**Minnesota Public Utilities Commission**
***Staff Briefing Papers***
**(CSG Rate)**

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**Meeting Date:** **August 7, 2014 ..............................................................**Agenda Item # 4A**

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**Company:** Xcel Energy (Xcel or the Company)

**Docket No.** **E002/M-13-867**

**In the Matter of the Petition of Northern States Power Company, doing Business as Xcel Energy, Requesting Approval of its Proposed Community Solar Gardens Program**

**Issues:** 1.What rate, Value or Solar (VOS) or Average Retail Rate (ARR), should the Commission approve for use in Xcel's Community Solar Garden tariff?
2. What is the appropriate methodology and calculation of Xcel's VOS rate?

**Staff:** Andrew Bahn ........................................................................ (651) 201-2249
Susan Mackenzie ........................................................................ 201-2241

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***Relevant Documents***

Order Approving Distributed Solar Value Methodology (Docket 14-65).................. April 1, 2014
Order Rejecting Xcel's Solar-Garden Tariff Filing (Docket 13-867) ......................... April 7, 2014
Xcel Energy's (Xcel) Motion to Show Cause.............................................................. May 1, 2014
Department of Commerce (DOC or Department) Comments ..................................... June 2, 2014
Minnesota Community Solar (MNCS) Comments..................................................... June 2, 2014
Solar Interveners[1] Comments ...................................................................................... June 2, 2014
Interstate Renewable Energy Council (IREC) Comments.......................................... June 2, 2014
City of Minneapolis Comments ...................................................................................... June 2, 2014
Sundial Solar Comments.................................................................................................. June 2, 2014
TruNorth Solar Comments................................................................................................ June 2, 2014
Minnesota Solar Energy Industry Alliance (MnSEIA) Comments .............................. June 3, 2014
Public Comments[2]........................................................................................................ June 10, 2014

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[1] The Solar Interveners consist of Fresh Energy, Environmental Law and Policy Center, Institute for Local Self-Reliance, and the Izaac Walton League of America.
[2] Comments were submitted to Public Comments by Novel Energy Solutions (NES), SoCore Energy, Rural Renwable Energy Alliance (RREAL) and innovative Power Systems (IPL) on June 2, 2014 and were filed under Public Comments on June 10, 2014.

Xcel Reply Comments ........ June 19, 2014
DOC Reply Comments ........ June 19, 2014
SunEdison Reply Comments ........ June 19, 2014
TruNorth Solar Reply Comments ........ June 19, 2014
MNCS Reply Comments ........ June 19, 2014
IREC Reply Comments........ June 19, 2014
Solar Interveners Reply Comments ........ June 19, 2014
SoCore Energy Reply Comments ........ June 19, 2014

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The attached materials are workpapers of the Commission Staff. They are intended for use by the Public Utilities Commission and are based upon information already in the record unless otherwise noted.

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# I. STATEMENT OF THE ISSUES

- What rate, Value of Solar (VOS) or Average Retail Rate (ARR) should the Commission approve for use in Xcel's Community Solar Garden tariff?
- What is the appropriate methodology and calculation of Xcel's VOS rate?

*Note: All other aspects of Xcel's proposed Community Solar Garden compliance tariff are addressed in separate staff briefing papers.*

# II. BACKGROUND

Legislation was passed in 2013 requiring the Department of Commerce (Department) to file a Distributed Solar Value methodology with the Minnesota Public Utilities Commission (Commission) by January 31, 2014. The Commission was directed to approve, modify with the Department's consent, or disapprove the methodology within 60 days. See Minn. Stat. §216B.164, subd. 10, Alternative tariff; compensation for resource value.

On April 1, 2014, the Commission issued its *Order Approving Distributed Solar Value Methodology* as proposed and modified with the consent of the Department, in Docket No. E999/M-14-65.

Legislation was also passed in 2013 directing Xcel Energy (Xcel or the Company) to file a plan for a community solar garden (CSG) program by September 30, 2013.[3]

On September 30, 2013, Xcel filed a petition for approval of its proposed community solar garden program plan under Minn. Stat. §216B.1641.

On April 7, 2014, the Minnesota Public Utilities Commission (Commission) issued its *Order Rejecting Xcel's Solar Garden Tariff Filing and Requiring the Company to File a Revised Solar Garden Plan* in the instant docket.

With respect to the bill credit rate to CSG subscribers, the Commission determined that the statutory applicable retail rate (ARR) is the full retail rate, including energy, demand, and customer charges as well as applicable riders, which would be approximately $0.12 per kWh. The case record demonstrated that a rate of approximately $0.15 is the minimum needed to secure financing and attract subscribers; thus the Commission also established a value for the solar renewable energy credits. On page 24 of the April 7 Order, the Commission stated:

> The Commission has tried to establish a bill-credit rate that will be workable for solar-garden developers and subscribers, as well as Xcel and its ratepayers, until Xcel has an approved value-of-solar tariff in place. However, it is important that the transition to a value-of-solar rate occur as soon as reasonably possible to

[3] Minn. Stat. §216B.1641(a) The public utility subject to section 116C.779 shall file by September 30, 2013, a plan with the commission to operate a community solar garden program which shall begin operations within 90 days after commission approval of the plan.

> ensure that solar gardens are compensated for the full value of the solar energy they produce, including all the benefits represented by the solar RECs.

To that end, the Order required that:[4]

> Within 30 days of the Commission's order approving a value-of-solar methodology, Xcel shall either
>
> a. file a value-of-solar tariff with the Commission for the purposes of the solar-garden program subject to Commission review and approval; or
>
> b. make a filing with the Commission that includes a calculation of the value-of-solar rate for the solar-garden program and shows cause why the rate should not be implemented.

On May 1, 2014, Xcel filed its Value of Solar (VOS) rate calculation and Motion to Show Cause why this rate should not be used. Xcel requested that the Commission grant Xcel's Motion and approve the use of the applicable retail rate (ARR). In the event that the Commission denies the Motion, Xcel requested the Commission use the VOS rate subject to conditions that would be included in Xcel's CSG tariff.

On May 5, 2014, Commission staff issued a notice setting a Comment period and asking for Comments to be filed on the following:

- Xcel's position that the use of the Value of Solar rate for solar gardens is not in the public interest at this time and that ARR should be used;

- Xcel's suggested alternative options to use the Value of Solar rates on an interim basis to meet an overall program capacity target or for a one-year pilot period;

- Whether Xcel's calculation of the Value of Solar rate complies with the methodology adopted by the Commission.

Comments on Xcel's Motion to Show Cause were filed on or around June 2nd by SoCore Energy, Novel Energy Solutions, Rural Renewable Energy Alliance, Innovative Power Systems,[5] City of Minneapolis, Sundial Solar, TruNorth Solar, Minnesota Community Solar, Solar Interveners,[6] Interstate Renewable Energy Council, Minnesota Solar Energy Industry Association and the Department of Commerce.

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[4] Ordering Paragraph 22.

[5] SoCore Energy, Novel Energy Solutions, Rural Renewable Energy Alliance,and Innovative Power Systems Comments were filed as Public Comments on June 2, 2014 and dated June 10, 2014 in eDockets.

[6] The Solar Interveners consist of Fresh Energy, Environmental Law and Policy Center, Institute for Local Self-Reliance, and the Izaac Walton League of America.

Reply Comments were filed on June 19th by Xcel, Minnesota Community Solar, Sun Edison, Interstate Renewable Energy Council, TruNorth Solar, Solar Interveners and the Department of Commerce.

As the Commission will see in the summary of comments following, initially most solar commenters recommended that the Commission deny Xcel's Motion to Show Cause and find that the use of the VOS was in the public interest. The majority of commenters favored the use of the VOS rate over the ARR, although many suggested that a solar incentive may need to be added to the VOS rate to allow for the creation, financing and accessibility of CSGs. After the Department filed its Comments correcting errors in Xcel's calculation of its VOS, resulting in an even lower VOS rate, most parties were amendable to the use of the ARR on a temporary basis in Reply Comments.

## III. XCEL'S MOTION TO SHOW CAUSE

Xcel stated its primary concern is that the CSG program is uncapped, and that the VOS rate appears to provide an incentive to promote the adoption of solar. Xcel stated this may prove more costly to its other customers over time, particularly if there is no flexibility to adjust to changes.

Xcel stated that while it recognized that the Commission found that there is uncontroverted evidence that it will take a $.015/kWh rate to make a CSG work, it believed that a rate lower than the VOS or a lower applicable retail rate (with reduced or no REC payments) may provide the necessary incentive to support solar development in Minnesota.

Xcel also stated that there is no clear mechanism under which the Commission can review the methodology underlying the VOS rate to determine if it remains appropriate and that its Motion to Show cause is an effort to balance the benefit of some flexibility with the likelihood that in the near term, its calculation of VOS would be lower than the ARR with RECs.

### A. The VOS Rate for Solar Gardens is not in the Public Interest at This Time; the ARR Should Be Used, Instead.

1. Xcel's Motion to Show Cause

Xcel stated in its Motion to Show Cause, filed on May 1, 2014, that it believed it is not in the public interest to use the VOS rate for CSGs at this time and instead recommended the use of the ARR for CSG facilities. Xcel stated there are legal, financial and practical considerations that support using the ARR at this time.

*Legal*

Xcel stated that the VOS statute and CSG statute, when read together, allow for the continued use of the ARR. Xcel stated the CSG statute requires Xcel to purchase energy generated from a CSG at a rate calculated under the VOS statute, or until that rate has been approved by the Commission, the ARR and the VOS statute allows Xcel the option of filing a VOS tariff, which would become VOS rate once it were approved by the Commission. Xcel stated that, while the Department's VOS methodology has been approved by the Commission, Xcel has not yet filed a VOS tariff with the Commission under the VOS statute. Therefore, Xcel concluded that a migration from the ARR to the VOS rate is not statutorily required at this time.

*Financial and Practical*

Xcel stated that the ARR for residential customers is approximately the same as its calculation of the starting point VOS rate, and non-participating customers are relatively neutral to that decision at the outset. However, for business customers, the ARR is well below the starting point value of the VOS, according to Xcel's calculation of the VOS.

Xcel calculated that the 2014 VOS rate would be $0.147/kWh on a levelized basis and calculated the VOS rate when adjusted for inflation to be $0.114/kWh in 2014. Xcel stated that this is less than the REC incented ARR that range from $0.115/kWh for large installations subscribed by commercial customers up to $0.15/kWh for small installations subscribed by residential customers.

Xcel stated it believed compensating solar garden subscribers at the ARR presents fewer concerns than the VOS rate, because the ARR recognizes the differences among customer classes and that it likely provides more flexibility over time. Xcel stated that large load commercial customers will find either the VOS rate or the ARR substantially more attractive than net metered rates in the absence of additional financial incentives. Xcel stated that an advantage of the ARR is that the compensation to CSG subscribers for RECs is a value that can be adjusted for prospective projects based on Commission discretion as it reviews the market response to the program.

In addition, Xcel stated that if there is not substantial adoption at the ARR, it believed that it would be appropriate for the Commission to allow Xcel to opt into the VOS for the CSG program at a future date. Thus, Xcel concluded that the discretion to adjust the ARR may prove to be the lowest cost means of making the CSG offering.

2. Comments by Other Parties in Response to Xcel's Motion to Show Cause

Several parties commented on Xcel's Motion to Show Cause. In these Comments, only one of the Parties, Minnesota Community Solar, recommended approval of Xcel's Motion and agreed that the Commission should require the use of the ARR as opposed to Xcel's proposed VOS rates. Most of the other parties recommended the Commission deny Xcel's Motion and disagreed that the use of the VOS rate was not in the public interest. However, there was a strong sentiment that if the Commission approved the proposed VOS rate, then an incentive may be required to allow for the creation, financing and accessibility of CSGs.

*Minnesota Community Solar (MNCS)*

MNCS recommended the Commission approve Xcel's Motion to Show cause and agreed with Xcel that the Commission should require the use of the ARR as opposed to the proposed VOS rates for CSGs.

MNCS stated there are two fundamental differences between CSGs and other solar projects that lead to the conclusion that the ARR is preferable and necessary for the success of CSGs.

- The CSG statute expressly requires that any CSG program which is adopted must "reasonably allow for the creation, financing and accessibility" of CSGs; and
- The economics of CSG projects are decidedly different than traditional solar projects.

MNCS stated that the pricing for CSGs must necessarily be set at a level sufficient to sustain viability and provide access to subscribers. In contrast, according to MNCS, the VOS statute requires that the VOS methodology established only takes into consideration the various system benefits provided by solar generation; therefore, the VOS rate is set without regard to whether the price is sufficient to sustain any particular project or type of project.

In regard to the economics of CSGs, MNCS stated that the CSG program includes regulatory, legal and administrative requirements that create substantial costs that are not present in an ordinary solar installation. MNCS estimated that, in the aggregate, these costs would add 15-30% to the overall cost of a CSG on average depending on project size and configuration.

Although MNCS agreed with Xcel that the Commission should require the use of the ARR as opposed to the proposed VOS rates for CSG, it also recommended the following changes to the ARR that it stated were necessary for CSG viability:

- Annual Adjustments,
- Limit Rate Changes, and
- No Required Transition to VOS rate.

<u>Annual Adjustments</u>. MNCS requested that the methodology be improved to more expeditiously capture significant changes in the ARR rate. According to MNCS, Xcel's Compliance Filing proposed that the Standard Rate and REC rate would be adjusted annually and that the ARR will be based on historical actual retail revenues, including fuel clause revenues, divided by actual corresponding sales. MNCS stated that it appears the calculation uses12 months of data ending November. According to MNCS, Xcel proposes to file the revised calculation the following January and make the revised rates effective March 1.

According to MNCS, Xcel's proposed process appears to include a substantial lag between major events that might increase Xcel's rates (interim and base rate increases) and the recognition of such increases in CSG rates. If a base rate increase were to be implemented in April of any year, MNCS stated the resulting increase in retail revenues would not be reflected until the subsequent November calculations and finally reflected in actual CSG subscriber benefits the following March, almost 11 months after taking effect.

Limit Rate Changes. MNCS recommended that the REC value added to the Standard Rate should not be allowed to decrease over the term of the contract. According to MNCS, Xcel's proposal in its Motion to Show Cause makes clear that it believes the REC rate is likely to be decreased in the future based on market conditions or other circumstances. MNCS stated it is critical that such decreases not occur and recommended that the Commission not allow it to for existing CSGs.

No Required Transition to VOS rate. MNCS also opposed the proposed concept that if the Commission orders Xcel to use the VOS, CSGs must shift to the new VOS rate from the existing ARR. MNCS stated that if the proposed VOS rate is materially lower or less advantageous than the ARR on which the CSG was developed, viability and expected subscriber benefits will be threatened. To eliminate this uncertainty, MNCS recommended that the applicability of any such VOS rate to CSGs must be prospective only for new CSGs, and even then only apply if the rate is sufficient to sustain CSG viability as required by law. MNCS stated that another option it would support would be to allow existing CSGs and those under development at the time any VOS is implemented to elect whether to continue under their original ARR or to switch to the new VOS rate.

*Minnesota Solar Energy Industry Association (MnSEIA)*

MnSEIA requested that the Commission deny Xcel Energy's Motion to Show Cause, and asked the Commission to review Xcel's filed VOS rate. MnSEIA stated that Xcel failed to show why the VOS rate should not be implemented and its motion raised no new issues. MnSEIA stated that because the ARR changes yearly and will have unknown escalators and REC values, the rate does not work for CSG developers or subscribers and does not meet the requirements of the CSG statute. MnSEIA stated that the VOS provides a more stable base rate for CSG installers, and rate predictability is as important as rate price. In addition, MnSEIA stated the VOS is a simpler for consumers, and fairly compensates both solar generators and the utility for the produced energy.

In the event that the Commission determines Xcel has shown cause, and that CSG consumers are better served with the ARR, MnSEIA agreed with MNCS and recommended the Commission apply the following conditions:

- A locked-in three (3) cent REC floor over the 25 year contract period;
- To ensure rate security for investors, require that the ARR won't be changed to the inflation adjusted VOS later in a contract period; and
- Require that the ARR has rate parity with Xcel's energy rates to ensure that the ARR is not effectively depreciated over time.

In sum, MnSEIA stated it believed the VOS is the better base rate that the ARR. However, if the Commission decides to use the ARR, then MnSEIA would like the rate to start at $0.123/kWh, so that the requested $0.03 REC could boost it to the $0.15/kWh minimum installation threshold. Additionally, MnSEIA asked for more certainty for investors, and for the ARR's escalation rate to mimic, or rise similarly to, Xcel's future rate increases.

*TruNorth Solar (TruNorth)*

TruNorth stated it would endorse and adopt the comments filed by the MnSEIA in support of adoption of a VOS rate. TruNorth stated Xcel had failed to show sufficient cause why the Commission should not approve and implement a VOS rate immediately, and one which reasonably allows for the creation and financing of community solar gardens in the state.

TruNorth stated that Minnesota Statutes §216B.1641(d) provides that Xcel must purchase all energy generated by the solar garden and that the "purchase shall be at the rate calculated under section 216B.164, subdivision l 0, or, until that rate for the public utility has been approved by the commission, the applicable retail rate." TruNorth stated further that the legislature clearly intended that the VOS rate would be the final rate to govern CSGs in Minnesota, versus an interim ARR. TruNorth Solar stated that the Commission has all the information it needs to adopt a VOS rate which can provide industry, investors and subscribers with the level of certainty necessary to drive investment and meaningful contributions of community solar before the federal solar investment tax credit reduces from 30% to 10% in the next two years. TruNorth concluded that time is of the essence and recommended the Commission adopt a VOS rate which will allow for the reasonable creation and financing of CSGs in Minnesota.

*City of Minneapolis*

The City of Minneapolis stated that the use of the VOS rate is in the public interest because the legislature established and required the VOS in its formation of CSG legislation and the statute outlines that the VOS rate represent "the value to the utility, its customers, and society for operating distributed solar photovoltaic resources interconnected to the utility system." According to the City, the VOS statute implies that the VOS was not meant to be a financing incentive as implied in Xcel's Motion, but rather was meant to be a fair compensation to solar generators.

*Interstate Renewable Energy Council (IREC)*

IREC disagreed with Xcel and stated it believed that using the VOS rate for CSGs would be in the public interest. IREC stated that, whether or not a transition to the VOS rate is required, the statutory provision in §216B.1641(d), addressing the purchase rate for CSGs, clearly contemplates such a transition now that the Commission has approved the VOS methodology.

IREC stated that the ARR, plus the values for Renewable Energy Credits (RECs) approved by the Commission, was intended to serve as a temporary proxy and that the VOS rate reflects a fairer and more transparent calculation of the value of CSG generation.

IREC pointed to the Commission's April 7 Order which stated, "it is important that the transition to a value-of-solar rate occur as soon as reasonably possible to ensure that solar gardens are compensated for the full value of the solar energy they produce, including all the benefits represented by the solar RECs." In addition, IREC referred to the Commission's April 1, 2014 Order approving the VOS calculation methodology in Docket No. 14-65, which stated "[a] correctly calculated Value of Solar should compensate solar PV customers in a way that does not advantage or disadvantage them relative to other customers or other forms of generation."

*Solar Interveners*

The Solar Interveners stated that they also believed that requiring Xcel to offer the VOS rate to community solar garden subscribers is supported by substantial evidence and is consistent with the public interest. The Solar Interveners stated the fact that the Legislature established and required the VOS approach is clear evidence that use of the VOS rate is in the public interest.

The Solar Interveners disagreed with Xcel that the VOS subscriber rate is too high, and thus "substantially more attractive," particularly for "large load commercial customers[.]" The Solar Interveners stated that this was not the first time Xcel had raised this concern before the Commission and that, regardless, the Commission approved the VOS Methodology (including for commercial solar generators/subscribers), and denied Xcel's Motion for Reconsideration. The Solar Interveners stated that a separate and lower VOS subscriber rate for Xcel's commercial customers would violate both the VOS statute (which bases the rate on actual value delivered) and the Commission-approved methodology, in addition to harming commercial subscribers, who should have the same opportunity as other subscribers to participate in Xcel's program and receive fair compensation for the value they deliver to the utility, its customers, and society. The Solar Interveners concluded that the application of the VOS rate for CSGs is in the public interest because the VOS rate is transparent, simple, predictable, and fair.

*SoCore Energy (SoCore)*

SoCore submitted Comments that stated the success of the CSG program will, in large part, hinge on the ability of developers to secure financing for solar garden projects and that financiers are extremely sensitive to uncertainty. SoCore stated that, as a general rule, the less certain and predictable the revenue stream, the less likely a project is to secure financing, and the financing that is made available will come at a higher cost.

SoCore stated further that the ARR and VOS have very different characteristics from the perspective of financiers. Because the ARR would be reviewed and potentially readjusted, SoCore stated the rates under which revenue streams are calculated for a project developed under the ARR are unknowable, rendering the project extremely risky from the perspective of a financier. SoCore stated it believed that if the Commission were to authorize Xcel to utilize the ARR, the market for financing solar garden projects would be very limited.

SoCore stated that although the VOS rate does not mitigate all uncertainty, it is preferable in that the base rate ($/kWh) is known and the escalation rate is pegged to the Consumer Price Index. SoCore concluded that applying the VOS rate to the CSG program is in the public interest because it will facilitate financing for projects and allow the program to be successful while using the ARR will cause the CSG program to be constrained and will fail to stimulate the development sought by the legislature and required in Minn. Stat. 216B.1641(d).

*Novel Energy Solutions (NES), Rural Renewable Energy Alliance (RREAL), Innovative Power Systems (IPS) and Sundial Solar*

NES, RREAL, IPL and SunDial Solar all recommended the Commission deny Xcel's Motion to Show Cause, and requested that the Commission review and approve Xcel's filed value-of-solar (VOS) rate in the manner outlined in Point 22(a) of the April 7, 2014 CSG Order.[7]

*The Department of Commerce (DOC or the Department)*

The Department noted that two different statutes govern the VOS and CSGs and in analyzing Xcel's motion the Department concentrated on the following statute language:

- *Community Solar Garden, Minnesota Statute 216B.1641(e):* The commission may approve, disapprove, or modify a community solar garden program. Any plan approved by the commission must [among other things]: (1) reasonably allow for the creation, financing, and accessibility of community solar gardens; And

- *Alternative tariff; compensation for resource value (Value of Solar) 216B.164 Subd. 10(a):* A public utility may apply for commission approval for an alternative tariff that compensates customers through a bill credit mechanism for the value to the utility, its customers, and society for operating distributed solar photovoltaic resources interconnected to the utility system and operated by customers primarily for meeting their own energy needs.

The Department noted further that the two statutes guiding CSGs and the VOS list different requirements for plans and tariffs designed in compliance with these statutes. For example, the Department noted the VOS statute does not list financing or accessibility as criteria for a VOS tariff and the CSG language does not identify solar energy's value to the utility, its customers, and society.

The Department stated that VOS rates calculated in conformance with the Commission-approved Methodology must comply with the statutory language to compensate customers for the value of solar to the utility, its customers, and society. The Department added, however, that the VOS methodology was not designed to meet a particular cost per kWh value to "reasonably allow for the creation, financing, and accessibility of community solar gardens." According to the Department, the VOS rate design does not consider solar market financing considerations, nor was it calculated around a utility's existing ARR. In addition, the Department stated the VOS rate was not designed to trigger a set level of solar development, so the appropriateness of the rate does not depend on the level of capacity needed to meet the solar energy standard or other solar policy goals. Rather, the Department stated the goal of the VOS rate is to reflect the value of solar resources based on the utility's circumstances and other criteria as outlined in statute.

[7] Ordering paragraph 22 (a) of the April 7, 2014 CSG Order states that within 30 days of the Commission's order approving a value-of-solar methodology, Xcel shall…file a value-of-solar tariff with the Commission for the purposes of the solar-garden program subject to Commission review and approval;

As to CSGs, the Department stated in its Comments that it is not in the position to argue what is a financeable rate. The Department stated that other parties that work directly with solar equipment manufacturers and project developers may have more knowledge of the current and forecasted costs of solar projects.

## B. Use the VOS Rates, but only on an Interim Basis to Meet an Overall Program Capacity Target or for a One-Year Pilot Period

1. Xcel's Alternative proposal

If the Commission determines that the use of the VOS rate is appropriate, Xcel stated it believed that implementing the VOS rate subject to some form for review of meeting the goals outlined in the CSG Order would be appropriate. Xcel stated that this would allow the Commission to evaluate program outcomes and market data after an interim period to determine if continued use of the VOS rate for its CSG program remains consistent with the public interest. Xcel suggested the Commission could consider implementing measures that can be incorporated into its CSG tariff that would allow for the interim use of the VOS rate.

Xcel noted that due to the timing of the VOS and solar gardens proceedings, this is the first filing that Xcel suggested using an implementation approach for the VOS rate. Xcel stated that now that the VOS methodology has been approved, the impact of the VOS rate as it relates to CSGs has become clearer.

Xcel requested the Commission consider implementing a trigger point for review of the CSG program based on overall program capacity or use the VOS rate for a one-year pilot period. Xcel suggested that after either the target being met or the one-year pilot period, the Commission could reevaluate the VOS rate in the context of the additional information that would be available. Xcel stated that this would provide the Commission the opportunity after one year to review program outcomes and market data that would then be available to determine if the VOS rate remains appropriate for the solar gardens program. If the Commission were to determine a lower rate would be reasonable, Xcel stated that customer interests would be served by obtaining the subsequent generation contracted under the solar gardens program at a lower rate.

*Program Capacity Target*

Xcel stated that one way the Commission could implement the VOS rate on an interim basis is to use an overall program capacity target to trigger further review of the tariff. Xcel stated it believed that the benefit of this approach is that it could serve as a gauge for whether the VOS rate is adequately supporting the development of CSGs and that the time it takes to meet the target could indicate whether the rate is set too high or too low. Xcel stated that such a measure would allow the Commission to gauge the effect of the VOS rate on stimulating or not stimulating the program.

*One-Year Pilot Period*

The other option suggested by Xcel was to use the VOS rate for a one-year pilot period, which, according to Xcel, would effectively limit the number of solar gardens that will participate in the program at the initial VOS rate. Xcel stated that this would also provide an opportunity for the Commission to reevaluate the program after a year of experience and consider market data that would then be available.

2. June 2 Comments by Other Parties on Xcel's Alternative Proposal

*City of Minneapolis*

The City of Minneapolis stated in its Comments that it does not believe that either of Xcel's two suggested alternative options is warranted at this time. The City stated that according to the CSG statute there shall be no limitation on the number or cumulative generating capacity of community solar garden facilities other than the limitations imposed under section 2168.164, subdivision 4c, or other limitations provided in law or regulations. The City stated that Xcel's suggested one year pilot would limit the number of solar gardens and is in direct conflict with this legislative language.

*IREC*

IREC stated in its Comments that it does not believe it is necessary to impose additional constraints on the program, such as the two alternative options proposed by Xcel. IREC stated further that it believed that the annual updates to the VOS as well as the Commission's and Department's discretion to adjust the underlying methodology provide sufficient flexibility and consumer protection.

In addition, IREC stated the Commission already has mechanisms in place to monitor the program's progress and that if problems arise related to the VOS rate or other aspects of the problem, they should emerge through the stakeholder working group and the regular reports Xcel must submit on the program. IREC added that additional constraints on the program, such as the two proposed by Xcel, would only serve to increase uncertainty surrounding the program and negatively impact CSG development.

Finally, IREC noted that the Commission already determined that Xcel's earlier proposal to place capacity limitations on the program was contrary to the public interest. IREC concluded that by adopting the VOS rate at the outset, and allowing Xcel to update it pursuant to the transparent, Commission-approved methodology going forward, the Commission would set a clear trajectory for the CSG program and maximize its chances for success.

*Solar Interveners*

The Solar interveners stated that they do not believe that the adoption of either of Xcel's suggestions for a program limitation is warranted at this time. The Solar interveners stated that the goal of the VOS statute is not to accomplish a certain level of market development, but rather is intended to fairly compensate solar generators for the value that they provide "to the utility, its customers, and society…"

Further, the Solar Interveners noted the Commission has already established multiple mechanisms to monitor the development and implementation of Xcel's community solar program, such as filing annual reports to the Commission within 18 months after the first solar garden is operational that include data on "the bill credits earned and paid" and "lessons learned and any potential changes to the program." In addition, the Solar Interveners noted the Commission has also asked the utility to work with solar-garden developers and other interested parties, and to report back to the Commission within six months to identify any issues of concern and potential resolutions.

In addition, the Solar Interveners stated that both of Xcel's suggested program limitations would increase market uncertainty and investment risk during the program's critical startup phase. The Solar Interveners added that this increased uncertainty and risk would make it harder for market participants to internally justify the effort and expense needed to develop and finance CSG projects —making it less likely that the program would "reasonably allow for the creation, financing, and accessibility of community solar gardens" as required by statute

Finally, the Solar interveners noted that a one-year rate pilot would "effectively limit the number of solar gardens" participating under the VOS rate and Xcel's stated preference for a lower VOS rate makes it clear that the utility would prefer to reduce the VOS rate after such a pilot program—effectively limiting program capacity even further. The Solar Interveners stated that this would contradict the legislative intent behind the program and noted that the Commission has already rejected an attempt by Xcel to limit the capacity of its community solar program to 20 megawatts during the first two years—finding the proposed temporary limitation to be "contrary to the public interest."

*SoCore*

SoCore urged the Commission to reject Xcel's suggested alternatives. SoCore stated that both alternatives would increase the risk that the investment terms of the CSG programs are subject to change. SoCore stated further that developers and investors make calculated decisions about the markets in which they choose to invest and the potential for long-term, sustainable growth is one of the criteria considered when businesses choose where to invest resources, hire staff, and cultivate customers and development opportunities. SoCore concluded that both of Xcel's suggested alternatives would measurably reduce the chance that developers will invest start-up resources in CSGs, thus limiting participation and compromising its success.

*The Department*

The Department recommended that the Commission reject Xcel's suggested alternative options to use the VOS rates on an interim basis or for a one-year pilot period.

The Department stated it did not support either Xcel's recommendation that the Commission implement a trigger point for review of VOS rates based on overall program capacity, or Xcel's alternative recommendation for a one-year VOS pilot project. The Department stated that underlying both of these recommendations is Xcel's belief that the VOS Methodology was designed to incentivize a certain level of solar development, including CSG subscriptions. The Department disagreed with this belief and advised that the VOS Methodology was designed to measure solar energy's value to the utility, its customers, and society for operating distributed solar photovoltaic resources interconnected to the utility system and operated by customers primarily for meeting their own energy needs. The Department stated that no component of the approved Methodology is tied to a particular programmatic solar capacity goal or limit.

In addition, the Department stated that Xcel's proposals to tie the VOS to overall program capacity or for a one year pilot period would add additional uncertainty to customers interested in CSGs and would make it more difficult for customers to evaluate their subscription options. The Department added that such approaches would make it unworkable for customers to invest in a subscription to a CSG under a VOS rate for one year that could change to the applicable retail rate later based on factors outside of the subscriber's control. Further, the Department stated that the proposed pilot program is not in the public interest as it is unclear how success would be measured thereby creating greater uncertainty and unnecessary delays.

Finally, the Department stated it was also concerned about Xcel's suggestion that it may be appropriate in later years of a given customer's subscription for the Commission to change the VOS rate under that existing subscription for reasons other than the annual inflation adjustment. The Department stated that while the VOS for a given subscription is updated annually for inflation throughout the life of the subscription, the rate is based on the present value of 25 years of solar production at the time the contract is executed. As such, the Department advised it would not be appropriate to change the underlying methodology and rate structure in later years for VOS rates approved in earlier years. Instead, the Department recommended that any changes to the methodology that may be made should apply only to solar installations interconnecting after any revised methodology and resulting rate calculation is approved by the Commission.

## IV. XCEL'S CALCULATION OF THE VOS RATE

Although several parties commented on Xcel's final VOS rate, the Department was the only party that commented on Xcel's calculation and its compliance with the Commission approved VOS methodology.

### A. Xcel's VOS Calculation

Xcel included a VOS rate calculation with its Motion to show Cause that could be used as part of its CSG tariff. A breakdown of the total costs of the VOS rate and the avoided costs was provided in figure ES-1 attached to Xcel's filing.

| 25 Year Levelized Value | Economic Value ($/kWh) | Load Match (No Losses) (%) | Distributed Loss Savings (%) | Distributed PV Value ($/kWh) |
|---|---|---|---|---|
| Avoid Fuel Cost | $0.0449 | | 9.8% | $0.0493 |
| Avoid Plant O&M - Fixed | $0.0014 | 48.6% | 10.8% | $0.0008 |

| | | | | |
|---|---|---|---|---|
| Avoid Plant O&M – Var. | $0.0016 | | 9.8% | $0.0017 |
| Avoid Gen. Capacity Cost | $0.0799 | 48.6% | 10.8% | $0.0430 |
| Avoid Res. Capacity Cost | $0.0058 | 48.6% | 10.8% | $0.0031 |
| Avoid Trans. Capacity Cost | $0.0333 | 48.6% | 10.8% | $0.0179 |
| Avoid Dist. Cap Cost | $0.0007 | 55.2% | 3.2% | $0.0004 |
| Avoid Environmental Cost | $0.0284 | | 9.8% | $0.0311 |
| Avoid Voltage Control Cost | | | | |
| Solar Integration Cost | | | | |
| **TOTAL** | | | | **$0.1473** |

Xcel adjusted the VOS rate for inflation over the 25 years of the contracts and the calculations were attached as Figure ES-2 in Attachment A to its filing. Xcel calculated the VOS rate for 2014 to be **$0.1139**/kWh.

## B. June 2 Comments by Other Parties on Xcel's Calculation of the VOS Rate

*MNCS*

MNCS compared Xcel's proposed ARR with the proposed VOS rate and concluded that ARR pricing is superior to the proposed VOS pricing for CSGs. As described in its Comments, MNCS compared the proposed ARR pricing for CSGs set forth by Xcel in its compliance filing, including its "Standard Rate" and the additional price to be paid for RECs, $0.15033/kWh for residential customers, with Xcel's proposed VOS rate, which is $0.147/kWh on a levelized basis, and starts in 2014 at $0.114/kWh when adjusted for inflation.

MNCS stated that Xcel's proposed VOS rate does not provide adequate revenues for a CSG to be successful in terms of meeting its costs or offering subscribers a reasonable chance of a positive benefit over the life of the contract. Therefore, MNCS concluded it will be highly unlikely that MNCS or other CSG developers will be able to fully subscribe a project. Finally, MNCS stated that given the Commission's conclusion that a rate of at least $0.15/kWh is needed to sustain viability of a CSG, and the fact Xcel's proposed VOS rate falls short of this target, MNCS concluded that the ARR is the right choice for CSGs.

*MnSEIA*

MnSEIA stated that while it was in favor of a VOS rate for CSGs, it was concerned that Xcel's proposed VOS rate will not allow CSGs to work within the preexisting legal framework. MnSEIA added that CSG construction requires at least a $0.15/kWh rate from the moment the boots hit the roof until the end of the contract period and the proposed VOS rate does not meet that threshold.

With the 2014 solar construction season on the line, MnSEIA asked the Commission to review and approve Xcel Energy's calculated VOS rate as if it was filed as a tariff under Order Point

22(a), and to either adopt its averaging modification or develop an incentive program that will start, and maintain, a $0.15/kWh CSG rate.

MnSEIA stated that if Xcel’s proposed VOS rate is implemented as is, with an escalation factor of 2.75% for a twenty-five (25) year term, the solar industry will be unable to create solar gardens for subscribers and the public interest will not be served. MnSEIA reasoned that because CSGs have more costs than other non-CSG solar installations and the VOS methodology, correctly, does not incorporate those costs into its methodology, solar installers need more than Xcel’s proposed VOS rate.

MnSEIA stated further that financing realities must be addressed in this docket, because CSGs are the only solar projects that are financed by both subscribers and private investors. MnSEIA added that, in addition to ignoring CSG’s increased costs, the VOS methodology also does not incorporate the financing issues associated with CSG installation.

MnSEIA stated that these shortcomings are not the fault of the VOS, because the VOS rate is intended to allow for creation and development of other non-CSG solar projects. Therefore, MnSEIA concluded that the VOS methodology does not require modification and instead, the CSG docket is where these additional CSG costs must be addressed.

In order to make CSGs work in Minnesota, MnSEIA stated that any program the PUC approves must grant the upfront capital necessary to finance the entire contract and the primary approach advocated by MnSEIA is to look at the full duration of the contract, and then to average the contract’s total value across 25 years. MnSEIA calculated that averaging the full 25 year value, using the VOS’s 2.75% escalation rate, creates a $0.1608/kWh CSG bill credit rate. MnSEIA stated that Xcel would still pay out approximately the same total value over the duration of this averaged approach as it would with a plan that starts at $.1139/kWh and escalates 2.75% each year for 25 years.

In the event, however, the Commission is uncomfortable with its averaging proposal, MnSEIA would advocate any incentive program that can get installers to $0.15/kWh from day one through the life of the contract. MnSEIA stated an incentive program could include, but is not limited to, supplementary REC values, adding value for the uncalculated location specific benefits in the VOS rate, or implementing a program – such as on-bill repayment - that could reduce upfront installer costs.

*TruNorth*

TruNorth Solar agreed with MNSEIA that the minimum VOS rate that will actually result in CSGs being built in Minnesota is $0.15/kWh.

*City of Minneapolis*

The City stated it did not have time to adequately evaluate Xcel’s calculations and therefore did not have any comments as to whether or not it complied with the Commission approved VOS methodology.

*IREC*

IREC stated that a key provision of the CSG statute requires that any plan approved by the Commission must "reasonably allow for the creation, financing, and accessibility of community solar gardens." IREC stated further that if the Commission finds that the VOS rate cannot currently accomplish the statutory mandate to reasonably allow for the creation, financing, and accessibility of CSGs, then the Commission may wish to consider a temporary stopgap, such as a modest per kilowatt-hour incentive.

*Solar Interveners*

The Solar Interveners stated that they acknowledge that some solar industry stakeholders have argued that the subscriber rate (under either the VOS or the interim rate) may be insufficient to "reasonably allow for the creation, financing, and accessibility of community solar gardens," as required by statute. For this reason, the Solar Interveners suggested that the Commission consider the use of a limited subscriber or developer incentive, if necessary, to help bridge the gap and enable the creation, financing, and accessibility of community solar gardens.

In addition, the Solar Interveners stated that Xcel's calculations of the VOS rate should be as transparent as possible to improve transparency and facilitate understanding among stakeholders and regulators. As such, the Solar interveners stated that Xcel should make public a spreadsheet file for each Figure and Table in its rate filing to allow all stakeholders to examine and confirm the mathematical formulas behind the data presented in each Figure and Table. In addition, the Solar Interveners stated that, where applicable, Xcel should also make public any underlying data and spreadsheets and allow access to other data subject to Commission confidentiality practices.

The Solar interveners had no further comment on whether Xcel's calculations did or did not comply with the Commission-approved methodology.

*NES, RREAL, IPL and Sundial Solar*

NES, RREAL, IPL and SunDial Solar each submitted Comments requesting that the Commission review and approve Xcel's filed value-of-solar (VOS) rate in the manner outlined in Point 22(a) of the April 7, 2014 CSG Order.

NES stated that while it agreed with much in MNSEIA Comments, it was NES's belief that the VOS rate they are asking for CSGs is the bare minimum required necessary to build CSGs, and not the fair market value rate for solar or the solar from CSGs. NES stated that due to the fact that the proposed VOS drastically undervalues solar electricity and that 3rd party studies referenced in past submissions (including the staff briefing papers) have shown a value to the ratepayers of at least $0.25/kWh for solar generation, it requested that solar receive its fair value, and nothing more. NES stated that it believed a VOS rate of $0.20/kWh is required for adequate compensation to solar installers of CSGs.

RREAL, IPL and SunDial Solar stated that they also agreed with several points made by MnSEIA in its Comments and that they support an even higher rate than $0.15/kWh to ensure that CSGs flourish in the near future. In addition, RREAL stated that in order to meet the statutory intent of the CSG statute the PUC must adopt a rate that reasonably allows for the "creation, financing, and accessibility of community solar gardens." Finally, RREAL and Sundial stated they agreed with the Commission that a reasonable uncontroverted rate of at least $.15/kWh from day one is required for a successful CSG program.

*Department*

The Department stated that it, and its consultant Clean Power Research, reviewed Xcel's filed VOS rate calculations and subsequent responses to the Department's Information Requests for conformance with the Commission-approved Methodology and found errors and made modifications in the following utility specific assumptions and calculations for the avoided costs. The corrected calculation components are listed in the table below. The differences for each component from Xcel's filed VOS rate are provided in the last column.

| **25 Year Levelized Value** | Econ. Value ($/kWh) | Load Match (No Losses) (%) | Distributed Loss Savings (%) | Distributed PV Value ($/kWh) | Difference from Xcel proposed VOS |
|---|---|---|---|---|---|
| Avoided Fuel Cost | **$0.0420** | | 9.80% | **$0.0461** | -$0.0032 |
| Avoided Plan O&M - Fixed | **$0.0016** | 48.60% | 10.80% | **$0.0009** | $0.0001 |
| Avoided Plan O&M – Var. | **$0.0016** | | 9.80% | **$0.0018** | $0.0001 |
| Avoided Gen Capacity Cost | **$0.0441** | 48.60% | 10.80% | **$0.0238** | -$0.0192 |
| Avoided Reserve Cap. Cost | **$0.0032** | 48.60% | 10.80% | **$0.0017** | -$0.0014 |
| Avoided Trans Cap. Cost | **$0.0280** | 48.60% | 10.80% | **$0.0151** | -$0.0028 |
| Avoided Dist. Capacity Cost | **$0.0133** | 55.20% | 13.20% | **$0.0083** | $0.0079 |
| Avoided Envrn. Cost | **$0.0262** | | 9.80% | **$0.0288** | -$0.0023 |
| Avoided Voltage Cntrl Cost | | | | | |
| Solar Integration Cost | | | | | |
| **TOTAL** | | | | **$0.1264** | -$0.0209 |

Xcel calculated the VOS rate for 2014 to be $0.0984/kWh, which was $0.0155/Kwh less than the 2014 VOS rate calculated by Xcel. The Department offered the following recommendations for the Commission to consider if the Commission chooses to direct Xcel to file a VOS tariff.

*Annual Inflation Adjustment Process*

The Department stated the Methodology directs utilities filing a VOS tariff to adjust the rate for inflation annually using U.S. Bureau of Labor Statistics Urban Consumer Price Index (CPI) data. To give utilities enough time to gather the data and calculate the VOS component values the Department recommended that utilities be required to file the updated inflation-adjusted rate tariff by March 1st of each year in the 25 year contract.

*VOS Rate Filings for New Interconnections*

To allow the utility to collect the necessary CPI and avoided fuel cost data while giving the Department time to review the calculations in time for the solar summer construction, the Department recommended that utilities filing updated VOS rates file the updated rate calculation by March 1st of the year in which they will take effect.

## V. REPLY COMMENTS FILED ON JUNE 19

### A. Xcel

Xcel's Reply Comments stated that if the Commission orders the use of the VOS rate for CSGs, the Commission might consider setting a period to review the rate once implemented and then determine whether the goals of the methodology are met, whether additional benefits and costs need to be quantified, and whether the continued use of the VOS rate is in the public interest.

In response to parties that emphasized the statutory provision requiring that the CSG program "reasonably allow for the creation, financing and accessibility" of CSGs and requests for incentives to be added to the VOS or ARR for CSGs, Xcel stated that should the Commission find that additional compensation is required, the Commission may wish to solicit comments on how an additional incentive can be appropriately designed. Xcel stated it believed the appropriate time for such discussions would follow an initial review period after the rate has been implemented and has an opportunity to be market tested.

In response to parties' concerns about the potential for uncertainty with respect to rates, Xcel stated that it does not intend to propose any midstream changes that would alter rate structures for an existing garden. Xcel stated further that it will propose annual updates to its rates consistent with the rate structure adopted by the Commission and that any structural changes to rate offerings would be made to new CSGs only and would not upset the agreements under which existing gardens operate, unless the Commission orders otherwise. Finally, Xcel stated that the Commission may wish to carefully consider whether allowing an existing CSG to "cut over" between an existing to a newly available rate is in the public interest.

Xcel also noted that if it is ordered to use the VOS in its CSG program, significant billing system development is required to accommodate its "yearly vintage" structure and that it may require the full 180 days from program approval until bill crediting is available, as allowed by Minn. Stat. § 216B.1641(g).

In response the Department's corrections of Xcel's calculation of the VOS rate, Xcel agreed with the majority of modifications proposed by the Department.

Xcel incorporated the corrections for Peak Load Loss Savings factor and Heat Rate Degradation into its revised calculation. For the avoided costs components of the VOS calculation, Xcel updated the avoided fuel costs by incorporating the Department's correction for heat rate degradation and using the Fuel Price Overhead number as calculated below.

Ventura vs. Henry Hub basis Differential is equal to - $0.18. Xcel stated the Ventura Hub typically trades at lower prices than the NYMEX Henry Hub in Louisiana.

Plus

Delivery Charge from Ventura Hub to Plant is equal to $0.14.

Therefore, Xcel calculated the total Fuel Price Overhead calculated to be -$0.04.

Xcel updated all the remainder of the avoided costs in its VOS calculation to reflect the Department's preferred approach.

| **25 Year Levelized Value** | **Economic Value ($/kWh)** | **Load Match (No Losses) (%)** | **Distributed Loss Savings (%)** | **Distributed PV Value ($/kWh)** |
|---|---|---|---|---|
| Avoid Fuel Cost | $0.0369 | | 9.8% | $0.0405 |
| Avoid Plant O&M - Fixed | $0.0016 | 48.6% | 10.8% | $0.0009 |
| Avoid Plant O&M – Var. | $0.0016 | | 9.8% | $0.0017 |
| Avoid Gen. Capacity Cost | $0.0441 | 48.6% | 10.8% | $0.0237 |
| Avoid Res. Capacity Cost | $0.0032 | 48.6% | 10.8% | $0.0017 |
| Avoid Trans. Capacity Cost | $0.0283 | 48.6% | 10.8% | $0.0152 |
| Avoid Dist. Cap Cost | $0.0133 | 55.2% | 13.2% | $0.0083 |
| Avoid Environmental Cost | $0.0262 | | 9.8% | $0.0288 |
| Avoid Voltage Control Cost | | | | |
| Solar Integration Cost | | | | |
| **TOTAL** | | | | **$0.1208** |

Xcel adjusted the VOS rate for inflation over the 25 years of the contracts and the calculations were updated and attached to its Reply Comments as Figure ES-2 in Attachment A. Xcel calculated the VOS rate for 2014 to be $0.0940/kWh.

Xcel also responded to the Department's recommendations regarding the process to update the VOS, if the Commission orders its use. Xcel stated it supported the Departments annual inflation adjustment process using the Consumer Price Index (CPI) and it did not oppose the Department's recommendation for Xcel to file updated inflation-adjusted rate tariffs by March 1 Annually. However, Xcel stated that it will need time prior March 1 to incorporate the Department's adjustments to the future year vintage and asked that the Department provide the required inputs, which include fixed assumptions and environmental costs, by no later than January 15 annually to ensure the Company has adequate time to meet the March 1st deadline.

Finally, Xcel commented on MnSEIA's averaging approach and stated it was unable to verify the calculations in MnSEIA's Comments and it was unsure if MnSEIA's suggested approaches were in alignment with the Department's methodology. Therefore, Xcel stated that it did not support MnSEIAs averaging approaches.

## B. MNCS

MNCS stated in Reply Comments that it agreed with the Department and all other commenters that Xcel's proposed alternatives of a pilot program or interim program are unacceptable. MNCS also agreed with the Department's analysis of the CSG and VOS statutes and the conclusion that VOS rates are not designed nor intended to ensure the viability or success of any particular solar project, including CSGs.

MNCS stated that if the Department's adjustments to Xcel's calculation of the VOS rate are correct, then Xcel's VOS rate falls far short of a level needed to support successful CSGs and MNCS's initial comments are strengthened in favor of use of the ARR, as clarified.

MNCS requested in Reply Comments that the Commission use the ARR for CSGs subject to modification of the calculations and implementation of the ARR as proposed by MNCS in its initial comments.

## C. TruNorth

TruNorth reiterated in its Reply Comments that the statutory intent of the CSG statute is for the Commission to approve a VOS rate for CSGs and that the ARR rate was only meant to be used temporarily. However, TruNorth also stated that to finance CSGs in Minnesota a rate of at least $0.15/kWh is needed and the $0.1264/kWh VOS rate calculated by the Department would not reasonably allow for the creation, financing and accessibility of CSGs in Minnesota. Therefore, TruNorth recommended CSGs should be able to use either the VOS or ARR as long as either rate is sufficient to attract investment and therefore allow the CSG to be financeable.

In addition, TruNorth stated in its Reply Comments that a two-year pilot implementation plan may be appropriate. TruNorth stated that while it strongly believed that CSGs will cause no adverse rate impacts to Xcel's non-participating customers, it nonetheless appreciates the uncertainty that CSGs may have on Xcel. Thus, TruNorth stated it was not necessarily averse to the Commission setting a specific date for an overall review of the CSG program and rate. TruNorth recommended that it would be more much appropriate to extend the review period for no less than two years out to give the market sufficient time to develop, and to allow significantly more information from which to judge the program and make the Commission's review more meaningful. TruNorth stated also that any CSG project approved prior to the review cannot be subject to future change and to the extent that changes in the CSG program are made based on the review, those changes must be prospective only.

## D. IREC

In its Reply Comments, IREC urged the Commission to maximize market certainty, whether it approves a VOS rate or ARR and if the rate changes in the future, existing solar gardens should be grandfathered on their existing rate. IREC also stated that if the ARR is used; it should be adjusted over time so that it is not devalued by inflation, just as the VOS is adjusted.

In addition, IREC stated that whatever rate is used, it remains critical that it is sufficient to “reasonably allow for the creation, financing, and accessibility of community solar gardens,” and the solar industry emphasized the importance of a minimum rate of $0.15 per kWh in its initial comments.

Finally, IREC suggested that the Commission determine the CSG rate as soon as possible so that Xcel may begin implementing its program.

## E. Solar Interveners

In its Reply Comments, the Solar Interveners requested that the Commission move forward with approval of Xcel’s CSG program under the interim ARR and enhanced ARR. For projects developed under the interim rate, the Solar Interveners stated it would be beneficial for the Commission to clarify that subscribers can continue to earn the interim rate for the life of the project and that once a VOS rate for CSGs is approved by the Commission, that rate can then be applied to new CSG projects.

The Solar Interveners also requested that the Commission consider requiring Xcel to file an updated VOS rate calculation that would trigger a more robust rate-review process than is possible in the current context of responding to Xcel’s Motion to Show Cause. The Solar Interveners stated that they believe that a process that allows for the verification of Xcel’s Table 5 input data (such as the installed cost of peaking and intermediate peaking gas plants), a consideration and determination of the appropriate magnitude and structure of program incentives, and a Commission determination of the applicability of the VOS rate-floor provision in Minn. Stat. § 216B.164(j), may be necessary to fully review this first application of the approved VOS methodology for CSGs.

In conclusion the Solar Interveners requested that the Commission implement the program clarifications and modifications recommended by Solar Interveners and other stakeholders in this docket, approve Xcel’s CSG program plan using the ARR subscriber rates as soon as possible, and provide further guidance to stakeholders regarding the process and timeline for final review and approval of Xcel’s corrected CSG VOS rate (along with any necessary program incentives).

## F. SoCore

SoCore stated in its Reply Comments that for the CSG program to drive development and investment in Minnesota, developers and investors need to be able to understand what the return on investment will be for a CSG project and also be able to earn a sufficient rate of return on their investment.

SoCore maintained that both the VOS and ARR require modification if the CSG program is to “reasonably allow for the creation, financing, and accessibility of community solar gardens.” SoCore stated it did not believe that the Commission is bound to adopt one or the other as currently conceived, but can make the adjustments it deems necessary to ensure the success of the CSG program.

SoCore noted that the Department's proposed revised 2014 VOS rate of $0.0984 per kWh may be inadequate to afford investors a sufficient return on investment as compared to alternative opportunities and proposed that the Commission could improve the VOS rate by establishing a price adder to sit on top of the VOS tariff to offer investors a sufficient return to attract capital to the CSG program. SoCore clarified that the additional incentive needed to catalyze the development of new solar gardens could be designed to decline over time, though the adder associated with each contract should be fixed throughout the contract term. SoCore encouraged the Commission to utilize the modified VOS plus adder approach as the foundation for the CSG program, correcting for the fact that the VOS alone is not sufficient to stimulate development.

## G. SunEdison

In its Reply Comments SunEdison stated that it does not believe Xcel has met its burden to show cause as to why it should not apply the VOS rate. However, SunEdison also expressed its concern that the calculations made by Xcel Energy and the Department were so disparate at this late stage with the 2014 VOS rate calculated by Xcel of $0.1139/kWh, whereas the 2014 VOS rate calculated by the Department is $0.0984/kWh.

SunEdison stated it received the Department's calculations and workbooks on June 16 and is in the process of analyzing them and it simply has not had sufficient time to adequately analyze the numbers and calculations provided. Therefore, SunEdison stated that the Commission may wish to seek further comment and input from stakeholders to ensure the VOS rate is accurately set.

In addition SunEdison stated that financing is a critical element of any CSG program that is unique and distinct from the VOS rate in that the CSG program must "reasonably allow for the creation, financing, and accessibility of community solar gardens."

According to SunEdison, the VOS methodology can be incorporated by any public utility and is designed to be an alternative rate to net metering that was implemented in 2013 as an integral part of the net-metering and distributed generation statute but designed as an option to supplant the traditional net-metering crediting system. SunEdison stated that the CSG program, on the other hand, is designed to allow for the creation and financing of centralized development of solar generating facilities and how the Commission satisfies its mandate to ensure financing and access to these centralized solar generating facilities is within its discretion.

In order to bridge the gap (in full or in part) between an approved VOS rate and what the record in this docket supports as a financeable rate such that Xcel's program would also meet the CSG statutory requirements, SunEdison respectfully requested that the Commission consider further how the two statutes may operate together or independently.

To add simplicity and transparency the process SunEdison also encouraged the Commission to clarify that Xcel shall file the updated inflation rate by March 1 of each year and alongside the annual VOS rate adjustment. SunEdison requested further that the Commission clarify that the inflation rate published for the year in which a subscriber enters the CSG program would apply throughout the contract term so that projected project revenue streams over the life of the contract can be more effectively calculated for the purposes of financing.

SunEdison also noted that, in addition to required and efficient CSG program implementation, it is also critical that Commission make sure this initial application of the approved VOS methodology adhere to the VOS statute, which prohibits the Commission from authorizing Xcel to charge a VOS tariff rate that is lower than the utility's applicable retail rate for three years. Independent of any Commission determination on how Xcel Energy or the Department arrived at their respective VOS rates, SunEdison requested that the Commission ensure compliance with State law that prohibits application of a rate under the ARR for the first three years of the CSG program and that determining the best approach to ensuring such compliance is within the Commission's discretion.

## H. The Department

In its Reply Comments the Department responded to MnSEIAs proposal to develop an "averaged" VOS rate based on total subscriber production payments over the 25 years of a CSG contract, from which MnSEIA calculated a proposed rate of $0.1608/kWh. The Department determined that MnSEIA's calculation failed to account for the present value differences between the two total payments under the inflation-adjusted VOS rate and their proposed rate.

In regard to the CSG rate certainty issue raised by other parties, the Department stated in its Reply Comments that due to the complexity of CSG financing that arises from the number of parties involved in the project, additional rate certainty may be required to make these projects viable. The Department recommended that CSG projects that submit an application to Xcel be able to remain under that rate system, whether it is the ARR or VOS rates, for the entirety of the CSG contract.

In addition, the Department stated it is open to the idea of establishing a set inflation adjustment rate for the purposes of adding rate certainty for CSGs. The Department stated that the Commission could set a fixed inflation adjustment rate for VOS rates used in CSGs without reopening the VOS methodology used to calculate a VOS tariff in lieu of net metering and if the Commission does fix a VOS CSG inflation-adjustment rate, the Department recommended that the rate be the same as the general escalation rate used to calculate the VOS rate for CSGs.

The Department acknowledged that setting a 25 year inflation-adjustment rate for a VOS CSG rate adds investment certainty, but it does not get the VOS rate to the rates the Commission found to be a financeable in its April 7, 2014 Order. The Department stated that it is clear that if the Commission wishes to use a VOS rate for CSGs and this rate is below what is determined to be a financeable rate, then some type of incentive would needed to fill the gap between the two rates.

In response to other parties that have suggested that adding an incentive on top of the VOS rate would allow the Commission to use the VOS rate while also compensating subscribers at a financeable rate, the Department noted there are many questions that arise in considering and designing a CSG incentive and, in particular, there are challenges in designing an incentive used in a 25 year CSG contract based on current solar market financing conditions. The Department stated that any incentive used in CSGs should be transparent and designed to support CSG growth without leading to excess developer profits at the cost to Xcel's ratepayers.

The Department stated further that it did not find enough information in the record to determine what is a financeable CSG rate, and the appropriate incentive level, for CSG projects in 2014 and in future years. Therefore, the Department recommended that the Commission gather more information on Minnesota solar market financing requirements to inform the design and level of any CSG incentive.

The Department stated that developing a record to support the design of an incentive based on CSG financing conditions will take time. In light of the short Minnesota solar construction season and the decline of the 30 percent federal Investment Tax Credit (ITC) at the end of 2016, the Department recommended that the Commission find that the ARR and REC prices for CSGs set in the Commission's April 7, 2014 Order continue to be used for CSGs filing complete applications to Xcel's CSG program in the next year. Specifically, the Department recommended that the Commission find that:

1. CSG Projects filing complete applications during this time should be able to lock in the REC price for the duration of the 25 year contract;

2. These projects should be credited under the ARR in place at the time of energy generation for the duration of the 25 year contract; and

3. Any adjustment to REC prices made by the Commission in later years should only apply to new CSG project applications.

In the long run, a VOS rate for CSGs plus an appropriate incentive will create more transparent CSG rates than the current ARR approach offers. For this reason, the Department recommended that the Commission continue to build the record on what is a financeable rate for CSGs. Between now and March 1, 2015 the Department suggested that parties could file comments on determining a financeable CSG rate for new and future projects, how an incentive could be designed, the potential funding source(s) for an incentive, and the rate review process. Once the 2015 VOS rate is filed and reviewed, the Department stated that the Commission could use this record to design an incentive that fills the gap between the 2015 VOS and financeable rates.

The Department proposed that the record on CSG financeable rates and incentive design be built following the general timeline listed below:

1. October 2014 – Parties file comments on determining a financeable CSG rate under current solar market conditions, and methods to reevaluate the financeable rate as the market changes.

2. December 2014 – Parties file comments on how any CSG incentive, used in conjunction with the VOS, should be designed, funded, and reevaluated as the solar market changes.

3. March 1, 2015 – Xcel files updated VOS calculation for new projects.

4. Early April 2015 – The Department completes its review of Xcel's filed VOS calculation.

5. Late April 2015 – Parties file comments on the proposed incentive level in light of the financeable rate, incentive design, and VOS rate records.

In Summary, the Department recommendations are as follows:

1. Reject Xcel's suggested alternative options to use the VOS rates on an interim basis or for a one-year pilot period;

2. Set a March 1st deadline for Xcel to file annual VOS inflation updates and updated rate calculations using the approved Methodology for future interconnections if the Commission directs Xcel to file a VOS tariff;

3. Find that the CSG applicable retail rates and REC prices continue to be used for CSG projects filing complete applications within the next year;

4. Determine that CSG projects filing complete applications during this time should be able to lock in the REC price for the duration of the 25 year contract;

5. Confirm that CSG projects under the applicable retail rate should be credited under the applicable retail rate in place at the time of energy generation for the duration of the 25 year contract;

6. Find that any adjustment to REC prices made by the Commission in later years should only apply to new CSG project applications; and

7. Direct parties to file more information on CSG financing to inform to the design of a potential incentive to be used in conjunction with the VOS rate for CSGs.

## VI. STAFF ANALYSIS

### A. VOS Rate

Staff's calculation of the VOS rate using the input values as recommended by the Department and listed by Xcel in its Reply Comments largely confirms the VOS rate calculated by Xcel, with some minor and insignificant differences (most notably in the Avoided Distribution Capacity Cost). Staff's calculations of the avoided cost components are listed below.

| 25 Year Levelized Value | Econ Value | Load Match | Distribute Loss Savings | Distribute PV Value | Difference from Xcel's Updated |
|---|---|---|---|---|---|

| | ($/kWh) | (%) | (%) | ($/kWh) | VOS |
|---|---|---|---|---|---|
| Avoid Fuel Cost | $0.0369 | | 9.8% | $0.0405 | $0.0000 |
| Avoid Pl. O&M - Fixed | $0.0016 | 48.6% | 10.8% | $0.0009 | $0.0000 |
| Avoid Pl O&M – Var. | $0.0016 | | 9.8% | $0.0017 | $0.0000 |
| Avoid Gen. Cap. Cost | $0.0441 | 48.6% | 10.8% | $0.0237 | $0.0000 |
| Avoid Res. Cap. Cost | $0.0032 | 48.6% | 10.8% | $0.0017 | $0.0000 |
| Avoid Trans. Cap. Cost | $0.0283 | 48.6% | 10.8% | $0.0151 | -$0.0001 |
| Avoid Dist. Cap Cost | $0.0133 | 55.2% | 13.2% | $0.0095 | $0.0012 |
| Avoid Envn. Cost | $0.0262 | | 9.8% | $0.0287 | -$0.0001 |
| Avoid Volt Cntrl Cost | | | | | |
| Solar Integration Cost | | | | | |
| **TOTAL** | | | | **$0.1218** | **$0.0010** |

Staff notes that most parties were unable to analyze and confirm the calculations of the VOS rate as determined by Xcel in its Initial Filing and Reply Comments and also as determined by the Department. Staff agrees with the Solar Interveners that a process that allows for the verification of Xcel's input data, along with other considerations, may be necessary to fully review the approved VOS methodology for CSGs. Likewise, Staff agrees with SunEdison that parties may not have had sufficient time in this proceeding to adequately analyze the input numbers and calculations provided for the VOS rate; therefore, further comment and input from stakeholders may be needed to ensure the VOS rate is accurately set. Staff has provided the spreadsheets it has developed in accordance with the approved VOS methodology as Attachment A to these briefing papers for use by the parties to analyze and verify VOS calculations in this and subsequent proceedings. [8]

*MnSEIA's Rate Proposal*

In its June 2 Comments, MnSEIA proposed the Commission use a VOS rate that was "averaged" over the 25 years of the contract. MnSEIA calculated this average value by looking at the inflation adjusted values provided by Xcel in its initial filing[9] and then taking the average of the contract's total value across 25 years. The methodology used by MnSEIA does not appear to conform to the Department's methodology because it does not account for the discounting factors used in the Department's VOS methodology. As stated by the Department:[10]

> MnSEIA's calculation fails to account for the present value differences between the two total payments under the inflation-adjusted VOS rate and their proposed

[8] Although Staff has made every attempt to ensure Attachment A accurately reflects the VOS Methodology developed by the Department and approved by the Commission, Staff cannot guarantee that all formulas and calculations in the figures and tables are entirely accurate. Staff welcomes edits and corrections to the spreadsheets as needed.
[9] Xcel's Motion to Show Cause, Attachment A, Figure ES-2
[10] DOC Reply Comments, p. 3.

> rate. Using the 6.51 percent discount factor used by Xcel in their VOS rate filing, MnSEIA's rate proposal results in a present value payment that is 10 percent higher than the total payments under the VOS rate calculated using the approved methodology. This difference comes from the fact that MnSEIA's averaged rate is higher than the inflation-adjusted VOS in early years when the effects of discounting to present value dollars are less than in later years when the VOS rate is higher.

**B. Xcel's Motion to Show Cause and its recommendation that the VOS rate for CSGs is not in the public interest at this time and that the ARR should be used, instead.**

Staff agrees with Xcel that the CSG statute allows for the continued use of the ARR and that a migration from the ARR to the VOS rate may not be statutorily required at this time. The CSG statute requires Xcel to purchase energy generated from a CSG at a rate calculated under the VOS statute, or until that rate has been approved by the Commission, the ARR. More precisely, The CSG statute states the following: [11]

> The public utility must purchase from the community solar garden all energy generated by the solar garden. The purchase shall be at the rate calculated under section 216B.164, subdivision 10, or, until that rate for the public utility has been approved by the commission, the applicable retail rate.

Staff also agrees with other parties that the intent of the CSG statute is for the Commission to eventually approve a VOS rate for CSGs and that the ARR rate is only meant to be used temporarily.

**C. Xcel's alternative proposals for the use of the VOS rate, but only on an interim basis to meet an overall program capacity target or for a one-year pilot period**

Staff agrees with Xcel that if the Commission were to implement the VOS rate, a review process may be beneficial for determining the effectiveness of the CSG program. Staff also agrees with other parties that any subsequent changes to the program after a review period should not impact existing CSGs and subscriber contracts.

However, staff also agrees with parties that proposing an interim VOS rate for the purpose of not exceeding an overall program capacity target may contradict the legislative intent behind the CSG program. In addition, if the Commission were to implement the VOS rate on an interim basis, Staff recommends that the Commission carefully craft language to reduce the uncertainty and investment risk for developers and subscribers over the interim period.

**D. VOS rate with incentives**

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[11] Minn Statute §216B.1641 (d)

Staff agrees with the Department and other parties that noted the separate purposes of the VOS and the CSG statutes. The relevant statutory languages that govern the VOS and CSGs and that the Commission may use as guidance for setting a VOS rate for CSGs are as follows:

1) *Community Solar Garden, Minnesota Statute 216B.1641(e):* The commission may approve, disapprove, or modify a community solar garden program. Any plan approved by the commission must [among other things]:

    (1) reasonably allow for the creation, financing, and accessibility of community solar gardens;

And

2) *Alternative tariff; compensation for resource value (Value of Solar) 216B.164 Subd. 10(a):* A public utility may apply for commission approval for an alternative tariff that compensates customers through a bill credit mechanism for the value to the utility, its customers, and society for operating distributed solar photovoltaic resources interconnected to the utility system and operated by customers primarily for meeting their own energy needs.

The Department noted the following separate purposes of the two statutes in its initial Comments:[12]

> The two statutes guiding Community Solar Gardens and the Value of Solar list different requirements for plans and tariffs designed in compliance with these statutes. For example, the VOS statute does not list financing or accessibility as criteria for a VOS tariff. Further, the Community Solar Garden language does not identify solar energy’s value to the utility, its customers, and society.
>
> VOS rates calculated in conformance with the Commission-approved Methodology comply with the statutory language to compensate customers for the value of solar to the utility, its customers, and society. The rate Methodology was not designed to meet a particular cost per kWh value to “reasonably allow for the creation, financing, and accessibility of community solar gardens.” The VOS rate design does not consider solar market financing considerations, nor was it calculated around a utility’s existing applicable retail rate. The VOS rate was not designed to trigger a set level of solar development, so the appropriateness of the rate does not depend on the level of capacity needed to meet the solar energy standard or other solar policy goals. The goal of the VOS rate is to reflect the value of solar resources based on the utility’s circumstances and other criteria as outlined in statute.

[12] DOC Comments, p. 2.

In addition, Staff also notes that the VOS rate calculated by Xcel falls short of the rates the Commission found to be financeable in its April 7, 2014 Order. The Order states:[13]

> The Commission's analysis does not end with the applicable retail rate. The solar-garden statute mandates that any plan approved by the Commission reasonably allow for the creation, financing, and accessibility of solar gardens. The record in this case demonstrates that the full retail rate, approximately $0.12 per kWh, is too low to reasonably allow for the creation and financing of community solar gardens. Rather, developers' uncontroverted statements indicate that a rate of approximately $0.15 per kWh is the conservative minimum needed to secure financing and make solar gardens attractive to subscribers.

Staff agrees with the Department that if the Commission approves the use of a VOS rate for CSGs that falls short of a financeable rate, then some type of incentive would be needed on top of the VOS rate to meet the requirements of the CSG statute. As stated by the Department in its Reply Comments:[14]

> Setting a 25 year inflation-adjustment rate for a VOS CSG rate adds investment certainty, but it does not get the VOS rate to the rates the Commission found to be a financeable in its April 7, 2014 *Order*. Other parties have suggested that adding an incentive on top of the VOS rate would allow the Commission to use the VOS rate while also compensating subscribers at a financeable rate. It is clear that if the Commission wishes to use a VOS rate for CSGs and this rate is below what is determined to be a financeable rate, then some type of incentive would needed to fill the gap between the two rates.

Staff also shares the Department's concern for what the financeable rate is now and whether that rate will change in the future. Staff agrees that any incentive should be designed carefully to support CSG growth without leading to excessive developer profits at the cost to Xcel's ratepayers. Staff also agrees that the Commission would benefit from additional information in the record to be used for determining what incentives are available under the current regulatory framework; determining what a financeable rate is; and, if needed, how to design an appropriate incentive to reach the financeable rate with these objectives in mind. The Department stated the following in regard to determining a financeable CSG rate:[15]

> The Department does not find enough information in this record to determine what is a financeable CSG rate, and the appropriate incentive level, for CSG projects in 2014 and in future years. The Department has encouraged solar developers to provide more information on their financing requirements in this docket.

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[13] Order Rejecting Xcel's Solar-Garden Tariff Filing and Requiring the Company to File a Revised Solar-Garden Plan, April 7, 2014, P. 15.
[14] DOC Reply Comments, p. 2.
[15] Ibid. p. 3.

Any incentive used in CSGs should be transparent and designed to support CSG growth without leading to excess developer profits at the cost to Xcel's ratepayers. The Department recommends that the Commission gather more information on Minnesota solar market financing requirements to inform the design and level of any CSG incentive.

As noted by other parties, the solar market is changing rapidly in Minnesota and across the Country. Any incentive set for CSG projects applying for interconnection this year may not be appropriate for new projects interconnecting in future years. The Department recommends that any incentive developed be reevaluated for future projects as the market changes.

### E. The Department's Recommended Procedures and Timelines.

Staff appreciates all the above concerns and also parties concern for limiting the delays in the implementation of the CSG program. Given these concerns, Staff believes the Department's recommendations may be the most reasonable approach for balancing the objectives for determining a VOS rate for CSGs and developing an incentive if needed; while allowing CSG developers and subscribers the opportunity to create, finance and access CSGs using the ARR with the REC enhanced credit on an interim basis – until a financeable rate for CSGs is determined and a VOS rate for CSG is approved by the Commission. Staff has included the Department's recommendations as decision options, with slight modifications to clarify timelines. Staff welcomes edits to the decision options if they do not reflect the intent of the parties.

## VII. COMMISSION ALTERNATIVES

A. What rate should be used for purchases of energy under Xcel's CSG tariff?

1. Determine that it is not in the public interest to use the VOS rate for CSGs at this time; instead continue to use the ARR with the enhanced option for CSG operators to transfer Solar RECs to Xcel at the compensation rates that were determined in the Commissions April 7, 2014 Order (Xcel's position in its Motion to Show Cause);

2. Determine that it is not in the public interest to use the VOS rate for CSGs at this time; instead continue to use the ARR with the enhanced option for CSG operators to transfer Solar RECs to Xcel at the compensation rates that were determined in the Commissions April 7, 2014 Order and clarify the following (MNCS recommendation):

   a. Lag Time on Annual Adjustments for the ARR;
   b. Limit Rate Changes for ARR and REC over the life of the contract;
   c. No Required Transition to VOS rate over the life of the contract.

3. Determine that the VOS rates should be used, but only on an interim basis, in order to: (Xcel's Alternative position in its Motion to Show Cause)

   a. to meet an overall program capacity target; or
   b. for a one-year Pilot Program;
   c. Reject Xcel's suggested alternative options to use the VOS rates on an interim basis or for a one-year pilot period;

B. How should the VOS Rate Be Calculated for CSGs?

1. Approve the use of Xcel's calculation of the VOS rates in its Initial Filing, which determined a levelized VOS rate of \$0.1473/kWh and when adjusted for inflation a 2014 VOS rate of \$0.1139/kWh;

2. Approve the use of the Department's calculation of the VOS rates in its Comments, which determined a levelized VOS rate of \$0.1264/kWh and when adjusted for inflation a 2014 VOS rate of \$0.0984/kWh;

3. Approve the use of Xcel's calculation of the VOS rates in its Reply Comments which determined a levelized VOS rate of \$0.1208/kWh and when adjusted for inflation a 2014 VOS rate of \$0.0940/kWh;

4. Approve the use of Xcel's calculation of the VOS rates in its Initial Filing which determined a levelized VOS rate of \$0.1473/kWh and when adjusted for inflation a 2014 VOS rate of \$0.1139/kWh;

5. Approve the use of MnSEIA's averaging method, which calculated an average VOS rate over the duration of a 25 year contract of \$0.1608/kWh;

6. Determine an appropriate incentive to add to the VOS rates to meet a financeable rate that will allow for the creation, financing, and accessibility of CSGs; and/or

7. Take no Action

C. Other Recommendations

1. Set a March 1st deadline for Xcel to file annual VOS inflation updates and updated rate calculations using the approved Methodology for future interconnections if the Commission directs Xcel to file a VOS tariff for CSGs;

2. Require the Department to provide Xcel with required inputs for the VOS rate calculation, which include fixed assumptions and environmental costs, by no later than January 15 annually to ensure the Company has adequate time to meet the March 1st deadline;

3. Find that the CSG applicable retail rates and REC prices approved in the Commission's April 7, 2014 Order in the current docket will continue to be used for

all CSG projects filing complete applications until a future date that Commission issues an Order approving a VOS rate for CSGs;

4. Determine that CSG projects filing complete applications during this time should be able to lock in the REC price for the duration of the 25 year contract;

5. Confirm that CSG projects under the applicable retail rate should be credited under the applicable retail rate in place at the time of energy generation for the duration of the 25 year contract;

6. Find that any adjustment to REC prices made by the Commission in later years should only apply to new CSG project applications;

7. Direct parties to file more information on CSG financing to inform to the design of a potential incentive to be used in conjunction with the VOS rate approved for CSGs; and

8. Revise the VOS tariff sheets for CSG to be consistent with the Commission's Decisions above.