positive adjustments.[1]

On December 28, 2016, DOC posted a letter in the docket stating they would take comments until January 13, 2017.[2]

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1 ORDER APPROVING VALUE-OF-SOLAR RATE FOR XCELS SOLAR GARDEN PROGRAM, CLARIFYING PROGRAM PARAMETERS, AND REQUIRING FURTHER FILINGS, PUC, Docket No. E-002/M-13-867, Doc. ID. 20169-124627-01 at 24 (Sept. 6, 2016).

2 LETTER, DOC DER, Docket No. E-002/M-13-867, Doc. ID. 201612-127653-01 at 1 (Dec. 28, 2016).

On March 1, 2017, DOC posted its VOS adder recommendation.[3]

On March 10, 2017, the Commission posted a Notice of Comment Period regarding DOC's VOS adder recommendation.[4]

II. COMMENTS

i. MNSEIA SUPPORTS THE DEPARTMENT OF COMMERCE'S RESIDENTIAL INCENTIVE RECOMMENDATION, WITH MODIFICATIONS.

The Minnesota Solar Energy Industries Association (MnSEIA) supports DOC's residential Community Solar adder of $.025/kwh.[5] We believe that the VOS rate, in and of itself, is insufficient to create, develop and make residential CSGs accessible across Xcel Energy's service territory - so long as no colocation above 1MW is permitted.

The CSG statute states "any plan approved by the commission must: […] reasonably allow for the creation, financing, and accessibility of community solar gardens."[6] DOC's recommendation for a Residential CSG adder is for the Commission to "[a]dopt an adder of $0.025 per kWh for residential subscribers to CSGs for 2017 with the rate decreasing to $0.015 in 2019 and $0.005 in 2020 and thereafter or until further modified by the Commission."[7] We believe that DOC's adder with modifications will comport with the CSG statute.

There are two modifications that we would make to DOC's adder. First, the adder should not decrease over time, instead it should be monitored by the Commission. Second and alternatively, if the Commission wants to adopt a decreasing adder, then it should increase the initial application period for receiving the adder.

A. The Adder Should Not Decrease Over Time; Instead, It Should Be Monitored By The Commission.

We suggest that the adder stay constant at $.025/kwh, and that the Commission and DOC should have regulatory authority to reduce the adder if market demand grows significantly.

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[3] COMMENTS, DOC DER, Docket No. E-002/M-13-867, Doc. ID. 20173-129559-01 (Mar. 1, 2017) [hereinafter, *DOC Recommendation*].

[4] NOTICE OF COMMENT PERIOD, PUC, Docket No. E-002/M-13-867, Doc. ID. 20173-129786-10 at 1 (Mar. 10, 2017).

[5] *DOC Recommendation*, *supra* note 3 at 12.

[6] Minn. Stat. § 216B.1641, subd. (e)-(e)(1).

[7] *DOC Recommendation*, *supra* note 3 at 12.

Currently, DOC's adder amount moves from $.025/kwh in 2017 – 2018, then down to $.015/kwh in 2019, and further to $.005/kwh in 2020. The challenge with an incentive decreasing in this manner is twofold: 1) it presumes a drop in solar pricing commensurate with the decrease in incentive amount; and 2) it fails to acknowledge that the challenge for residential gardens is predicated on the "one-size-fits-all" aspect of the VOS rate.

a. Presuming a drop in solar pricing commensurate with the decrease in incentive amount is challenging, and can result in a CSG statute violation.

Part of the challenge of the transition to the VOS rate is that it reduces residential access without additional adders, because it heavily encourages developers to only subscribe the fewest number of subscribers authorized under statute. This is five subscribers.[8] Without a residential adder or even with an overly aggressive reduction in incentive amount, Minnesota will see a complete shift towards larger, more corporate subscribers, thereby reducing access for residential customers.

This shift will occur simply because each subscriber places an additional financial burden upon the garden developer. Every subscriber has a cost associated with their acquisition, with their uploading into Xcel's system, with servicing their account, and with risks associated with their procurement and satisfation.[9] Having a multi-tiered rate 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.

The statute's "accessibility" clause directly forbids the Commission from authorizing a plan that does not allow for different subscriber classes. A single flat rate will currently violate the statute, but so will an incentive that is too low to foster residential development.

DOC's idea is adopted from Fresh Energy's (FE) comments. In their comments, FE states the following on the subject:

> We are also certain that the costs associated with the development of CSG projects will decline over time as module and inverter prices continue to fall, permitting authorities become more familiar with this type of development, interconnection is further streamlined, and the subscriber markets become more educated. Therefore

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8 *Id*. at subd. (a).

9 *DOC Recommendation*, *supra* note 3 at 9, footnote 6 (stating "The Department notes that the applicability of federal and/or state securities regulations to community solar gardens is unclear at this time, and is thus not part of this analysis.) This highlights the fact that with each subscriber there is increased risk of liability around securities law, consumer protections, etc., and that risk has associated costs – that are at this time - borne solely by developers.

> we recommend starting with a limited adder for 3 years to ensure the ongoing stability and success of the program at which point we hope the VOS bill credit rate will be sufficient without subsidy.
>
> […]
>
> In designing the structure and programmatic details of the adder, we recommend the following:
>
> […]
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> That the adder value and capacity be established for year-one, year-two, and year-three with a planned step down each year.[10]

FE's proposal, as adopted by DOC, presumes a rather substantial decrease in costs on a yearly basis. There does not, however, seem to be any justification for how DOC's incentive reduction amounts were calculated. Instead, it seems to be an arbitrary $.01/kwh yearly reduction.

It may make sense to encapsulate the cost changes in solar technology and soft costs, but broad speculation about the cost reductions is arbitrary and capricious, and it could result in violation of the CSG statute on its face.

As DOC states in its comments "the Department understands the statutory directive to mean that the rates are sufficient to make a variety of CSGs financeable under a variety of circumstances, not that a specific CSG proposed by a specific developer will be financeable."[11] Having an incentive amount that drops off too radically, thereby resulting in un-financeable gardens, will result in a violation of the CSG statute under DOC's own interpretation. There also is no need to reduce the annual incentive amount preemptively. Minnesota Power, in Docket 15-825, had their CSG pilot program approved, and they are subject to annual progress review to ensure the program is working accordingly.[12] Presumably, if the program is not getting enough subscribers, the Commission could request Minnesota Power to make some programmatic changes at that time.

Xcel's residential CSG adder is effectively a pilot project too. It would be better served with a stated check in period several years out in order to ensure the Commission can have sufficient information about the adder's pricing, prior to making adjustments to the adder's amount. If the

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10 COMMENTS, FRESH ENERGY, Docket No. E-002/M-13-867, Doc. ID. 20173-129717-01 at 2 (Mar. 8, 2017).

11 *DOC Recommendation*, *supra* note 3 at 9.

12 *See* ORDER APPROVING PILOT PROGRAM WITH MODIFICATIONS, PUC, Docket No. E-015/M-15-825, Doc. ID. 20167-123636-01 at 12-13 (Jul. 27, 2016).

incentive amount changes too quick or too drastically, it may even preclude some developers from participating in the program during periods when they actually can develop residential gardens, because they cannot justify entering our market for a limited duration with the understanding that they will have to leave one year later.

We believe that the annual step-down proposal *as is* may result in a CSG statute violation, and is both unnecessary and arbitrary. But more importantly, it will not give the Commission sufficient information to determine whether it was a successful program.

Any yearly incentive amount decrease should be predicated on real, Minnesota-specific solar industry cost reductions (i.e., land prices, EPC prices, solar panel cost reductions, shipping, etc.), and this is better done on a year-by-year basis. Or, we would recommend that the Commission keep the first-year $.025/kwh incentive amount for the full three-year period and evaluate whether the rate should be decreased at that time.

b. DOC's suggestion also fails to acknowledge that the challenge for residential gardens is predicated on the "one-size-fits-all" aspect of the VOS rate.

The DOC's three-year trajectory towards no incentive for residential gardens misses the crux of the need for a residential incentive in the first place. The challenge is, as we discussed above, if there is one flat-rate, developers are encouraged to create gardens with the fewest number of subscribers. <u>This will remain true for the foreseeable future</u>. Therefore, dropping the incentive amount down on a yearly basis only makes low-subscriber gardens more lucrative.

This is not to say that there is no point in time when one flat rate cannot yield a robust community solar marketplace. In theory, if the number of large, corporate subscribers starts to dwindle, then the acquisition costs associated with those entities would go up. This would encourage developers to search elsewhere for subscribers or increase their subscriber numbers. Conceptually, at some point a single flat rate could result in a varied CSG marketplace.

But that time is not now. Nor is it anytime in the near future. Simply put, corporate demand for this program is still quite high, and as long as it is easy to acquire large subscribers, then a single flat rate will not yield a residential market. As Xcel noted in its recent Annual Report, "Nearly 90 percent of the completed gardens' capacity is allocated to commercial subscribers… The average number of subscribers per garden is eight."[13] Even with the Applicable Retail Rate's higher residential pricing, it is already more lucrative for developers to spend their time on commercial subscribers, and there seems to be enough corporate appetite for garden subscriptions to last well into the future.

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13 SOLAR REWARDS COMMUNITY 2016 ANNUAL REPORT, XCEL ENERGY, Docket No. E-002/M-13-867, Doc. ID. 20173-130400-01 at 2 (Mar. 31, 2017).

With that in mind it seems clear that the Commission should avoid a single flat-rate for the entire CSG program, and it should encourage the deployment of residential community solar via an incentive amount that stays constant. The Commission, of course, would have the ability to later modify the incentive for future gardens, once commercial subscribers become harder to enlist. This could be done every three years, or on an annual basis.

B. If The Commission Wants To Adopt A Decreasing Adder, Then It Should Increase The Initial Application Period For Receiving The Adder.

If the Commission opts for DOC's suggestion, then we have a further recommendation. By the time that this adder is approved and applied, it may be late 2017. This would limit the number of applications that are able to take advantage of the $.025/kwh residential adder. Instead, if the Commission wants to adopt DOC's suggestion, then it should have the $.025/kwh adder apply to gardens submitted in 2017, 2018 and 2019 before any stepdown should take place.

Because it is hard to sell residential gardens before the adder is adopted, the initial DOC-proposed adder amount is being reduced every day that passes. Moreover, regardless of what the incentive amount is, the first year with an incentive will require time for the developers to alter their sales tools, revamp their models, etc., to encapsulate the policy change. Because it will take some time to pivot, the first year's incentive amount should be extended so that developers can effectively use the incentive prior to its first step-down.

ii. MNSEIA CONTENDS THAT PUBLIC FACILITIES, COMMERCIAL OR INDUSTRIAL ROOFTOPS, GARDENS DIRECTLY IN THE COMMUNITIES THE SOLAR GARDENS SERVE, AND TO A LESSER EXTENT BROWNFIELDS/LANDFILLS, SHOULD BE AFFORDED AN OPPORTUNITY TO VOUCH FOR AN INCENTIVE AFTER LOCATIONAL BENEFITS ARE ADDED TO THE VOS IN 2018.

In their Comments DOC did not support an adder for locational factors. They stated, "The Department does not recommend applying an adder to the VOS for any of the locational factors *at this time* due primarily to the limited information from commenters and the 2018 VOS methodology changes to incorporate locational impacts on the distribution system."[14] DOC, however, when discussing Low and Moderate Income incentives, stated, "At this time, the Department recommends that the Commission revisit consideration of an adder specific to low-income subscribers when Xcel's low-income CSG proposal has been developed and its experience considered."[15] We believe that locational adders should be revisited for community solar, the same way Low-Income Residential Customer adders will be revisited later.

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14 *DOC Recommendation*, *supra* note 3 at 10.

15 *Id.* at 11.

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

The developers themselves, for the most part, are agnostic about where the garden is deployed. Thus, 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. The best way to mitigate this would be to provide some sort of incentive to encourage CSG deployment closer to Xcel's load.

If the CSGs are closer to Xcel's load there are additional locational benefits that Xcel receives. This should be considered in the 2018 VOS methodology change. However, due to the significant and dynamic impact of CSG location, it seems that after the VOS methodology is approved, there should be an opportunity to comment on any additional adders needed to appropriately encapsulate this value as it pertains specifically to CSGs.

Thank you for the opportunity to comment on these important matters.

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