STATE OF MINNESOTA
PUBLIC UTILITIES COMMISSION

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In the Matter of Xcel Energy's Plan for a Community Solar Garden Program Pursuant to Minn. Stat. §216B.1641

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

Date: 11/6/2013

COMMENTS OF THE MINNESOTA SOLAR ENERGY INDUSTRY ASSOCIATION

We provide these comments on behalf of the Minnesota Solar Energy Industry Association (MnSEIA). As a membership association comprised of 58 organizations involved in photovoltaic and solar thermal energy production, MnSEIA promotes the development and use of solar energy to create a sustainable future for the state.

INTRODUCTION

According to Minnesota Statute § 216B.1641, the Public Utilities Commission (the "Commission" or "MPUC") must use an "applicable retail rate" ("ARR") while the Value of Solar Tariff ("VOST") is being determined. Because the Minnesota State Legislature does not define the "ARR" in the statute, we argue that the meaning of the language is not plain or easily understood. Instead, the ARR is ambiguous. Therefore, MnSEIA urges the Commission to look to the Legislature's intention and adopt a standard for the ARR that incorporates the real value of solar. The correct standard the Commission should use when determining the ARR is whether the rate will allow for the "creation, financing, and accessibility of community solar gardens" that are "consistent with the public interest."[1]

Without a rate that incorporates the real value of community solar gardens ("CSGs"), solar installers will be unable to create enough megawatts to help meet the state's solar energy standard. In the near term, failure to launch a CSG program by early Spring of 2014 will jeopardize the 2014 solar construction season. The 2014 installation

[1] Minn. Stat. § 216B.1641.

season will be wasted, crushing the budding CSG installation industry before anyone has a chance to create CSGs. Additionally, if any CSGs are installed using Xcel's proposed ARR rate, those CSGs will be inconsistent with Minnesota's public interest, because they will require parts manufactured in other countries, and labor rates that will not support Minnesota families.

As entailed in the comments below, we urge the Commission to adopt an ARR that includes the true value of solar, and to make other important changes to Xcel's plan that will create CSGs that are consistent with the statute's legislative intent and the public interest.

BACKGROUND

This past May, the Legislature enacted Minn. Stat. § 216B.1641. This statute will transform Minnesota's solar energy market. The legislation, as part of the 2013 Omnibus Energy Act, sought to spur needed investment and jobs in solar energy, and significantly increase Minnesota's installed solar capacity from 13 MW to more than 450 MW. Also the Omnibus Energy Act created a new solar energy standard. That standard requires the state's public utilities to obtain 1.5% of their energy from solar energy sources by 2020, along with a goal of reaching a 10% solar penetration by 2030.[2] To help achieve these standards, the legislature created the CSG Program.[3]

As part of the CSG program, the Legislature directed the Commission to "approve, disapprove, or modify" any CSG plan that the utility designed and submitted to the Commission for approval.[4] On September 30, 2013 Xcel submitted its proposed plan.[5] We comment upon that plan today.

COMMENTS

I. MnSEIA's Response to the Questions "Does Xcel's Proposed Plan for Operating a Community Solar Garden (CSG) Meet All the Program Design Requirements, as well as the Terms and Conditions in Minn. Stat. §216B.1641? Are There Other Relevant Program Design Features or Terms and Conditions Required for a Successful Program?"

Xcel's proposed plan meets several of the program design requirements as stated in the new CSG law. For instance, the plan appears to meet the law's logistical

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2 Minn. Stat. § 216B.1691, subd. 2f.

3 Minn. Stat. § 216B.1641.

4 *Id.*

5 Sept. 30, 2013. COMMUNITY SOLAR GARDENS PROGRAM. Docket No. E002/M-13-867, at Cover Page [Hereinafter, *Proposed Plan*].

requirements, including location of the CSGs, on-line application process, and its promotional requirements. But the plan is insufficient in five areas.

We comment on five specific terms of Xcel's proposed plan.

The first part of Xcel's terms that is inadequate, is its proposed treatment of solar renewable energy credits, or "S-RECs." In its proposal, Xcel notes that once the VOST is approved, the S-RECs from solar gardens automatically transfer to the utility.[6] That is generally accurate.

But in the absence of the VOST, Xcel argues that in the interim period it is also entitled to the S-RECs. Xcel's argument is that it deserves the S-RECs because it has effectively already paid for the S-RECs by offering a rate "above" its avoided energy cost. It is clear that Xcel understands S-RECS have a distinct value, and that transfer of S-RECs is not automatic absent payment of that value. A key question before the Commission in regards to CSGs is how that value should be quantified under the new Solar Energy Standard's compliance provisions.

The Interstate Renewable Energy Council ("IREC") has created some best practices for SREC transfer and trade. We quote their comments from a related Docket, *E002/M-13-642*. In that docket, the IREC best practice is stated as follows:

> The concept underlying the best practice is that RECs should transfer to the utility only when it compensates the initial REC owner for the RECs generated by his/her system, either through an incentive or specific compensation for the REC in a contract, because the renewable energy attributes are a valuable component of the total value created by the customer's investment in a renewable energy system. Accordingly, a utility should not be allowed to transfer this value absent compensation. On the other hand, when the utility offers a solar rebate program or similar incentive, the incentive serves as compensation to the generator for the RECs. Indeed, many states transfer RECs to utilities in order to comply with Renewable Energy Standards ("RES") as part of utility incentive programs for solar and other renewables that are offered to help the utility meet RES requirements.[7]

The above IREC best practice principles have been implemented in 21 of 25 states that have addressed this same issue.[8] We submit that the S-RECs associated with CSGs

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6 *Proposed Plan* at 20.

7 ELPC, Comments In the Matter of the Petition of Northern States Power Company for Approval of Tariff Modifications Implementing Net Metered Facility Provisions, Standby Service Exemptions, and Meter Aggregation Pursuant to the 2013 Omnibus Energy Bill, Docket No. E002/M-13-642, at 4 (Sept. 30, 2013).

8 *Id.*

should be given a distinct value and separate financial consideration until the VOST goes into effect.

Second, MnSEIA wants to ensure that demand matches the load on each premise in regards to Xcel's plan to allow only 120% of the subscriber's average annual consumption at the subscriber's premises. Generally, MnSEIA agrees with Xcel's 120% subscriber average, as it is consistent with the Minn. Stat. 216B.1641. But if demand does not match the load, then the 120% subscriber average will prevent some subscribers from being credited properly for the energy their subscription produced. Consequently, this will result in fewer subscriptions sold and more unsubscribed energy production.

Third, MnSEIA contends that Xcel should provide a rate for unsubscribed energy. In Xcel's plan they state, "[i]f, at any time after the date of commercial operation, the solar garden is less than 100 percent subscribed, meaning there is no subscriber for a portion of the production, there will be no bill credit for the unsubscribed portion."[9] We ask the Commission to understand that it is ethical and consistent with CSG practice to have unsubscribed production, as developers' wish to "under promise" and "over deliver" on panel production.

While there should be a motivation to maintain high levels of subscription for the life of the CSG, MnSEIA believes it is inappropriate for Xcel to place a $0.00/KWh rate on *undersubscribed* and *over producing* CSGs. This practice is unfair to the CSG operators and will create a significant short fall in the interim period between subscriptions, result in fewer installed CSGs. MnSEIA is willing to entertain a discounted rate to incentivize each operator to maintain full subscriptions.

Fourth, the Commission should clarify the extent of Xcel's recovery of program costs under its Fuel Clause Adjustment, and its recovery of its program costs generally. Xcel states that it will recover the costs of CSG energy under its FCA. But Xcel does not mention if it intends to recover any other costs associated with the program (other than through program fees and deposits). On this issue, Xcel may seek to recover any costs associated with CSGs pursuant to Minn. Stat. § 216B.1645.[10]

Fifth, Xcel proposes a fixed 20-year term, but a 25-year contract is more consistent with solar module warrantees. Solar module performance warrantees are 25 years in duration. The panels should last at least 25 years. A 25-year term is the most applicable term length for CSGs from a practical and scientific standpoint.

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9 *Id.* at 21.

10 That statute provides that Xcel may seek recovery of "investments or expenditures" Xcel made to satisfy its renewable energy objectives and standards set forth in Section 216B.1691 - which now includes the new 1.5% solar standard.

II. MnSEIA's Response to the Question "Does Xcel's Plan Contain Sufficient Disclosure and Protection for Xcel Customers/Program Subscribers, Including the Identification of All Information that Must be Provided to Potential Subscribers to Ensure Fair Disclosure of Future Costs and Benefits of Subscriptions?"

Xcel's plan contains sufficient disclosure and protection for Xcel's customers and program subscribers. Xcel's plan provides all of the necessary information that potential subscribers require. If adopted, fair disclosure of future costs and benefits of subscriptions will result.

We believe the onus is on both Xcel and the solar installers to work together to communicate properly with the subscribers. Developing a good, working relationship between Xcel, the installers, and the subscribers requires strong communication from all of the parties.

We believe that the required information that Xcel has provided is sufficient to meet the subscribers' needs, because MnSEIA expects to see strong subscriber-installer relationships in the future. But if Xcel wants to provide additional information, or lines of communication, it would further benefit the relationship between the utility, installer and subscriber.

Also, we agree that subscriptions to solar gardens implicate state and federal securities and tax laws, and that garden owner/operators have primary responsibility for appropriate disclosure and related compliance requirements.

III. MnSEIA's Response to the Questions "Prior to the Establishment of a Value of Solar Rate, Pursuant to Minn. Stat. §216B164, subd. 10, What Should be the Interim Rate Paid to Subscribers by Xcel for the Purchased Energy and Transfer of Renewable Energy Credits (RECs)? How Long Should this Interim Rate Remain in Effect?"

1. The Legal Standard

The ARR, as part of the overall plan the Commission approves, must be sufficient to reasonably allow for CSG "creation and financing."[11] Unless the ARR allows reasonably for the creation and financing of solar gardens, gardens will not be built, and the legislative intent of the statute will not be met.

2. Why Xcel's Plan is Inconsistent with the Law

[11] Minn. Stat. § 216B.1641(e)(1).

Xcel proposes that the ARR should be the rate set forth in its Net Energy Billing tariff, which they state is its "average retail utility energy rate." They formulated this average retail utility energy rate by relying on their avoided cost rate for qualifying facilities less than 40 kw, as set forth in Minn. Stat. § 216B.164, subd. 3(d). Xcel's proposed ARR does not reflect the true value of solar energy or a close approximation thereof, and is thus in non-accordance with the statute's legislative intent.[12]

Xcel's proposed "average retail utility energy rate" does not allow for the creation or financing of CSGs. CSGs are different than typical smaller scale solar installations because the CSG's developer must add more value to ensure a quality project for the subscribers. Additional costs subject to the life of the contract include, but are not limited to, (1) operating and maintenance costs, (2) liability insurance, (3) customer service costs, (4) land or rooftop ownership or leasing costs. In short, CSGs require more upfront capital than rooftop installations. So the same A50 rate Xcel is using for rooftop installations is insufficient to develop CSGs.

Moreover, the "average retail utility energy rate" fails to take into account many of the factors associated with solar generation including the Commissions approved capacity credit, S-REC value, updated externality values and locational benefits. Additionally, the rate does not include quantified future escalation of solar generated value to the utility.

From its Net Energy Billing rate, Xcel proposes the following for its applicable retail CSG rates:

	Oct – May	Jun – Sep
Retail Non-Demand Metered Service	\$0.10170/ kWh	\$0.10647/ kWh
Retail Demand Metered Service	\$0.06009/ kWh	\$0.06177/ kWh

MnSEIA's comments focus largely on the \$.06 rate and not the Non-Demand Metered Service rate as a building block for the interim ARR.

Xcel's rates are too low to support either the creation or financing of CSGs. As such, MnSEIA urges the Commission to take a more robust approach to establishing the ARR. To assist the Commission, we offer the following information.

3. Using the Slayton Report to Develop a Baseline ARR

Thus far, we have explained how that Xcel's proposed ARR is inconsistent with

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12 "This average retail utility energy rate language remains in the statute to date and, therefore, we believe the Net Energy Billing Service tariff (rate code A50) provides a reasonable basis for determining bill credits through the community solar garden program." *Proposed Plan*, at 18.

the legal standard, and we now explain where Xcel's own numbers suggest the ARR should be for CSG produced energy.

Xcel has previously worked with community solar. Xcel's Public Service Company of Colorado has installed approximately 18 MW of community solar, and pays a higher rate for that energy than it proposes here. The best information on projects similar to those in CO comes from the 2 MW Slayton, Minnesota solar energy project, the state's single largest solar facility. The project was implemented so that Xcel could learn the true costs of solar energy on its system.

In March, independent consulting firm Renovo Renewable Energy published a final report on the Slayton project.[13] One of the purposes of the report – indeed of the Slayton project – was to create better information and gain a better understanding on the cost and value to ratepayers of solar. The report valued CSG solar as follows:

Avoided Cost – Slayton Solar	Value (Year 1)	Annual Inflation	Average $/kwh (25 yr. Contract)
Annual Avoided Energy Costs	$115,306.00	3.1%	$0.06965
Annual Avoided Capacity Costs	$78,443.00	2.5% (yr.1); 3.5% thereafter	$0.04954
Annual Avoided T&D Costs	$13,100.00	3.1%	$0.00791
Annual Avoided Environmental Costs	$9,432.06	3.0%	$0.00562
S-REC Credit Value	$1,965.00	Fixed	$0.00075
		Total	$0.13348

The report calculated the benefits attributable to avoided energy and capacity costs. Because both energy and capacity costs are expected to increase in the future, the report included inflation rates as reflected in the above table.[14] The report also included avoided transmission, distribution costs, and environmental costs as well as a miniscule value for the renewable energy credits associated with solar energy.

As the report notes, solar energy from the Slayton project – like that from CSGs – will create benefits for Xcel in the form of S-RECs, which Xcel will be able to use to comply with its solar energy standard obligations. These S-RECs have real value, which can either be added to the ARR or paid for separately.

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13 Renovo Energy, *Slayton Solar Final Milestone Report*, at 1 (Mar. 26, 2013) (http://www.xcelenergy.com/staticfiles/xe/Corporate/Corporate%20PDFs/Slayton Solar-RDF_Final_Milestone_Report.pdf) [Hereinafter, *Slayton Report*].

14 *Slayton Report* at 16.

Thus, based on the values Xcel provided and as identified in the Slayton report, over a 25-year period, the value of solar to Xcel is $0.13348/KWh, or approximately $0.07/KWh greater than Xcel's proposed interim rate. But this number does not include a reasonable value for S-RECs.

Xcel's proposed use of the ARR is inappropriate to develop the interim value for CSGs, because, according to Xcel's own Slayton Report, their rate does not capture an appropriate value of solar energy to the utility. While this evidence shows that Xcel's proposed ARR is too low, we submit the Slayton report's ARR is also too low to meet Minn. Stat. § 216B.1641's statutory intent. The Slayton Report is a good *starting point*, but not a good end point for Minnesota's ARR. We submit the following three potential ARRs to further develop Minnesota's CSG program.

4. Three potential interim rates consistent with the law

Because Xcel's proposed ARR is insufficient to meet the legal standard, we have designed three potential interim ARRs that will meet that standard. Our ideal rate is proposed ARR number three with a locational benefit adder included. We believe that rate is the closest approximation to the true value of solar, and will best allow for the "creation, financing, and accessibility of community solar gardens" that are "consistent with the public interest."[15]

We believe that the interim rate should be the expected present value of the retail energy rate for that customer class over the contract life, making it similar to net metering. If the Commission accepts Xcel's proposal then community solar projects will be disadvantaged relative to traditional net metering projects. An economic disadvantage is contrary to the statute's legislative intent.

Xcel's retail rates will continue to rise. In the last decade Xcel's retail rates have risen nearly 40%. CSG subscribers will have to pay more for their electricity consumption without getting a commensurate value from their solar energy subscription. Our three potential interim rates seek to assuage those subscriber's concerns, and create economic similarity between CSG rates and established net metering rates.

In formulating our three potential rates, which attempt to include a good approximation of the true value of solar to the utility, we used a 2.36% annual escalation value in conjunction with our transparent, verifiable and defendable variables. We chose this escalation value because it is the same one Xcel has used in the past.[16] The rates we chose are levelized using a 7.56% discounted Net Present Value that is consistent with

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15 Minn. Stat. § 216B.1641

16 Jul. 23. 2012. DIVISION OF ENERGY RESOURCES INFORMATION REQUEST NO. 1, Docket No. E,G002/CIP-12-447, at 2.

the rate Xcel gave in the Slayton Final Report.[17]

A. Potential Interim Rate I

Recent information indicates that community solar should be allowed an even greater credit for avoided generation capacity than the Slayton report cites. In May of this year, the Commission adopted an interim photovoltaic ("PV") capacity credit of $5.15/KW per month, or $61,800/MW per year.

As follow-on to Xcel's 2010 rate case, Xcel was required to study the load profile of larger solar facilities that are similar to CSGs. From that study, the Commission found that solar PV facilities contribute to meeting Xcel's peak demand requirements and that Xcel's current standby tariff did not reflect the value of this contribution. While the Commission indicated that more study is necessary, it stated nonetheless that it is likely that any final solar PV capacity would be "no less" than the $5.15/kw month.[18]

Simply adding the Commission's recently adopted interim capacity credit to Xcel's average energy rate increases the interim community solar rate to $0.011/KWh in the first year and $0.14/KWh if escalated.

Xcel's A50 Avoided Average Energy Rate; Approved Capacity Credit:

Component	Year 1 $/KWh	25 YR Contract Levelized $/KWh
Xcel Rate A50 (Seasonal Average)	$0.06093	$0.06391
Effective Load Carrying Capacity (ELCC) Credit	$0.04944	$0.07506
Total:	$0.11037	$0.13896

The calculated 25 year CSG "Levilized Cost of Energy" (LCOE), labeled "25 YR Contract Levilized $/KWh" in the table above, is calculated as the minimum price at which this project would break even (Future Value = 0) over 25 years, given the Net Present Value (NPV) of all the combined energy rates (escalated at 2.36%), using a NPV discount rate of 7.56%.

B. Potential Interim Rate II

The second potential interim rate that meets the statutory intent incorporates a more accurate S-REC value. In our opinion, the $0.0075/KWh S-REC value used in the Slayton report is grossly undervalued, and should be raised in the ARR.

To support our position, value derived from an online trading website show values

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17 *Slayton Report* at 5 fn. 7.

18 May 13. 2013. ORDER SETTING INTERIM RATE AND ESTABLISHING NEW SOLAR RATE DOCKET, Docket No. E002/CI-13-315 at 3.

ranging from $0.14/KWh to over $0.49/KWh.[19] Also in 2005, Solar RECs sales generally ranged from $0.01 - $0.06/KWh throughout the country in compliance markets.[20] Furthermore, Xcel's latest Solar Rewards Rebate program offered an incentive payment of $1.50/watt installed DC capacity for a 20-year term. At $1.50/watt for a 1MW CSG, producing approximately 29,444,993 KWh over a 25-year contract, the associated S-REC has the value of approximately $0.05094/KWh.

Thus, if we include above S-REC calculation to Xcel's average energy rate and also include the Commission's interim capacity credit for solar, the ARR is approximately $0.16/KWh in year 1 and $0.19/KWh for a 25 year contract period.

Xcel's A50 Average Energy Rate, MPUC Capacity Credit, and S-REC Value:

Component	Year 1 $/KWh	25 YR Contract Levelized $/KWh
Xcel Rate A50 (Seasonal Average)	$0.06093	$0.06391
Effective Load Carrying Capacity (ELCC) Credit	$0.04944	$0.07506
S-REC Value	$0.05094	$0.05094
Total:	$0.16131	$0.18990

C. Potential Interim Rate III

The third potential ARR we propose, and that meets the statutory intent, incorporates an updated externality value. The Commission's current externality values do not reflect the latest science on the environmental costs of fossil fuel electric generation. Based on information in the Minnesota Center for Environmental Advocacy's (MCEA) recent Motion to Re-open Externalities Docket, the Commission's current carbon dioxide externality value of $4.37/ton (which represents the high, "urban" value) should be – and we submit likely will be – increased.

Based on MCEA's filing, damages from CO_2 emissions are more likely in the range of $11/ton to $55/ton, with a median value of $36/ton. A 1MW CSG will offset 1,017 tons of CO2 in the first year.[21] At $36/ton, a 1MW CSG will have $36,635 in avoided carbon costs in the first year and should assume an annual escalation of 3%.

By simply adding the *low-end* of the range being advocated by MCEA - $11/ton for CO_2 - increases the ARR to $0.17/KWh and $0.20/KWh.

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19 SREC TRADE, www.S-RECTrade.com (Last Visited Nov. 4. 2013).

20 Ed Holt, Emerging Markets For Renewable Energy Certificates, NATIONAL RENEWABLE ENERGY LAB, at 2 (Jan. 2005) http://apps3.eere.energy.gov/greenpower/resources/pdfs/37388.pdf.

21 eGrid2012 Version 1.0 Year 2009, UNITED STATES ENVIRONMENTAL PROTECTION AGENCY, www.epa.gov/egrid (last visited Nov. 4, 2013).

Xcel's A50 Avoided Energy Rate, MPUC Capacity Credit, S-REC Value, CO_2 Externality:

Component	Year 1 $/KWh	25 YR Contract Levelized $/KWh
Xcel Rate A50 (Seasonal Average)	$0.06093	$0.07506
Effective Load Carrying Capacity (ELCC) Credit	$0.04944	$0.06391
S-REC Value	$0.05094	$0.05094
Updated Externalities Values ($11/ton)	$0.00895	$0.01103
Total:	$0.17027	$0.20093

If the median range of $36/ton of CO_2 is used, the ARR increases to $0.19/KWh and $0.23/KWh.

Xcel's A50 Avoided Energy Rate, MPUC Capacity Credit, S-REC Value, CO_2 Externality:

Component	Year 1 $/KWh	25 YR Contract Levelized $/KWh
Xcel Rate A50 (Seasonal Average)	$0.06093	$0.07506
Effective Load Carrying Capacity (ELCC) Credit	$0.04944	$0.06391
S-REC Value	$0.05094	$0.05094
Updated Externalities Values ($36/ton)	$0.02930	$0.03610
Total:	$0.19062	$0.22600

5. Valuable Adders to Consider

In developing the methodology for the VOST, the statute encourages the Department of Commerce, based on "known and measurable evidence" of the cost or benefit of solar energy, to incorporate other values, including, among other things, the benefits to the utility of solar facilities installed at "high-value" locations on the distribution grid.

Xcel knows, or should know, the benefit of a locational benefit adder. In Colorado, for instance, Holy Cross Electric Cooperative installed a 78 kW PV System (phase 1) and 938 kW (phase 2) solar PV system. In determining the compensation that it would credit to its customers, Holy Cross included the value of the locational benefits that the CSG provided to its distribution grid. Holy Cross determined that the locational credit was worth $0.03/KWh.

As its rates increase over time, Holy Cross determined that the locational credit will always result in a rate with a locational benefit higher than credits without the locational benefit. While Xcel will have to study the exact locational value a specific CSG has on the system, MnSEIA submits that it would be inappropriate to simply ignore the benefit altogether. The Holy Cross credit is at least a good starting proxy.

By adding a $0.03/KWh locational credit to the previous rate (using the $11/ton

CO_2 value) results in an interim value of solar rate of $0.20/KWh and $0.23/KWh when escalated using the $11/ton externality value.

Xcel's A50 Avoided Average Energy Rate, MPUC Capacity Credit, S-REC Value, CO_2 Externality, Locational Benefit:

Component	Year 1 $/KWh	25 YR Contract Levelized $/KWh
Xcel Rate A50 (Seasonal Average)	$0.06093	$0.07506
Effective Load Carrying Capacity (ELCC) Credit	$0.04944	$0.06391
S-REC Value	$0.05094	$0.01103
Updated Externalities Values ($11/ton)	$0.00895	$0.05094
Locational Benefit Adder	$0.03000	$0.03000
Total:	$0.20027	$0.23093

We provide the supportable, transparent, and verifiable information above to encourage the Commission to consider other ways to develop the ARR. But unlike Xcel's interim rate, each of the above potential rates meets the legislative intent. Each will allow for the creation, financing, and accessibility of CSGs.

Although MnSEIA remains willing to examine other methods and values on which to base an interim ARR for CSGs, the starting point for an interim rate should only be something that the Commission is convinced will allow for the creation, financing, and accessibility of CSGs. As it stands now, Xcel's proposed ARR will not meet that statutory requirement. We ask the Commission to adopt a CSG program that is consistent with the statute's legislative intent.

IV. MnSEIA's Response to the Question "Is the Implementation Schedule for the CSG Program Included in Xcel's Plan Reasonable and Consistent with the Public Interest?"

1. The Two Year Learning Period Creates an Artificial Cap that is Contrary to Minnesota Statute § 216B.1641 (a).

Xcel's proposed implementation limits CSGs. But the CSG statute specifically prohibits limits on the "number or cumulative generating capacity of community solar garden programs . . . ."[22] Xcel's program is inconsistent with the CSG statute, because the proposed schedule will slow CSG growth, and will result in long-term negative impacts for consumers.

In its plan, Xcel proposes a *two-year* "learning period" (beginning at least 90 days after the Commission approves the plan) where it seeks to impose a limit of just 2.5 MW

[22] Minn. Stat. § 216B.1641(a).

in each quarter. The plan immediately limits community solar to no more than 20 MW for the foreseeable future. While MnSEIA appreciates Xcel's desire for careful management, the Legislature strictly admonishes artificial limits on the program.

Moreover, a faster time table would help to develop CSGs before the December 31, 2016 expiration of the 30% federal Investment Tax Credit ("ITC") for solar energy. Expiration of the 30% ITC will have a significant impact on the net costs of constructing solar for Minnesota's ratepayers, CSG subscribers and its developer/owners. Delaying development of the CSGs until after the expiration of the 30% ITC will eliminate most, if not all, solar financing opportunities.

Because no party is interested in administrative delays, we pledge to work with Xcel in monitoring plan implementation. We will do everything possible to assist smooth program implementation. But placing artificial caps on the program's outset sets a bad precedent for community solar before it has even started and is inconsistent with the law.

2. Xcel's Two Year Plan is an Unreasonable and Impractical Restraint on the Solar Industry

If Xcel begins accepting applications in the second quarter of 2014, then otherwise qualified projects will not be developed until the third or fourth quarter of next year. This would prevent any installer from participating in the 2014 installation season. This too will be detrimental to the solar market, and is both an unreasonable and impractical requirement to place on industry.

Xcel argues the need for the two year learning period is because of staffing concerns. While MnSEIA is sympathetic to Xcel's staffing fears, staffing and resource constraints will not necessarily be based on the total capacity of the proposed systems. Instead, staff and resources are based on the number of applications received. In other words, a 400 kW solar garden application will not require 10 times as much staff time for review and approval as a 40 kW system.

Furthermore, Xcel has had extensive experience with its CSG program in Colorado and is able to make reasonable estimates of the staff time needed to administer this program. Two years is an unreasonable amount of launch time when Xcel can already look to Colorado for guidance.

MnSEIA believes that actual demand should determine the number of projects built each quarter instead of artificial quotas. Limiting the number of projects that can be built will negatively impact job growth and increase ratepayers' costs. The two year learning period is unreasonable and impractical.

V. MnSEIA's Response to the Question "Is the Proposed Mechanism that Allows

Xcel to Recover Interconnection Costs for Each Community Solar Garden Fair and Reasonable?"

MnSEIA supports recovery of Xcel's interconnection costs from each developer *within reason*. This proposed process is consistent with other solar distributed photovoltaic systems. With that said, actual costs must be documented and transparent on an ongoing basis and not be subject to unreasonable fees or time delays because of Xcel. This would be consistent with the Xcel's statement that it wishes to have a "simplified and expedited interconnection review" for CSGs.

VI. MnSEIA's Response to the Question "Are the Means by Which Xcel Proposes to Promote its CSG Program Sufficient?"

MnSEIA supports creating a CSG working group. Ideally, a working group should be created that includes CSG developers and Xcel to discuss and coordinate efforts to promote CSG to potential subscribers.

We appreciate Xcel's efforts thus far to reach out to MnSEIA, and believe it is critical that Xcel work closely with our membership involved in CSG development to ensure successful CSG coordination.

VII. MnSEIA's Response to the Question "Is Xcel's Proposal for an Application and Approval Process Reasonable?"

Xcel has proposed upgrades for application to GSGs thru on-line processes that appear to be the result of feedback already provided by MnSEIA members. Likewise, we believe it would be fruitful for the CSG working group proposed above to consider some non-burdensome project readiness criteria in conjunction with the first-come first-serve application process Xcel proposed. In this regard, once an application has been deemed complete, Xcel should be required to approve or reject a CSG application within 60 days.

VIII. MnSEIA's Response to the Question "Are Xcel's Proposed Consumer Solar Garden Operator Deposits and Fees Fair and Reasonable?"

MnSEIA only supports fees sufficient for Xcel to maintain their CSG program, and to promote CSG production. We are wary that the current fee structure provides Xcel with additional compensation beyond a sufficiency for program maintenance. Xcel's proposed plan states, Xcel "will require applicants (garden operators) to pay an application fee, participation fee, metering fee, deposit, escrow fee, and an interconnection fee."[23] Xcel is seeking more fees than they have in Colorado.

[23] *Proposed Plan*, at 18.

Additionally, the fees Xcel is charging in Minnesota are substantially higher than it currently charges for CSGs in Colorado. A summary of the difference is below:

	Colorado Approved		Minnesota Proposed	
Type	Amount	Period	Amount	Period
Application	$500 (bid)	One-time, non-refundable	$1,200	One-time, non-refundable
Participation	$0		$300	Annual, non-refundable
Metering			Single Phase: $5.50 Three Phase: $8.00	Monthly
Deposit	$100/KW	One-time, refundable	$100/kW	One-time, refundable
Escrow	$0		$100/kW	One-time, refundable
Interconnection	Variable	One-time, non-refundable	Variable	One-time, non-refundable
Totals	$600 - $106,000		$10,800 - $311,000 (25 years)	

As the chart illustrates, Xcel is proposing an escrow payment $100/KW of capacity, as well as a $100/KW fee as a deposit. For a 1 MW CSG, this would be $201,200 in total fees and does not include (1) any interconnection fees, (2) engineering review fees, or (3) infrastructure fees.

The fees in Minnesota seem higher than Xcel would need to support its CSG program on their face. When you compare Minnesota's fees to Colorado's, then the numbers further suggest that Xcel's fee structure is more than sufficient to retain their CSG program. The fees are unreasonably high.

Additionally, some of the fees actually prevent Xcel from maintaining their CSG program and harm CSG production. The fees increase the upfront costs for solar installers and subscribers to a point where CSG production will be inhibited. For instance, the $100/kw capacity and $100/kw deposit fees are redundant and will only increase the costs of construction. Increased costs of construction will limit the amount of CSGs built. MnSEIA does not support this redundancy.

Further compounding the fees' constraints on installers, Xcel has stated that they do not intend to pay interest on any of the refundable fees while the CSGs are constructed. Withholding an installer's capital prevents the installers from using the money in more economical ways. We believe interest should accrue any time an entity holds another business's capital. That expectation applies here. Xcel should pay interest on the refundable fees.

CONCLUSION

Any plan the Commission approves must reasonably allow for the "creation, financing, and accessibility of community solar gardens," and must "be consistent with the public interest." As we have shown in our comments, Xcel's plan, specifically its proposal to use its A50 rate even if we are able to include a reasonable demand charge credit, will make it inordinately difficult for solar installers to develop CSGs, and render it impossible to develop CSGs that are consistent with Minnesota's public interest. Xcel's proposed ARR is inconsistent with the legislative intent. Therefore, MnSEIA urges the Commission to adopt an ARR rate that incorporates the real value of solar gardens, and to incorporate the other plan design elements that are entailed above.

Respectfully submitted,

Lynn Hinkle
Policy Director
Minnesota Solar Energy Industries Association - MnSEIA
lhinkle@mnseia.org
612-310-4742