

**State of Minnesota
Public Utilities Commission**

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August 15, 2022

**In the Matter of the Petition of Minnesota Power, for Approval of its request to modify the
SolarSense Customer Solar Program - Docket No. E015/M-20-607**

**REPLY COMMENTS IN RESPONSE TO MINNESOTA POWER'S COMMENTS OF JUNE 1,
2022 NOTICE BY
MNIPL, SOLAR UNITED NEIGHBORS, VOTE SOLAR, AND SIERRA CLUB**

Minnesota Interfaith Power and Light (MNIPL), with organizational partners Vote Solar (VS), Solar United Neighbors (SUN), and Sierra Club (SC) *submit these Comments in response to Minnesota Power's (the Company) June 1 2022 notice to seek modification of its SolarSense program, and petition to intervene in the docket, as we did in the 2016 and 2020 filing of Solar Sense.*

MNIPL and its cosigned partners submit these comments in addition to our initial comments in this docket, filed on July 15, 2022. We do so in order to respond to filed comments, to submit additional recommendations for the current SolarSense program, and to place before the Commission, Company, and public, future considerations for SolarSense as it evaluated for public benefit at the end of its current funding cycle, in 2024.

I. Proposed Modifications to SolarSense Customer Incentive Program

Support for additional ratepayer funding allocations to the SolarSense general rebate fund for the 2023 and 2024 program years, in agreement with MNSEIA comments

MNIPL and our cosigned partners appreciate the initial comments by MNSEIA in regards to establishing metrics for utility carbon reduction as a way to measure the need for distributed solar incentives. Additionally, we agree with MNSEIA that the only way to truly alleviate the demand supply rebate issues at this time is to dedicate more funding to the general SolarSense rebate program.

To build on the point that MNNEIA made in their comments about the current supply/demand imbalance in the general SolarSense incentive rebate, a current reading of the Company's SolarSense dashboard of 2022 applications indicates there have been to date \$675,305 of SolarSense incentive applications received, in pursuit of \$175,349 of rebate funding.

In our initial recommendations, we asked to Company and Commission to use unspent, pre-allocated past, present and future funding from the SolarSense development and delivery budget, to establish new, annual SolarSense customer incentive budgets for the 2023 and 2024 program years, at the current 2022 budget level, or \$175,349 annually. We recommended this along with support for the Company's individual rebate awards reductions, and did so because it would *alleviate* the rebate supply/demand

imbalance previously indicated, in our opinion a vast improvement over the current plan to reduce SolarSense rebate funding in 2023 and 2024 to \$87,675, and not increase costs to ratepayers.

However, MNIPL and our cosigned partners recognize that our recommendations taken together would only alleviate about 33% of the current SolarSense rebate demand/supply imbalance, not fully resolve that imbalance. In light of the gross demand/supply imbalance referred to above, even MNSEIA's suggestion for a 30% increase of 2022 SolarSense rebate funding falls far short of their goal of matching incentive funding to demand.

If the Company and Commission wish to fully resolve this imbalance, we would suggest all parties consider increasing the SolarSense rebate annual budget to 2021 levels, at \$350,698, for 2023 and 2024 program years, while accepting the Company's recommendations for individual Solar Sense award cuts, as well as allowing the transfer of unused funding from the SolarSense development and delivery budget as MNIPL and our cosigned partners previously recommended. This solution would increase the cost to ratepayers by around \$350,000 in total. However, we believe it is in the public interest to fully adjust rebate supply to current demand trends, while at the same time greatly increasing support for distributed generation within Minnesota Power's service area, considering all the public benefit that brings (see our Future Recommendations section).

II. Future Considerations for the Solar Sense Program

Continued Support for Distributed Solar is in the Public Interest

In the recently completed Integrated Resource Plan for Xcel Energy, both the Distributed Solar Parties (Vote Solar, Cooperative Energy Futures, the Institute for Local Self Reliance, and the Environmental Law & Policy Center) and the Citizens Utility Board submitted modeling that demonstrated the economic benefits of distributed generation. In particular, CUB utilized the WIS:dom® -P model by Vibrant Clean Energy which demonstrated how significant use of distributed generation provides the lowest total cost path to decarbonization.

Customer-owned or sponsored distributed generation provides increased value by distributing the profits from renewable generation as direct customer bill savings. The value of a megawatt of solar owned by customers produces returns as direct bill savings to individual customers. The savings that occur from utility-owned generation are not equally shared by those historically shut out of the economy. Instead, the savings flow through cost-of-service rules to predominantly the largest energy users. Finally, job creation and local business development opportunities are inherently greater for community-based renewable energy than for large, centralized energy systems for multiple reasons:

- A larger number of smaller projects create more jobs, both during construction and long-term operations than a single large project of the same total size.
- Distributed generation development also disperses business development and job creation opportunities, making jobs and enterprises more accessible to a wider range of individuals. Financing is also more feasible locally for relatively smaller-sized projects.

Along with the economic benefits of DER expansion, these resources can help limit high energy burdens for consumers. Energy burden is the percentage of income paid towards energy costs. Low-to-moderate-income (LMI) families, households of color, multifamily and renting households spend a much larger percentage of their income on energy bills than the average family. According to a recent MN Department

of Commerce Minnesota Energy Data Dashboard report, in Minnesota, the average energy burden is 2%, while LMI households average an energy burden of 8% and some Minnesotans face an energy burden exceeding 30%. The application of DERs to reduce energy burden is promising but must be managed strategically and deliberately. DERs should be deployed as part of a strategy that includes assistance such as LIHEAP funding and weatherization efforts focused on LMI and aging housing stock. When paired with these investments, DER applications such as LMI-focused solar programs and community solar can help lower energy bills and relieve energy burden.

For the most recent Minnesota Power IRP, the CEOs commissioned the “Incorporating Health and Equity Metrics into the Minnesota Power 2021 Integrated Resource Plan” report from Physicians, Scientists, and Engineers for Healthy Energy (“PSE Report”). The PSE Report estimates that low to moderate-income households represents ~30 percent of the population in Minnesota Power’s territory. Furthermore, the report states that PSE found notably high energy burdens in rural areas of Minnesota Power’s service territory and particularly in parts of Duluth. Minnesota Power’s customer mix presents a prime opportunity to examine and showcase the advantages of investing in low-income solar incentive opportunities.

Specific suggestions for SolarSense expansions

Continuation of SolarSense incentives is in the public interest

Taking into consideration Minnesota Power’s customer mix as well as the current state of inflation and energy prices, this is exactly the wrong time to be lessening support for solar incentives - especially those directed at low to moderate-income households. It is evident from the continued success of the SolarSense rebate program that great interest and need for solar incentives persists in northern Minnesota. A decrease in the dollar amount of individual rebates is reasonable when considering the cost declines for solar energy systems. However, further limiting an already sensible incentive budget does not seem prudent at this juncture. Targeted program changes as outlined in these comments and a consistent or increased budget are the most logical steps to take at this time.

In addition to proven customer interest in the program and the fact that solar energy is a targeted and proven way to reduce energy burden, distributed solar also has cumulative positive effects on the electric grid. *Rooftop solar is more expensive to install on a strict per kWh basis than larger grid generation projects, but its location (on your own roof) avoids a range of costly transmission and distribution investments.* When an individual customer invests in solar it has residual benefits such as localized decreased peak demand, reduced emissions impacts, ancillary services, deferred utility investment, increased grid reliability, and community resiliency. In an uncertain future of climate-related weather disasters, the increased reliability and resiliency benefits on the grid from distributed solar, *especially solar plus storage*, projects are potentially substantial.

Energy Storage incentives should be considered

Energy storage adoption is vital in the pursuit of a climate-resilient grid. Solar plus storage applications enhance the resiliency of the electric grid and potentially decrease the need for costly upgrades related to distributed energy resource adoption. If structured and incentivized appropriately, solar plus storage applications can also provide essential health, economic, and resiliency benefits to historically marginalized communities. Providing a storage incentive is an important step towards further advancing clean, distributed, equitable energy along with strengthening the reliability and resiliency of the grid. One example of a proven storage incentive is Green Mountain Power’s Bring Your Own Device (“BYOD”) program. The BYOD program allows customers to purchase a battery from a list of approved vendors. The customer chooses their incentive level and commits to utilizing the battery for backup power purposes when there

are outages on the grid or for self-consumption purposes. The batteries enrolled under the backup power incentive also commit to providing peak demand reduction for 10 years. A Company SolarSense program structured similarly would provide resilience and reliability to individual customers as well as to the distribution grid.

Low Income Solar Grant program deserves increased support

Minnesota Power states that the goal of the Low-Income SolarSense program is to: “create a viable, long-term solar market for low-income customers in northern Minnesota by exploring innovative ways to address the solar adoption challenges commonly faced by this customer segment. These challenges can include lack of upfront capital, home ownership status, physical condition of the home, low credit scores, limited access to information and more.” In order to continue to support a viable market, we suggest the Company shore-up program participation and administration rules and increase the program budgets. By increasing program clarity, transparency, and accessibility (as we recommended in our initial comments), as well as the overall budget, more individuals will have access to incentives - a positive outcome as evidenced by the popularity of the SolarSense incentive program.

Low-income community solar gardens would improve LI access

Another option to expand and improve SolarSense is to create a path to allow for low-income community solar projects. Minnesota Power’s current community solar program is fully subscribed, with around a 65-person waitlist. The popularity of this initial foray into community solar is indicative of great interest in solar by customers. As stated in Minnesota Power’s June 1, 2022 Community Solar Garden compliance report in Docket No. E015/M-15-825, the current community solar garden program does not have a low-income or nonprofit organization carve-out and 50% of the output is subscribed to two commercial customers. The majority of participating customers own their own home and nearly half reported having an annual household income of over \$80,000 per year. When coupling this reality with the PSE Report’s finding that less than 5% of rooftop solar adopters in Minnesota are in the lowest income bracket, while more than 40% are in the highest-income category, a solar garden committed to low-income customers and nonprofit entities would be an excellent resource for Minnesota Power’s most vulnerable customers. Low-to-moderate income-focused community solar projects can create wealth in often under-resourced communities and are a hedge against volatile fuel prices for customers who cannot accept such uncertainty.

IV. Recommendations

The following recommendations are in addition to the recommendations we previously submitted within our initial comments on July 15, 2022. At this time, MNIPL and the cosigned partners further recommend:

- 1) the Company and Commission consider establishing a new, annual SolarSense customer incentive budget level for the 2023 and 2024 program years, at the previous 2021 budget level, or \$350,698 annually.**
- 2) this increase to the annual budget in 2023 and 2024 be achieved with unspent, pre-allocated funds to the current SolarSense program, in the form of past, present and future unspent funding from the SolarSense development and delivery budget, as well as additional ratepayer allocations necessary to reach the funding levels requested in point 1.**

- 3) that if the Company and Commission does not wish to increase SolarSense funding through a rate increase to ratepayers, that MNIPL and our cosigned partners initial comment recommendations 1 and 2 be considered as an viable alternative.**
- 4) consideration of increased support for distributed solar, through rebates, energy storage incentives, a continuation of the Low-Income Solar Grant program, and defined pathways for community solar deployment, as the SolarSense program is reevaluated in 2024.**

Sincerely,

Bret Pence, Greater Minnesota Director, Minnesota Interfaith Power & Light
Bobby King, Minnesota State Director, Solar United Neighbors of Minnesota
Jenna Warmuth, Midwest Regional Director, Vote Solar
Duluth Clean Energy Team, Sierra Club North Star Chapter