

1264 Energy Lane Saint Paul, MN 55104 www.allenergysolar.com

February 2nd, 2024.
Will Seuffert
Executive Secretary
Minnesota Public Utilities Commission
121 7th Place East, Suite 350
St. Paul, MN 55101

RE: In the Matter of Updating the Generic Standards for the Interconnection and Operation of Distributed Generation Facilities Established Under Minn. Stat. § 216B.1611 (Docket E999/CI-16-521)

Dear Mr. Seuffert:

All Energy Solar submits to the Minnesota Public Utilities Commission reply comments addressing the issues and solutions raised by stakeholders answering the question "What changes to the Minnesota Distributed Energy Resources Interconnection Process (MN DIP) should the Commission make to achieve the purpose of Minnesota Law 2023, Ch. 60, Art. 12, Sec. 75 (HF 2310)," noticed for comment on September 1, 2023, in this docket.

Sarah Whebbe All Energy Solar Policy Analyst Michael Allen All Energy Solar CEO February 2nd, 2024

DOCKET NO. E999/CI-16-521

IN THE MATTER OF UPDATING THE GENERIC STANDARDS FOR THE INTERCONNECTION AND OPERATION OF DISTRIBUTED GENERATION FACILITIES ESTABLISHED UNDER MINN. STAT.§ 216B.1611.

INITIAL COMMENTS REGARDING THE CREATION OF A PRIORITY QUEUE FOR SYSTEMS WITH CAPACITY OF UP TO 40 KW.

Katie J. Sieben

Joseph Sullivan

Hwikwon Ham

Valerie Means

John A. Tuma

Chair

Vice-Chair

Commissioner

Commissioner

Commissioner

ALL ENERGY SOLAR'S COMMENTS

I. Background

On September 1, 2023 the Commission issued a notice of comment period In the Matter of Updating the Generic Standards for the Interconnection and Operation of Distributed Generation Facilities Established Under Minn. Stat. §216B.1611. On November 1, 2023 proposals for modifications for MN DIP were filed by Dakota Electric Association, Otter Tail Power Company, Xcel Energy, the Minnesota Rural Electric Association and MNSEIA.

Proposals were to address the following topics:

- 1. Interconnection procedures that allow customer-sited distributed generation projects up to 40 kilowatts alternating current in capacity to be processed according to schedules specified in the MN DIP, giving such projects priority over larger projects that may enjoy superior positions in the processing queue.
- 2. Whether the prioritization of these projects include areas where the distribution system is capacity constrained as well as in areas that are not similarly constrained.
- 3. Whether there are changes to the MN DIP that would be de minimis in nature regarding policy but would update the document to accurately reflect recent changes and references.
- 4. Are there other issues or concerns related to this matter?

II. Comments

It is undisputed that Minnesota's current interconnection framework has resulted in grid congestion and expensive upgrades that halt progress towards meeting renewable energy deployment goals. With the passage of HF 2310, deployment of DG is anticipated to grow exponentially over the next six years and

logically, this will exponentially amplify the grid congestion and expensive upgrades caused by the current interconnection framework. We agree with commenters that both short term/immediate solutions and long term solutions are needed to address MN DIP deficiencies that have caused capacity constraints.

As a short term solution, we agree with the proposal of the Department of Commerce to implement an 18-24 month pilot program in Xcel Energy territory where the utility may implement its two-queue proposal. Two queues are not needed for all utilities and as stated by Dakota Electric in its reply comments, a two queue system would create unnecessary administrative burden for utilities that are not currently capacity constrained. Another reasonable solution proposed by MnSEIA is to implement such a pilot in capacity constrained areas only. Eligible capacity constrained areas could be determined by the feeders that will be updated utilizing funds from Xcel's DG Upgrade program.

Long term solutions will likely require larger changes to the MN DIP that enable the use of advanced technology. Echoing MnSEIA's statements, this update to the MN DIP is not about allowing small systems to "skip the line" in a separate queue, but instead applying the correct screens for smaller systems commensurate to their impact on the grid. The most cost effective way to ensure capacity is available for small generators is by screening all generators correctly and mitigating export during low load periods through inverter settings.

With the Commission's October 6th order that IEEE 1547-2018 certified advanced inverters are readily available, Minnesota already made the first step towards advancing screening procedures to support high levels of DG penetration. The Commission has also adopted the use of smart inverter settings as a solution to capacity constraints when it required, beginning April 3, 2023, that Xcel's System Impact Studies include the option of using a smart inverter as a mitigation measure.

Amending the MN DIP screens to incorporate mitigation measures for all interconnection applications can and will "allow customer-sited distributed generation projects up to 40 kilowatts alternating current in capacity to be processed according to schedules specified in the MN DIP[.]"

The MN DIP would be well served by amendments to define the export capacity of a system and differentiate export capacity from nameplate capacity. Screening methodology can then be revised so that initial and supplemental screens define where export capacity should be used and incorporate an inadvertent export screen as part of initial review. Defining export capacity will also enable improvements to the Simplified Process Screening Criteria to incorporate applications for solar and storage that utilize Certified Inverter Based DERs with a Nameplate Rating of 40 kW or Less, and a maximum pre-determined Export Capacity for the storage device.

As with all implementations of smart inverter functionality, stakeholders require adequate notice and opportunity for discussion and collaboration before changes are made. Adoption of new screening practices and settings for export limitations should flow through DGWG, where a complete review of technical and policy considerations can take place within a predetermined time frame, before the group makes final recommendations to the Commission.

The DGWG would also be poised to address the issue of modernizing the allocation of grid upgrade expenses. We believe that resolving allocation issues will require many years of deliberation and decision making and as such, now is the time for the group and the Commission to start working on those long term solutions.

III. Conclusion

Minnesota is not the first state to attempt to reach high levels of penetration of DG. Stakeholders commenting on this matter have provided the Commission with a long list of other states where interconnection processes have been updated to utilize technological advances and update engineering screenings to improve how grid capacity is managed. To reach its carbon free energy goals affordably and within a reasonable time, Minnesota should follow the example set by states like New Mexico, New York, Massachusetts and New Jersey.

All Energy Solar appreciates the opportunity to comment and looks forward to continuing to work with the Commission and other stakeholders on this important issue.

Respectfully submitted,

Sarah Whebbe All Energy Solar Policy Analyst Michael Allen All Energy Solar CEO