

STATE OF MINNESOTA
OFFICE OF ADMINISTRATIVE HEARINGS
FOR THE PUBLIC UTILITIES COMMISSION

In the Matter of the Petition of Northern
States Power for Approval of its Proposed
Community Solar Gardens Program

**SUMMARY OF
PUBLIC TESTIMONY**

On February 26, 2016, the Minnesota Public Utilities Commission (the Commission) issued a notice requesting comments from interested persons on Xcel Energy's Community Solar Gardens (CSG) program. Following receipt and review of those comments, the Commission determined further that a set of public hearings on two particular issues would be beneficial.

On May 19, 2016 and May 24, 2016, the Commission convened public hearings in order to solicit oral and written testimony from the public on the following items:

- (1) What steps could the Commission take to ensure that CSGs are accessible to and benefit a broad cross-section of customers and customer classes?
- (2) What steps could the Commission take to encourage developers to include low-income and minority subscribers in CSGs?

A public hearing was held on Thursday, May 19, 2016, at 6:00 p.m., in the Auditorium of the Wilder Center in Saint Paul, Minnesota. On Tuesday, May 24, 2016, at 6:00 p.m., a second hearing was held in the Community Room of the Urban League's Glover Sudduth Center, in Minneapolis, Minnesota. In all, 43 persons testified at the public hearings, three individuals submitted written comments to the Commission's *SpeakUp!* system and Northern States Power Company, doing business as, Xcel Energy, eFiled its comments.

SUMMARY OF PUBLIC TESTIMONY

The public hearings drew together a very diverse set of stakeholders – in terms of race, education and socio-economic status. Notwithstanding the wide diversity of the persons who contributed to the hearing record, the barriers these participants described, and the suggestions they made for further Commission inquiries, were remarkably uniform. Below, three key policy concerns, three specific barriers to access and four possible regulatory reforms are described.

I. Particular Policy Concerns

A. Access to Participation by Low-Income Persons

A number of stakeholders expressed concern that there is very little access to solar energy programs for low-income persons. Muhammed Jiwa, of Maple Grove, expressed the view of many when he remarked:

Essentially what I feel like I'm hearing from individuals or from companies, corporations and people who can make the decisions, is that I don't matter because I don't have the money. Even though I didn't cause, or have a lesser overt effect on, climate change, it doesn't matter and too bad because I don't have the money or the credit score to do anything about it; either by adapting, or by making a change by energy efficiency upgrades, including solar.¹

Councilman Cam Gordon, of Minneapolis, concurred. Pointing to the City's efforts to broaden program participation, he remarked:

We're very excited about community solar, and the city is on record strongly supporting giving better access to community solar to low- and moderate-income people. We're really trying to see that work, and work quickly and easily. It's one of the best things we think there is about community solar, is that more people can benefit from it financially without having to own a home or putting down a lot of upfront capital.²

Patty O'Keefe, of Minnesota 350, maintained that broader access to solar garden subscriptions was not only a just outcome, in and of itself, but also integral to the success of the underlying projects. She maintained:

One other thing I wanted to bring up is that people keep kind of intimating that it's a choice between scaling up solar quickly and making it equitable, and I want to say that that's a false choice. By not creating renewable energy access for low-income people, we are leaving out a massive base of potential customers that are needed for renewables to skyrocket and to scale up. So we need to create smart systems that can achieve both scale and equity, and leaving it up to the same big power players and the same systems isn't going to get us there. I don't think it's going to get us there.³

¹ Public Hearing Transcript, Volume I at 45-46; see also, Tr. Vol. I at 19 (Kruger); Tr. Vol. I at 24 (Islam); Tr. Vol. I at 52 (Jacobson); Tr. Vol. I at 61 (Mercer-Taylor); Tr. Vol. I at 73 (O'Keefe); Tr. Vol. I at 76 (Kolstad); Tr. Vol. I at 79, 82 (Nerbonne); Tr. Vol. I at 90-91 (DenHerder-Thomas); Public Hearing Transcript, Volume II at 17 (Mills); Tr. Vol. II at 20 (Konewko); Tr. Vol. II at 25 (Wagenius); Tr. Vol. II at 27 (Miller); Tr. Vol. II at 31 (Benjegerdes); Tr. Vol. II at 35 (Luce); Tr. Vol. II at 36 (Bardwell); Tr. Vol. II at 44 (Christofaro); Tr. Vol. II at 54-55 (Tisel); Tr. Vol. II at 60 (Farrell); Tr. Vol. II at 72 (Nassar); Tr. Vol. II at 78-79 (Sorour); Tr. Vol. II at 83 (Bohnhorst); Tr. Vol. II at 90 (Kolstad).

² Tr. Vol. II at 68-69 (Gordon).

³ Tr. Vol. I at 73 (O'Keefe).

B. Participation by Persons of Color

Several stakeholders expressed the view that program participation in Minnesota is stratified along ethnic and racial lines, and does not include all segments of the state's population. As Matt Rohn, of Northfield Area Community Solar, observed:

Inclusion of all is also an important matter of class and racial justice too long inadequately addressed by the state. Sustainability should not be a rich or white person's club. State agencies can and should change systems that have produced that belief.⁴

Jamez Staples, of Renewable Energy Partners, agrees. Pointing to the difficulty in obtaining "the necessary work to put people to work" from communities of color, he noted that more needs to be done to include minorities on renewable energy development projects. Calling for dedicated set-asides on such projects for minority contractors, he noted:

[B]lack in Minnesota suffer from economic apartheid. I don't care how it's done, whether with care or state, we need participation to help eliminate the racial and economic division that takes place here in the state of Minnesota.⁵

C. Public Supports for a Shift in the Energy Generation Mix

Some commentators testified that existing financial and regulatory incentives reinforce Minnesota's reliance on older methods of energy generation and discourage the move to cleaner technologies. As John Kolstad, President of Mill City Music, remarked:

[T]he world has changed and our model is not changing with it. I view the current model of the utility monopoly that they have and the control over movement to alternate sources is being like the horse and buggy day in the time the automobile was coming on. It's time for us to move on to the next available means of generating electricity. I think that NSP and Xcel could play a role in that, but I think that their role has become one of blocking and retarding and slowing down, and that's got to stop.

....

And the Public Utilities Commissions is a *Public* Utilities Commission, it's not an Xcel Public Utilities Commission. So I think we need to find ways

⁴ Tr. Vol. I at 26 (Rohn); see also, Tr. Vol. I at 22 (Johnson); Tr. Vol. I at 24 (Islam); Tr. Vol. I at 61-62 (Mercer-Taylor); Tr. Vol. I at 67 (Byrd); Tr. Vol. I at 73 (O'Keefe); Tr. Vol. I at 79 (Nerbonne); Tr. Vol. II at 17 (Mills); Tr. Vol. II at 36 (Bardwell); Tr. Vol. II at 88 (Rudrud)

⁵ Tr. Vol. II at 75 (Staples).

to accelerate anybody who wants to put solar, find a way to do it. This country is the richest in the world. We have the money.⁶

Timothy DenHerder-Thomas, founder of Cooperative Energy Futures, a member-owned solar energy and weatherization company, agrees. He observed:

[The Administrative Law Judge] asked a number of questions about, could you get foundations, could you get local government partners to help with finance. And a very substantial part of the financing, which is usually debt, all of those parties can play. You can get low-interest financing from program-related investments from foundations, from cities or local governments.

But, in general, it's really hard to make the numbers work just using that if you're leaving tax equity off the table. And that tax equity is the financing that owns the system, especially in the early years, and takes the investment tax credit, the depreciation benefit, and you have to have the tax liability to do so. So a government entity or foundation is not eligible to do that.⁷

II. Specific Barriers to Participation

A. Use of the Subscriber's Credit Score

As noted above, some solar project developers require a certain minimum credit score in order to join the project as a subscriber. Many commentators criticized such a requirement as a needless and harmful barrier to broader participation. As Kendrick Hall, of Minneapolis, asserted:

The developers of community solar gardens are requiring households who want to buy shares in community solar gardens to have a credit of 700 or higher, and this locks hundreds of thousands of people out of making investments and saving more on their utility bills. It affects a lot of low-income communities.⁸

Lee Samelson agrees. He noted that a requirement to have a credit score of 680 or 700 "effectively screened out" many interested and trustworthy subscribers – subscribers that are needed to support renewable energy projects.⁹

⁶ Tr. Vol. II at 40 (Kolstad) (emphasis added); see also Tr. Vol. I at 21 (Johnson); Tr. Vol. I at 24 (Islam); Tr. Vol. I at 26 (Rohn); Tr. Vol. I at 46 (Jiwa); Tr. Vol. I at 48-50 (Alemayhu); Tr. Vol. I at 64 (Mercer-Taylor); Tr. Vol. I at 72 (O'Keefe); Tr. Vol. I at 79 (Nerbonne); Tr. Vol. I at 99 (Samelson); Tr. Vol. II at 24 (Wagenius); Tr. Vol. II at 27 (Miller); Tr. Vol. II at 36 (Bardwell); Tr. Vol. II at 46 (Cristofaro); Tr. Vol. II at 58 (Neaton); Tr. Vol. II at 64 (Moore); Tr. Vol. II at 76-77 (Madden); Comment of Rev. Stephen Sylvester.

⁷ Tr. Vol. I at 93 (DenHerder-Thomas).

⁸ Tr. Vol. II at 52 (Hall).

⁹ Tr. Vol. I at 97-99 (Samelson); see also, Tr. Vol. I at 19 (Krueger); Tr. Vol. I at 41 (Laursen); Tr. Vol. I at 72 (O'Keefe); Tr. Vol. I at 81 and 85 (Nerbonne); Tr. Vol. II at 20 (Konewko).

B. A 25-Year Subscription Requirement

Noting that it was a common practice among solar project developers to insist upon a 25-year contractual commitment from participating subscribers, several commentators criticized these requirements as unreasonable and exclusionary.

Mary Ann Lundquist, representative of the Unitarian Universal Solar Coalition, detailed the problems the Coalition faced in enrolling residential subscribers to its CSG project.

[S]ome of the problems that we have encountered in signing up over 300 people to date for residential is the fact that it's a 25-year contract, which is very scary to a number of people. I assure you, I don't think I'll be paying an electric bill in 25 years, and that's of great concern, if people have to make that kind of commitment. But that is what it is and it's also demanded by the financiers and the developers.¹⁰

Don Rudrud, a retiree and local activist, asserted that the 25-year contract term is “absurd” and overly-burdensome. He maintained that such an eligibility restrictions barred low-income people who are committed to the CSG’s environmental goals, but who change their residence more often than other, wealthier Minnesotans:

I'm told by public school teachers in the inner city that sometimes children move three and four times in one year from apartment to apartment. A 25-year commitment is absurd to me, but it might be appropriate for the landlords. And I think landlords have to take their responsibility in this situation too. There should be some way that that's worked out, that this commitment to solar and to the alternative of clean energy should be available to people that are also desperately poor.¹¹

C. Lengthy Project Review Periods

Some commentators expressed frustration over the length of the approval process to accredit qualifying CSG projects. Mr. Rohn, of Northfield Area Community Solar, pointed to the challenges that his firm faced in obtaining needed approvals:

Our organization has been working for three years to see the first garden we largely initiated receive Xcel approval. This garden should have been financed, approved and operating within the first year. Xcel approval did not happen until a month ago.

Delays have undermined the success of the whole program, as I think everybody knows, and have favored companies with large external

¹⁰ Tr. Vol. II at 50 (Lundquist); *see generally*, Tr. Vol. I at 14 (Gabler).

¹¹ Tr. Vol. II at 89 (Rudrud); *see also*, Tr. Vol. I at 32 (Crocker); Tr. Vol. I at 41 (Laursen); Tr. Vol. I at 100-02 (Klincara).

financing and big profit expectations over the then newly-created local Minnesota companies the program was intended to foster.¹²

Kay Anderson, of Minneapolis, agrees. Drawing upon her nine years of work experience with a local solar equipment installation company, she urged the Commission to undertake closer oversight Xcel Energy's review processes. She recommended:

I would really encourage the PUC to hold Xcel accountable to speed up their processes. They have the ability to do that, and it seems like they're an obstructionist to getting solar installed, whether it's solar gardens or residential solar. I think that the PUC is the only entity that Xcel Energy will listen to. And so I encourage the PUC to somehow force Xcel to speed up their processes so that all these solar gardens can be installed in a timely way.¹³

III. Possible Regulatory Solutions

A. On-Bill Financing and On-Bill Repayment

Minn. Stat. § 216B.1641(d) (2014) provides that “[t]he public utility must purchase from the community solar garden all energy generated by the solar garden . . . A subscriber’s portion of the purchase shall be provided by a credit on the subscriber’s bill.” At the public hearings, several commentators noted that the practice of receiving a bill from the solar garden operator, for subscription fees, and another invoice from Xcel Energy reflecting a “credit” for the subscriber’s share of energy generated, is both unnecessary and confusing. They urged reforms that would combine the various invoices onto the bill sent by Xcel Energy.¹⁴

Reverend Dwight Wagenius, Chairman of the Board of Minnesota Interfaith Power and Light, noted:

We support changes such as on-bill repayment. Using on-bill repayment, Xcel can collect community solar garden subscribers' payments through their bills. This shifts collection of payments to ... this reliable source and makes it easier for developers to sign up subscribers who are low income or don't have high credit scores. It's simple because it's done without a bank loan or an additional new bill that adds hassle and confusion for customers. It increases energy equity because everyone can have access to this renewable energy improvement. Barriers to participation are not high. Regular people can save money producing well. With on-bill

¹² Tr. Vol. I at 27 (Rohn); *see also*, Tr. Vol. II at 47 (Vohs).

¹³ Tr. Vol. II at 66 (Anderson).

¹⁴ *See* Tr. Vol. I at 19 (Krueger); Tr. Vol. I at 45-46 (Jiwa); Tr. Vol. I at 53-54 (Jacobson); Tr. Vol. I at 68-69 (Byrd); Tr. Vol. I at 82 (Nerbonne); Tr. Vol. I at 90 (DenHerder-Thomas); Tr. Vol. I at 98 (Samelson); Tr. Vol. II at 16 (Mills); Tr. Vol. II at 20 (Konewko); Tr. Vol. II at 30 (Benjegerdes); Tr. Vol. II at 44 (Cristofaro); Tr. Vol. II at 70 (Gordon); Tr. Vol. II at 77 (Madden).

financing, the amount of capital flowing into new community solar gardens will increase, creating jobs and saving carbon.¹⁵

Julie Nerbonne, also of Interfaith Power and Light, concurred. She noted:

One of the things we've heard again and again from residents of North Minneapolis as we've door-knocked and talked to hundreds and hundreds of people about becoming subscribers of the Shiloh garden is that they are unsure about taking on another bill. Having one bill would not only de-risk the system for investors, but it would also clarify it for subscribers and make the system easier to access.¹⁶

In its written comments, Xcel Energy, noted the important differences between “On Bill Finance” and “On Bill Repayment” programs, and expressed concern that the reforms urged by commentators might, unintentionally, convert the company into a provider of banking services. It wrote:

Some comments reflected a desire for the exploration of On Bill Finance (OBF) and On Bill Repayment (OBR) in this proceeding to promote participation among subscribers, including low income subscribers. OBF and OBR are mechanisms whereby a subscriber’s costs to participate would be paid on their utility bill. The Company would be in the role of financing this cost for subscribers under OBF, and effectuating the payment between subscriber and garden operator under OBR.

....

[W]e would need to carefully consider the Company’s potential introduction into the role of banking service provider in the context of the relationship between the subscriber and the garden operator. The community solar gardens statute does not require the Company to serve as a conduit for a garden operator’s billing needs. The statute prescribes a role for the Company in the transaction between the developer and subscriber where the Company must (1) purchase all the energy the solar garden produces, and (2) pay for the energy through a bill credit. It does not require the Company to pay a subscriber’s subscription fees. In advocating for these options, a garden operator would be both excluding the Company from the operator-subscriber relationship, and shifting its direct subscriber service obligations onto the Company.¹⁷

Additionally, Xcel Energy expressed concern that hosting such detail on its bills might imply to customers, incorrectly, that the independently owned and operated solar

¹⁵ Tr. Vol. II at 25 (Wagenius).

¹⁶ Tr. Vol. I at 79 (Nerbonne).

¹⁷ Written Comments of Xcel Energy, at 6-7 (eDocket No. 20166-122373-01).

projects are corporate affiliates of Xcel. It maintains that this kind of confusion exists today and would perhaps grow worse under any OBF or OBR requirements.¹⁸

B. Use of Inclining Block Rates

An Inclining Block Rate (IBR) for electricity is a set of two or more energy prices, with a lower price charged for the first kilowatt hour block in each month, and a higher price charged in each subsequent kilowatt hour block. If a customer uses less than the allotment under the first kWh block in a particular month, it is charged only the first-block rate. If the customer uses more than the allotment under first-block, it is charged the first-block rate for that kilowatt hour block, and the subsequent block rates for additional kilowatt hours.¹⁹

Some stakeholders urged the Commission to approve a set of inclining rates that would benefit low-income solar energy subscribers who use low amounts of electricity. For example, Former Councilwoman Beth Mercer-Taylor, of Falcon Heights, maintained that an IBR program would not only benefit low-income ratepayers, but would encourage cities like Falcon Heights to participate in CSG programs. She noted:

[T]his issue of justice and who's getting served by a community solar garden was a very pressing issue and a reason that we [in the City of Falcon Heights] actually haven't moved forward yet. So on our council we really wanted to see that the permit would be available for all of our citizens and not just for people in high-income situations because that's what seemed fair for us in our role sitting there as a city council. If you go back and ask council members, that was a strong consensus of opinion. So we're kind of waiting for the kind of mandate that you're talking about at this very hearing, to see that, because we'd be interested....

....

If we had known there would be an option like inclining block rates so that people could sign on and get a small component of solar at a lower price point so that we did feel like the program would be equitable and fair, we might have been a lot more game to move forward then.²⁰

C. Strengthening “Backup Subscriber” Models

Recognizing the interest that CSG developers have in maintaining a stable base of program participants, one reform suggested at the public hearings was creation of systems for “backup subscribers.” As Ms. Nerbonne, Executive Director of Interfaith Power and Light, explained:

¹⁸ *Id.* at 8.

¹⁹ See generally, Testimony of Paul Chernick, MPUC GR-13-868 (eDocket No. 20146-100165-01).

²⁰ Tr. Vol. I at 62-63 (Mercer-Taylor); Tr. Vol. II at 44 (Cristofaro); Tr. Vol. II at 56 (Tisel); Tr. Vol. II at 77 (Madden).

One of the most promising solutions we've been looking at is the backup subscriber model. In the backup subscriber model, an institution would enroll in a community solar garden. They would be part of the project. They would be potentially an anchor tenant of a project, an anchor subscriber of a project. And then as subscribers come into the system, if they fail to pay their bill, the backup subscriber or that anchor subscriber would be able to absorb those bill credits for the time being.

In order to make this happen, we need to make sure that the system works in such a way that the backup subscriber is given the same bill credit rate during a time period where a new residential subscriber is found. So these are the details that are going to be important to consider. You know, the residential bill credit rate and the business bill credit rate are different. How can we make sure that the financials are evened out as the backup subscriber comes in and out of the system.²¹

The features of such a system are complicated and not yet widely in use. As Ms. Nerbonne continues:

[A]t this point, there's been a couple of barriers. First of all, if there is a developer who has agreed -- We've had conversations with a number of developers about the backup subscriber model, big developers who are excited about this. We got so far as putting it in their finance department and analyzing exactly what it was going to look like.

And what they came back and said is that, well, we would be willing to do this if your institutions qualify. They're going to have to take the same rate as the residential pair or -- They'll have -- The developer then will have to take the lower rate of the business subscriber, and so the -- thus changing the economic equation. And the conversation sort of stopped there because financial models need to be stable. So having a little bit of flexibility about the rules around institutional subscribers that also serve as backup subscribers will give us the ability to attract backup subscribers and attract developers who would be willing to engage the backup subscriber model.²²

D. Reducing Development and Operational Risks

As part of the conversation on possible reforms, some stakeholders addressed the need to reduce development and operational risks of CSG programs. For example, Mr. DenHerder-Thomas, General Manager of a local solar developer, detailed the work of his own firm, and others, in this area:

Tax equity is legally complex, logistically complex. It's unfamiliar to investors who don't already know it, so it is difficult to walk people through

²¹ Tr. Vol. I at 81 (Nerbonne); see also, Tr. Vol. I at 47 (Jiwa); Tr. Vol. I at 62 (Mercer-Taylor); Tr. Vol. I at 90 (DenHerder-Thomas); Tr. Vol. II at 17-18 (Mills); Tr. Vol. II at 95 (Bohnhorst)

²² Tr. Vol. I at 83-84 (Nerbonne).

that process and get people to feel comfortable and safe when they've never heard of this before or never done it before. But to the extent that we can create processes and rules to encourage that and make it simpler, that's a huge opportunity. I've also been in collaboration with organizations nationally that are actually looking at setting up a tax equity fund, very similar to what most of the very large renewable energy companies are doing, that is set up on the principle of, we're going to de-risk these projects through an approach that creates access. And that's also very long-term, difficult work, but it's a huge opportunity and allows us to take the pilot project that we're doing right now and take them to scale.²³

While Xcel Energy favors “a straightforward approach” of setting aside a portion of CSG programs for the exclusive use of low income subscribers, it urged policy-makers to also consider public supports and oversight for incentive Funds that are managed by local developers. As it explained in its written comments, an alternative to specific set-asides for participation by low-income persons, is that:

a garden operator could elect to instead contribute a percentage of subscription revenue to a dedicated Low Income Community Solar Garden Fund. The set per-garden financial contribution or revenue portion a garden operator electing this option must contribute could be established by the Commission after reviewing the financial information provided by garden operators in this proceeding. An independent board could be established to administer the fund and issue Requests for Proposals (RFPs) for low income garden projects.

....

We are interested in exploring the Department of Commerce's (Department) Loan Guarantee Fund suggestion, too, and whether there could be some association between the Fund concept suggested by the Department to support individual subscribers with their subscription costs and the Company's suggested Fund for developers planning gardens to serve low income customers. We are unclear if, in the Department's suggestion, the fund would structure loans as forgivable or perhaps would offer grants to qualifying subscribers. It is not clear to the Company if the public interest would support public mechanisms that increase debt load for low income customers as a means of participating in renewable programs.²⁴

All of the participants thanked the Commission for the opportunity to provide testimony through the public hearing and comment process and to engage with other stakeholders on possible reforms of the CSG program.

E. L. L.

²³ Tr. Vol. I at 94 (DenHerder-Thomas); see also, Tr. Vol. II at 51 (Lundquist); Tr. Vol. II at 71 (Gordon).

²⁴ Written Comments of Xcel Energy, at 6-7 (eDocket No. 20166-122373-01).

June 24, 2016

See Attached Service List

Re: In the Matter of the Petition of Northern States Power Company for Approval of its Proposed Community Solar Garden Program E002\M-13-867

**OAH 8-2500-33429
MPUC E-002/M-13-867**

To All Persons on the Attached Service List:

Enclosed and served upon you is the Administrative Law Judge's **SUMMARY OF PUBLIC TESTIMONY** in the above-entitled matter.

If you have any questions, please contact my legal assistant Rachel Youness at (651) 361-7881 or rachel.youness@state.mn.us, or facsimile at (651) 539-0310.

Sincerely,



ERIC L. LIPMAN
Administrative Law Judge

ELL:kjl

Enclosure

cc: Docket Coordinator

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CERTIFICATE OF SERVICE

In the Matter of the Petition of Northern States Power Company for Approval of its Proposed Community Solar Garden Program E002\M-13-867	OAH Docket No.: 8-2500-33429
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Katie Lin certifies that on June 24, 2016 she served the true and correct **SUMMARY OF PUBLIC TESTIMONY** by eService, and U.S. Mail, (in the manner indicated below) to the following individuals:

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