



414 Nicollet Mall  
Minneapolis, MN 55401

September 23, 2015

—Via Electronic Filing—

Daniel P. Wolf  
Executive Secretary  
Minnesota Public Utilities Commission  
121 7<sup>th</sup> Place East, Suite 350  
St. Paul, MN 55101

RE: RESPONSE TO MPUC INFORMAL INFORMATION REQUEST NO. 7  
COMMUNITY SOLAR GARDENS  
DOCKET NO. E002/M-13-867

Dear Mr. Wolf:

Enclosed please find our response to the referenced informal Minnesota Public Utilities Commission information request in the above-noted docket.

Please call me at (612) 337-2268 if you have any questions regarding this submission.

Sincerely,

Amber R. Hedlund  
Regulatory Case Specialist

Enclosure  
c: Service List

- Non Public Document – Contains Trade Secret Data
- Public Document – Trade Secret Data Excised
- Public Document

Xcel Energy

Docket No.: E002/M-13-867

Response To: Public Utilities Commission Informal Information Request No. 7

Requestor: Susan Mackenzie

Date Received: September 14, 2015

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Question:

Please explain the reason for imposing a \$1 million cap on distribution system upgrade costs and how alleviating the need to undertake long-lead time upgrades will improve the ability for CSG projects to be built.

In answering this request, please explain how distribution system upgrades that are material will create a delay in the processing of CSG applications, as well as in the completion of these projects. If one reason is related to delays possibly imperiling the ability of garden projects to meet ITC deadlines, please describe any potential delays, including delays in the CSG application steps, the Section 10 interconnection process, and the final completion of system upgrade and project. Please be specific in your description of the steps in the process and why a step will be delayed for that applicant, as well as other applicants positioned further down in the queue at that substation. As part of this response, explain how the queue works and which projects in the queue will be held up and why when material upgrades which result prolonged lead times are undertaken.

Response:

We provided our reasoning for the distribution system upgrade limitations and other elements of the Partial Settlement Agreement (PSA) in our September 8, 2015 Answer to the Request for Clarification and Petition for Rehearing and Reconsideration. At pages 2-3, we wrote (internal citations omitted):

*To help develop a path forward, at least on an interim basis, the Company and several developers agreed to the terms of the Partial Settlement Agreement (PSA). The heart of the PSA, set forth in Sections 2.2 and 2.3, established co-location restrictions, recognized the technical limits of the existing distribution system, established a path for accelerating the*

*application process, created more transparency in the application process, and established a process for refining program rules over the course of next year. [...]*

*For context, prior to the execution of the PSA, developers and participating customers sought certainty around seeing community solar gardens placed into service before the investment tax credit (ITC) step-down in 2016. The Company also sought certainty that the reliability of our system would not be compromised and the financial impact on our nonparticipating customers would be appropriately restrained. It was through this mutual desire for certainty that the settling parties were able to reach a near-term solution that moves the program forward in a more balanced way. Through compromise and willingness to work together, we were able to reach reasonable outcomes that allow the program to move forward rather than seeking recourse from the court of appeals or the Federal Energy Regulatory Commission.*

The threshold for determining a Material Upgrade is where the work described under aa (below) is involved, or includes the costs of work above \$1 million in the aggregate for three-phase line extension on existing feeders and for reconductor/build line work. The Company provided a detailed process for implementing the Order in our proposed draft tariff, filed on September 15, 2015. The process is as follows:

*i. The Company will determine whether a “Material Upgrade” to the Company network is needed to accommodate a Community Solar Garden. A Material Upgrade will not be performed.*

*aa. Examples of Material Upgrades that will not be performed include the following:*

- New substation transformer*
- Upgrade substation transformer<sup>1</sup>*
- Install new feeder bay*
- Install new overhead or underground feeder<sup>2</sup>*
- Changes that require a substation outage*

*<sup>1</sup> A substation transformer upgrade is defined by the replacement of entire unit. Auxiliary relaying, instrumentation, and other minor upgrades do not fall in this category.*

*<sup>2</sup> This provision only applies to a switchgear substation. A switchgear substation is one that contains pre-manufactured feeder breaker assemblies.*

*bb. In addition, a Material Upgrade includes the following upgrades or additions resulting from the engineering indicative cost estimate which, in the aggregate, exceed \$1 million:*

- Three-phase line extension on existing feeders*
- Reconductor/ build Line*

The intent behind the PSA was to bring forward a workable solution. We were and are sensitive to developers' concerns about bringing gardens online as quickly as possible. To that end, we agreed to substantially expedite our review process and offer a 50-day timeline for study. The key enabler to the expedited process was to limit the work the Company would be required to perform so that the distribution system would be taken "as is." By focusing on standard, non-material upgrades, the Company will be in a position to bring on as many gardens as are ready.

To illustrate the importance of this provision, we highlight the impact of system upgrades on the pace of garden development, both in the study phase, and the construction phase.

#### 1. Enabling Expedited Engineering Studies

The "expedited review" process reduces study time frames from 90 business days to 40 calendar days but no later than 50 business days from the date in which the applicant submits payment for the engineering study and is otherwise "Expedited Ready." This process shortens the study period for projects that are currently first in queue, but more importantly, it allows for studies for those not first in queue to be reviewed more promptly. Table 1 compares the Section 10 timeline with the "expedited review" timeline provided in our Proposed Draft Tariff<sup>1</sup> for projects behind those first in queue.

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<sup>1</sup> See Xcel Energy's Compliance Filing dated September 15, 2015.

**Table 1  
Second in Queue Timeline**

	<b>Section 10</b>	<b>“Expedited Review”</b>
<b>Engineering Study SOW provided to Applicant</b>	Within 15 days the applicant is notified that they are not first in queue. The SOW is then provided once the engineering study for the project immediately ahead of it is completed and that other developer has paid 1/3 of the indicative construction cost. This amounts to up to 120 business days.	Within 15 days
<b>Developer Decision to pay study cost</b>	30 business days	30 business days
<b>Study Timeline</b>	250kW – 1MW, 40 business days > 1MW, 90 business days (based on project site)	40 calendar days on a best efforts basis; but no later than 50 business days
<b>Developer Decision to pay 1/3 of construction cost</b>	30 business days	30 business days

As shown in Table 1, the “expedited review” process is intended to shrink our current process from nine to four months for the second in queue. Importantly, the 50-day timeline for “expedited engineering review” acknowledges that indicative construction estimates would be provided with the Material Upgrade provision as a prerequisite.

2. Enabling Planned Construction Efficiencies

a. *Physical Construction*

The equipment frequently associated with a Material Upgrade (such as a substation transformer, for example) has an ordering lead time of 12 months or longer. It can take an additional 6-12 months to complete construction. The Material Upgrade provision avoids situations where the first applicant requires a transformer upgrade, and the applicant second in queue must wait for the first construction timeline to be completed.

Similarly, if one solar garden is awaiting a three-phase line extension and another, behind them in queue, is being built three miles away, the second project must wait for the completion of construction on the first project, since the upgrade has now made these projects dependent upon each other.

While the Material Upgrade provision minimizes construction delays, it does not eliminate them. Some non-material upgrades will also incur lengthy lead times for

construction – these are dependent upon the specifications of each project. For example, we have identified projects that require 12-15 month construction lead times for 5 MW projects. If that same project eliminated 1 MW, the lead time would be significantly reduced because it no longer includes the same upgrade requirements. A benefit of the Material Upgrade provision is to minimize situations that slow the process down.

*b. Construction Resources*

For projects that drive upgrades such as a new feeder bay or new substation transformer, the Company coordinates the work of multiple teams, including distribution operations, distribution engineering, substation engineering and construction. In some instances, teams from transmission engineering and construction are also engaged. The intent behind the PSA was to minimize projects at this scale and to instead move quickly on projects that do not require these upgrades.

The PSA taken as a whole provides direction to applicants that allows them to focus their attention on projects with the highest likelihood of success. It enables the Company to expedite reviews, to manage impacts to the distribution system, to use resources efficiently, and to limit disruptions. In short, the Material Upgrade limitation allows us to achieve the goal of moving gardens online quickly.

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Preparer: Joel Limoges  
Title: Manager, Electric Area Engineer  
Department: Area Engineering  
Telephone: 651.229.2319  
Date: September 23, 2015

## CERTIFICATE OF SERVICE

I, Carl Cronin, hereby certify that I have this day served copies of the foregoing document on the attached list of persons.

xx by depositing a true and correct copy thereof, properly enveloped with postage paid in the United States mail at Minneapolis, Minnesota

xx electronic filing

**Docket No.        E002/M-13-867**

Dated this 23rd day of September 2015

/s/

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Carl Cronin  
Regulatory Administrator

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