

**STATE OF MINNESOTA
PUBLIC UTILITIES COMMISSION**

Katie Sieben
Valerie Means
Matt Schuerger
Joseph K. Sullivan
John Tuma

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Commissioner
Commissioner
Commissioner
Commissioner

**In the Matter of the Petition for
approval of Northern States Power
Company, d/b/a Xcel Energy, for
approval of its Community Solar
Garden Program**

**COMMENTS of the MINNESOTA
SOLAR ENERGY INDUSTRIES
ASSOCIATION (MnSEIA)**

June 21, 2021

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

MnSEIA's COMMENTS

The Minnesota Solar Energy Industries Association (MnSEIA) is a 501(c)(6) nonprofit trade association that represents our state's solar businesses, with 125 member companies, which employ roughly 4,000 Minnesotans.

BACKGROUND

On September 6, 2016, the Minnesota Utilities Commission (the Commission) issued an Order¹ in this docket approving a Value of Solar (VOS) rate for Xcel Energy's (Xcel) Community Solar Garden (CSG) Program. The Order requested that the Department of Commerce (the Department) subsequently file a report addressing whether adjustments to the rate are warranted, including whether to adopt an adder.

On March 1, 2017, the Department filed its report² and recommended that the Commission adopt an adder to be applied to residential customers' bills.

¹See ORDER APPROVING VALUE-OF-SOLAR RATE FOR XCEL'S SOLAR-GARDEN PROGRAM, CLARIFYING PROGRAM PARAMETERS, AND REQUIRING FURTHER FILINGS, In the Matter of the Petition of Northern States Power Company, d/b/a Xcel Energy, for Approval of Its Proposed Community Solar Garden Program, Docket No. E-002/M-13-867, Doc. ID. 20169-124627-01, (September 6, 2016).

² See Comments of the Minnesota Department of Commerce, Division of Energy Resources, In the Matter of the Petition of Northern States Power Company, d/b/a Xcel Energy, for Approval of Its Proposed Community Solar Garden Program, Docket No. E-002/M-13-867, Doc. ID. 20169-124627-01, (March 1, 2017).

On November 16, 2018, The Commission issued a notice requesting Comments on the report. Nearly a dozen parties offered Comments and/or Reply Comments.

On December 14, 2017, the Commission issued an Order³ directing Xcel to file an analysis of the potential rate impact of various levels of residential solar garden penetration, considering the Department's recommendation for an adder, and how to implement a solar residential carve-out.

On February 1, 2018, Xcel filed its analysis,⁴ as directed by the Commission, and filed a correction⁵ to its filing on February 23, 2018.

On February 14, 2018, the Commission issued a notice seeking Comments on Xcel's filing, including whether the Commission should take any further action.

Following that Notice and Comment period and associated hearing, the Commission issued an Order⁶ on November 16, 2018, adopting the Residential adder and setting reporting requirements.

On March 26, 2021, the Company filed a compliance filing⁷ with the Commission in keeping with the November 16, 2018 Order in this docket.

COMMENTS

We note at the outset what the appropriate standard of review should be in this matter. The onus is on the utility to show that there is *too much* participation in the Residential adder, and that the costs are too burdensome on ratepayers. Anything less does not rise to a level of ending the Residential adder—even a lack of data.

There are really three possible outcomes from the data that Xcel has collected on the Residential adder pilot program: 1) the adder is either not high enough to encourage residential participation

³ See ORDER REQUIRING FURTHER ANALYSIS OF RESIDENTIAL ADDERS AND CARVE-OUTS, In the Matter of the Petition of Northern States Power Company, d/b/a Xcel Energy, for Approval of Its Proposed Community Solar Garden Program, Docket No. E-002/M-13-867, Doc. ID. 201712-138185-01, (December 14, 2017).

⁴ See VALUE OF SOLAR ADDERS ANALYSES COMMUNITY SOLAR GARDENS PROGRAM, In the Matter of the Petition of Northern States Power Company, d/b/a Xcel Energy, for Approval of Its Proposed Community Solar Garden Program, Docket No. E002/M-13-867, Doc. ID. 20182-139688-01, (February 1, 2018).

⁵ See OTHER--CORRECTED VOS ADDERS ANALYSIS, In the Matter of the Petition of Northern States Power Company, d/b/a Xcel Energy, for Approval of Its Proposed Community Solar Garden Program, Docket No. E002/M-13-867, Doc. ID. 20182-140436-01, (February 18, 2018).

⁶ See ORDER--ORDER ADOPTING ADDER AND SETTING REPORTING REQUIREMENTS, Docket No. E002/M-13-867, In the Matter of the Petition of Northern States Power Company, d/b/a Xcel Energy, for Approval of Its Proposed Community Solar Garden Program, Doc. ID. 201811-147853-01, (November 16, 2018).

⁷ See Xcel Energy, RE: RESIDENTIAL ADDER PILOT PERFORMANCE AND FUTURE OPTIONS COMMUNITY SOLAR GARDEN PROGRAM, In the Matter of the Petition of Northern States Power Company, d/b/a Xcel Energy, for Approval of Its Proposed Community Solar Garden Program, Docket No. E-002/M-13-867, Doc. ID. 20213-172288-01, (March 26, 2021), *hereinafter* "Xcel Compliance Filing."

or is some other way faulty; 2) the rate of the Residential adder encourages residential participation as intended and without too much ratepayer impact; or, 3) participation in the residential adder is too high, and the ratepayer impact needs to be curbed. We will evaluate each prong in turn.

First, if the adder does not seem to encourage residential participation—if it is not high enough or is otherwise faulty—then there is no reason to *not* extend it. If anything, there is a need to increase the adder. But, keeping it helps those developers that, at least anecdotally, are able to include some residential customers. In short, if it is too low, it does no harm to extend the adder.

Second, if residential participation in the program has marginally increased during the pilot program, then there is evidence that the adder works, but is not overly rich. This scenario is the optimal outcome, because it shows the adder is encouraging residential participation without oversubsidizing the subscriber segment. Unless the Commission's goals have changed, this result also justifies extending the residential adder.

Third, if there is too much residential participation, or if the utility can show that the adder costs too much, only then there is a need to reduce the adder or eliminate it. In this case, the adder would be overly rich, and may impact ratepayers in a manner that the VOS does not. This last prong is really the *only* one that should give the Commission cause to decide the adder is not worth extending.

This framing of the issue is important, because a lot of the justification that appears in Xcel's report seems to suggest not that the adder is overly rich, but the opposite: that residential participation does not seem that high, and that developers are not all that interested in the adder. If this lack of participation is the case, then the Commission should extend the adder—it is either evidence of prong 1 or prong 2. That is, Xcel seems to be proving the wrong point. The burden is really on the utility to show that the program is unnecessarily costly, and it has not done that.

From the evidence presented and known to us, it is clear that either prong 1 or prong 2 are true here. Either the Residential adder is *inadequate* to support a broadscale pursuit of residential subscriptions, in which case there is no harm in continuing the experiment as more data accumulates, or, the Residential adder is *well tailored* to encourage residential subscriptions from some developers, in which case the pilot should be incorporated more permanently into the VOS regime.

From the evidence known to us, MnSEIA concludes that Prong 2, that the adder works as designed, is more likely, and that Prong 1, that the adder does not seem high enough to substantially increase residential participation, is possible. Prong 3, that the adder is too rich, does not seem to us to be likely. Thus, we believe the adder should be extended for at least another year, but preferably made continuous and permanent.

I. Prong 1: If the Residential adder Makes a Minimal Impact on Residential Participation, Then an Extension Would Do No Material Harm to the Ratepayer

Xcel argues, essentially, in its Compliance Filing⁸ that the Residential adder has not been successful in attracting residential subscribers to the program, and that therefore the pilot program should not be extended. The Company takes the position that developers have recruited too few residential subscribers, and—paradoxically—that this burden is too high on ratepayers.⁹ The Company’s conclusion that such a supposedly underutilized aspect of the Solar*Rewards Community (S*RC) program would be too costly to continue is illogical. Furthermore, the Company’s position shrugs off the Commission’s reasoning to order the adder pilot in the first place.

While MnSEIA concludes that Residential adder is well tailored to increase residential participation in the program (see section II), we will examine the possibility that it is underutilized here.

If the adder seems to be inadequate to the task in its present form, then the Commission should extend the pilot for several reasons. First, the context of its adoption by the Commission—that the VOS without an adder discourages residential participation—has not disappeared, and the need to encourage residential subscribers remains the priority of this proceeding. Second, any observation that the collection of data is incomplete should suggest extending the pilot period, not stopping it short. Third, the lack of data seems to be mostly a function of long interconnection and subscriber information timelines, for which Xcel is largely responsible.

A. The original need for the Residential adder continues

MnSEIA agrees with the Company and the Commission that the facilitation of a more equitable mix of subscribers in the S*RC program is a worthy public policy goal. Without the adder residential customers do not much participate in the S*RC program, because the costs and financial risk associated with their acquisition, service, and turnover are significantly higher than for established commercial customers.

The Residential adder is the best pathway forward to encourage residential participation, because its simplicity and predictability encourages both developers and subscribers to take on the burden of relatively higher transaction costs. Its simplicity and certainty are an asset in an otherwise complex program.

⁸ See generally, Xcel Compliance Filing.

⁹ See Xcel Compliance Filing at 2, stating, “It is the Company’s view that increasing program costs on this \$146 million per year program by extending the adder to additional vintage years lacks record support.”

There are trade-offs with the different rate structures that have been in place for this program. The current rate, the VOS, is a predictable, fixed rate that—by virtue of being value-neutral—ensures that the program does not harm ratepayers. Its certainty is also easier to finance, because it uses a constant escalator.

By contrast, one of the advantages of the Applicable Retail Rate (ARR) is its better record of attracting a higher proportion of residential subscriptions. The Company agrees that the ARR attracted a higher proportion of residential subscribers:

“The growth in Residential participation predates the availability of the adder. Most Residential participants formed agreements with garden operators for projects grandfathered into the Applicable Retail Rate (ARR) compensation tariff, which sunsetted in 2016.”¹⁰

The most straightforward explanation is that the ARR compensates residential subscribers at a premium that varies annually, and is currently 3.09¢/kWh over the ARR bill-credit rate for general service customers.¹¹ Xcel argues that because most of the residential subscribers in the program joined while the ARR was in effect, that the pilot should be discontinued. We draw a different conclusion. Instead, the greater residential participation in the program under the ARR suggests to us that—with time—the residential adder will achieve similar results.

B. Any lack of data about the Residential adder’s effect suggests extending, not curtailing the Pilot

The Company argues in its Compliance Filing that the lack of data about the Residential adder pilot in the record does not support the extension of the pilot program. MnSEIA disagrees that there is a lack of relevant data (see below), but if there were, that lack would suggest extending the pilot while more adder-eligible gardens come online.

The stated policy reason for the adder is to extend the subscription benefits to more residential customers,¹² which is in the public interest. Furthermore, as shown below, the available evidence shows that the adder works, which should be sufficient reason to continue it.

If more data is needed to evaluate the success of the pilot, then the logical course of action would be to extend the life of the pilot as the data becomes available. Furthermore, to the extent that there even is a lack of data, that lack stems from events and timelines under Xcel’s control.

¹⁰ See Xcel Compliance Filing, at 2.

¹¹ See Northern States Power Company, MINNESOTA ELECTRIC RATE BOOK - MPUC NO. 2, SOLAR*REWARDS COMMUNITY PROGRAM, Section No. 9, 6th Revised Sheet No. 64.1, (April 1, 2021).

¹² See ORDER--ORDER ADOPTING ADDER AND SETTING REPORTING REQUIREMENTS, In the Matter of the Petition of Northern States Power Company, d/b/a Xcel Energy, for Approval of Its Proposed Community Solar Garden Program, Docket No. E002/M-13-867, Doc. ID. 201811-147853-01, (November 16, 2018).

MnSEIA believes, however, that there *is* sufficient evidence that the residential adder works as intended, as we will later discuss.

C. Xcel is the reason for the lack of data, to the extent that a lack exists

Xcel's gloss of the pilot program cites a lack of data ("record support"¹³) as the primary reason not to extend the adder, noting primarily two sources for that lack: the number of residential subscribers in 2019 and 2020 vintage gardens as of January 8, 2021,¹⁴ and a supposed dearth of developer input from stakeholder surveys.¹⁵ The former is a direct result of the Xcel-controlled interconnection process and the timing of the sample, and the latter, MnSEIA believes and will demonstrate, is a mischaracterization of the sample and methodology.

The long timelines associated with CSG interconnection have been discussed at length in other dockets and venues; and, while it would not serve the discussion to continue that conversation in depth here, we will restate the industry's position that extensions beyond MN DIP timelines seem to have arisen from *a lack of Company resources dedicated to interconnection*. It is only because of slow interconnection processes that, as of January 8, 2021, only 6 of 52 2019 vintage gardens (and no 2020 gardens) have come online.¹⁶

The lack of interconnected gardens should greatly concern the Commission here. Not only does the Company's unusually slow process unnecessarily slow interconnections, but also the Company appears to justify its arguments around the residential adder by way of that slowness. Xcel is one of the primary causes for the lack of data, and are now seeking to use the lack of data as justification for its position.

Furthermore, the data that the Company offers in its Report omits residential subscribers eligible for—and perhaps marketed to because of—the residential adder, for the simple reason that, as the Company acknowledges,¹⁷ gardens are not able to upload subscriber information until the very last stage of the process. The Company points out that gardens are not *required* to add subscriber information until 10 days before energization.¹⁸ But the flipside then must also be true, that the Company's choice not to *allow* subscriber information uploads until the design and construction phase obscures subscriber information from 290 of 321 eligible gardens from the record. While these utility process decisions were presumably made with no consideration of the

¹³ Xcel Compliance Filing at 2.

¹⁴ Xcel Compliance Filing at Table 2, at 6.

¹⁵ *Id.* at § III and Attachment 1.

¹⁶ *Id.* at Table 2, at 6.

¹⁷ *Id.*, at 6.

¹⁸ *Ibid.*, stating "Developers can begin to add subscribers during the design and construction phase of their projects; however, they are not required to upload this information until just prior to energization. Uploading subscriber information is a multi-step process requiring submission and approval of Subscriber Agency Agreement and Consent forms and most developers complete this process near the end of construction."

present issue, they *do* affect the visibility of residential subscriber data for 2019 and 2020 gardens in the Company's Compliance Filing.

Regardless of the lack of data or reasons for that lack, as argued above, evidence that the adder is underutilized should *not be reason to discontinue the pilot*. Rather, both a lack of data and data that suggests minimal usage of the adder should suggest a continuation of the pilot.

II. Prong 2: The Residential adder Is Working As Intended, and Therefore Should be Extended

The Company's contention that the adder has been underutilized rests on an incomplete data set, which shows minimal participation in the pilot. The evidence for this lack of participation is misrepresented, and has subsequently been surpassed by evidence that MnSEIA will introduce to the record here.

This evidence, on the whole, suggests that the adder has—contrary to the Company's position in its Compliance Filing—been successful in attracting residential subscribers to the S*RC program.

A. Further evidence suggests that the adder is even more successful than the present record attests

While Xcel's tabulation of the stakeholder survey dismisses and undercounts evidence that the adder has been serving its intended purpose, there is further evidence now available that the adder has and will increase residential participation in the S*RC program.

MnSEIA's own internal fact finding reveals that one member expects to submit more than 1,000 residential subscribers to projects in the 2019 vintage. For this company,¹⁹ the adder has become central to a business strategy: it has already filled 3 gardens with 100% residential subscriptions, and expects that it will fill 2 more with 100% residential participation by the close of the year. Or, as this company responded in the survey: "It enabled us to develop solar gardens focused on residential subscribers (the only type of projects we develop)."²⁰ A continuation of the adder, for this company, means a continuation of this strategy—and the industry meeting the Commission's policy goal.

We do not believe that this company's strategy is evidence of an adder that is "too hot," because it is clear from the record and Xcel's Compliance Filing that some other developers have

¹⁹ We have been told that this company intends to submit a letter in this docket.

²⁰ See Xcel Compliance Filing, Attachment A, at 3.

continued to focus on non-residential subscribers. Diversity in business strategies is evidence of a healthy market.

Further, according to Xcel's responses to a set of Information Requests by MnSEIA, residential participation has significantly increased from VOS 2017-2018 vintage years (when residential adder was not available) to VOS 2019 vintage year (when the residential adder was available):

Table 1. Subscriptions by vintage VOS, 2017-2019

Vintage VOS	2017 ²¹	2018 ²²	2019 ²³
Total Subscriptions	820	1,755	631
Residential Subscriptions	446	133	422
Percentage of Resi. Subscriptions by capacity	~8%	~1%	~22%

As shown above, the proportion of residential subscriptions for vintage 2019 gardens—the first year of the adder pilot—has gone up significantly compared to the previous two vintage years. While most 2019 vintage gardens are not yet online, and therefore the data set is incomplete, more recent data than shown in the Company's Compliance Filing shows that *the adder is working as intended*.

While the data for VOS 2019 is incomplete and subject to change, it is worth noting that the adder seems to be increasing residential subscriptions as a percentage of the total subscriber mix, which as of January, 2021, sat at 13% by capacity.²⁴ For comparison, Xcel's statewide customer mix is 28% to 29% residential.²⁵

²¹ See Xcel response to MnSEIA IR 47, (June 7, 2021).

²² See Xcel response to MnSEIA IR 48 (June 7, 2021).

²³ See Xcel response to MnSEIA IR 49 (June 7, 2021).

²⁴ See Northern States Power Company, d/b/a Xcel Energy, COMPLIANCE – 2020 ANNUAL REPORT COMMUNITY SOLAR GARDENS PROGRAM, In the Matter of the Petition of Northern States Power Company, d/b/a Xcel Energy, for Approval of Its Proposed Community Solar Garden Program, Docket No. E002/M-13-867, Doc. ID. 20214-172475-01, (April 1, 2021), Table 6, at 20.

²⁵ See Staff Briefing Papers, In the Matter of the Petition of Northern States Power Company, d/b/a Xcel Energy, for Approval of Its Proposed Community Solar Garden Program, Docket No. E002/M-13-867, Doc. ID. 201810-146816-01, (October 3, 2018), at 24. See also Energy Information Agency, Annual Electric Power Industry Report, Form EIA-861 detailed data files, "Sales_Utl_Cust_2019.xls," Northern States Power Company, at row 1963, showing 29,166,665 MWh total 2019 sales and 8,552,013 MWh to the Residential class, Retrieved at <https://www.eia.gov/electricity/data/eia861/> (June 14, 2021).

B. The Company's presentation of stakeholder input is misleading

The Company's Compliance Filing also understates and minimizes the level of CSG developer participation in Xcel's survey tool. The Company seems to use this understatement and minimization to show developer disinterest in the adder—presumably to show that it is ineffectual and should be discontinued—but this portrayal of developer engagement is misleading for several reasons.

First, the level of participation in the stakeholder survey was far more representative than the Company portrays. Second, the Company mischaracterizes the survey results as to the impact of the residential adder. Third, income-qualified subscribers are a greater focus of developer efforts than the Company depicts. Lastly, the Company's report dismisses stakeholder input as to other, non-monetary solutions.

The Report characterizes the number of responses from stakeholders as not “representative or statistically significant sampling,” stating that the vast majority of the 900 email addresses sent the survey did not respond.²⁶ However, those 900 contacts do not represent 900 distinct CSG developers in the market, but simply email contacts across the industry and related groups that have been added to the S*RC listserv over the years. It is probably safe to assume that organizations delegated only one respondent to the survey, that most percentage of the survey recipients are not developers, and that many of the recipients are no longer even in the market. Moreover, while the developers that participate in Community Solar change annually, we would estimate that there are about 20 CSG developers in our association that are currently active in the Minnesota market. There are definitely a few active CSG developers that are not members, but not that many. So it is reasonably possible, if not probable, that the sample actually represents most participants in the sector: Attachment A clearly shows that 11 CSG developers responded to the Survey in November 2020; and, Attachment B shows that 13 developers responded to the same Survey in March 2021. Even allowing for potential overlap, this means that over a dozen developers participated in the survey—which is actually quite significant.

Xcel's compliance report also mischaracterizes the survey results as to the impact of the residential adder. Xcel writes that “5 of the 14 respondents say they were utilizing the adder to sell subscriptions”²⁷—which implies that only a minority of developers plan to even use the adder. But the actual survey results show that 6 developers had already sold (and 10 planned to sell) residential subscriptions under the adder as of November 2020,²⁸ while 10 developers (a clear majority of respondents) had already sold residential subscriptions under the adder as of March 2021.²⁹

²⁶ See Xcel Compliance Filing., at 7.

²⁷ *Ibid.*

²⁸ *Id.*, Attachment A, at 2-3.

²⁹ *Id.*, Attachment B, at 1-2.

Third, Xcel writes that “income-qualified customers were not a focus of the adder (in most cases). But, a clear majority of the survey respondents stated that they do plan to use the residential adder “to also subscribe low-income residential customers.”³⁰

Lastly, Xcel’s compliance report mischaracterizes developers’ survey responses as to other non-monetary options for increasing residential participation in the program. Although this was a key requirement of the Commission’s November 16, 2018 Order, and survey respondents provided extensive input on this topic, Xcel summarizes and effectively dismisses this developer input in just a single sentence: “Suggestions widely varied from on bill collections, legislative changes, addressing perceived program barriers and further promotion by the Company.”³¹

For the record, here is an accurate tally of the November 2020 survey responses regarding suggested no-cost ways to improve residential accessibility:

- 15 suggestions to remove the contiguous-county restriction (*i.e.*, for residential subscribers);
- 6 suggestions for a consolidated utility billing option for residential subscribers (*i.e.* on-bill repayment option);
- 2 suggestions for improved program marketing and materials for residential and/or low-income customers;
- 2 suggestions to increase the maximum project size;
- 1 suggestion to improve program coordination with existing energy assistance programs;
- 1 suggestion to improve CSG interconnection timelines; and
- 1 suggestion to fix the bugs in Xcel’s timely delivery of residential bill credits.

And, here is a tally of the March 2021 survey responses on the same topic:

- 11 suggestions for a consolidated utility billing option for residential subscribers;
- 8 suggestions to remove the contiguous-county restriction;
- 5 suggestions for improved program marketing and materials for residential and/or low-income customers;

³⁰ *Id.*, Attachment A, at 3; Attachment B, at 5.

³¹ *Id.*, at 7-8.

- 3 suggestions for improved transfer of bill credits when a residential subscriber moves from one address to another;
- 2 suggestions to increase the maximum project size;
- 1 suggestion for improved coordination with energy assistance programs;
- 1 suggestion to reduce the program-deposit requirement for applicants that reserve project capacity to serve residential subscribers only; and,
- 1 suggestion to improve CSG interconnection timelines.

While the Company's choices regarding interconnection and subscriber uploading timelines have had only indirect effects on the availability of residential subscriber data, its misleading presentation of stakeholder survey data is deliberate. A thoughtful reading of the survey results, by contrast, shows an engaged community of at least 15 CSG developers that are using (or plan to use) the Residential adder to expand residential accessibility, and who would like to see other program improvements (as listed above) to further improve residential accessibility.

III. Prong 3: The Company Fails to Show that the adder is Too Expensive

Xcel has failed to meet its burden that the adder is too expensive to continue. In fact, nowhere in its Compliance Filing does the Company make a comparison between actual adder costs and the benefits of attracting more residential subscribers to the program. Instead, the Company just asserts generally that the adder adds costs, that the program as a whole is costly, and that “neither the benefits nor the costs of the program are distributed evenly among customer classes, and it is the Company's view that the current distribution of benefits and costs is not equitable.”³²

To the extent that the adder adds costs beyond the VOS, which is designed to hold ratepayers harmless, we concede that the adder may add costs, though those costs are likely quite small—especially once actual program benefits (including displaced coal and natural gas fuel costs) are taken into account. To the Company's concern that the current costs and benefits are not distributed evenly or equitably—*this concern demonstrates why the Residential adder is a necessary corrective that should not be abandoned.*

³² *Id.*, at 10.

To the latter point, we would like to reiterate the framing of the issue by the Environmental Law and Policy Center (ELPC) during the initial consideration of the adder.³³ ELPC pointed out that residential participation in the S*RC program as a percentage of total CSG subscription capacity (at the time, roughly 10%) lagged behind the percentage of Xcel residential customers (at the time, roughly 28%),³⁴ which means that residential customers are underserved relative to their aggregate energy consumption. As we have illustrated in the previous section, the current underrepresentation of the residential class (13% program participation vs. 29.3% of Xcel customers) has improved, but is still an underrepresentation of residential subscribers/customers. Even if the preliminary data shown from Xcel’s responses to MnSEIA Information Requests holds true—showing a significant uptick in residential program participation—then the gap is still not closed (~22% program participation vs. 29.3% of Xcel’s annual energy sales). We contend that the adder should be continued until residential participation in the program corresponds to the residential class proportion of Xcel’s customers.

The burden of proof for the Company would be to show that the adder is “overheating” the residential market, in ELPC’s terms,³⁵ where the adder would cause the residential segment to be *overrepresented* in the program—and even then, the Company would need to convincingly argue that such an overrepresentation is bad public policy. The Company has not met, or attempted to meet, either burden of proof. Instead, it has only reiterated its 2018 position that any fix to the residential-participation problem not impose costs on ratepayers, and that the program is a costly one. On these points the Company’s reach may exceed its grasp.

A. The Company overstates general S*RC program costs

The Company seeks to frame any discussion of the adder within the context of a program with supposedly runaway costs that drive up energy bills. It begins its discussion with the following table (which is shown here without non-Minnesota data):

Table 2: CSG Contributions to Fuel Clause Adjustment³⁶

2017	\$15.4 M
2018	\$67.0 M
2019	\$98.7 M
2020	\$145.6 M

³³ See Comments of the Environmental Law and Policy Center, In the Matter of the Petition of Northern States Power Company, d/b/a Xcel Energy, for Approval of Its Proposed Community Solar Garden Program, Docket No. E002/M-13-867, Doc. ID. 20184-141759-01 (April 6, 2018).

³⁴ *Id.* at 1.

³⁵ *Id.* at 3.

³⁶ See Xcel Compliance Filing at 3.

Program-to-Date	\$326.7 M
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The way the Company presents that data—while ignoring offsetting cost reductions from displaced coal and natural gas fuel purchases—would suggest that the S*RC program is driving up customer fuel costs. But, in reality, Xcel’s actual Minnesota Fuel Costs (inclusive of all S*RC purchases) over the last 4 years shows a *downward* trend:

Table 3: FCA by year, 2017-2020

Calendar Year	Minnesota Fuel Costs ³⁷
2017	\$777,535,737
2018	\$866,951,481
2019	\$825,501,328
2020	\$746,292,000

Xcel’s Minnesota Fuel Costs, which the Company recovers through the FCA, have declined over the last few years, *even as CSG purchases have gone up by almost 10 times over that same period*.³⁸ From Xcel’s rhetoric, most folks would probably assume that net fuel costs have been skyrocketing over the past few years due to CSGs.

Moreover, we can see from the tables above that, even at the peak of CSG energy purchases during this period, 2020, S*RC contributions to the FCA make up only about 20% of the total. Purchases at the ARR make up the vast bulk of those purchases in 2020 (1,130,325 MWh_{ac} out of a total of 1,212,855 MWh_{ac}³⁹), and purchases from adder-eligible gardens at the 2019 VOS rate (212 MWh_{ac}) are but a tiny fraction of the FCA. Furthermore, the cost of the adder from within that 212 MWh_{ac}—from 3 residential subscribers⁴⁰—is nothing more than a rounding error. The data simply does not suggest that the adder is a burden on ratepayers.

A great deal of that decline in fuel costs in 2020 could be explained by the acute fall in natural gas prices,⁴¹ but there is also evidence that solar generation from CSGs first displaces expensive

³⁷ See Xcel response to MnSEIA IR 52 (June 7, 2021).

³⁸ See Xcel response to MnSEIA IR 50 (June 7, 2021).

³⁹ See Xcel response to MnSEIA IR 50 (June 7, 2021).

⁴⁰ See Xcel Compliance Filing at 6.

⁴¹ See MINNESOTA SOLAR ENERGY INDUSTRIES ASSOCIATION’S (MnSEIA) COMMENTS, In the Matter of the Petition of Northern States Power Company, d/b/a Xcel Energy, for Approval of Its Proposed Community Solar Garden Program, Docket No. E002/M-13-867, Doc. ID. 202011-168426-02, (November 18, 2020), at 6-10; discussing the drop in natural gas prices.

coal generation that is on the margin⁴²; regardless, CSG contributions to the FCA are not simply additive, but rather displace a variety of Company and ratepayer costs, including burned fossil fuels and deferred infrastructure investments.

B. Material contributions to the system by CSGs have been uncounted

CSG Developers, and by extension S*RC program subscribers, have made significant contributions to the utility and ratepayers that the utility does not account for in its Compliance Filing.

Table 4: CSG Developer Contributions to Ratepayers

Total Program Unsubscribed Energy ⁴³	CSG Developer Late Fees ⁴⁴
77,709 MWh _{ac}	\$3,571,821

CSG Developer late fees directly offset fuel clause adjustments, as they are, “credited back on a scheduled basis to Minnesota customers through the fuel clause.”⁴⁵ Unsubscribed energy from CSGs is purchased through the FCA at a very steep discount compared to either the ARR or the VOS—the A51 avoided cost rate, plus 1¢/kWh for the solar renewable energy credit. These purchases accrue to the Company and the ratepayer *all* the value accounted for under the VOS methodology at a *fraction* of the cost. A total of 77,709 MWh_{ac} of unsubscribed energy from CSGs has been purchased by ratepayers through the FCA between 2017 and 2020.⁴⁶

Furthermore, interconnection fees—\$109,671,592,48 paid to date⁴⁷—represent direct investments in the Company’s distribution infrastructure, as they pay for a host of physical components that the Company then owns; granted, these components may not be necessary but-for the addition of a CSG to the distribution system, but nonetheless allow for future increased load and demand at no cost to the Company or ratepayers.

These data points make clear that the S*RC program contributes material benefits to all ratepayers, in addition to its benefits to subscribers. Any discussion of the cost of the program should use actual net costs. Without inclusion of these contributions, the costs of the program are overstated.

⁴² See Gabrel Chan Revised Late Comments, In the Matter of the Petition of Northern States Power Company, d/b/a Xcel Energy, for Approval of Its Proposed Community Solar Garden Program, Docket No. E002/M-13-867, Doc. ID. 202011-168552-01, (November 24, 2020); discussing marginal generation displaced by CSGs.

⁴³ See Xcel response to MnSEIA IR 51, (June 7, 2021) See Xcel response to MnSEIA IR 54, (June 7, 2021).

⁴⁴ See Xcel response to MnSEIA IR 53, (June 7, 2021).

⁴⁵ *Id.*

⁴⁶ See Xcel response to MnSEIA IR 51, (June 7, 2021).

⁴⁷ See Xcel response to MnSEIA IR 54, (June 7, 2021).

Moreover, and more importantly in this context, it is exceedingly clear that the adder has not burdened ratepayers with excessive—really, any—costs. Xcel has in no way shown that the adder should be discontinued for being “too hot.”

IV. Non-Monetary and Non-adder Alternatives

Both the Company and industry stakeholders have submitted to this proceeding a raft of alternative pathways to seeing increased residential participation in the program—none of which Xcel highlighted in its Compliance Filing. Xcel suggests a “mixed adder” that would seek to curtail additional program costs through “pairing a negative adder with a positive adder.”⁴⁸ The Company also once again suggests that residential participation be increased by fiat, “or requirements for community solar developers to include residential and/or income-qualified subscribers as a firm mechanism to increase Residential participation.”⁴⁹ By contrast, the most common *stakeholder* suggestion is a statutory one, to remove the contiguous-county restriction, with 23 such suggestions. The second-most common stakeholder solution is on-bill repayment, with 14 mentions. Other popular suggestions include improved coordination with energy assistance programs, an improved process for transferring bill credits when the customer moves to a new address, and Xcel’s willing facilitation and promotion of the program.

While the idea of a mixed adder has some merit, we have concerns with its implementation and with the complications that it may add. Instead we urge the Commission to extend the life of the Residential adder as currently constructed, and we continue to urge the Company to exercise its unique position to facilitate residential and low-income participation through mechanisms available to it—particularly on-bill repayment.

A. The mixed adder balances policy goals, but may needlessly complicate an already complicated program

The Company’s primary alternative to the residential adder in its current form is the mixed adder. Such a tariff would reduce the rate for businesses, and increase the rates for residential, non-profit, and government organizations that primarily serve income-qualified customers. We are intrigued by this idea. In theory, a mixed adder tariff would combine the best aspects of the ARR (differing compensation by customer class) with the best of the VOS (a predictable, grid-value-neutral rate).

However, we are concerned that this sort of scheme may, in practice, needlessly complicate an already complicated program. As we have stated, an advantage to the residential adder is its

⁴⁸ Xcel Report at 10.

⁴⁹ *Ibid.*

simplicity and predictability—which cuts to the financeability requirement in statute. We are further concerned that efforts to keep a garden’s total compensation value neutral (what the Company seems to mean by “Target Breakout”⁵⁰) would dictate the subscriber mix in each solar garden. This constraint may overly-burden developers to achieve the desired result. If each garden were free to mix and match subscriber classes, however, then the value-neutral aspect of the VOS would be eroded.

The concept of a mixed adder may need further development to be a workable solution. In the meantime, the residential adder in its present form remains the most clear, facile, and straightforward mechanism to increase residential participation in the program.

B. A carveout burdens developers, and is not feasible on its own

The Company also suggests a mandatory “carveout,” or a program requirement that developers reserve a certain proportion of each garden’s capacity for residential subscriptions. While this suggestion might accomplish the goal of increasing residential participation, it could also reduce actual CSG development (and thus residential accessibility) by dictating inflexible business strategies to developers without any compensation. Legislative efforts that would combine a carveout with lifting contiguous county requirements—which has been the most popular solution offered by developers—are statutory changes that are beyond the scope of the Commission’s authority.

MnSEIA does not support carveouts on their own.

C. On-bill repayment would be the most effective solution

The most widely-suggested solution by stakeholders that does not require legislative changes has long been an on-bill, or consolidated utility billing option for residential subscribers. Such a solution would greatly simplify the experience of residential subscribers, and would eliminate credit-worthiness barriers that hamper income-qualified participation. Unfortunately, this solution depends on the utility’s participation, and the Company does not seem to support it. MnSEIA encourages the Company to reconsider its position regarding consolidated billing.

D. The Company could, and should, take unilateral action to accomplish this policy goal

The Company could, however, take actions to facilitate further residential participation without the use of consolidated billing. Stakeholders have suggested increased coordination with existing

⁵⁰ See Xcel Compliance Filing, Table 3: Sample of Mixed Positive and Negative adder, at 11.

energy assistance programs and marketing efforts as good-faith efforts that the Company could make to directly influence residential and income-qualified participation in its S*RC program.

Moreover, other stakeholder suggestions include improving interconnection timelines. That improvement would both ease the marketing and recruitment burden on residential subscribers, and increase the visibility of the pilot's success.

Conclusion

MnSEIA supports the continuous application of the residential adder, because it remains the most direct pathway to encouraging residential participation in the program.

The Company has failed to meet its burden to show that the adder is too rich, or too much of a burden on ratepayers. Rather, the data set available to us shows that either, 1) the adder is working as intended, or 2) the adder is too low to attract the desired level of residential participation.

Any lack of data about the pilot's success, to the extent that there is a lack, stems from the long timelines associated with interconnection in the program, not from developer disinterest. Available information, both in the record and presently emerging, suggests that the adder works.

If the Commission were to pursue other options, we urge that care be taken to balance interests. Burdening residential customers with undue complications or developers with mandated business models may chill the market and put industry jobs at risk.

Lastly, we urge the Company to continue the good-faith improvement of its program. On-bill repayment and other marketing efforts to embrace the country's most successful CSG program would do wonders to address any inequities in the current regime.

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Peter Teigland
Policy Associate
MnSEIA
(P) 612-283-3759
(E) pteigland@mnseia.org

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Xcel Energy	Information Request No.	47
Docket No.:	E002/M-13-867	
Response To:	Minnesota Solar Energy Industries Association	
Requestor:	Peter Teigland	
Date Received:	May 26, 2021	

Question:

What is the total number of subscribers and residential subscribers to vintage 2017 VOS gardens that have been uploaded into Xcel's program portal?

Response:

Individual subscribers can have more than one subscription. In fact, there are several residential premises that have multiple subscriptions to different gardens. As such, these are counted as one subscriber or customer. We note this for clarification as to why we provide subscriptions, not subscribers, in the remainder of this response. The number of subscribers would be less than the number of subscriptions provided.

The total number of subscriptions uploaded into the online portal by developers under the 2017 VOS vintage is 820, as of May 28, 2021. The total number of residential subscriptions is 446, representing approximately eight percent of the total allocated capacity of the 2017 VOS vintage.

Garden Operators can upload subscriptions into the portal at any time. However, until the garden has been granted permission to operate, these subscribers remain inactive and do not receive bill credits. Allocations will often change between the time these projects are uploaded to the time in which they are validated and complete. Also, subscriptions to a given VOS vintage can change throughout the life of this program.

We further note that this information may not match other reporting mechanisms as the Company only counts valid subscriptions with active bill credits when reporting on subscriptions.

Preparer: Crystal Pomerleau
Title: Solar*Rewards Community Program Manager
Department: Renewable and Choice Programs
Telephone: 612-321-3204
Date: June 7, 2021

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Xcel Energy	Information Request No.	48
Docket No.:	E002/M-13-867	
Response To:	Minnesota Solar Energy Industries Association	
Requestor:	Peter Teigland	
Date Received:	May 26, 2021	

Question:

What is the total number of subscribers and residential subscribers to vintage 2018 VOS gardens that have been uploaded into Xcel's program portal?

Response:

Individual subscribers can have more than one subscription. In fact, there are several residential premises that have multiple subscriptions to different gardens. As such, these are counted as one subscriber or customer. We note this for clarification as to why we provide subscriptions, not subscribers, in the remainder of this response. The number of subscribers would be less than the number of subscriptions provided.

The total number of subscriptions uploaded into the online portal under the 2018 VOS vintage is 1,755, as of May 28, 2021. The total number of residential subscriptions is 133, representing approximately one percent of the total allocated capacity of the 2018 VOS vintage.

Garden Operators can upload subscriptions into the portal at any time. However, until the garden has been granted permission to operate, these subscribers remain inactive and do not receive bill credits. Allocations will often change between the time these projects are upload to the time in which they are validated and complete. Also, subscriptions to a given VOS vintage can change throughout the life of this program.

We further note that this information may not match other reporting mechanisms as the Company only counts valid subscriptions with active bill credits when reporting on subscriptions.

Preparer:	Crystal Pomerleau
Title:	Solar*Rewards Program Manager
Department:	Renewable and Choice Programs
Telephone:	612-321-3204
Date:	June 7, 2021

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Xcel Energy

Information Request No. 49

Docket No.: E002/M-13-867

Response To: Minnesota Solar Energy Industries Association

Requestor: Peter Teigland

Date Received: May 26, 2021

Question:

What is the total number of subscribers and residential subscribers to vintage 2019 VOS gardens that have been uploaded into Xcel's program portal?

Response:

Individual subscribers can have more than one subscription. In fact, there are several residential premises that have multiple subscriptions to different gardens. As such, these are counted as one subscriber or customer. We note this for clarification as to why we provide subscriptions, not subscribers, in the remainder of this response. The number of subscribers would be less than the number of subscriptions provided.

The total number of subscriptions uploaded into the online portal under the 2019 VOS vintage is 631, as of May 28, 2021. The total number of residential subscriptions is there are 422, representing approximately twenty-two percent of the total allocated capacity of the 2019 VOS vintage.

Garden Operators can upload subscriptions into the portal at any time; however, until the garden has been granted permission to operate, these subscribers remain inactive and do not receive bill credits. Allocations will often change between the time these projects are upload to the time in which they are validated and complete. Also, subscriptions to a given VOS vintage can change throughout the life of this program.

We further note that this information may not match other reporting mechanisms as the Company only counts valid subscriptions with active bill credits when reporting on subscriptions.

Preparer: Crystal Pomerleau

Title: Solar*Rewards Community Program Manager

Department: Renewable and Choice Programs

Telephone: 612-321-3204

Date: June 7, 2021

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Xcel Energy Information Request No. 50
Docket No.: E002/M-13-867
Response To: Minnesota Solar Energy Industries Association
Requestor: Peter Teigland
Date Received: May 26, 2021

Question:

What is the total energy (in MWh) purchased from all CSGs in the calendar years 2017, 2018, 2019, and 2020? Please, provide this information in a table organized by vintage VOS year and ARR.

Response:

The Company provides MWh production by vintage and year below (including both subscribed and unsubscribed energy). This information is current as of June 2, 2021.

Table 1: MWh_{AC} Production per Bill Credit Type (Vintage)

Calendar Year	ARR	VOS 2017	VOS 2018	VOS 2019	Total
2017	151,150				151,150
2018	569,527				569,527
2019	822,575	3,892	139		826,606
2020	1,130,325	30,361	51,957	212	1,212,855
Total	2,673,578	34,253	52,095	212	2,760,139

Preparer: Jessica Peterson
Title: Performance and Strategy Manager
Department: Policy and Strategy
Telephone: 612.330.6850
Date: June 7, 2021

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Xcel Energy Information Request No. 51
Docket No.: E002/M-13-867
Response To: Minnesota Solar Energy Industries Association
Requestor: Peter Teigland
Date Received: May 26, 2021

Question:

What is the total unsubscribed energy (in MWh) purchased from all CSGs in the calendar years 2017, 2018, 2019, and 2020? Please provide this information in a table organized by vintage VOS year and ARR.

Response:

The table below contains total unsubscribed energy (in MWh) the Company purchased from all CSGs in calendar years 2017, 2018, 2019 and 2020.

Table 1: MWh_{AC} Unsubscribed per Bill Credit Type (Vintage)¹

Calendar Year	ARR	VOS 2017	VOS 2018	VOS 2019	Total
2017	25,933				25,933
2018	25,222				25,222
2019	11,389	1			11,390
2020	14,345	90	729		15,164
Total	76,889	91	729		77,709

Unsubscribed energy for all garden vintages is purchased by the Company. We have provided unsubscribed energy according to the vintage in which the garden is associated for subscribed bill credits.

Preparer: Jessica Peterson
Title: Strategy and Policy Manager
Department: NSPM Regulatory
Telephone: 612 330 7588
Date: June 3, 2021

¹ As of June 4, 2021, and for unsubscribed energy associated with bill credits after the first full month of production.

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Xcel Energy
Docket No.: E002/M-13-867
Response To: Minnesota Solar Energy Industries Association
Requestor: Peter Teigland
Date Received: May 26, 2021

Information Request No. 52

Question:

What is the total aggregate fuel cost (inclusive of CSG energy purchases) for all customer classes in the calendar years 2017, 2018, 2019, and 2020?

Response:

The table below contains the total aggregate fuel and purchased power costs for all Minnesota customer classes in the calendar years 2017, 2018, 2019 and 2020. These costs include CSG energy purchases and other costs recoverable in the Minnesota jurisdiction Fuel Clause Rider.

Calendar Year	Minnesota Fuel Costs
2017	\$777,535,737
2018	\$866,951,481
2019	\$825,501,328
2020	\$746,292,000

Preparer: John Chow
Title: Pricing Consultant
Department: NSPM Regulatory
Telephone: 612 330 7588
Date: June 7, 2021

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Xcel Energy
Docket No.: E002/M-13-867
Response To: Minnesota Solar Energy Industries Association
Requestor: Peter Teigland
Date Received: May 26, 2021

Information Request No. 53

Question:

To date, how many dollars in developer late fees have been collected from CSG developers? How does Xcel use developer late fees?

Response:

As of May 28, 2021, \$3,571,821 in late fees have been collected by the Company. Late fees are credited back on a scheduled basis to Minnesota customers through the fuel clause, offsetting a small portion of the cost of this program borne by all customers.

Preparer: Crystal Pomerleau
Title: Program Manager
Department: Renewable and Choice Programs
Telephone: 612-321-3204
Date: June 7, 2021

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Xcel Energy
Docket No.: E002/M-13-867
Response To: Minnesota Solar Energy Industries Association
Requestor: Peter Teigland
Date Received: May 26, 2021

Information Request No. 54

Question:

Please, provide the total aggregate interconnection costs (i.e., for substation and distribution system upgrades) that have been paid to Xcel Energy by CSG applicants and developers to date and an average interconnection costs paid on a per-project basis.

Response:

Total aggregate interconnection costs billed through May 31, 2021 are shown below. Most of these have been paid or are in the process of being paid.

Sum of Actual Interconnection Cost	
Total	\$109,671,592.48
Average (by Site)	\$292,457.58

Preparer: Crystal Pomerleau
Title: Program Manager
Department: Renewable and Choice Programs
Telephone: 612-321-3204
Date: June 7, 2021

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Xcel Energy Information Request No. 55
Docket No.: E002/M-13-867
Response To: Minnesota Solar Energy Industries Association
Requestor: Peter Teigland
Date Received: May 26, 2021

Question:

Please, provide the aggregate interconnection study costs that have been paid by CSG applicants and developers to Xcel Energy to date.

Response:

Please see MnSEIA information request number 13 for information prior to mid-October 2018. Table 1 includes information for the additional 124 studies under the pre-MN DIP process since October 2018, and 245 studies in MN DIP (for System Impact Study and Facilities Study analysis only).

Table 1: Study Costs October 2018 – May 2021

	Study Costs Paid
Pre-MN DIP	\$2.7 M
MN DIP	\$2.7 M
TOTAL	\$5.4 M

The numbers in Table 1 assume the standard pre-MNDIP Scoping Study Fee of \$22,000 and does not consider any refunds for pre-MNDIP studies. All MNDIP interconnection study costs are actuals, as outlined in the MNDIP System Impact Study Agreement.

The aggregate amount of study costs for 2015 through today is approximately \$13 Million. This estimate does not include the several re-studies conducted under pre-MN DIP due to changes within the queue due to application withdrawals, as these costs were not charged to CSG applicants for the additional analysis.

Preparer: Crystal Pomerleau
Title: Solar*Rewards Community Program Manager
Department: Renewable and Choice Programs
Telephone: 612.321.3204
Date: June 7, 2021