**STATE OF MINNESOTA**
**PUBLIC UTILITIES COMMISSION**

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

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

**MINNESOTA SOLAR ENERGY INDUSTRY ASSOCIATION'S REPLY COMMENTS ON THE COMMUNITY SOLAR GARDEN PROGRAM'S ADDER**

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

**Date: 3/2/2015**

# REPLY COMMENTS OF THE MINNESOTA SOLAR ENERGY INDUSTRY ASSOCIATION

## I. INTRODUCTION

The Minnesota Solar Energy Industries Association (MnSEIA) respectfully submits these reply comments, regarding an appropriate adder to apply to a proposed Value-of-Solar (VOS) rate to ensure compliance with Minnesota statutes.

## II. BACKGROUND

In its order published September 17, 2014, the Minnesota Public Utilities Commission (the "Commission") found that it was "not in the public interest to use the value-of-solar rate, as calculated under Minn. Stat. § 216B.164, subd. 10, for community solar gardens at this time."[1] Instead, the Commission determined that an inquiry into a potential Community Solar Gardens (CSG) incentive was required to meet Minnesota's Legislature's intent.[2]

Thus began the adder development process. The Commission directed multiple CSG stakeholders:

> [T]o engage in further discussions and to file comments by October 1, 2014, regarding the appropriate adder, if any, to apply in conjunction with a proposed

[1] ORDER APPROVING SOLAR-GARDEN PLAN WITH MODIFICATIONS, Docket No. E-002/M-13-867, Doc. ID. 20149-103114-01, at 1 (9/17/2014).

[2] *Id.* at 10.

value-of-solar rate to ensure compliance with the community-solar-garden statute, including, but not limited to, a requirement that the community-solar-garden plan approved by the Commission reasonably allow for the creation, financing and accessibility of community solar gardens.[3]

On October 1, multiple parties filed their responses to the Commission's directive. The responses ranged from alterations to the CSG adder's design process to the structure of the incentive itself.[4] MnSEIA argued that the adder should be a levelized $.15/kWh, should have a 2.75% escalation rate floor that otherwise tracks with the utility's energy rate, and should be paid for with the Fuel Clause Adjustment Charge.[5]

On October 9, the Commission asked the parties to begin drafting reply comments that were due on December 1, 2014.[6] The Commission posted multiple questions, headers and points of inquiry for the parties to address.[7]

On November 24, 2014, MnSEIA filed a Variance Request.[8] We asked for an extension because we were concerned that the Commission was looking for more tangible information than models, projections and solar installer feedback.[9] We argued that real market data is the optimal source of information for developing the CSG Adder.[10]

On December 1, 2014 the Commission granted our Variance Request.[11]

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3 *See* NOTICE OF CONFIRMATION OF THE OCTOBER 1, 2014 COMMENT DATE, Docket No. E-002/M-13-867, Doc. ID. 20149-102912-01 at 1 (9/8/2014).

4 *See* COMMENTS, Socore, Docket No. E-002/M-13-867, Doc. ID 201410-103509-01, at 2 (10/01/2014); *See also* COMMENTS, DOC DER, Docket No. E-002/M-13-867, Doc. ID 201410-103485-01 at 1-2 (10/01/2014).

5 *See* COMMENTS, MINNESOTA SOLAR ENERGY INDUSTRIES ASSOCIATION, Docket No. E-002/M-13-867, Doc. ID 201410-103498-01 at 5-6 (10/01/2014).

6 NOTICE OF REPLY COMMENT PERIOD Docket No. E-002/M-13-867, Doc. ID 20141-103695-01 at 1 (10/09/2014).

7 *See Id.* at 1-3.

8 *See* EXTENSION OF TIME TO FILE COMMUNITY REPLY COMMENTS, MINNESOTA SOLAR ENERGY INDUSTRIES ASSOCIATION, Docket No. E-002/M-13-867, Doc. ID 201411-104904-01 at 1 (11/24/2014).

9 *Id.*

10 *Id.*

11 *See* NOTICE OF EXTENDED REPLY COMMENT PERIOD, PUC, Docket no. E-

On January 28, 2015 the Commission again extended the comment period.[12] It also opened up more additional issues that parties could reply to.

## III. REPLY COMMENTS

### i. Comments Pertaining to Original October 9th Reply Comment Filing Date.[13]

#### 1. Regarding The $.15/kWh Bill Credit.

MnSEIA still contends that a $.15/kWh rate is optimal to create, finance and make CSGs accessible.[14] Our members, however, also agree that the rate table published in section nine of Xcel's rate book, and pertaining to CSGs, is also a reasonable rate calculation.[15] Our member organizations have, and are able to present, models and projections illustrating this point. While we, as the membership organization that represents those installation corporations, have no control over whether they submit documentation, we have encouraged them to do so.

#### 2. Escalation Rate Over The Life Of The Contract.

In order to balance the needs of some installers that require a fixed escalation rate with those that require an escalation rate that tracks with the utility's general energy rate, MnSEIA continues to stand by its proposal to have a 2.75% escalation rate floor that otherwise tracks with general electricity rates.[16] If the Commission feels it is necessary, our members also support an annual "true-up" of the rate to Xcel's actual energy rate increase. A rate with a fixed floor that otherwise tracks with the utility's general energy rate will best serve the industry, subscribers and ratepayers.

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002/M-13-867, Doc. ID 201412-105013-02 at 1 (12/1/2014).

12 NOTICE OF EXTENSION/VARIANCE – SECOND EXTENSION OF COMMENT PERIOD, PUBLIC UTILITIES COMMISSION, Docket No. E-002/M-13-867, Doc. ID 20151-106735-01 at 1 (1/28/15).

13 In this section we have copied the Commission's headers for clarity and organizational consistency.

14 *See* COMMENTS, MINNESOTA SOLAR ENERGY INDUSTRIES ASSOCIATION, Docket No. E-002/M-13-867, Doc. ID 201410-103498-01 at 5-6 (10/01/2014).

15 *See* Appendix; *See also* Xcel's Rate Book, § 9, Sheet No. 64 http://www.xcelenergy.com/staticfiles/xe/Regulatory/Regulatory%20PDFs/rates/MN/Me_Section_9.pdf.

16 *See Id.* at 6.

### 3. Expectations And Preferences Of Potential Solar Garden Subscribers.

Consumers are interested in receiving the quickest payback possible. The only people that will accept a payback period that is longer than ten years are the subscribers who joined the CSG for non-monetary reasons. There are, however, very few customers that do this. Nearly all of the customers expect a payback within ten years.[17]

The installers and developers we represent tell us that it is quite hard to sell a ten year payback, challenging to sell a seven-ten year payback, moderately difficult to sell a five-seven year payback and easy to sell anything that pays back in the first four years.[18] We are not providing this information to argue for the lowest payback possible. Instead, we seek to highlight that gardens will only be built if they payback in ten years or less. If the garden pays back in more than ten years, then our developers will be unable to sell a sufficient amount of subscriptions to build, and the CSG program will not meet the statute's intent.

### 4. Expected Costs For Solar Gardens.

MnSEIA cannot opine as to the price of each CSG or their associated costs, but we hope the solar members we represent will submit information that helps to illustrate the many costs required to develop, own, and operate CSGs.

The program is new, however, and it may be the case that this data is currently unavailable. With no CSGs yet completed under Xcel's Solar* Rewards Community program in Minnesota, most of the information that our members would present would be speculative models.[19]

### 5. Information And Data On Project Financing.

MnSEIA also cannot opine on issues of project financing. Each installer and developer has their own methodology for financing their CSG projects. The approaches are multifaceted, and are often "trade secret." We currently do not have any unique insight to share, but we hope our members will be able to provide the data that the Commission seeks.

Again, the program is new and our members may be unable to provide this data. With no completed CSGs under this program, most of the data that our members would present would be

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17 The answer to this question was developed using testimony from the CSG installers and developers we represent about their sales experiences.

18 Some installers are having success with a "pay-as-you-go model," because the payback is upfront it circumvents the normal return period for residential customers.

19 Xcel has the ability to provide estimated CSG installation costs, and should provide those. *See* Minn. Stat. 216B.1611, Subd. 3a.

speculative models. The most accurate approach is to wait until some CSGs are built and then ask for information regarding the costs that were required.

**6. Information On The Potential Impact Of State And Federal Programs And Credits On The Creation, Financing And Accessibility Of Community Solar Gardens.**

One of the primary financing devices that members of our industry use is the Federal Investment Tax Credit (ITC). The ITC helps finance roughly 30% of a solar garden, but it is poised to decrease in 2016.[20] The ITC is set to go down to 10%.[21] Currently, it seems the ITC's reduction will provide a significant setback for our developers.

With the current federal political makeup, it appears unlikely that the ITC will be renewed at the same level it was initially set at, and it may not be renewed at all. Due to this consideration, the Commission should integrate the sun-setting of the ITC into its incentive design, or at least include the option to increase the adder, if the ITC or a similar program is not approved by the end of 2016. We have reiterated, in this document and elsewhere, that $.15/kWh is the conservative minimum required to create CSGs in Minnesota. But that number may need to be increased if the ITC is reduced.

**7. Any Information And Data On Trends In Solar Costs.**

One of the primary benefits on solar energy is that it is getting cheaper all of the time. MnSEIA expects solar will eventually become a less expensive alternative to fossil fuels, and will not require an adder. But today is not that day. To stay competitive, CSGs will require some form of incentive for at least the next few years.

Our installers are already talking about solar prices flattening.[22] This slowdown in the cost decline may be the result of high demand on currently sold panels. With solar manufacturers already at full capacity, there is less incentive to innovate a new, more cost-effective panel. Additionally, the decrease in solar prices also may be curbed by trade tariffs, development constraints, already cheap dollar per watt rates, increased construction costs and the declining ITC.

Specific to Minnesota, the state Department of Employment and Economic Development published an October 2014 status report on clean-energy jobs here in Minnesota. According to

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20 *See* Solar Investment Tax Credit (ITC), Solar Energy Industries Association, http://www.seia.org/policy/finance-tax/solar-investment-tax-credit, (last viewed: 11/30/2014).

21 *Id.*

22 The answer to this question was developed using testimony from the CSG installers and developers we represent about their sales experiences.

that report, the average annual wage for Minnesota's solar industry sector is $70,000, significantly higher than the statewide average for all jobs.[23] Rising worker wages also must be included when determining the true trend of solar costs.

All of the above factors must be considered when analyzing solar trends. Historically, solar's price has always continued to drop. That pace, however, is starting to slow, and we expect the decline to become more sluggish in the next few years.

**8. Differentiated Financial Adder.**

It is too soon to tell whether a differentiated financial adder, or incentive, is required for CSGs. Without knowing the CSG fleet makeup, we cannot determine whether a one size fits all incentive or a tiered rate structure is appropriate.

Having said that, MnSEIA believes an adder that boosts the VOS rate up to $.15/kWh is still ideal. A "one-size fits all" model, like the VOS, will work. If, however, the Commission believes a tiered rate structure is required, then we contend that the rate's effect should be dictated by reductions in consumer acquisition and care costs. In short, if a tiered rate structure is mandated, then gardens with more subscribers should receive more adder benefits.

**9. Potential Incentive Designs.**

Similar to the above point, MnSEIA feels that a $.15/kWh flat rate or the current Xcel tariff outline in the rate book section nine will adequately allow for the creation, financing and accessibility of CSGs. But we will discuss the other Commission highlighted adder designs below:

**A. Declining Incentive Schedule**

While solar costs will continue to drop for some years to come, the pace is starting to slow. Couple this with the sun-setting of the ITC in 2016, and the industry may actually require a higher CSG adder three years from now than it does today. Any declining incentive schedule should factor in both the slowed projections for solar cost reductions with the value lost to the ITC's reduction.

**B. Competitive Procurement**

At this time we would like to reserve judgment on a competitive procurement incentive design, but we are concerned that this approach will allow Xcel to effectively cap the program.

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[23] Minn. Dep't of Employment & Econ. Dev., Minnesota Clean Energy Economy Profile at 5, [*available at* http://mn.gov/deed/images/MN_CleanEnergyEconomyProfile_FullReport.pdf].

### C. Upfront Incentive

An upfront adder would allow for short-term tax equity financiers to receive their payback quicker. It must be noted, however, that the benefit's value is more important to our industry than the timing of its delivery. Having said that, if all things were otherwise financially equal, and we had to choose one model over the other, then an upfront adder would be the more preferable option.

**10. Identifying A Funding Source For Any Incentives Ordered By The Commission.**

MnSEIA still stands strongly behind using the Fuel Clause Adjustment Charge.[24] This charge has no cap, and does not allow Xcel to regulate CSG production.

**11. Size Of The Incentive Budget; What Limit, If Any, Should Be Placed On The Size Of The Overall Incentive Budget?**

There should be no limit on the adder's budget. The goal of the legislation is to create, finance and make CSGs accessible.[25] An adder cap would prevent some CSGs from being created. Further, it would prevent several entities from accessing CSGs. A limitation on garden development necessarily restricts individuals' ability to join. The only way to meet the statute's requirements is to keep the financial pool uncapped.

**12. The Recommended Timeline For Determining A Decision On The Appropriate Financial Adder, If Any, To Be Added To The VOS Rate To Reasonably Allow For The Creation, Financing, And Accessibility Of Community Solar Gardens.**

The timeline for instituting the CSG VOS incentive should be pushed back until adequate information is available for all interested parties. We had hoped that we would have a greater understanding of how many CSG projects will actually be built, and what the garden subscriber base would entail. Unfortunately, the only information we have is that 431 projects are in the queue, some of them are expected to be close to each other, and that 89 project applications have been deemed "complete" as of mid-February.[26] At this point there is no useful CSG data. The adder should be calculated only after more relevant information is available.

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24 *See* COMMENTS, MINNESOTA SOLAR ENERGY INDUSTRIES ASSOCIATION, Docket No. E-002/M-13-867, Doc. ID 201410-103498-01 at 6 (10/01/2014); *See also* COMMENTS – RE XCEL'S COMPLIANCE FILING, FRESH ENERGY, Docket No. E-002/M-13-867, Doc. ID 20146-100486-01 at 1 (6/16/2014).

25 Minn. Stat. § 216B.1641 (e)(1).

26 *See* COMMENTS, XCEL ENERGY, Docket No. E-002/M-13-867, Doc. ID 20152-

We further bolster our position with the same three reasons we cited in our extension filed on November 24, 2014. They are still applicable and are quoted below:

> As of today, the installers we represent can only provide the requested data in the form of modeling and projections. If given sufficient time, however, our installers could provide project-specific, real-world information about the program. Data on CSG costs, consumer requests, etc. may only be two months away. This market data will help the Commission develop an accurate and transparent adder.
>
> Next, MnSEIA is interested in learning more about what Minnesota's CSG fleet will entail. Before making a statement about tiered adders, or boosts based on the number of subscribers, we would like to know what percentage of filed CSGs are Residential, Industrial and Commercial. Allowing CSG development to go forward under the Applicable Retail Rate ("ARR") with RECs added will inform our organization, and the other stakeholders, on how well a tiered system works.
>
> Lastly, although a CSG inducement may be necessary to bolster the Value of Solar rate, there is currently no need to institute an adder. CSGs will be built using the ARR, and our installers are willing to try the ARR while market data develops. The solar industry believes that the Commission, in-conjunction with the relevant stakeholders, should develop a transparent and well-designed adder. This requires sufficient data and time. Fortunately, there is no need to expedite the process now that the ARR is in place, and the Commission should not feel compelled to address the adder question immediately.[27]

We also asked for more time in the comments we published last week in response to Xcel's concerns about garden proximity, and we reiterate that stance today.[28] More time is needed.

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107208-01 at 5 (02/10/2015); *See also* Xcel Energy, Information for Subscribers, List of Garden Operators by County [*available at* http://www.xcelenergy.com/Energy_Solutions/Business_Solutions/Renewable_Solutions/SolarRewards_Community-MN].

27 EXTENSION OF TIME TO FILE COMMUNITY REPLY COMMENTS, MINNESOTA SOLAR ENERGY INDUSTRIES ASSOCIATION, Docket No. E-002/M-13-867, Doc. ID 201411-104904-01 at 1-2 (11/24/2014).

28 *See* COMMENTS, MINNESOTA SOLAR ENERGY INDUSTRIES ASSOCIATION, Docket No. E-002/M-13-867, Doc. ID 20152-107619-01 at 8 (2/24/2015) (requesting the Commission employ a "Wait and See" approach.).

With all of the aforementioned reasons in mind, the development of the VOS adder should be delayed until all the information necessary to make an informed decision is present and accessible.

**13. Any Legal Issues The Commission Should Consider In Developing An Incentive.**

There are no other legal questions related to the development of the incentive that MnSEIA would like to highlight at this time.

## ii. Additional Issues Related to CSG Implementation as Asked for in January 28th Variance.

**1. Interconnection Requests.**

MnSEIA would like to address Xcel's understaffed interconnection team. We foresee a situation where Xcel's current interconnection staff is unable to keep up with project demand. Retaining an underequipped team would give Xcel effective control over when and how many projects are connected to the grid in a given year.

We highlight the potential problem today, because we ask the Commission to consider it moving forward. In its April 7th Order, the Commission noted that it "can revisit [the interconnection issue] at a future time if the parties' initial experience with the solar-garden program demonstrates the need to do so."[29] Our installers are expecting significant interconnection delays. The interconnection procedures should be reviewed as soon as the Commission has sufficient program data.

In the comments we published last week, we also advocated for Xcel to "provide simple system interconnection information."[30] That same information would help with this issue as well. If developers can determine optimal places to put aggregated interconnections, then Xcel's limited staff will have fewer requests. The Commission should also request Xcel to provide simple system interconnection information.

**2. REC ownership for Unsubscribed Energy.**

Assuming the garden operator has elected to sell their RECs, the utility should be required to purchase any RECs generated from the operator's unsubscribed energy. Xcel is already required to purchase the unsubscribed energy. In its April 7th, 2014 Order the Commission required Xcel

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29 ORDER REJECTING XCELS SOLAR-GARDEN TARIFF FILING AND REQUIRING THE COMPANY TO FILE A REVISED SOLAR-GARDEN PLAN, Docket 13-867, Doc. ID. 20144-98041-01 at 11 (04/07/2014).

30 COMMENTS, MINNESOTA SOLAR ENERGY INDUSTRIES ASSOCIATION, Docket No. E-002/M-13-867, Doc. ID 20152-107619-01 at 8 (2/24/2015).

to "purchase unsubscribed energy from the solar-garden operator at (1) Xcel's avoided-cost rate for solar gardens larger than 40 kW capacity and (2) the Company's average retail utility energy rate for solar gardens smaller than 40 kW."[31] Xcel is already purchasing the unsubscribed energy from the CSG operator. It then follows that Xcel should also have to compensate the CSG operator for any RECs associated with any unsubscribed energy.

**3. Transition Time Between Applicable Retail Rate and Value of Solar.**

Some of our solar installers are concerned that if the VOS is phased in too quickly it could result in some projects being stalled. The VOS should be set as soon as is practicable. But the date it goes into effect should be delayed and the ARR should be used in the interim.

The Legislature predicted the transition period between the two rates would be a challenging one and they created a provision to ease the difficulty. According to the CSG statute, Minn. Stat. 216B.1641(d), the CSG VOS rate is "calculated under section 216B.164, subdivision 10." That statutory subdivision provides at (j):

> The commission may not authorize a utility to charge an alternative tariff rate that is lower than the utility's applicable retail rate until three years after the commission approves an alternative tariff for the utility.

This provision was intended to create a "rate floor" for the first three years of the VOS methodology in order to provide the rate certainty that solar developers would need to mobilize capital and experienced personnel.

For this reason, we believe the Commission may not authorize a utility to pay a CSG VOS rate plus adder "that is lower than the utility's applicable retail rate" until three years after the Commission first approved the VOS tariff methodology.

We recommend the transition occur well into the CSG program's development. The transition must be seamless to protect consumers from unexpected subscription increases, to comply with the statute's intent and to lock-in certainty for garden financiers. Thus, the transition date should be set well ahead of time.

**4. Comment Period After Value of Solar and RECs for Applicable Retail Rate are Calculated and Published.**

While we are fairly confident that the Commission will provide a comment period after the VOS and REC values are recalculated, we would like to go on-record and explicitly ask for a comment period at that time. We are unsure of whether we will currently use that period, but in the event that either calculation is done improperly or in a manner contrary to our understanding, we would like to have the opportunity to speak to those issues.

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31 ORDER REJECTING XCELS SOLAR-GARDEN TARIFF FILING AND REQUIRING THE COMPANY TO FILE A REVISED SOLAR-GARDEN PLAN, Docket 13-867, Doc. ID. 20144-98041-01 at 2 (04/07/2014).

Sincerely,

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# Appendix

| | | 2014 CSG Rate | | | | | | |
|---|---|---|---|---|---|---|---|---|
| Customer class | | Bill Credit Rate per KWh (AC) | | | | | | |
| | | Rate that reasonably allows for CSG Creation | VOS V3-Xcel 6/19/14 | | | | VOS V5-Xcel 3/2/15 | |
| | | | Levelised | **Infl Adj Year 1** | **2014 CSG Rate Equiv Adder** | 2014 CSG Rate | **2014 CSG Rate Equiv Adder** | 2014 CSG Rate |
| Residential Service | Standard | 0.12033 | 0.1208 | **0.0940** | **0.0263** | 0.1203 | **0.12033** | **0.12033** |
| | Enhanced – Solar Gardens > 250 KW (AC) | 0.14033 | 0.1208 | **0.0940** | **0.0463** | 0.1403 | **0.14033** | **0.14033** |
| | Enhanced – Solar Gardens ≤ 250 KW (AC) | 0.15033 | 0.1208 | **0.0940** | **0.0563** | 0.1503 | **0.15033** | **0.15033** |
| Small General Service | Standard | 0.11783 | 0.1208 | **0.0940** | **0.0238** | 0.1178 | **0.11783** | **0.11783** |
| | Enhanced – Solar Gardens > 250 KW (AC) | 0.13783 | 0.1208 | **0.0940** | **0.0438** | 0.1378 | **0.13783** | **0.13783** |
| | Enhanced – Solar Gardens ≤ 250 KW (AC) | 0.14783 | 0.1208 | **0.0940** | **0.0538** | 0.1478 | **0.14783** | **0.14783** |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| General Service | Standard | 0.09456 | 0.1208 | **0.0940** | **0.0006** | 0.0946 | **0.09456** | **0.09456** |
| | Enhanced – Solar Gardens > 250 KW (AC) | 0.11456 | 0.1208 | **0.0940** | **0.0206** | 0.1146 | **0.11456** | **0.11456** |
| | Enhanced – Solar Gardens ≤ 250 KW (AC) | 0.12456 | 0.1208 | **0.0940** | **0.0306** | 0.1246 | **0.12456** | **0.12456** |