#### BEFORE THE MINNESOTA PUBLIC UTILITIES COMMISSION

**Beverly Jones Heydinger** Chair David C. Boyd Commissioner Nancy Lange Commissioner Dan Lipschultz Commissioner Betsy Wergin Commissioner

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

ISSUE DATE: September 17, 2014

DOCKET NO. E-002/M-13-867

ORDER APPROVING SOLAR-GARDEN PLAN WITH MODIFICATIONS

## PROCEDURAL HISTORY

The community-solar-garden statute, Minn. Stat. § 216B.1641, requires Xcel Energy (Xcel or the Company) to file a plan to operate a community-solar-garden program, under which customers will be able to subscribe to solar generating facilities (known as "community solar gardens," or simply "solar gardens") and receive bill credits for a portion of the energy generated.

On September 30, 2013, Xcel filed its proposed plan to operate a community-solar-garden program, including a tariff and standard contract implementing the program.

The Commission reviewed Xcel's plan and, in an April 7, 2014 order, directed the Company to modify certain aspects of the plan to ensure that it would reasonably allow for the creation and financing of solar gardens. The Commission gave Xcel 30 days to file a revised communitysolar-garden plan and tariff.

In its April 7 order, the Commission directed Xcel to credit solar-garden subscribers' bills at the subscribers' applicable retail rates. But the Commission also ordered Xcel to file a tariff implementing a value-of-solar rate for community solar gardens or, alternatively, to file a calculation of the value-of-solar rate for solar gardens and show cause why the rate should not be implemented.<sup>1</sup>

On May 1, 2014, Xcel filed a "Motion to Show Cause" providing a calculation of the value-of-solar rate and explaining why the Company believes that the rate should not be implemented for community solar gardens.

<sup>&</sup>lt;sup>1</sup> The value-of-solar rate is a rate calculated according to a methodology established by the Minnesota Department of Commerce, which compensates customers for the value to a utility, its customers, and society of operating distributed solar photovoltaic resources. Minn. Stat. § 216B.164, subd. 10.

On May 7, 2014, Xcel filed a revised solar-garden plan and tariff incorporating the changes ordered by the Commission.

From June 2 to 16, 2014, the following parties filed comments on Xcel's motion to show cause, its revised solar-garden plan and tariff, or both:

- Sundial Solar
- TruNorth Solar
- The Minnesota Department of Commerce (the Department)
- MN Community Solar, LLC
- The Solar Intervenors, a group of environmental non-profit organizations made up of Fresh Energy, the Environmental Law and Policy Center, the Institute for Local Self-Reliance, and the Izaak Walton League of America
- The Interstate Renewable Energy

Council (IREC)

- The City of Minneapolis
- The Minnesota Solar Energy Industries Association (MnSEIA)
- Fresh Energy
- The Metropolitan Council
- SoCore Energy
- Novel Energy Solutions
- Rural Renewable Energy Alliance
- Innovative Power Systems, Inc.

Parties commented on various aspects of Xcel's revised plan, but the issue receiving the most attention was whether subscribers should be compensated at the applicable retail rate or the value-of-solar rate.

From June 16 to 19, 2014, the following parties filed reply comments:

- SunEdison
- IREC
- MN Community Solar
- Xcel
- The Department

- TruNorth
- The Solar Intervenors
- SoCore Energy
- Oak Leaf Energy Partners

On August 7, 2014, the matter came before the Commission.

## **FINDINGS AND CONCLUSIONS**

#### I. Background

#### A. Community Solar Gardens

A solar garden is a facility that generates electricity by means of a ground-mounted or roof-mounted solar photovoltaic device whereby subscribers receive a bill credit for the electricity generated in proportion to the size of their subscription. A solar garden must have a nameplate

capacity of no more than one megawatt (MW) and may be owned by a public utility or by a third-party operator who contracts to sell the garden's output to the utility.<sup>2</sup>

## B. Requirement to File Community-Solar-Garden Plan

The community-solar-garden statute, Minn. Stat. § 216B.1641, requires Xcel to file with the Commission a plan to operate a community-solar-garden program. To be approved, Xcel's solar-garden plan must, among other requirements, reasonably allow for the creation, financing, and accessibility of community solar gardens and be consistent with the public interest.<sup>3</sup>

Once the Commission has approved its plan, Xcel has 90 days to launch the solar-garden program.<sup>4</sup> It must begin crediting subscribers' bills within 180 days of the plan's approval.<sup>5</sup>

# C. Compensation for Solar-Garden Energy

The solar-garden statute requires Xcel to purchase all energy generated by a solar garden at the rate calculated under the value-of-solar statute or, until a value-of-solar rate has been approved by the Commission, the "applicable retail rate."

## 1. Value-of-Solar Rate

The value-of-solar statute requires the Department to establish a methodology for valuing distributed solar electricity generation and to submit the methodology to the Commission for approval. Utilities may then apply this methodology to calculate a value-of-solar rate to replace the net-metering rates under Minn. Stat. § 216B.164, subds. 3 and 3a. 8

The Department filed its value-of-solar methodology in January 2014. The methodology comprises several formulas, a set of assumptions that would apply to all utilities, and two tables of supporting information that utilities must include in a value-of-solar tariff filing. Assumptions common to all utilities include forecasted natural gas fuel prices, the value of avoided environmental costs attributable to solar generation, and a 25-year lifespan for solar facilities.

The Commission approved the Department's methodology with modifications on April 1, 2014. Xcel and other utilities may now use the methodology to calculate a compensation rate for distributed solar resources, including community solar gardens.

<sup>&</sup>lt;sup>2</sup> Minn. Stat. § 216B.1641(a)–(b).

<sup>&</sup>lt;sup>3</sup> Minn. Stat. § 216B.1641(e).

<sup>&</sup>lt;sup>4</sup> Minn. Stat. § 216B.1641(a).

<sup>&</sup>lt;sup>5</sup> Minn. Stat. § 216B.1641(g).

<sup>&</sup>lt;sup>6</sup> Minn. Stat. § 216B.1641(d).

<sup>&</sup>lt;sup>7</sup> Minn. Stat. § 216B.164, subd. 10(e).

<sup>&</sup>lt;sup>8</sup> *Id.*, subd. 10(b).

<sup>&</sup>lt;sup>9</sup> Docket. No. E-999/M-14-65.

## 2. Applicable Retail Rate

Until the Commission has approved a value-of-solar rate for solar gardens, Xcel must purchase solar-garden energy at the "applicable retail rate." The statute does not define "applicable retail rate." However, the Commission has interpreted the term to mean "the full retail rate, including the energy charge, demand charge, customer charge, and applicable riders, for the customer class applicable to the subscriber receiving the credit." <sup>10</sup>

## D. Xcel's Initial Solar-Garden Plan Filing

On September 30, 2013, Xcel filed a petition outlining the major components of its proposed solar-garden program. Xcel proposed to implement the program through two key documents—a solar-garden tariff and a standard contract to be executed by Xcel and each solar-garden operator.

The tariff sets forth the rate Xcel will pay for garden energy, the bill-credit process, and basic terms and conditions that reflect the statutory limits on solar-garden size and subscribership. The standard contract contains much more detailed terms and conditions by which Xcel and the solar-garden operator will be bound.

#### E. The Commission's First Order

In its April 7, 2014 order, the Commission required Xcel to make numerous changes to its solar-garden plan to ensure that the solar-garden program complied with the statute. The required changes included, among others, the following:

- Setting no limit on the aggregate installed capacity of solar gardens;
- Processing developer applications on a first-ready, first-served basis;
- Requiring garden operators to disclose detailed subscription costs and benefits to prospective subscribers;
- Using a 25-year contract term; and
- Purchasing surplus bill credits annually.

Because a value-of-solar rate had not yet been proposed or approved, the Commission required Xcel to compensate solar-garden subscribers at the applicable retail rate for the energy attributable to their subscriptions.

However, the Commission found that the applicable retail rate—approximately \$0.12 per kilowatt hour (kWh) for residential and small commercial customers—was too low to reasonably allow for the creation and financing of community solar gardens as required by statute. Based on developers' uncontroverted statements, the Commission determined that \$0.15 per kWh was the conservative minimum needed to secure financing and make solar gardens attractive to subscribers.

<sup>&</sup>lt;sup>10</sup> Docket No. 13-867, April 7, 2014 Order at 15.

Therefore, to help ensure that the total payment for garden energy would be sufficient to allow for the creation and financing of solar gardens, the Commission required Xcel to offer to purchase from garden operators the renewable energy credits (RECs) associated with garden energy at a rate of \$0.02/kWh for large gardens and \$0.03/kWh for small gardens. The applicable retail rates and REC payment amounts were to be reviewed and adjusted annually and continue in effect until the Commission approved a value-of-solar rate for solar gardens.

The Commission ordered Xcel to revise its solar-garden plan to incorporate these changes and to refile the plan within 30 days. Further, recognizing the importance of compensating solar gardens for the full value of the energy they produce, the Commission directed Xcel to file a value-of-solar tariff for solar gardens or, alternatively, to file a calculation of the value-of-solar rate for solar gardens and show cause why the rate should not be implemented.

#### F. Xcel's Revised Solar-Garden Plan and Motion to Show Cause

Xcel's revised solar-garden tariff includes the program refinements required by the Commission's April 7 order. The tariff compensates solar-garden subscribers at the applicable retail rate and lists this rate for each customer class, as well as the total effective rate where a garden operator elects to sell the solar RECs to Xcel:

2014 Applicable Retail Rates + REC Payments (\$/kWh)				
REC Payment	Residential Service	Small General Service	Demand Metered	
None (Applicable Retail Rate)	0.12033	0.11783	0.09456	
<b>0.02</b> (> 250 kW gardens)	0.14033	0.13783	0.11456	
<b>0.03</b> (≤ 250 kW gardens)	0.15033	0.14783	0.12456	

In its motion to show cause, Xcel calculated a value-of-solar rate using the Department's methodology. Levelized over the 25-year useful life of a solar generating facility, the value-of-solar rate was \$0.1473 per kWh. For 2014, Xcel calculated an inflation-adjusted rate of \$0.1139 per kWh.

Xcel later revised its calculation in response to the Department's comments, which pointed out errors in the calculation. The following chart shows Xcel's initial calculation of the value-of-solar rate, the Department's calculation, and Xcel's revised figures.

Value-of-Solar Rate Calculations (\$/kWh)			
	25-year Levelized	2014	
Xcel – Motion to Show Cause	0.1473	0.1139	
<b>Department – Comments</b>	0.1264	0.0984	
Xcel – Reply Comments	0.1208	0.0940	

Xcel argued that the value-of-solar rate may overincentivize solar-garden subscriptions, which could prove costly to Xcel's other customers, who must subsidize the program. Xcel believes that the applicable retail rate is preferable because the Commission will have more discretion to adjust the REC value based on market response to the program.

## II. Commission Analysis and Action

The Commission finds that Xcel's community-solar-garden plan, as revised in its June 19, 2014 reply comments and with the modifications described below, meets the requirements of Minn. Stat. § 216B.1641.

The Commission will require Xcel to file revised tariff sheets reflecting the Commission's decisions within ten days of the date of this order and will approve Xcel's solar-garden plan effective 15 days from the date of the filing, provided that no objection is raised within that 15-day period. If an objection is raised, the Commission will take further actions to resolve the issues raised.

The Commission finds that it is not in the public interest to approve a value-of-solar rate for solar gardens at this time and that Xcel should continue to use the applicable retail rate, with an optional REC sale, as set in the Commission's April 7 order. To facilitate a possible future transition to a value-of-solar rate, the Commission will require the parties to engage in further discussions and to file comments addressing the appropriate adder, if any, to apply to a value-of-solar rate to ensure that the solar-garden program reasonably allows for the creation, financing, and accessibility of community solar gardens, as required by statute.

#### A. Compensation Rate for Solar-Garden Energy

#### 1. Positions of the Parties

Commenters were roughly evenly split between those who supported using the value-of-solar rate and those who supported using the applicable retail rate.

Those commenters who favored the value-of-solar rate generally did so because of its transparency and predictability, noting that the rate is calculated based on utility inputs using the Department's methodology and is adjusted yearly for inflation. These commenters generally viewed the applicable retail rate and REC payment as too unpredictable to attract investment.

Developers who favored using the applicable retail rate with optional REC payments did so because of the higher initial value—approximately 15 cents per kWh for a residential or small commercial customer subscribed to a less-than-250-kW solar garden. Xcel favored using the applicable retail rate based on its flexibility relative to the value of solar rate. However, several commenters recommended modifications to the applicable retail rates and REC payments to increase their predictability. And most supported an eventual transition to a value-of-solar rate after further stakeholder input to determine an appropriate adder.

# a. Commenters Supporting Immediate Use of the Value-of-Solar Rate

Those who supported using the value of solar rate uniformly considered that rate calculated by the Department and Xcel inadequate absent some type of added incentive payment to increase overall compensation per kWh.

IREC argued that the solar-garden statute contemplates a transition to the value-of-solar rate. It believes that the value-of-solar rate reflects a fairer and more transparent calculation of the value of solar garden generation and is more predictable over time. IREC suggested that the Commission add a modest per-kWh incentive to the value-of-solar rate if it finds that the rate is not currently high enough to reasonably allow for the creation, financing, and accessibility of solar gardens.

MnSEIA argued that the applicable retail rate does not reasonably allow for the creation and financing of solar gardens because it changes annually and will have unknown escalators and REC values. MnSEIA believes that a value-of-solar rate would offer greater predictability. However, to achieve a financeable rate in the early years of the solar-garden program, MnSEIA suggested an averaging approach, whereby the total value of a solar-garden contract would be averaged over its 25-year term. In the alternative, MnSEIA stated that it would support any incentive that would boost the initial bill credit to 15 cents per kWh.

SoCore stated that the value-of-solar rate is preferable to the applicable retail rate from a financing perspective because the base rate is known and the escalation rate is pegged to the Consumer Price Index (CPI). The value-of-solar methodology thus essentially establishes a floor price that financiers can count on. However, because the value-of-solar rate as currently calculated may not provide a sufficient return to attract financing, SoCore recommended establishing a price adder to boost the bill credit initially.

Other commenters who supported an immediate transition to the value-of-solar rate were Sundial Solar, TruNorth Solar, and the City of Minneapolis.

## b. Commenters Supporting Use of the Applicable Retail Rate

MN Community Solar argued that the applicable retail rate offers a higher price and less uncertainty than the value-of-solar rate. According to MN Community Solar, the price premium offered by the applicable retail rate with REC payments is particularly important in the program's early years because solar gardens have regulatory, legal, and administrative costs that ordinary solar installations do not.

The Solar Intervenors believed that solar gardens should eventually receive the value-of-solar rate but recommended that the Commission approve Xcel's program using the applicable retail rate for the present, allowing project developers to begin putting together subscriber offers and project financing as soon as possible.

The Department recommended that the Commission allow Xcel to use the applicable retail rates and REC prices set in the Commission's April 7 order for solar gardens that file complete applications in the next year. Longer term, the Department believes that the value-of-solar rate combined with an appropriate incentive would be a more transparent means of compensating solar gardens.

# c. Recommendations to Improve the Financeability of the Applicable Retail Rate

Commenters recommended several clarifications to improve the financeability of projects receiving the applicable retail rate. There was broad agreement that any eventual transition to the value-of-solar rate should not be retroactive. In other words, solar gardens that are approved and interconnect under the applicable retail rate should continue to receive that rate even after Xcel implements a value-of-solar rate for solar gardens.

Parties also offered suggestions on setting a floor on the applicable retail rates, locking in a REC price, or both. For example, MN Community Solar recommended making the initial applicable retail rates a floor. SoCore recommended both setting a floor price for the applicable retail rates at 2014 levels and fixing the amount of the REC payments for the term of a contract.

The Department did not recommend setting a floor for the applicable retail rate. Instead, it recommended clarifying that community-solar-garden projects under the applicable retail rate should be credited at the applicable retail rate in place at the time of energy generation for the duration of the 25-year contract.

The Department did, however, support allowing solar-garden projects filing complete applications under the applicable retail rate to lock in the REC price for the duration of the 25 year contract. The Department recommended that any adjustment to REC prices made by the Commission in later years should only apply to new solar-garden project applications.

# d. Building the Record for an Eventual Transition to a Value-of-Solar Rate

Several parties, including the Department, recommended that the Commission continue to develop the record on what would constitute a financeable rate before implementing a value-of-solar rate.

Specifically, the Department recommended that the Commission direct Xcel to file its 2015 value-of-solar calculation by March 1, 2015, and direct the parties to file comments on how to determine a financeable rate, design an incentive to bring the value-of-solar rate to that level, and fund the incentive.

The Department suggested that, once the 2015 value-of-solar rate is filed and reviewed, the Commission could use the record developed to design an incentive that fills the gap between the 2015 value-of-solar and financeable rates.

#### 2. Commission Action

The Commission concurs with MN Community Solar and the Department that solar-garden energy should be compensated at the applicable retail rate combined with REC value as set forth in its April 7, 2014 order, rather than the value-of-solar rate for now. As the Commission concluded in its April 7 order, the solar-garden statute requires that solar-garden rates be sufficient to support the creation and financing of community solar gardens. While the value-of-solar rate might provide greater predictability over time, it is much lower initially than the applicable retail rate and significantly below the level needed to support the financing and development of solar gardens as required by the applicable statute. Although greater predictability would help developers obtain financing for projects, setting a rate predictably below the levels required for financing would be of no value and would fail to fully comport with the applicable statute. In contrast, the applicable retail rate, combined with the REC values set in the Commission's April 7 order, would provide compensation for solar-garden generation at or near the level shown by the record to be minimally needed to reasonably allow for the financing and development of solar gardens. The Commission's decision in this case will allow a developer to lock in the current REC value in effect when it has submitted a complete application. Moreover, to the extent the applicable retail rate changes over time, it is likely to increase. Therefore, concerns about predictability do not appear to seriously undermine the merits of the applicable retail rate and REC value as appropriate compensation under the applicable statute.

As suggested by several parties, one way to bring the value-of-solar rate up to a financeable level would be to employ an incentive or adder. However, the transparency offered by the value-of-solar rate would be sacrificed if care is not taken in selecting and justifying the appropriate value for an adder. The Commission is not convinced that an appropriate incentive can be determined on the current record.

Developing the record on what constitutes an appropriate incentive will take time. Yet the Department and other parties have underscored the need to proceed expeditiously with the approval of Xcel's community-solar-garden program, with the 2014 construction season coming to a close and the federal Investment Tax Credit set to expire in 2016.

The Commission concludes that the most prudent course of action is to approve the solar-garden program now, using the applicable retail rates and REC prices set in the Commission's April 7 order. The Commission concurs with the Department that these rates and REC prices are appropriate with the following clarifications:

- community-solar-garden projects filing complete applications under the applicable retail rate should be allowed to lock in the REC price for the duration of the 25-year contract;
- solar-garden projects approved under the applicable retail rate should be credited at the applicable retail rate in place at the time of energy generation for the duration of the 25-year contract; and
- any adjustment to REC prices made by the Commission in later years should only apply to new community-solar-garden project applications.

These clarifications will improve the predictability of the applicable-retail-rate-plus-REC combination and aid solar-garden developers in securing financing while the Department, Xcel, and other stakeholders work to design an incentive for solar-gardens that will complement a value-of-solar rate.

The Commission will direct the parties to engage in further discussions and to file comments by October 1, 2014, regarding the appropriate adder, if any, to apply in conjunction with a proposed value-of-solar rate to ensure that the community-solar-garden program reasonably allows for the creation, financing, and accessibility of solar gardens.

Finally, the Commission will set a March 1 deadline for Xcel to file annual value-of-solar inflation updates and updated rate calculations using the Department's methodology. This requirement will allow stakeholders to continue to compare the value-of-solar rate with the applicable retail rate and will ensure that an up-to-date value-of-solar calculation is available at such time as the Commission may order Xcel to adopt a value-of-solar rate for solar gardens.

## B. Subscription-Size Limits and the Definition of "Subscriber"

The solar-garden statute places certain limits on garden subscribership. A garden must have a minimum of five subscribers, each with a subscription representing no more than 40% of the garden's output. Each subscription must also be sized to supply no more than 120% of the average annual consumption of electricity by each subscriber at the premises to which the subscription is attributed, when combined with other distributed-generation resources serving the subscriber's premises. <sup>11</sup> Xcel's tariff and standard contract incorporate these requirements.

### 1. Positions of the Parties

Several commenters, including Fresh Energy, MN Community Solar, and the Department, requested clarification as to how commercial, industrial, and government customers with multiple premises and account numbers will be affected by the solar-garden subscription limits.

Because Xcel's tariff and standard contract define "subscriber" as "a retail customer of the Company," a customer with multiple accounts is still counted as one subscriber for the purposes of applying the 40% and 120% rules. Fresh Energy and MN Community Solar suggested that Xcel define "subscriber" as a single metered account so that, for example, a large customer with several accounts—potentially at different locations—could subscribe to more than 40% of a solar garden's output.

Xcel opposed redefining "subscriber" as a single metered account, arguing that its definition is consistent with the solar-garden statute, which describes "subscribers" as "retail customers of the public utility." Xcel further argued that redefining "subscriber" as a single account would allow a large organization with many accounts to buy up all the shares in a solar garden, contrary to the community purpose of the program.

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<sup>&</sup>lt;sup>11</sup> Minn. Stat. § 216B.1641(a)–(b).

<sup>&</sup>lt;sup>12</sup> Minn. Stat. § 216B.1641(c).

#### 2. Commission Action

The Commission agrees with Xcel that "subscriber" should be defined as a retail customer of the Company. This definition is consistent with the language of the solar-garden statute, which refers to subscribers as "customers." It is also consistent with the statute's goal of promoting greater community investment in distributed solar generation. Treating a single customer's accounts as separate subscribers would allow large customers with multiple accounts to crowd out residential subscribers, churches, schools, and other community groups.

Conversely, defining "subscriber" as a retail customer does not significantly limit solar-garden accessibility for larger customers. A large customer may subscribe to many solar gardens, provided that its subscriptions do not exceed 120% of the energy used at the premises associated with those subscriptions, and that the customer holds no more than a 40% share in any one solar garden. For these reasons, the Commission declines to adopt the definition of "subscriber" proposed by Fresh Energy and MN Community Solar.

## C. Measuring Compliance with the 120% Rule

Consistent with the statute and the Commission's prior order, Xcel's solar-garden tariff requires that subscriptions be sized so as to represent no more than 120% of a subscriber's average annual electricity use over the prior 24 months. The tariff does not specify when or how often compliance with the 120% rule will be measured.

#### 1. Positions of the Parties

Fresh Energy argued that the solar-garden statute does not contemplate any sort of ongoing enforcement requirement on the part of operators and recommended that the tariff language be clarified accordingly. MN Community Solar argued that the 120% assessment should be performed once at the time of subscription and that subscription size will not be subject to later reassessment or reduction if the subscriber's usage changes in later years.

Xcel stated that it intends to require the 120% compliance check once at the beginning of a subscription and later only if a subscriber changes his or her subscription size.

#### 2. Commission Action

The Commission agrees with the parties that, after an initial check, compliance with the 120% rule need not be verified on a regular basis. This will encourage subscribers to conserve energy, rather than penalizing them for reducing electricity use by requiring them to reduce their subscription size and lose some of the benefits.

However, to prevent potential abuse of the program, a compliance check should be performed if the subscriber elects to change his or her subscription size or relocates to a new address. The Commission will require Xcel to add language to its tariff to clarify that the 120% compliance check will be performed once at the beginning of a subscription and later only if the subscriber changes his or her subscription size or relocates to a new address.

## **D.** Definition of Operator

The standard contract defines "Community Solar Garden Operator" as "the organization whose purpose is to operate the Community Solar Garden for its Subscribers. A Community Solar Garden Operator may be an individual or any for-profit or non-profit entity permitted by Minnesota law."

Fresh Energy recommended broadening the definition of Community Solar Garden Operator to include "the organization whose purpose is to operate <u>or otherwise manage</u> the Community Solar Garden for its Subscribers." This change would be consistent with the statute, which uses the word "manager," rather than "operator." Xcel does not oppose the change.

The Commission agrees and will require Xcel to revise the definition of "Community Solar Garden Operator" at Tariff Sheet No. 70 (and wherever else the definition occurs in the proposed tariff) to read, "'Community Solar Garden Operator' is identified above and shall mean the organization whose purpose is to operate or otherwise manage the Community Solar Garden for its Subscribers. A Community Solar Garden Operator may be an individual or any for-profit or non-profit entity permitted by Minnesota law."

## **E.** Project-Completion Deadline

Under Xcel's proposed tariff, a solar-garden developer must complete its project within 18 months of the date when Xcel finds its application complete. Within that 18-month period, the following steps must take place:

- Xcel must approve or reject the application based on engineering review within 60 days of finding it complete;
- If Xcel timely rejects the application, the developer may submit additional information, and the 60-day approval period begins anew;
- The developer must submit the following information:
  - o evidence that the project has obtained or arranged appropriate insurance,
  - o evidence of site control at the point of interconnection,
  - o evidence of projected subscription,
  - o evidence of compliance with the solar-garden tariff and contract, and
  - o a signed solar-garden contract and interconnection agreement; and
- The developer must obtain the necessary financing and construct the project.

The tariff provides for an extension of the 18-month deadline in one circumstance: Xcel's failure to meet the interconnection-study deadlines in its distributed-generation tariff will extend the deadline on a day-for-day basis.

#### 1. Positions of the Parties

MN Community Solar argued that the 18-month project-completion deadline puts developers at risk of forfeiting their investment in a project due to delays caused by Xcel. MN Community Solar argued that 60 days of the 18 months could be lost while a developer waits for Xcel to approve its

application. If Xcel rejects an application and allows a developer to submit additional information, another 60 days could be lost. MN Community Solar stated that, although Xcel must extend the deadline for delays related to interconnection studies, there is no required extension for other reasons, such as delays related to contract negotiations.

Xcel stated that it believes an 18-month project-completion window beginning with the finding of application completeness is consistent with the Commission's prior order.

#### 2. Commission Action

The Commission recognizes the need for a deadline to ensure that unworkable projects do not tie up valuable solar sites or waste program resources. However, a project-completion deadline that is too short presents a significant risk to developers and may prevent viable projects from being built.

The Commission concludes that extending the completion deadline to 24 months strikes a reasonable compromise, recognizing the significant time and effort required to bring a project to fruition while also ensuring that unfeasible projects will not languish indefinitely. The Commission will require Xcel to amend its tariff to substitute 24 months for 18 months as the deadline for a solar-garden operator to complete a project.

In its prior order, the Commission directed Xcel to file annual reports on various aspects of the solar-garden program, including the application process. The Commission will require the Company, in reporting on the application process, to include information on what percentage of projects are finished within the 24-month deadline for project completion. This information will enable the Commission to make an informed judgment as to whether 24 months is an appropriate period, or whether the deadline may need to be shortened or extended.

### F. Definition of "Community Solar Garden Site"

In the first iteration of its standard contract, Xcel defined "community solar garden site" in terms of a parcel of real property:

"Community Solar Garden Site" shall mean the parcel of real property on which the PV System will be constructed and located, including any easements, rights of way, surface use agreements and other interests or rights in real estate reasonably necessary for the construction, operation and maintenance of the PV System.

In its April 7 order, the Commission directed Xcel instead to define "community solar garden site" based on a point of interconnection. The Commission concluded that defining a solar-garden site based on a point of interconnection would allow multiple solar gardens to be installed in close proximity to each other, reducing costs and benefitting all stakeholders.

In accordance with the Commission's order, Xcel updated the standard contract to define "community solar garden site" based on a point of interconnection: "Community Solar Garden Site' shall mean the point of interconnection associated with the Community Solar Garden."

#### 1. Positions of the Parties

Several parties, including the Department, SoCore, and Fresh Energy, expressed concern that the revised definition of "community solar garden site" is still not sufficiently clear that multiple gardens may be located in one place.

Fresh Energy recommended that the Commission require Xcel to state that multiple solar garden sites may be located on a single parcel of land.

SunEdison suggested that substituting the term "point of common coupling" for "point of interconnection" in the definition of a garden site would help clarify the definition. SunEdison pointed out that the solar-garden tariff does not define "point of interconnection" and asserted that the term appears nowhere else in Xcel's ratebook. However, it stated that Xcel's distributed-generation tariff uses the term "point of common coupling" in defining "generation system." <sup>13</sup>

SunEdison also suggested that the Commission eliminate a reference to "point of interconnection" in the application-process section of the solar-garden tariff. The tariff requires a developer to submit "evidence of site control at the point of interconnection" as part of its application. SunEdison recommended that the tariff be amended to require "evidence of control of the Community Solar Garden Site."

Xcel stated that the current definition of "community solar garden site" does not preclude multiple solar gardens from being located on a single parcel of land, provided that each garden has its own production meter and interconnection agreement. Xcel stated that it was willing to coordinate with a solar-garden developer to ensure that solar gardens situated in close proximity to one another can share distribution infrastructure.

#### 2. Commission Action

The Commission concurs with Fresh Energy that the definition of "community solar garden site" should expressly state that solar gardens may be sited near each other in order to share distribution infrastructure. This clarification will allow solar gardens to be built more cost-effectively and is consistent with the statutory mandate that the program reasonably allow for the creation, financing, and accessibility of solar gardens.

The Commission also agrees with SunEdison that replacing the term "point of interconnection" with "point of common coupling," a term that is defined and used elsewhere in Xcel's tariffs, will add clarity to the definition of "community solar garden site."

Accordingly, the Commission will require Xcel to replace the current definition of "community solar garden site" with the following definition:

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<sup>&</sup>lt;sup>13</sup> *See* Minnesota Electric Rate Book - MPUC No. 2, Section No. 10, Original Sheet No. 84. "Point of common coupling" is defined as "the point where the Local EPS [electric power system] is connected to Xcel Energy." *Id*.

"Community Solar Garden Site" is the location of the single point of common coupling located at the production meter for the Community Solar Garden associated with the parcel or parcels of real property on which the PV System will be constructed and located, including any easements, rights of way, and other real-estate interests reasonably necessary to construct, operate, and maintain the garden. Multiple Community Solar Garden Sites may be situated in close proximity to one another in order to share in distribution infrastructure.

And as recommended by SunEdison, the Commission will direct Xcel to amend the solar-garden tariff to remove the requirement that developers submit "evidence of site control at the point of interconnection" and instead to require developers to submit "evidence of control of the Community Solar Garden Site."

## G. "Solar\*Rewards Community" Program Name

Under its existing Solar\*Rewards program, Xcel offers production-based incentive payments to owners of solar energy systems up to 20 kW in size. Xcel has proposed to officially name the solar-garden program "Solar\*Rewards Community," tying it to the existing Solar\*Rewards program under a common brand of solar incentive programs.

Typical participants in the existing Solar\*Rewards program are homeowners with rooftop solar panels. However, solar gardens less than 20 kW in size are eligible to participate. <sup>14</sup> Xcel has proposed a standard contract for solar gardens participating in the Solar\*Rewards program, entitled "Solar\*Rewards with Solar\*Rewards Community." <sup>15</sup>

#### 1. Positions of the Parties

Fresh Energy and the Department were concerned that the use of the term "Solar\*Rewards" to describe the solar-garden program could confuse customers. Fresh Energy suggested adopting a generic, descriptive program signifier, such as "community solar program." The Department suggested that Xcel either identify the existing Solar\*Rewards program as the Solar\*Rewards *Incentive* program, or drop the "Solar\*Rewards" label from its solar-garden program.

Xcel stated that it is invested in its branding and uses brands consistently across jurisdictions. Xcel believes that once the Solar\*Rewards Community program is operating in Minnesota, customers will come to recognize the name.

#### 2. Commission Action

The Commission agrees with Xcel that "Solar\*Rewards" and "Solar\*Rewards Community" are sufficiently distinct and that customers should be able to distinguish them. The Commission will approve Xcel's request for program naming, including the name "Solar\*Rewards Community" for the community-solar-garden program.

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<sup>&</sup>lt;sup>14</sup> Minn. Stat. § 216B.1641(d).

<sup>&</sup>lt;sup>15</sup> Docket No. E-002/M-13-1015.

However, to provide additional clarity, the Commission will require Xcel to rename its standard contract for customers participating in both programs as "Solar\*Rewards Community Contract for those receiving Solar\*Rewards Incentive." The Commission will require Xcel to make a compliance filing in this docket and Docket No. E-002/M-13-1015 within 10 days of this order including any revisions to the contract consistent with the Commission's orders in these dockets.

### H. Remedies for Xcel's Breach of the Solar-Garden Contract

The standard contract provides remedies for a garden operator's breach of the solar-garden contract or interconnection agreement, up to and including termination of the contract and disconnection of the solar garden from Xcel's system.

MN Community Solar argued that the standard contract does not provide a remedy if Xcel breaches its obligations under the contract. MN Community Solar asserts that investors will expect the contract to provide for (1) remedies for Xcel's failure to pay or credit amounts due, (2) financier cure rights for an operator's default, and (3) an extended cure period for defaults requiring more than 30 days to cure, such as an equipment malfunction requiring repair or replacement.

At the Commission meeting, Xcel stated that it did not object to including these remedies in the solar-garden contract.

The Commission concurs. In the interest of fairness and to help ensure that solar gardens are financeable as required by statute, the Commission will require Xcel to include language in the standard contract that provides for (1) identification of an Xcel breach for failure to pay or credit amounts due when due, (2) financier cure rights for an operator default, and (3) an extended cure period for defaults requiring more than 30 days to cure.

## I. Simplifying Contract Language

In its April 7 order, the Commission directed Xcel to require garden operators to provide subscribers with a number of disclosures, including the future costs and benefits of subscription, a copy of the solar-garden contract, a copy of the solar-panel warranty, proof of insurance, proof of a long-term maintenance plan, production projections, and operator contact information. Section 6(S) of the standard contract recites these and other disclosure requirements.

MN Community Solar recommended simplifying section 6(S), arguing that the disclosure obligations are already contained in the Commission's previous order, and that including detailed disclosure requirements in the standard contract would unnecessarily involve Xcel in the relationship between an operator and subscriber.

The Commission concurs with MN Community Solar that the solar-garden contract need not list all disclosure requirements, and that doing so could needlessly involve Xcel in policing those requirements. The Commission will therefore require Xcel to shorten section 6(S) of the standard contract to read as follows:

Fair Disclosure. Prior to the time when any person or entity becomes a Subscriber, the Community Solar Garden Operator will fairly disclose the future costs and benefits of the Subscription, and provide to the potential Subscriber a copy of this Contract. The Community Solar Garden Operator shall comply with all other requirements of the MPUC and applicable laws with respect to communications with subscribers.

## J. Participation by SES-Exempt Customers

The Solar Energy Standard (SES) requires public utilities to generate or procure sufficient electricity from solar sources so that by the end of 2020, at least 1.5 percent of a utility's total retail electricity sales in Minnesota are generated by solar energy.<sup>16</sup>

The SES statute excludes sales to iron mining facilities, paper mills, sawmills, and other wood-product manufacturers from counting toward a utility's total sales for the purposes of calculating its 1.5-percent obligation. Similarly, the statute prohibits a utility from charging these customers any costs of satisfying the Solar Energy Standard.<sup>17</sup>

Xcel will likely use the RECs it procures from solar gardens to help meet its obligation under the Solar Energy Standard. However, Xcel will be prohibited from charging SES-exempt customers any of the costs of procuring these RECs. Since SES-exempt customers will not share in the cost of procuring solar-garden RECs, the Commission will prohibit these customers from participating in or subscribing to community solar gardens. This is consistent with the statutory paradigm of exempting these customers from paying for SES compliance and ensures fairness to the rest of Xcel's ratepayers.

### K. Handling RECs from Unsubscribed Energy

Under certain circumstances, Xcel and the garden operator may each be entitled to a share of the RECs associated with a garden. This is most likely to occur if a garden operator has sold Xcel the RECs associated with subscribed energy but has chosen to retain RECs associated with unsubscribed energy.

Xcel will likely use its share of the RECs to help meet its obligation under the Solar Energy Standard. For its RECs to count toward SES compliance, however, Xcel must register the garden with the Midwest Renewable Energy Tracking System (M-RETS).<sup>18</sup>

M-RETS rules require that a facility's entire energy output be registered and allow only one registered owner. Xcel therefore proposes to take title to all solar-garden RECs initially, register the facility with M-RETS, and transfer RECs associated with unsubscribed energy back to the

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<sup>&</sup>lt;sup>16</sup> Minn. Stat. § 216B.1691, subd. 2f(a).

<sup>&</sup>lt;sup>17</sup> *Id.*, subd. 2f(d).

<sup>&</sup>lt;sup>18</sup> In the Matter of the Implementation of Solar Energy Standards Pursuant to 2013 Amendments to Minnesota Statutes, Section 216B.1691, Docket No. E-999/CI-13-542, Order Clarifying Solar Energy Standard Requirements (April 25, 2014).

garden operator if the operator "completes all actions required to receive these RECs, including but not limited to maintaining an active account in the Midwest Renewable Energy Tracking System (M-RETS)."

MN Community Solar opposed Xcel's proposal, arguing that a solar-garden operator might not find it cost-effective to establish an M-RETS account to track relatively small numbers of unsubscribed RECs. Xcel responded that its proposal is the only way to comply with M-RETS rules and ensure that its RECs can be counted toward the Solar Energy Standard.

The Commission concurs with Xcel and will approve the Company's proposal to require solar-garden operators to maintain an active account with M-RETS in order to receive RECs associated with unsubscribed energy. The procedure proposed by Xcel appears to be the only feasible way to ensure that its solar-garden RECs can be registered with M-RETS and counted toward the Solar Energy Standard. The Commission recommends further discussion of this issue as part of the collaborative workgroup encouraged by the Commission in its April 7, 2014 order.

## L. Clarifying the Term of the Solar REC Sale

Fresh Energy recommended clarifying that, if a garden operator elects to sell RECs to Xcel, the REC payments will last for the full term of a solar-garden contract. The Commission concurs; making the term of the REC payments explicit will improve the financeability of solar gardens. The Commission will require Xcel to revise its standard contract to make clear and to state in one location in the contract that REC payments will last for the full term of the contract.

## M. Program Cost Recovery and Reporting

Xcel stated that it intends to recover the cost of the solar-garden program, including subscriber bill credits and REC payments, through the fuel clause rider. The Department supported this proposal.

The Commission concurs. Minn. Stat. § 216B.16, subd. 7, allows Xcel to request the automatic adjustment of charges for the costs of fuel used in the generation of electricity. Here, Xcel will be purchasing energy from solar gardens under contract in much the same way it purchases renewable energy from large wind facilities through a power purchase agreement. The Commission has approved Xcel's recovery of such costs through the fuel clause rider.

The Commission will approve Xcel's proposal to recover community-solar-garden program costs, including customer bill credits, additional REC credits, and unsubscribed energy, through the fuel clause rider. The Commission will further require Xcel to include information about its bill credits (as reported in its annual reports in this docket) in the Company's Annual Automatic Adjustment (AAA) Report, reflecting the same time period covered by the AAA report.

### **ORDER**

1. The Commission approves Xcel's community-solar-garden plan pursuant to Minn. Stat. § 216B.1641, including revisions proposed by Xcel in the Company's June 19, 2014 reply comments and the above modifications. The plan will be considered approved for the purposes of Minn. Stat. § 216B.1641(a) and (g) if no objections are raised within 15 days of the compliance filing required by this order.

- 2. The Commission finds that it is not in the public interest to use the value-of-solar rate, as calculated under Minn. Stat. § 216B.164, subd. 10, for community solar gardens at this time; instead, Xcel shall continue to use the applicable retail rate with the option for community-solar-garden operators to transfer solar RECs to Xcel at the compensation rates set in the Commission's April 7, 2014 order.
- 3. Xcel shall clarify the following in its tariff with respect to the use of the applicable retail rate and REC payments:
  - a. Community-solar-garden projects filing complete applications under the applicable retail rate should be able to lock in the REC price for the duration of the 25-year contract;
  - b. Community-solar-garden projects under the applicable retail rate should be credited at the applicable retail rate in place at the time of energy generation for the duration of the 25-year contract; and
  - c. Any adjustment to REC prices made by the Commission in later years should only apply to new community-solar-garden project applications.
- 4. The Commission directs the parties to engage in further discussions and to file comments by October 1, 2014, regarding the appropriate adder, if any, to apply in conjunction with a proposed value-of-solar rate to ensure compliance with the community-solar-garden statute, including, but not limited to, a requirement that the community-solar-garden plan approved by the Commission reasonably allow for the creation, financing, and accessibility of community solar gardens.
- 5. Xcel shall file annual value-of-solar inflation updates and updated rate calculations by March 1, using the approved methodology.
- 6. Xcel shall add language to its tariff to clarify that the compliance check for the 120% rule will be performed once at the beginning of a subscription and later only if the subscriber changes his or her subscription size or relocates to a new address.
- 7. Xcel shall revise the definition of "Community Solar Garden Operator" in the standard contract at Tariff Sheet No. 70 (and wherever else the definition occurs in the proposed tariff) to read, "'Community Solar Garden Operator' is identified above and shall mean the organization whose purpose is to operate or otherwise manage the Community Solar Garden for its Subscribers. A Community Solar Garden Operator may be an individual or any for-profit or non-profit entity permitted by Minnesota law."
- 8. Xcel shall amend its tariff, sheet 9-67, to substitute 24 months for 18 months as the deadline for a solar-garden operator to complete a project.
- 9. Xcel shall, in reporting on the application process, include information on what percentage of projects were finished within the 24-month deadline for project completion.
- 10. Xcel shall revise the definition of "Community Solar Garden Site" in the standard contract to read as follows:

"Community Solar Garden Site" is the location of the single point of common coupling located at the production meter for the Community Solar Garden associated with the parcel or parcels of real property on which the PV System will be constructed and located, including any easements, rights of way, and other real-estate interests reasonably necessary to construct, operate, and maintain the garden. Multiple Community Solar Garden Sites may be situated in close proximity to one another in order to share in distribution infrastructure.

- 11. Xcel shall revise criterion (iii) for application readiness in its tariff to read as follows: "the applicant has submitted evidence of control of the Community Solar Garden Site."
- 12. The Commission approves Xcel's request for program naming, including the name "Solar\*Rewards Community" for the community-solar-garden program, but requires the Company to rename "Solar\*Rewards with Solar\*Rewards Community Contract" as "Solar\*Rewards Community Contract for those receiving Solar\*Rewards Incentive."
- 13. Within ten days of this order, Xcel shall submit a compliance filing in Docket Nos. E-002/M-13-1015 and 13-867 with any revisions to the "Solar\*Rewards Community Contract for those receiving Solar\*Rewards Incentive" needed to achieve consistency with the orders in 13-1015 and 13-867.
- 14. Xcel shall include language in the standard contract that provides for (1) identification of an Xcel breach for failure to pay or credit amounts due when due, (2) financier cure rights for any operator default, and (3) an extended cure period for defaults requiring more than 30 days to cure (e.g. a problem with the physical equipment requiring repair or replacement).
- 15. Xcel shall modify paragraph 6(S) of the standard contract to read as follows:

Fair Disclosure. Prior to the time when any person or entity becomes a Subscriber, the Community Solar Garden Operator will fairly disclose the future costs and benefits of the Subscription, and provide to the potential Subscriber a copy of this Contract. The Community Solar Garden Operator shall comply with all other requirements of the MPUC and applicable laws with respect to communications with subscribers.

- 16. Xcel shall revise its tariff to state that customers who are exempt from the Solar Energy Standard (SES) under Minn. Stat. § 216B.1691, subd. 2f (d), shall not participate in or subscribe to community solar gardens.
- 17. The Commission approves the language proposed by Xcel in the standard contract, Tariff Sheet No. 85, requiring that garden operators maintain an active account with M-RETS in order to receive RECs associated with unsubscribed energy.

- 18. Xcel shall revise its tariffed standard contract to make clear and to state in one location in the contract that, while the applicable retail rate is in effect, REC payments will last for the full term of the contract.
- 19. The Commission approves Xcel's proposal to recover community-solar-garden program costs, including customer bill credits, additional REC credits, and unsubscribed energy, through the Fuel Clause Adjustment (FCA) mechanism.
- 20. Xcel shall include information about its bill credits, as reported in its Annual Compliance Report in this docket, in the Company's annual FCA Annual Automatic Adjustment (AAA) Report, reflecting the same time period covered by the AAA report.
- 21. Xcel shall file revised tariff sheets reflecting the Commission's decisions within ten days of this order.
- 22. This order shall become effective immediately.

BY ORDER OF THE COMMISSION

Burl W. Haar

**Executive Secretary** 

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