

BEFORE THE MINNESOTA PUBLIC UTILITIES COMMISSION

Katie J. Sieben
Hwikwon Ham
Valerie Means
Joseph K. Sullivan
John A. Tuma

Chair
Commissioner
Commissioner
Commissioner
Commissioner

In the Matter of the Formal Complaint and
Request for Relief by the Minnesota Solar
Advocates

ISSUE DATE: February 27, 2024

DOCKET NO. E-002/C-23-424

ORDER DISMISSING COMPLAINT

PROCEDURAL HISTORY

On September 12, 2023, the Minnesota Solar Advocates (Solar Advocates)¹ filed a complaint against Xcel Energy (Xcel or the Company) alleging that Xcel is unreasonably limiting the capacity of its entire distribution system without Commission approval.

By October 20, 2023, the Commission received comments from the Department of Commerce, Division of Energy Resources (the Department); Solar Advocates; Xcel; and the Office of the Attorney General—Residential and Utilities Division (the OAG).

By November 3, 2023, the Commission received reply comments from Clean Energy Economy MN, Solar Advocates, Sierra Club, and Xcel.

On November 17, 2023, the International Union of Operating Engineers Local 49 and the North Central States Regional Council of Carpenters (LIUNA and NCSRC) filed comments.

The Commission also received 16 public comments recommending investigation of the complaint.

On December 14, 2023, the Commission met to consider the matter.

¹ Solar Advocates include: Minnesota Solar Energy Industries Association (MnSEIA); the Coalition for Community Solar Access; Cooperative Energy Futures; Minneapolis Climate Action; MN Solar; Solar United Neighbors; Luke and Layne Schmitz; David Crawford and Megan Clency; Lorelle and Daniel Blezek; Dale Mossey; Roman and Mila Podrezov; Ryan Schaefer; Lori and Ken Byro; Michael Rynders; Wild Mountain, Inc.; Nexamp, Innovative Renewable Energy, Inc.; Vote Solar; SunShare; Rotochopper, Inc.; Novel Energy Solutions; All Energy Solar; Blue Horizon Energy, LLC; Syncarpha Capital, LLC; Sunrise Energy Ventures, LLC; and the Institute for Local Self-Reliance.

FINDINGS AND CONCLUSIONS

I. The Complaint

A. Introduction

The Solar Advocates alleged that Xcel is unlawfully operating its entire distribution system in a manner that disadvantages distributed energy resources. They recommended that the Commission find that Xcel's interconnection rules and practices limit the capacity of its distribution system and requested that the Commission therefore direct the Company to discontinue such practices.

According to the complaint, Xcel has implemented a technical planning standard without Commission authorization and in violation of Minn. Stat. §§ 216B.164, 216B.1641, 216B.1611, 216B.03, 216B.05, 216B.07, and 216B.16.

The Solar Advocates argued that under Minn. Stat. § 216B.164, Xcel may limit the cumulative generating capacity of net metered facilities only with authorization from the Commission after demonstrating that sales from such facilities have reached four percent of Xcel's annual retail electric sales.

Further, the complaint asserts that Minn. Stat. § 216B.1641 prohibits limits on community solar gardens other than the limitations set forth under Minn. Stat. § 216B.164. And, the complaint states that Xcel is not authorized to change rates, including rules and practices, without Commission approval under Minn. Stat. § 216B.16 and must obtain Commission approval of its distributed generation tariff under Minn. Stat. § 216B.1611.

The complaint also states that Xcel's rules and practices must be reasonable under Minn. Stat. §§ 216B.03 and 216B.07 and filed with the Commission under Minn. Stat. § 216B.05.

B. Technical Planning Standard

The Solar Advocates argued that the technical planning standard Xcel utilizes to operate its distribution system negatively affects the development of distributed energy resources by eliminating approximately 2-3 gigawatts of capacity that would otherwise be used for such resources.²

The standard itself was developed using engineering assumptions and calculations to determine the maximum possible level of distributed energy resources on a distribution feeder or substation transformer. It allows the interconnection net flow of distributed energy resources up to 80 percent of the limiting equipment thermal rating, which could be at either the substation transformer or feeder level.

The Solar Advocates claimed that Xcel is applying its engineering judgment to create a single interconnection requirement that is broadly applicable to all distributed energy resource

² The technical planning standard was developed in: *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. E-999/CI-16-521.

interconnections, contrary to the purpose of such judgment. They contended that engineering judgment should instead be used to inform decisions affecting the individual characteristics of specific projects, not as a basis for setting a generic standard that unreasonably restricts installation of distributed energy resources, such as small solar projects.

They recommended that the Commission take action to expressly invalidate Xcel's technical planning standard and require the Company to comply with applicable law encouraging or requiring the expansion of distributed energy resources.

II. Comments

A. The Department

The Department stated that the Commission has jurisdiction over the complaint and that there are reasonable grounds to investigate, citing the allegations in the complaint.

B. The OAG

The OAG concurred that the Commission has jurisdiction over the complaint and recommended an investigation to ensure that the Company's standards are in the public interest and investigate whether the Company is authorized to implement engineering standards without express Commission authorization.

C. Clean Energy Economy MN and Sierra Club

Both Clean Energy Economy MN and the Sierra Club stated that the Commission has jurisdiction over the complaint and recommended that the Commission take up an investigation to ensure that the Company is in compliance with the requirements identified in the complaint.

D. Solar Advocates

The Solar Advocates filed comments largely reiterating the allegations in its complaint and further asserting that the Company is disregarding the authority of the Commission and threatening a transition to a clean energy future.

E. Labor Unions

The labor unions recommended against utilizing Commission resources to investigate the complaint and instead recommended that parties focus on the implementation of newly passed legislation that affects distributed generation resources.

F. Xcel

The Company concurred that the Commission has jurisdiction over the complaint but recommended that the Commission find that there are not reasonable grounds to investigate.

The Company stated that in 2022, it ranked significantly above other utilities in Minnesota in the deployment and interconnection of distributed energy resources. And while the Company expressed its commitment to clean energy goals, including through the interconnection of distributed energy resources, the Company also stated that operation of its distribution system is

informed by prevailing standards, including technical and engineering standards of the American National Standards Institute, the Institute of Electrical and Electronics Engineers (IEEE), and the National Electric Safety Code.

In response to assertions that the Company is precluding installation of distributed energy resources, the Company stated that there is no justification for setting an expectation that it is safe and reliable to operate electrical equipment at 100 percent of its rating limit. The Company explained that its engineering standards reasonably provide necessary operational flexibility and a margin to operate a safe and reliable electric distribution system. The Company also cautioned that requiring a utility to operate its system at the brink of capacity creates a serious risk of loss of service and structural damage. Technical planning standards and operational limits underpin operational variability that minimizes the risk of extreme system impacts for customers, such as equipment damage or voltage issues, while also limiting the risk of curtailing installed distributed energy resources. This also reduces the system's vulnerability to impacts from sudden changes in customer load.

In expressing its commitment to clean energy goals, the Company stated that it considers all available opportunities to add clean energy, including distributed energy resources, as well as significant amounts of utility-scale solar energy.

In countering the Solar Advocates' assertion that the technical planning standard is invalid, the Company challenged the timeliness of the complaint, stating that the standard was in place 18 months prior to the complaint and that investigating the allegations could slow the implementation of new legislation and contribute to confusion over what standards apply.

Finally, the Company stated that prior Commission approval of the standard was not required. The Company stated that it has worked openly with interested stakeholders to share as much information as possible to facilitate the successful interconnection of distributed energy resources.

III. Commission Action

The Commission concurs with the parties, all of whom agree, that the Commission has jurisdiction over the complaint.

Based on the record, however, it appears that the practical limitations of Xcel's system are at issue—not the Company's compliance with the law.

As a threshold matter, it is unreasonable to expect that Xcel could effectively, reliably, and safely operate its complex and vast distribution system without technical standards and engineering practices that are designed for that purpose. Absent such measures, failures of its distribution system would likely ensue, not only negatively impacting end-user customers but also distributed energy resources, which would be unable to operate on a compromised system. Every customer within the Company's service territory has a reasonable expectation of continuously reliable service, and the law reflects the state's commitment to this expectation. Yet in spite of extensive rules and regulations governing the provision of electric service by public utility companies, customers do, and will, experience service interruptions for a variety of reasons; this is true even without the relatively recent advancement of distributed energy resources and underscores the technical complexity and ongoing challenge of operating a consistently reliable electric distribution system.

In this light, the Commission remains mindful of the breadth of its regulatory responsibilities, which include oversight that achieves utility compliance with all applicable law without unduly prioritizing one policy objective at the risk of another in a manner that would jeopardize service to its customers.

In claiming that Xcel is unreasonably restricting distributed energy resources, the Solar Advocates have argued that it is unlawful for Xcel to establish a standard that is designed to protect the integrity of the system at the cost of additional distributed energy resources without first establishing the need for such a standard and obtaining Commission approval. But as Xcel has stated, its judgment is informed by engineering standards designed for the purpose of providing consumers and installers with clear technical requirements to guide the interconnection process—in other words, to effectively facilitate the *addition* of distributed energy resources onto its system. The fact that Xcel’s standard accounts for the distribution system’s capacity limits is an acknowledgment of practical realities and assists the Company in identifying vulnerabilities and potential upgrades for the purpose of adding distributed energy resources. This approach is consistent with how the Company manages its system absent distributed energy resources—identifying and addressing system limitations. Such an approach fosters interconnections rather than restricting them in violation of applicable statutes, as the Solar Advocates have claimed.

Even with such a standard in place, however, the Company’s reasonable application of the standard to individual projects remains within the Commission’s purview, and the Commission will continue to scrutinize the Company’s actions on a case-by-case basis to ensure reasonable outcomes consistent with applicable law, as has been the Commission’s practice.

And while most of the parties recommended that the Commission investigate the complaint, those recommendations rely primarily on the face of the allegations as support for their positions. For example, the Department’s comments do not provide a separate analysis of the complaint’s claims or the Company’s response. For the reasons set forth above, the Commission is not persuaded that the complaint sets forth allegations that call into serious doubt the merits of the Company’s engineering standards.

The Commission is equally unpersuaded by broad, unsubstantiated claims. For example, the complaint alleges that “Xcel has not provided evidence of any facts that demonstrate that there will be a need to reconfigure all the feeders in its distribution system.” The Company has been clear, however, that it will require feeder upgrades as needed to protect the integrity of its distribution system while continuously incorporating distributed energy resources.

The Commission also concurs with Xcel that prior Commission approval was not required to implement its standard. Assertions that it is unlawful for Xcel to operate its distribution system in reliance on sound engineering practices is confounding. Furthermore, the Company has worked extensively with stakeholders in a public process to develop a myriad of technical standards applicable to interconnections, and while there remain legitimate disagreements about Xcel’s approach to balancing corresponding responsibilities, the Commission is confident that the valuable input offered by stakeholders has been seriously considered and meaningfully evaluated with refinements made to the interconnection process based on that input.

Finally, the Commission recognizes the state’s commitment to clean energy goals, particularly as set forth in recent legislation, and remains clearly cognizant of the need to encourage and further

these important policy objectives while balancing the need to ensure safe and reliable service to all customers.

For all these reasons, the Commission will dismiss the complaint, finding that there are not reasonable grounds to investigate.

To encourage continued development of the issues raised and additional solutions for improving the interconnection process, the Commission will direct Xcel to continue meeting with stakeholders, as set forth below.

ORDER

1. The Commission finds that it has jurisdiction over the issues raised in the complaint filed by the Minnesota Solar Advocates.
2. The Commission finds that there are not reasonable grounds at this time to proceed with an investigation into the complaint under Minn. Rules 7829.1900 and hereby dismisses the complaint without prejudice.
3. By March 1, 2024, Xcel must host informational stakeholder meetings with relevant and interested parties on the justification and decision-making behind the Company's implementation of the technical planning standard, including options to apply the standard more granularly and set aside a smaller buffer. Xcel must subsequently file meeting summaries with the Commission.
4. This order shall become effective immediately.

BY ORDER OF THE COMMISSION



Will Seuffert
Executive Secretary



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CERTIFICATE OF SERVICE

I, Mai Choua Xiong, hereby certify that I have this day, served a true and correct copy of the following document to all persons at the addresses indicated below or on the attached list by electronic filing, electronic mail, courier, interoffice mail or by depositing the same enveloped with postage paid in the United States mail at St. Paul, Minnesota.

**Minnesota Public Utilities Commission
ORDER DISMISSING COMPLAINT**

Docket Number **E-002/C-23-424**

Dated this 27th day of February, 2024

/s/ Mai Choua Xiong

First Name	Last Name	Email	Company Name	Address	Delivery Method	View Trade Secret	Service List Name
Michael	Allen	michael.allen@allenergysolar.com	All Energy Solar	721 W 26th st Suite 211 Minneapolis, MN 55405	Electronic Service	No	OFF_SL_23-424_Official
Kim	Benjamin	kim@mnsolarandmore.com	MN Solar and More, LLC	11830 County Rd 13 SE Watertown, MN 55388	Electronic Service	No	OFF_SL_23-424_Official
Lorelle and Daniel	Blezek	blezek@gmail.com		61705 257th Avenue Mantorville, MN 55955	Electronic Service	No	OFF_SL_23-424_Official
T	Brinkerhoff	tbrinkerhoff@Rotochopper.com	Rotochopper, Inc.	217 West Street St. Martin, MN 56376	Electronic Service	No	OFF_SL_23-424_Official
Lori and Ken	Byro	Contaysky90@gmail.com		18528 494th Avenue Lake Crystal, MN 56055	Electronic Service	No	OFF_SL_23-424_Official
Megan	Clancy	megan.a.clancy@gmail.com		36002 Oasis Road Lindstrom, MN 55405	Electronic Service	No	OFF_SL_23-424_Official
Jessica	Collingsworth	JCollingsworth@nexamp.com	Nexamp	101 North Wacker Drive Suite 200 Chicago, IL 60606	Electronic Service	No	OFF_SL_23-424_Official
Generic Notice	Commerce Attorneys	commerce.attorneys@ag.state.mn.us	Office of the Attorney General-DOC	445 Minnesota Street Suite 1400 St. Paul, MN 55101	Electronic Service	Yes	OFF_SL_23-424_Official
Kevin	Cray	kevin@communitysolaraccess.org	CCSA	1644 Platte St Denver, CO 80202	Electronic Service	No	OFF_SL_23-424_Official
George	Damian	gdamian@cleanenergyeconymn.org	Clean Energy Economy MN	13713 Washburn Ave S Burnsville, MN 55337	Electronic Service	No	OFF_SL_23-424_Official

First Name	Last Name	Email	Company Name	Address	Delivery Method	View Trade Secret	Service List Name
Danielle	DeMarre	danielle.demarre@allenergysolar.com	All Energy Solar	1264 Energy Lane St Paul, MN 55108	Electronic Service	No	OFF_SL_23-424_Official
James	Denniston	james.r.denniston@xcelenergy.com	Xcel Energy Services, Inc.	414 Nicollet Mall, 401-8 Minneapolis, MN 55401	Electronic Service	No	OFF_SL_23-424_Official
Griffin	Dooling	griffin@bluehorizonenergy.com	Blue Horizon Energy LLC	121 Cheshire Lane, Ste 500 Minnetonka, MN 55305	Electronic Service	No	OFF_SL_23-424_Official
John	Farrell	jfarrell@ilsr.org	Institute for Local Self-Reliance	2720 E. 22nd St Institute for Local Self-Reliance Minneapolis, MN 55406	Electronic Service	No	OFF_SL_23-424_Official
Sharon	Ferguson	sharon.ferguson@state.mn.us	Department of Commerce	85 7th Place E Ste 280 Saint Paul, MN 551012198	Electronic Service	No	OFF_SL_23-424_Official
Jeremiah	IRE	jeremiah@championsolar.com	Innovative Renewable Energy, Inc.	20715 Hidden Ponds Drive Rogers, MN 55374	Electronic Service	No	OFF_SL_23-424_Official
William D	Kenworthy	will@votesolar.org	Vote Solar	332 S Michigan Ave FL 9 Chicago, IL 60604	Electronic Service	No	OFF_SL_23-424_Official
Bobby	King	bking@solarunitedneighbors.org	Solar United Neighbors	3140 43rd Ave S Minneapolis, MN 55406	Paper Service	No	OFF_SL_23-424_Official
Dean	Leischow	dean@sunrisenrg.com	Sunrise Energy Ventures	315 Manitoba Ave Ste 200 Wayzata, MN 55391	Electronic Service	No	OFF_SL_23-424_Official

First Name	Last Name	Email	Company Name	Address	Delivery Method	View Trade Secret	Service List Name
Gregg	Mast	gmast@cleanenergyeconomy.mn.org	Clean Energy Economy Minnesota	4808 10th Avenue S Minneapolis, MN 55417	Electronic Service	No	OFF_SL_23-424_Official
Maria	McCoy	maria@ilsr.org	Institute for Local Self-Reliance	2720 E 22nd St. Minneapolis, MN 55406	Electronic Service	No	OFF_SL_23-424_Official
Dale	Mossey	dalemossy@gmail.com		975 Leroy Street Saint Cloud, MN 56301	Electronic Service	No	OFF_SL_23-424_Official
Pouya	Najmaie	pouya@cooperativeenergyfutures.com	Cooperative Energy Futures	3416 16th Ave S Minneapolis, MN 55407	Electronic Service	No	OFF_SL_23-424_Official
Logan	O'Grady	logrady@mnseia.org	Minnesota Solar Energy Industries Association	2288 University Ave W St. Paul, MN 55114	Electronic Service	No	OFF_SL_23-424_Official
Colin	O'Neil	coneil@mysunshare.com	SunShare	1724 Gilpin Street Denver, CO 80218	Electronic Service	No	OFF_SL_23-424_Official
Roman and Mila	Podrezov	Roman.r.podrezov@gmail.com		206 9th Ave Court Northwest Lonsdale, MN 55046	Electronic Service	No	OFF_SL_23-424_Official
Benjamin	Ransom	bransom@mysunshare.com	SunShare	1724 Gilpin Street Denver, CO 80218	Electronic Service	No	OFF_SL_23-424_Official
Generic Notice	Residential Utilities Division	residential.utilities@ag.state.mn.us	Office of the Attorney General-RUD	1400 BRM Tower 445 Minnesota St St. Paul, MN 551012131	Electronic Service	Yes	OFF_SL_23-424_Official
Nathaniel	Runke	nrunke@local49.org	International Union of Operating Engineers Local 49	611 28th St. NW Rochester, MN 55901	Electronic Service	No	OFF_SL_23-424_Official

First Name	Last Name	Email	Company Name	Address	Delivery Method	View Trade Secret	Service List Name
Michael	Rynders	mikey.w.rynders@gmail.com		20260 Oxboro Lane North Marine on Saint Croix, MN 55047	Electronic Service	No	OFF_SL_23-424_Official
Kyle	Samejima	kyle@mplsclimate.org	Minneapolis Climate Action	N/A	Electronic Service	No	OFF_SL_23-424_Official
Ryan	Schaefer	ryan.schaefer@live.com		16938 Pleasant Valley Road Shafer, MN 55074	Electronic Service	No	OFF_SL_23-424_Official
Luke	Schmitz	kid771@yahoo.com		1564 18th Street Northeast Sauk Rapids, MN 56379	Electronic Service	No	OFF_SL_23-424_Official
Christine	Schwartz	Regulatory.records@xcelenergy.com	Xcel Energy	414 Nicollet Mall FL 7 Minneapolis, MN 554011993	Electronic Service	No	OFF_SL_23-424_Official
Will	Seuffert	Will.Seuffert@state.mn.us	Public Utilities Commission	121 7th PI E Ste 350 Saint Paul, MN 55101	Electronic Service	Yes	OFF_SL_23-424_Official
David	Shaffer	david.shaffer@novelenergy.biz	Novel Energy Solutions	2303 Wycliff St Ste 300 St. Paul, MN 55114	Electronic Service	No	OFF_SL_23-424_Official
Brandon	Stamp	brandon.j.stamp@xcelenergy.com	Xcel Energy	401 Nicollet Mall Minneapolis, MN 55401	Electronic Service	No	OFF_SL_23-424_Official
Sara	WM	sara@wildmountain.com	Wild Mountain, Inc.	37200 Wild Mountain Road Taylors Falls, MN 55084	Electronic Service	No	OFF_SL_23-424_Official
Brad	WM	brad@wildmountain.com	Wild Mountain, Inc.	37200 Wild Mountain Road Taylors Falls, MN 55084	Electronic Service	No	OFF_SL_23-424_Official

First Name	Last Name	Email	Company Name	Address	Delivery Method	View Trade Secret	Service List Name
Jenna	Warmuth	jwarmuth@votesolar.org	Vote Solar	1 South Dearborn Street Suite 200 Chicago, IL 60603	Electronic Service	No	OFF_SL_23-424_Official
Sarah	Whebbe	sarah.whebbe@allenergysolar.com	All Energy Solar	45 Wentworth Ave W West St Paul, MN 55118	Electronic Service	No	OFF_SL_23-424_Official
Laurie	Williams	laurie.williams@sierraclub.org	Sierra Club	Environmental Law Program 1536 Wynkoop St Ste 200 Denver, CO 80202	Electronic Service	No	OFF_SL_23-424_Official
Curtis	Zaun	czaun@mNSEIA.org	MnSEIA	PO Box 8141 Saint Paul, MN 55108	Electronic Service	No	OFF_SL_23-424_Official
Fernando	Zurita	fernando.zurita@syncarpha.com	Syncarpha Capital, LLC	250 West 57th Street Suite 701 New York, NY 10107	Electronic Service	No	OFF_SL_23-424_Official