

STATE OF MINNESOTA PUBLIC UTILITIES COMMISSION

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

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

Date: April 2, 2015

REPLY COMMENTS OF KANDIYO CONSULTING, LLC

I. Issues related to the bill credits for Community Solar Garden subscribers.

Xcel Energy has raised concerns about the value of bill credits for subscribers to its Community Solar Garden program that are currently set at the subscriber's Applicable Retail Rate (ARR) plus a Renewable Energy Certificate (REC) value of two cents or three cents per kilowatt-hour based on the overall size of the Community Solar project.

Given the "buy-all, sell-all" nature of power purchases from Community Solar Gardens, this bill credit formula is appropriate and should be maintained for the near-term future. This bill credit structure rewards smaller Community Solar projects under 250 kilowatts of AC-rated capacity and rewards residential and small general service subscribers to Community Solar projects at a higher level than large commercial ratepayers. That is an appropriate public policy and represents the spirit and intent of the Community Solar legislation.

The current bill credit structure also reflects development costs that are likely to be slightly higher for small-to-medium size Community Solar projects and projects that have a subscriber mix that includes many more small subscribers.

A change in the bill credit formula to a single Value of Solar Tariff (VOST) for all subscribers, unless it is accompanied by an "adder" that maintains some of this rate progressivity, would have the effect of benefiting large commercial subscribers to Community Solar Gardens at the expense of other subscribers. This should be rejected by the Commission as contrary to the public interest and inconsistent with the intent of Community Solar legislation.

In addition, Xcel Energy's Community Solar program has been open for less than four months. A change in bill credits so soon after the program opened would be disruptive to the market and create uncertainty for project developers. At a minimum, the Commission should maintain the current bill credit formula for Community Solar for all projects developed through 2016. At that time, as the Commission is aware, federal tax incentives for solar energy may be significantly reduced. That would be an appropriate time for the State of Minnesota to evaluate whether its policies and incentives supporting solar energy are set at a level that will continue to expand the market for solar energy in Minnesota.

II. Issues related to the size of Community Solar Gardens.

Kandiyo believes that large, co-located Community Solar projects of 10.0 megawatts or more are inconsistent with the intent of the Community Solar legislation. The fact that most of

these projects are also in rural or exurban locations that offer minimal benefits to Xcel's system as Distributed Generation is also contrary to what Kandiyó believes to be one of the intended benefits of Community Solar legislation.

However, we do not suggest the Commission take any action to limit the size of these Community Solar projects at this time. It has become clear that many of these projects are likely to run into constraints in securing interconnection agreements with Xcel in a timely manner. Kandiyó also believes a significant group of potential subscribers will be less interested in these projects than in Community Solar projects that are developed in closer proximity to where subscribers live. Current regulatory and market forces should be allowed to play out for a period of time before changes are considered in the program.

Once again, an appropriate timeframe for revisiting the issue of the size of co-located Community Solar projects is probably at the end of 2016. At that time, solar project developers and the Commission will have much more information on the actual advantages and disadvantages of these large projects versus smaller projects of 1.0 megawatt or less.

III. Other issues related to Community Solar Gardens

1. Payment of RECs for unsubscribed energy. Xcel has taken the position that its current tariff does not allow it to pay for RECs on unsubscribed energy from Community Solar projects. It may be willing to pay for these RECs, but at a rate less than two cents or three cents based on the AC capacity of the project.

It is appropriate for Xcel to pay the full REC value in its original contract with a Community Solar project for unsubscribed energy. The REC value is intended to reflect the environmental and compliance value of solar energy and those benefits continue to accrue to Xcel even if the energy is unsubscribed. Xcel is already benefiting from a reduction in the cost of this unsubscribed energy by buying it at the utility's avoided cost rate, which is a substantial discount from its ARR.

Developers of Community Solar projects require greater certainty about the value they will receive from unsubscribed energy and the Commission should act to clarify this issue as soon as possible. Developers need this clarity for negotiations with project financiers, and also for determining what penalty, if any, will apply to a subscriber that wishes to terminate its subscription agreement before the end of its full 25-year term.

Maintaining the same REC agreement would also be easier for ongoing administration of Community Solar projects and may very well be more consistent with the requirements and structure of the M-RETS system for registering and selling RECs in Minnesota.

If the Commission or Xcel are concerned about Community Solar projects manipulating the system by purposefully maintaining a high level of unsubscribed energy, the Commission could establish an upper limit on the amount of unsubscribed energy that Xcel would be required to purchase at its avoided cost plus the full REC value in its original contract. The Commission may wish to consider a limit such as no more than 10 percent of a project's annual energy generation could be sold as unsubscribed energy with the full REC value.

2. Consistency in subscriber location. The Commission has already established that a subscriber with multiple locations will be treated as one, unified subscriber for purposes of purchasing subscriptions. This has the effect of limiting any one subscriber, even one with many locations, meters and utility accounts, from purchasing more than 40 percent of any one Community Solar project's subscriptions and becoming their own Community Solar project with five or more subscribers that are their own locations. Kandiyo believes that was an appropriate determination by the Commission.

For purposes of determining whether a subscriber qualifies as residing in the same or an adjacent county as the Community Solar project, Kandiyo believes the subscriber should be required to use its primary administrative offices where it receives its utility bills, or otherwise designate one of its multiple locations, for purposes of establishing this residency requirement. This will insure that a subscriber with multiple locations is treated as one subscriber and is subject to a simply determination of its eligibility for becoming a subscriber in a particular Community Solar project.

3. Current deposit levels are excessive for many Community Solar projects. The Commission has agreed with Xcel's position that a deposit of \$100 per kilowatt of project capacity must be deposited with Xcel as part of the Community Solar application process. The deposit is intended to inhibit frivolous Community Solar applications and set a minimum threshold of financial capacity for Community Solar developers.

While the use of deposits may be appropriate at some level, the amount of the deposit is excessive, especially for smaller Community Solar projects. To advance its Community Solar application, a developer is required to pay an initial non-refundable fee, and will need to expend funds for legal expenses, engineering, permits and other expenses that give the developer a vested interest or "skin in the game" on its projects. To require a deposit in addition to these costs ties up a considerable amount of capital (an estimated \$50 million currently), that could be better used as working capital by solar developers. Many of the solar developers that have been actively working in the Minnesota market for some time are already struggling to secure the additional working capital and investment to grow in response to the rapidly expanding solar market in Minnesota. Tying up this considerable amount of capital in deposits for up to two years exacerbates this issue.

Kandiyo believes an appropriate level of deposits for projects under 250 kilowatts AC capacity would be \$10,000 or \$100 per kilowatt, whichever is less. An appropriate level for projects from 250 kW to 1.0 MW would be \$25,000.

Sincerely,

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