



## Minnesota Solar Energy Industries Association

We Move Minnesota Solar + Storage Forward

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September 28, 2022

Will Seuffert  
Executive Secretary  
Minnesota Public Utilities Commission  
121 Seventh Place East, Suite 350  
St. Paul, MN 55105

**Re: Joint DG Parties Comments, Docket Numbers E999/CI-16-521 and E999/CI-01-1023:  
Updating the Generic Standards for the Interconnection and Operation of Distributed  
Generation Facilities Established under Minn. Stat. § 216B.1611**

Mr. Seuffert,

Please find attached comments from the Minnesota Solar Energy Industries Association (MnSEIA), the Environmental Law and Policy Center (ELPC), and Vote Solar (VS). These comments reflect the views of our organizations and interested members related to the Distributed Generation (DG) Tariff as discussed in Docket Numbers E999/CI-16-521 and E999/CI-01-1023.

Sincerely,

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Enclosure: Comments of the Joint DG Parties

**STATE OF MINNESOTA  
PUBLIC UTILITIES COMMISSION**

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Commissioner

**In the Matter of Updating the Generic  
Standards for the Interconnection and  
Operation of Distributed Generation  
Facilities Established under Minn.  
Stat. §216B.1611  
Docket Nos. E999/CI-16-521 and  
E999/CI-01-1023**

**COMMENTS of the MINNESOTA  
SOLAR ENERGY INDUSTRIES  
ASSOCIATION (MnSEIA), VOTE  
SOLAR, and the  
ENVIRONMENTAL LAW AND  
POLICY CENTER (ELPC)**

**September 28, 2022**

**Docket Nos. CI-16-521/M-01-1023**

**Introduction**

The Minnesota Solar Energy Industries Association (MnSEIA) is a 501(c)(6) nonprofit trade association that represents our state’s solar and storage businesses, with over 140 member companies, which employ over 4,000 Minnesotans.

The Environmental Law and Policy Center (ELPC) is a 501(c)(3) nonprofit public interest organization that works to achieve cleaner air and cleaner water, promote renewable energy and energy efficiency resources, and preserve natural resources in Minnesota and the Midwest. ELPC has an office in Minneapolis and has members throughout the state of Minnesota and the Midwest.

Vote Solar (VS) is an independent 501(c)3 nonprofit working to repower the U.S. with clean energy by making solar power more accessible and affordable through effective policy advocacy. Vote Solar seeks to promote the development of solar at every scale, from distributed rooftop solar to large utility-scale plants. Vote Solar has over 90,000 members nationally, including over

2,500 members in Minnesota. Vote Solar is not a trade organization nor does it have corporate members.

MnSEIA, ELPC, and VS offer these comments as the Joint DG Parties.

Our comments here today address the Minnesota Public Utilities Commission's (the "Commission" or PUC) August 29, 2022 Notice of Supplemental Comment Period, and provide further justification for modifying Attachment 6<sup>1</sup> of the Interconnection Standards with the suggested changes that we and other community stakeholders filed in our March 27, 2018 Motion to Reopen and Amend the Distributed Generation Tariffs.

**I. The Positions of the Joint DG Parties have been Fully and Accurately Stated in the Record**

The Joint DG Parties have fully and accurately stated our positions in the record over multiple filings since first petitioning the Commission in March, 2018.

The urgency of this issue, however, has only grown over the past four years. The passage of time has also led to several new facts on the ground that the Commission should take into account as it considers this matter.

- In early 2021, the United States formally rejoined the Paris Agreement, pledging to reduce economy-wide greenhouse gas emissions 50-52 percent by 2030, and reaching net zero emissions by no later than 2050.<sup>2</sup>
- In September 2022, Minnesota, Governor Tim Waltz likewise announced a statewide goal of reducing GHG emissions 50 percent by 2030 and reaching net zero emissions by 2050—along with a goal of 100% carbon-free electricity by 2040.<sup>3</sup> Those goals are in line with the Paris Agreement, but more ambitious than Minnesota's 2007 legislative goals of an 80% reduction

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<sup>1</sup> In the Matter of Updating the Generic Standards for the Interconnection and Operation of Distributed Generation Facilities Established under Minn. Stat. § 216B.1611, ORDER, Docket No. CI-16-521, (January 24, 2017), <https://perma.cc/3JK7-YYT2> [hereinafter Attachment 6].

<sup>2</sup> Press Release, The White House, *FACT SHEET: President Biden Sets 2030 Greenhouse Gas Pollution Reduction Target Aimed at Creating Good-Paying Union Jobs and Securing U.S. Leadership on Clean Energy Technologies* (April 22, 2021)

<https://www.whitehouse.gov/briefing-room/statements-releases/2021/04/22/fact-sheet-president-biden-sets-2030-greenhouse-gas-pollution-reduction-target-aimed-at-creating-good-paying-union-jobs-and-securing-u-s-leadership-on-clean-energy-technologies/>.

<sup>3</sup> See Minnesota's Climate Action Framework, at 13, 20 (available at <https://climate.state.mn.us/sites/climate-action/files/Climate%20Action%20Framework.pdf>)

by 2050, and a 30% reduction by 2025 (which the state is not currently on track to meet).<sup>4</sup>

- The last few months also saw passage of the federal Inflation Reduction Act of 2022 (IRA), which included multiple provisions intended to significantly reduce the effective cost of distributed generation, including distributed solar and storage facilities up to 10 MW AC in size. The IRA also provides additional tax credit options for distributed solar smaller than 5 MW AC in size, making it likely that distributed solar facilities across the full 1-10 MW range will become cost competitive for ratepayers (as compared to, *e.g.*, NSP's current average wholesale purchase price) over the next few years as domestic manufacturing and deployment really starts to ramp.

Nonetheless, one fact has not changed: over the last four years, zero new DG solar projects have been commissioned under Minnesota's current DG tariffs and governing Order—a fact that further demonstrates the existence of serious unaddressed flaws that should be addressed by the Commission as soon as possible.

#### A. Regarding Current Attachment 6 Guidance and Implementation

At the heart of the DG Parties' position is Minn. Stat. 216B.1611, under which the relevant utilities were required to establish a distributed generation (DG) tariff:<sup>5</sup>

**Distributed generation tariff.** Within 90 days of the issuance of an order under subdivision 2 . . . each public utility providing electric service at retail shall file a distributed generation tariff consistent with that order, for commission approval or approval with modification . . . .

The legislature also enacted, within this same statute, the explicit purpose of "promot[ing] the use of distributed resources", including but not limited to solar and storage facilities up to 10 MW AC in size.<sup>6</sup>

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<sup>4</sup> Alex Derosier, *Gov. Tim Walz Releases Plan to Bring Minnesota to Zero Net Carbon Emissions by 2050*, DULUTH NEWS TRIB., (Sept. 16, 2022, 5:30 PM), <https://www.duluthnewstribune.com/news/minnesota/gov-tim-walz-releases-plan-to-bring-minnesota-to-zero-net-carbon-emissions-by-2050>.

<sup>5</sup> Minn. Stat. § 216B.1611 subd. 3(1) (2014).

<sup>6</sup> Minn. Stat. § 216B.1611 subds. 1, 2 (2014).

The rate-regulated utilities' DG Tariffs, under which no projects have taken service, have failed to meet that goal, and so revisions to Attachment 6 are needed to guide those tariffs toward a workable state.

Of concern, and as explained in the original March 27, 2018 petition, the original DG tariffs are still on the books, but have failed to accomplish the statutory purpose of "promot[ing] the use of distributed resources." The Commission should therefore revisit these tariffs, along with the underlying Commission order, to modernize them with an eye towards incorporating new and improved practices to allow for the actual deployment of distributed resources up to 10 MW in size.

Reopening the DG tariffs is consistent with the Commission's actions in recent years to refresh other relevant aspects of DG interconnection, such as the technical interconnection standards and the State of Minnesota Distributed Energy Resources Interconnection Process ("MN DIP").

We have argued that the calculations of the DG Tariff rates submitted by rate-regulated utilities are neither appropriate nor reasonable, for two reasons. First, full avoided cost data is labeled as "trade secret,"<sup>7</sup> and second, the related practice of disclosing pricing once a legally enforceable obligation ("LEO") is met by the developer is unreasonably burdensome.

We have also argued that Minn. Stat. § 216B.1611—which gives rise to Attachment 6—is not constrained by Minnesota's Public Utility Regulatory Practices Act ("PURPA") statute, Minn. Stat. § 216B.164, in particular subdivision 4. That subdivision contains a least-cost-renewable resource provision, which we have argued should not apply to Attachment 6 tariffs. The least-cost-renewable pricing from Minn. Stat. § 216B.164, Subd. 4 and the negotiated rates from Minn. Rule 7835.4019 (a rule that gets its statutory authority from § 216B.164, but not § 216B.1611) are inappropriate for DG Tariffs for a variety of reasons, which MnSEIA, ELPC, Vote Solar, and Fresh Energy detailed in an October 2020 filing.<sup>8</sup>

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<sup>7</sup> While this issue has been the subject of a recent lawsuit, the case was dismissed based on lack of standing and the Court did not reach the merits of the issue. *See Matter of Trade Secret Designations of 2019 Cogeneration & Small Power Prod. Reps.*, No. A20-0827, 2021 WL 1247948, at \*7 (Minn. Ct. App. Apr. 5, 2021) (unpublished), holding that appellants lacked standing on the matter.

<sup>8</sup> MnSEIA, ELPC, Fresh Energy, and Vote Solar, Comments, In the Matter of Updating the Generic Standards for the Interconnection and Operation of Distributed Generation Facilities Established under Minn. Stat. § 216B.1611, Docket Nos. E999/CI-16-521 and E999/CI-01-1023, Doc. ID, 202010-167827-01, (October 30, 2020), at 4-11. [hereinafter MnSEIA et al. Comments].

## B. Suggested Revisions to Attachment 6

The DG Tariff's rate was meant to be an avoided cost rate—separate rates for avoided energy and avoided capacity costs—plus compensation to DG facilities for non-energy benefits. Those benefits include distribution credits, diversity credits, line loss credits, renewable credits, emission credits, and reliability credits. Such guidance should result in real-world DG projects that also protect ratepayers from cross-subsidization.

We have previously filed clean and tracked changes versions of Attachment 6,<sup>9</sup> but will summarize changes here.

### 1. *Attachment 6's Line Loss Credits Should Also Be Based on System-Wide Line-Loss Rates*

Rather than conduct a facility study to conduct estimated line losses, which is unreasonably burdensome for projects 1-10 MW in size, an alternative method using system-wide line losses that is simple, transparent, and universal should be adopted in Attachment 6 revisions.

### 2. *To Better Align Avoided Capacity Costs with Integrated Resource Planning, Capacity Cost Calculations Should be Aligned with 15, not 5 year periods*

The 5 year periods prescribed by Attachment 6 are an inadequate period of time to measure capacity deficits, as it is misaligned with how the utility, Commission, and stakeholders plan for new capacity. Moreover, the 5 year look ahead contravenes the statutory requirements in Minn. Stat. § 216B.1611 by ignoring the differing system requirements and operating characteristics of various DG technologies. The time period is misaligned with the useful life of most DG assets, such as solar farms that typically have a 25-year project life. By contrast, Integrated Resource Planning generally looks ahead 15 years. We recommend a 15 year look ahead, with the remaining years of the contract using annualized capacity values.

### 3. *Contract Length Should Reflect Operating Characteristics of the Technology Deployed to Encourage Financeability and Fairness*

The current tariffs that arise from Attachment 6 of the 2004 Order fall short of the statutory intent of Minn. Stat. § 216B.1611, in part because there is no term-length requirement as part of Attachment 6. Currently, each utility's DG Tariff either calls for individual power purchase

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<sup>9</sup> MnSEIA et al. Comments, Attachs. A & B.

agreements (“PPAs”) with varying negotiated terms, or reset each year.<sup>10</sup> These contract terms are unreasonable and counter to statute. These contract terms are unreasonable for two reasons—first, the uncertainty means that DG facility contracts will be unfinanceable, and second, because they are inconsistent with the characteristics of distributed generation technologies.

*4. The Onsite Requirement in Attachment 6 is Archaic, and Superseded by both Commission Order and Industry Practice*

The onsite requirement of Attachment 6 is no longer necessary, given the breadth and scope of the Interconnection Standards, and by the ways in which they are employed. The Commission has already approved, in concept, the idea of stand-alone generators that interconnect with utility distribution systems through resolution of the question of “house power” for community solar gardens, and has thus set precedent that the generation facility need not serve on-site load.

Attachment 6, as it currently reads, requires in the “QUALIFICATIONS” section, that “The DG facility must be an operable, permanently installed or mobile generation facility serving the customer receiving retail electric service at the same site.”<sup>11</sup> We have argued that this requirement is no longer necessary.<sup>12</sup> The Commission implicitly agreed that modernization of all of the Interconnection Standards, including Attachment 6, were due when it updated the Interconnection Standards in this docket. The close statutory relationship between the Interconnection Standards and the DG Tariff—which are respectively required by Minn. Stat. § 216B.1611 subd. 2 and subd. 3—further supports the premise that if the Interconnection Standards do not require onsite load, and that a workable and statutorily correct DG Tariff operating within those confines should also not require onsite load.

Furthermore, MN DIP succeeds the archaic requirement of Attachment 6 for onsite generation when it accounts for the possibility of a “stand-alone generator” in the Pre-Application Report. MN DIP § 1.4.1.7. In practice, Xcel Energy interconnects “stand-alone generators” on a frequent basis. Community Solar Gardens operating under Xcel’s Solar\*Rewards Community program send all of their power directly to the distribution grid, and receive nominal service from the grid—“house power”—which creates a buy/sell relationship between the utility and the facility;

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<sup>10</sup> See MINNESOTA ELECTRIC RATE BOOK - MPUC NO. 2, Section 10, Sheet 78, found at [https://www.xcelenergy.com/staticfiles/xe-responsive/Company/Rates%20&%20Regulations/Rate%20Cases/Me\\_Section\\_10.pdf](https://www.xcelenergy.com/staticfiles/xe-responsive/Company/Rates%20&%20Regulations/Rate%20Cases/Me_Section_10.pdf); Minnesota Power Electric Rate Book - Volume I, Section V, Page No. 82, found at <https://www.mnpower.com/CustomerService/RateBook>; Otter Tail Power Company, Electric Rate Schedule, Section 12.04, Distributed Generation Service Rider, at 5; Dakota Electric Association Ratebook; See also, utility answers to Information Request 10.

<sup>11</sup> Attachment 6 (emphasis added).

<sup>12</sup> MnSEIA et al., Motion to Reopen and Amend the Distributed Generation Tariffs, In the Matter of Updating the Generic Standards for the Interconnection and Operation of Distributed Generation Facilities Established under Minn. Stat. § 216B.1611, Docket No. E999/CI-01-1023, Doc. ID, 20183-141398-01, (Mar. 23, 2018), Ex. B at 7.

this arrangement so constitutes an “on-site” system in a way to keep common practice aligned with statute. Those facilities are also subject to the requirements of Minn. Stat. § 216B.1611 as promulgated through MN DIP.

*5. A Workable DG Tariff should appropriately value Diversity and Reliability Credits*

The September 2004 Order also contains what appear to be mistakes or not fully fleshed-out concepts, which require revisiting in their own right. Under the topic of “Diversity Credits,” the Commission concludes that “No additional diversity credits for energy and capacity should be given to DG customers who contract for standby service.”<sup>13</sup> But, the Commission does not allude to whether it should permit Diversity Credits for traditional, non-standby systems. In fact, it suggests that Diversity Credits should be applied, but makes no definitive statement one way or another, nor does it truly define how a utility should value DG diversity benefits and added grid resiliency.

None of the relevant utilities have interpreted this language to allow for or require Diversity or Reliability Credits, as it is not present in any of their DG tariffs. A revised DG Tariff should ensure that Diversity and Reliability Credits are included in any applicable rates.

We have suggested to the Commission that Diversity & Reliability Credits should be provided for customers that are not on standby service, and should reflect the amount of reserve capacity it requires to back up a supply of electricity from smaller generators. This figure can be determined using an effective load carrying capability measurement, which may be modeled for the average DG generator the utility expects to receive under this tariff, or a Peak Load Reduction approach, which takes the maximum distribution load over the Load Analysis Period minus the maximum distribution load over the Load Analysis Period.

*6. The DG Tariff should include Distribution Credits that account for both long- and short-run avoided distribution costs resulting from DG*

Attachment 6 states that distribution credits to DG customers should equal the utility’s avoided distribution costs resulting from the installation facility. But, Attachment 6 requires that the utility perform a screening study (at the customer’s expense) to determine if a DG project has the potential to receive distribution credits based on the utility’s list of substation areas or feeders that “could be likely candidates for distribution credits as determined through the utility’s normal distribution planning process.”<sup>14</sup> That framework does not provide transparency into the utility’s

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<sup>13</sup> Attachment 6, § 9 (c) (i).

<sup>14</sup> Attachment 6 at 5 (order point 8bii).

process for identifying candidates for distribution credits; puts the burden of conducting a distribution benefit study on individual DG projects; and likely underestimates the avoided distribution costs associated with DG projects by focusing on the utility's distribution planning process (which may forecast only short-term distribution grid needs) to the exclusion of avoided costs over the lifetime of a DG project (which can be over 25 years).

We recommend that distribution credits account for both long-run system-wide avoided distribution capacity costs as well as short-run locational avoided capacity costs.<sup>15</sup>

*7. The DG Tariff could value different generation profiles, and should require that the utility purchase Renewable Energy Credits from the Distributed Generator at the Distributed Generator's Discretion*

If the Commission would like to apply generation specific avoided costs, then a simple, yet appropriate way to do that would be to 1) recognize differing capacity values based on the time of generation from distributed assets, rewarding the DG assets with a specific capacity value based on the delivery of capacity to the utility when needed, and 2) ensure that the Tariff also credits DG assets for the value of Renewable Energy Credits at a fair price. These two elements when taken together would ensure that facilities that qualify for the DG Tariff would be compensated for the benefit to the utility's capacity constraints, and that the value of green power is sufficiently incorporated into the final PPA price.

### **Conclusion**

The positions of the Joint DG Parties have been fully articulated in the record. The fact that zero new DG solar projects have been commissioned under Minnesota's current DG tariffs and governing Order demonstrate that the current regime fails to meet the statute's intent and must be updated.

We reiterate that in order to facilitate DG projects in accordance with statutory intent, the revised guidance for the DG Tariff and incorporated rates should: 1) be publicly available and transparent to the extent possible; 2) incorporate system-wide line-loss rates; 3) be consistent with integrated resource planning norms for the purposes of calculating capacity credits; 4) employ contract lengths appropriate to the deployed technology; 5) reflect generation profiles of the technology employed; 6) compensate renewable facilities with market-rate REC prices; and, 7) ensure appropriate and reasonable utility implementation.

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<sup>15</sup> MnSEIA et al. Comments at 17-18.

Thank you for your consideration of this critical item to Minnesota's distributed generation future.

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