

August 18, 2025

Mike Bull
Acting Executive Secretary
Minnesota Public Utilities Commission
121 7th Place East, Suite 350
St. Paul, MN 55101

**Re: Possible Amendment to Rules Relating to the Definition of “Capacity,” Minnesota
Rules, 7835.0100, subp. 4
Docket No. E-999/R-25-86**

Acting Executive Secretary Bull,

Pursuant to the July 14, 2025, Request of Comments issued by the Minnesota Public Utilities Commission, please find attached the Comments of the Minnesota Energy Rights Advocates in the above-referenced docket. These Comments reflect the views of the Minnesota Solar Energy Industries Association, Solar United Neighbors, Institute for Local Self Reliance, Cooperative Energy Futures, Clean Energy Economy Minnesota, and their interested members.

Sincerely,

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**STATE OF MINNESOTA
PUBLIC UTILITIES COMMISSION**

Katie Sieben	Chair
Hwikwon Ham	Commissioner
John Tuma	Commissioner
Joseph Sullivan	Commissioner
Audrey Partridge	Commissioner

*Possible Amendment to Rules Relating to the
Definition of “Capacity,” Minnesota Rules,
7835.0100, subp. 4*

COMMENTS

August 18, 2025

Docket No. E-999/R-25-86

The Minnesota Solar Energy Industries Association (“MnSEIA”), Solar United Neighbors (“SUN”), Institute for Local Self Reliance (“ILSR”), Cooperative Energy Futures (“CEF”), and Clean Energy Economy Minnesota (“CEEM”), (collectively, the Minnesota Energy Rights Advocates (“MERA”)), hereby submit these comments in the above-referenced docket.

MnSEIA is a nonprofit association that represents Minnesota’s solar and storage industry, with over 170 members, ranging from rooftop installers to non-profit organizations, developers, manufacturers, utilities, and many others, which employ over 5,000 Minnesotans. SUN is a non-profit organization dedicated to creating a clean, equitable, resilient energy system that benefits everyone. Nationally, SUN has helped 9,367 homes and businesses add more than 78 MW of solar combined. In Minnesota, SUN has run 22 solar co-ops to help neighbors learn about solar and go solar together at a group price. SUN has also educated thousands of Minnesotans about solar and storage, and has helped homes and small businesses install over 2 MW of solar combined. The ILSR is a nonprofit organization and advocacy group that was founded in 1974. ILSR provides technical assistance to communities about local solutions for sustainable community development

in areas such as banking, broadband, energy, independent business, and waste. CEF is a democratically-run, consumer-owned, renewable energy cooperative (308B) that focuses on reducing energy burden, wealth building and encouraging community ownership and participation in energy and energy policy, especially within, but not limited to, low income and historically disadvantaged communities. CEEM is an industry-led, nonpartisan, nonprofit organization representing the business voice of energy efficiency and clean energy in Minnesota. CEEM's work is focused on educating Minnesotans about the economic benefits of transitioning to a clean energy economy. CEEM's business membership comprises over 70 clean energy companies ranging from start-up businesses to Fortune 100 and 500 corporations that employ tens of thousands of Minnesotans across the state. CEEM and its members are committed to delivering a reliable, affordable, and clean energy future where all Minnesota businesses and citizens will thrive.

INTRODUCTION

Every Minnesotan is entitled to the energy rights that the Minnesota Legislature provides to them. As such, every Minnesota rule adopted by every Minnesota agency must be consistent with the rights provided by the Minnesota Legislature. A rule cannot impair or be inconsistent with any right provided by statute. Minn. Stat. § 216B.164, provides Minnesotans with many energy rights, including the right to be compensated for the net energy they export to a utility's distribution system at the same rate the utility charges them for the energy it provides to them, which is called the average retail utility energy rate, as long as the "capacity" of their solar generation system, called a facility, is less than 40 kW.¹ Minn. Stat. § 216B.164, subd. 2a(c), explicitly states that capacity "means the number of megawatts alternating current (AC) at the

¹ See Minn. Stat. § 216B.164, subd. 3.

point of interconnection between a distributed generation facility and a utility's electric system.”

The current Minnesota Rule, Minn. R. 7835.0100, subp. 4, which was updated by the Minnesota Public Utilities Commission (“Commission”) in 2015 after going through the rulemaking process, similarly states that capacity “means the capability to produce, transmit, or deliver electric energy, and is measured by the number of megawatts alternating current at the point of common coupling between a qualifying facility and a utility's electric system.” Both of these definitions measure capacity based on the amount of electricity at a particular location, not based on the amount of electricity a particular facility’s equipment can or is producing. And, most importantly, that location is indisputably where the customer’s electrical system connects with the utility’s system, which is called the Point of Interconnection/Common Coupling. While the capability of the equipment, either nameplate or production if limited by a power control system or otherwise, affects the amount of electricity at the Point of Interconnection/Common Coupling, it is only the number of megawatts at the Point of Interconnection/Common Coupling that matters for the purpose of determining the capacity of a system for purposes of Minn. Stat. § 216B.164. As discussed in more detail below, the Commission, Commission Staff, and Commerce have all explicitly, clearly and repeatedly stated that the Point of Interconnection and Point of Common Coupling are the same location, which is entirely consistent with industry standards and practices.² Notably, these definitions apply to all facilities under Minn. Stat. 216B.164, whether they are 1 kW or 1 MW.³ They do not vary based on the nameplate capacity, or more accurately called the nameplate rating, of a facility.

² See Minn. Stat. § 216B.1611, subd. 2 (interconnection standards must, at a minimum, be consistent with industry, federal, and state operational standards, “provide low-cost, safe, and standardized interconnection of facilities,” and allow for reasonable terms and conditions for the “efficient operation of interconnected equipment,” among other things).

³ See Minn. Stat. 216B.164, subd. 2a(a); Minn. R. 7835.0100, subp. 1.

The Commission’s Request for Comments states that the issue to comment on is “whether to measure capacity based on a qualifying facility’s electric energy production, rather than its nameplate capacity.”⁴ This appears to be a misstatement of the issue because it appears to imply that the capacity of a facility is currently measured by its equipment, either its maximum production capability or its limited production capability, rather than the location where the customer’s electrical system interconnects with the utility’s distribution system, which is clearly inconsistent with the plain language of the statute, the current rule and its rulemaking record, the record developed in the prior dockets regarding this issue, Minnesota Distributed Energy Resource Interconnection Process (“MN DIP”), and the Minnesota Technical Interconnection and Interoperability Requirements (“TIIR”). Moreover, any implication that the definition of capacity can be different for systems under 40 kW and over 40 kW is also inconsistent with the statute. There is only one statutory definition of capacity. It does not vary based on the capacity of the facility. In addition, the stated scope of the rulemaking implies that the current rule uses the nameplate rating to determine the capacity of a system for the purpose of determining whether it is eligible for the average retail utility energy rate, which is the rate under Minn. Stat. § 216B.164, subd. 3(d), which, again, is inconsistent with the plain language of the current rule and Minn. Stat. § 216B.164.

In short, the stated issue and scope of this rulemaking appear to be misstatements of the current law. The current law entitles a facility whose capacity at the Point of Interconnection/Common Coupling is less than 40 kW to the average retail utility energy rate. Thus, a change to measuring capacity by the facility’s production, either maximum or limited,

⁴*Possible Amendment to Rules Relating to the Definition of “Capacity,” Minnesota Rules, 7835.0100, subp. 4; Dkt. 25-86, Minn. Pub. Utils. Comm., REQUEST FOR COMMENTS (July 7, 2025).*

before load, which is the Point of DER Connection,⁵ would be inconsistent with the statutory language and the prior rulemaking that adopted the current Minn. R. 7835.0100, subp. 4. Any attempt to change the law by inaccurately characterizing the current law is inconsistent with the record across the various dockets regarding this issue, Minnesota law and policy, the MN DIP, and the TIIR. Accordingly, the Minnesota Energy Rights Advocates respectfully recommend that the Commission not make any changes to Minn. R. 7835.0100, subp. 4, or any other rule that changes the location of where the capacity of a facility is measured for purposes of Minn. Stat. § 216B.164.

BACKGROUND

It is important to remember that this rulemaking started as an objection in docket 16-521⁶ to Dakota Electric's ("DE") updates to its Technical Specifications Manual ("TSM"), which misstated the law regarding how the capacity of a distributed generation system/qualifying facility was measured for the purposes of determining its eligibility to receive the average retail utility energy rate. Specifically, DE proposed to update its TSM to state:

Dakota Electric is required to net-meter PURPA qualified DER systems that haves an aggregate Nameplate Rating of less than 40kW and are interconnected with the distribution system. Net-metering allows the member's DER to generate excess energy, ~~greater than the local load requirements~~ and push that energy back into the Area EPS and then later allows the member to draw the equivalent electrical energy from the grid for their on-site use. Over the course of a billing month, the excess energy generated and sent back into the distribution system (received by the utility) is metered by the main meter. This is instantaneously metered and recorded by the main meter. The energy delivered by the utility to the service (delivered usage) is separately metered by the main meter. Those two monthly register values are used to generate the monthly bill. Energy sent back into the grid and received by the utility is used to off-set energy delivered by the utility on the monthly billing. The sum of the two metering registers will be used to identify if a credit is available or payment assessed. The energy flowing through the DER production meter is not used in the monthly-billing calculation. generated by the DER is used to offset some or all the energy used by the member from the grid.

⁵ See MN DIP, Glossary of Terms, p. 5; TIIR, § 3.2, Definitions, p. 15.

⁶ Although the objection to DE's TSM was filed in docket 16-521, the Commission moved it to docket 18-711.

~~Net metering requires the separate measurement of energy flow, both into and out of the electrical service. To support this type of interconnection, the main service meter will be replaced or reprogrammed to measure and record energy flow in both directions.~~

This update was notable for both what it said, but also what DE proposed to remove from it. First, DE stated that it is required to provide the average retail utility energy rate if the “aggregate Nameplate Rating” is less than 40 kW. As the Commission recently explained to the Minnesota Court of Appeals, nameplate capacity/rating means “the maximum rated output of electric generator equipment under specific conditions designated by the manufacturer.”⁷ So, nameplate capacity/rating is not what a facility/system actually exports to the distribution system some or even most of the time, especially with a solar generation facility/system. Nameplate capacity/rating is its maximum output under ideal conditions and is not measured at the Point of Interconnection/Common Coupling. In fact, what is called a behind the meter system will never have a capacity at the Point of Interconnection/Common Coupling equal to its nameplate capacity/rating because some portion of its generation will always be offset by some load. But, even though a system’s nameplate capacity/rating will not be what impacts a utility’s distribution system because it is not what will be exported to the utility’s distribution system, Minnesota utilities declared that “It is, and always has been, standard practice for a qualifying facility’s generation capacity to be determined by the aggregated sum of the listed nameplate capacity of the qualifying facility’s system.”⁸ They also said, “The nameplate AC ratings of the inverters establish the associated solar qualifying facility’s usable production capability – hence it’s capacity.”⁹

⁷ *In the Matter of the Formal Complaint and Request for Relief by the Minnesota Solar Advocates*, Case No. A24-0845, Minn. Pub. Util. Comm., BRIEF OF RESPONDENT MINNESOTA PUBLIC UTILITIES COMMISSION, p. 12 (Sept. 25, 2024).

⁸ *In the Matter of Impacts of the “Capacity” Definition in Minn. Stat. § 216B.164 and Associated Rules on Net-Metering Eligibility for Rate-Regulated Utilities*, Dkt. 24-200, Minn. Rural Elec. Assoc., DECLARATION 1 OF 2, p. 2 (Sept. 3, 2024).

⁹ *Id.*

Second, DE removed the language stating “greater than the local load requirements,” a clear recognition that ratepayer facilities/systems could generate more than necessary to simply offset their own load.

Because the use of “aggregate Nameplate Rating” to determine rate eligibility was not consistent with the plain language of the law or Minnesota’s Interconnection Standards (the MN DIP and TIIR), MnSEIA objected to DE’s TSM. MnSEIA argued that Minn. Stat. § 216B.164 required that capacity be measured at the Point of Interconnection between the interconnection customer’s system and the utility’s system, which ONLY occurs at the bi-directional meter.¹⁰ DE argued that “nameplate rating” is “commonly used” and established the “criteria or threshold to reasonably tied a system’s size and interconnection to the requirements for retail net metering.”¹¹

In its Initial Comments in docket 18-711, Commerce stated, “The plain language of Minn. Stat. § 216B.164 and Minnesota Rule 7835.0100, comports with MnSEIA’s assertion that a DER or DER system comprising a QF with less than 40kW alternating current at the point of interconnection or the point of common coupling is eligible for net metering.”¹² Commerce then goes on to state, “The wording of a sentence in the TSM, which is not tariffed, belies a larger problem: it is apparently the common practice of DEA to limit the capacity of small power cogeneration by aggregating the nameplate capacity of each DER system component to calculate the capacity of that system, *rather than calculating the DER capacity as the export capacity at the*

¹⁰ *In the Matter of Updating the Generic Standards for the Interconnection and Operation of Distributed Generation Facilities Established Under Minn. Stat. § 216B.1611*, Dkt. 16-521, MnSEIA, OBJECTION OF MNSEIA TO PORTION OF DAKOTA ELECTRIC ASSOCIATION’S TSM RELATED TO QUALIFIED FACILITIES WITH CAPACITY LESS THAN 40 KW, p. 2 (Oct. 2, 2023).

¹¹ *In the Matter of Dakota Electric Association’s Distribution Interconnection Process and Agreement*, Dkt. No. 18-711, Dakoka Elec. Assoc., COMMENTS, p. 3 (Jan. 12, 2024).

¹² *In the Matter of Updating the Generic Standards for the Interconnection and Operation of Distributed Generation Facilities Established Under Minn. Stat. § 216B.1611*, Dkt. 18-711, Minn. Dept. of Commerce, INITIAL COMMENTS, p. 4 (Jan. 12, 2024).

point of common coupling. Such limitation runs contrary to Minn. Stat. § 216B.164, subd. 1), Minn. Stat. § 216B.1611, subd. 1(5), and Commission Order.”¹³

In the 18-711 proceeding, the Commission required DE to delete the “aggregate Nameplate Rating” language that MnSEIA has objected to as inconsistent with the law.¹⁴ As Commissioner Ham noted at the April 11 hearing, “The definition [of capacity] is already there in the statute, and is very clear.”¹⁵ Commissioner Ham even changed the wording of the Decision Option adopted by the Commission from one that questioned the definition of capacity to one that focused on its application because the definition was so clear. The original Decision Option proposed by Commission staff stated:

Open a Commission proceeding *to interpret* the definition of “capacity” as it relates to net metering rate eligibility for Dakota Electric, Minnesota Power, Otter Tail Power, and Xcel Energy. Delegate authority to the Executive Security to modify deadlines, schedules, and procedures throughout this proceeding.¹⁶

Commissioner Ham proposed changing the word “interpret” to “enforce” because, “we cannot redefine what is defined in statute, so that definition of capacity is already defined in the statute. So it is a matter of how we are going to enforce it without jeopardizing reliability.”¹⁷ After concern was raised by other commissioners about the term “enforce,” Commissioner Ham stated, “The statute clearly defines this term in the definitions section. So, I don’t know how we can interpret

¹³ *Id.*, p. 5-6 (emphasis added) (citation omitted).

¹⁴ *In the Matter of Dakota Electric Association’s Distribution Interconnection Process and Agreement*, Dkt. No. 18-711, Minn. Pub. Util. Comm., ORDER INITIATING PROCEEDING INTO DEFINITION OF “CAPACITY,” p. 4 (May 22, 2024).

¹⁵ *In the Matter of Dakota Electric Association’s Distribution Interconnection Process and Agreement*, Dkt. No. 18-711, Minn. Pub. Util. Comm., HEARING, at 1:27:45 (April 11, 2024) (emphasis added).

¹⁶ *In the Matter of Dakota Electric Association’s Distribution Interconnection Process and Agreement*, Dkt. No. 18-711, Minn. Pub. Util. Comm., APRIL 11, 2024 AGENDA – REVISED DECISION OPTIONS (April 10, 2024) (emphasis added).

¹⁷ *In the Matter of Dakota Electric Association’s Distribution Interconnection Process and Agreement*, Dkt. No. 18-711, Minn. Pub. Util. Comm., HEARING, at 1:46:52 to 1:47:09 (April 11, 2024).

that one. It is a more practical issue about how you apply it without jeopardizing reliability.”¹⁸

Commissioner Sullivan then suggested the word apply and the Decision Option was changed to read:

The Commission hereby opens a proceeding *into application of the definition of “capacity” in Minn. Stat. § 216B.164, subd. 3(d) and associated rules* without creating reliability problems related to net-metering rate eligibility for Dakota Electric, Minnesota Power, Otter Tail Power Company, and Xcel. The docket number of the new proceeding is E-002, E-111, E-017, E-015/CI-24-200.¹⁹

The above is the Decision Option that was adopted by the Commission.

In the subsequent proceeding, docket 24-200, Commerce filed comments once again affirming its previous position on the law. In its Initial Comments in this docket it stated, “The governing statute, Minn. Stat. § 216B.164, provides a clear definition of capacity for the purposes of determining eligibility.”²⁰ It goes on to state:

The definition of capacity under Minn. Stat. § 216B.164 and the associated rules in Minn. R. Ch. 7835 *provide clear guidance that capacity is defined at the point of interconnection, also called the point of common coupling, with the utility system.* For purposes of net-metered rates, then, capacity at the point of interconnection determines eligibility rather than nameplate capacity. Unlike in the context of interconnection requirements—discussed further below, and in which capacity is, at times, explicitly defined as nameplate capacity—Minn. Stat. § 216B.164 and Minn. R. Ch. 7835 consistently utilize the point of interconnection for purposes of defining capacity in the context of net-metered rate eligibility. In this context, then, utilities should abide by the definition of capacity provided in the governing statute.²¹

Commerce then states:

The implication of applying the definition of capacity at the point of interconnection for purposes of net-metered rate eligibility allows systems with

¹⁸ *In the Matter of Dakota Electric Association’s Distribution Interconnection Process and Agreement*, Dkt. No. 18-711, Minn. Pub. Util. Comm., HEARING, at 1:49:45 to 1:49:58 (April 11, 2024).

¹⁹ *In the Matter of Dakota Electric Association’s Distribution Interconnection Process and Agreement*, Dkt. No. 18-711, Minn. Pub. Util. Comm., ORDER INITATING PROCEEDING INTO DEFINITION OF “CAPACITY”, p. 4 (May 22, 2024) (emphasis added).

²⁰ *In the Matter of Impacts of the “Capacity” Definition in Minn. Stat. § 216B.164 and Associated Rules on Net-Metering Eligibility for Rate-Regulated Utilities*, Dkt. 24-200, Minn. Dept. of Commerce, INITIAL COMMENTS, p. 4 (Sept. 3, 2024).

²¹ *Id.*, p. 5 (emphasis added).

nameplate capacity higher than the statutory capacity limits to remain eligible, provided they limit capacity at the point of interconnection below the relevant threshold. DEA and other parties raised concerns with this outcome, as it would incentivize larger DER systems to access the more lucrative average retail rate, shifting distribution costs to other ratepayers.

The Department recognizes this concern. Nonetheless, Minn. Stat. § 216B.164 sets net-metered rate eligibility and, therefore, systems with capacity at the point of interconnection below the statutory limit—namely 40 kWac for purposes of the average retail rate under Minn. Stat. § 216B.164, Subd. 3(d)—remain eligible. The statute does not exclude the outcomes contemplated by commenters during the previous proceeding, but the concerns remain hypothetical and unquantified. It is not clear to the Department the extent of the potential problem caused by such systems retaining net-metered rate eligibility.²²

In its Reply Comments Commerce reiterated its position stating:

The Department maintains its position from initial comments that the governing statute is clear that capacity is defined at the point of interconnection with the utility system with respect to net-metered rate eligibility. The Department wishes to clarify its recommendation from initial comments to read that utilities should apply the definition of capacity for purposes of net-metered rate eligibility as the maximum export capacity of the DER system at the point of interconnection, consistent with the governing statute.²³

Commerce then goes on to explain:

The location at which the definition of capacity applies is relevant to the consideration of customer load. The inherent variability of customer load impacts the amount of energy exported to the utility system at the PCC. Multiple parties raised concerns with the inclusion of customer load in determining capacity for purposes of net-metered rate eligibility due to the impractical outcome and administrative challenges of determining eligibility based on an ever-changing value. The Department agrees that a variable capacity would be impractical to determine eligibility and would be an absurd outcome. Determination of eligibility requires a fixed value for capacity.

The Department observes, however, that this concern may arise from different interpretations among parties of export capacity. Utilities appear to interpret MnSEIA's position as export capacity at the PCC on a variable basis with fluctuations in customer load. In the Department's review of MnSEIA's comments filed in this proceeding, it is not clear that fluctuations in customer load are relevant

²² *Id.* at p. 5-6 (citations omitted).

²³ *In the Matter of Impacts of the "Capacity" Definition in Minn. Stat. § 216B.164 and Associated Rules on Net-Metering Eligibility for Rate-Regulated Utilities*, Dkt. 24-200, Minn. Dept. of Commerce, REPLY COMMENTS, p. 1 (Sept. 3, 2024).

to MnSEIA’s position regarding the definition of capacity for purposes of net-metered rate eligibility. . . .

The Department offers that it is helpful to differentiate between the maximum export capacity and the amount of energy exported to the utility’s system at a moment in time. While the amount of energy exported may fluctuate, the capacity, or the maximum capability to do so remains fixed. Fluctuations in customer load should not factor into net-metering eligibility. In essence, when customer load is zero, the DER system would be at its maximum export capacity, as there is no customer load to offset the DER system production. Thus, customer load does not impact the maximum export capacity, and the maximum export capacity of the system would be the same regardless of the point of measurement, whether at the PoC or the PCC. Customer load and its fluctuations impact the amount of energy exported to the utility’s system at any moment in time. In turn, the cumulative amount of energy exported, the net input to the utility system, determines the compensation received by the system owner.²⁴

Despite the clarity of the law argued by MERA parties and recognized by Commerce, which is the agency responsible for enforcement of Chapter 216B,²⁵ the Commission completely ignored evaluating the impact of applying the “very clear” definition of capacity, and, instead, initiated this rulemaking to consider changing the rules in a way that is inconsistent with the statute, the existing rule, the rulemaking order for the existing rule, the MN DIP and the TIIR, and Minnesota energy policy. Specifically, the Commission opened this rulemaking to consider changing the definition of capacity under Minn. Stat. § 216B.164, subd. 2a(c), which measures capacity at a location after load, the Point of Interconnection/Common Coupling, to measuring it at “the qualifying facility’s inverter or a power control system or supplemental device that controls production at the qualifying facility before the net-metered customer’s load,”²⁶ which is the Point of DER Connection.

²⁴ *Id.* at 4-5 (citations omitted).

²⁵ See Minn. Stat. § 216A.07, subd. 2 (

²⁶ *In the Matter of Impacts of the “Capacity” Definition in Minn. Stat. § 216B.164 and Associated Rules on Net-Metering Eligibility for Rate-Regulated Utilities*, Dkt. 24-200, Minn. Pub. Util. Comm., ORDER INITIATING RULEMAKING PROCEEDING, p. 3 (Jan. 23, 2025).

COMMENTS

State Law Explicitly States that Capacity is Measured at the Point Where the Customer’s System connects with the Utility’s System.

Minnesota law on the issue of where the “capacity” of a facility is measured for purposes of Minn. Stat. 216B.164 is clear and unequivocal.²⁷ The definition of capacity under Minn. Stat. § 216B.164, subd. 2a(c), states that capacity “means the number of megawatts alternating current (AC) at the point of interconnection between a distributed generation facility and a utility's electric system.” (Emphasis added). Minnesota Rule 7835.0100, subp. 4, provides even more clarity to where the capacity of a system is measured by stating:

"Capacity" means the capability to produce, transmit, or deliver electric energy, and is measured by the number of megawatts alternating current at the point of common coupling between a qualifying facility and a utility's electric system.

(Emphasis added). As Commission Staff stated, the rule makes it clear that “*the point of interconnection between a distributed generation facility and a utility's electric system,*” as stated in the statute, is also called the point of common coupling, which is a more technical term that is used in the Commission’s prior and current interconnection standards, and Commission decisions.²⁸ There is only one point **between** the utility’s electric system and the customer’s facility, and it is located after the customer’s load, not before.

Rule Defining Where Capacity is Measured Relies on Commission Interconnection Standards.

²⁷ See Minn. Stat. § 645.08(1) (“[W]ords and phrases are construed according to rules of grammar and according to their common and approved usage; but technical words and phrases and such others as have acquired a special meaning, or are defined in this chapter, are construed according to such special meaning or their definition”); Minn. Stat. § 645.16 (“When the words of a law in their application to an existing situation are clear and free from all ambiguity, the letter of the law shall not be disregarded under the pretext of pursuing the spirit.”).

²⁸ *In the Matter of Possible Amendments to Rules Governing Cogeneration and Small Power Production, Minnesota Rules, Chapter 7835*, Dkt. 13-729, Minn. Pub. Util. Comm., STAFF BRIEFING PAPERS, p. 5 (Oct. 30, 2014) (emphasis added).

The Staff Briefing Papers from when Minn. R. 7835.0100, subp. 1 was amended in 2015 highlight this point. They start by noting that the draft rule language, which is the language that is ultimately adopted, “incorporates much of the statutory language while retaining existing rule language” and then provides the amendments as:

Capacity. “Capacity” means the capability to produce, transmit, or deliver energy and is measured by the number of megawatts alternating current at the point of common coupling between a qualifying facility and a utility’s electric system.²⁹

They then state that “[t]he draft uses the term ‘qualifying facility’ (instead of ‘distributed generation facility’) to make the rule applicable to all facilities. The draft also uses the term ‘point of common coupling,’ *which is used in the Commission’s interconnection standards as the point where the customer’s electric power system connects to the utility’s power system.*”³⁰ The Statement of Need and Reasonableness issued by the Commission reiterated where capacity is measured, stating:

It is also reasonable to use the term “point of common coupling,” which is used in the Commission’s interconnection standards as the point where the customer’s electric power system connects to the utility’s power system. *Although the “point of interconnection” and the “point of common coupling” are commonly used interchangeably,* the proposed rule’s use of “point of common coupling” is consistent with earlier Commission decision.³¹

The Commission again reiterated the location of where capacity is measured in its order adopting the rule changes stating:

To address the issue raised, however, the Commission will separately define “point of common coupling.” Use of this term is consistent with recent Commission decisions, including the Commission’s decision establishing interconnection standards, which define “point of common coupling” *as the point where the local*

²⁹ *In the Matter of Possible Amendments to Rules Governing Cogeneration and Small Power Production, Minnesota Rules, Chapter 7835, Dkt. 13-729, Minn. Pub. Util. Comm., STAFF BRIEFING PAPERS, p. 5 (Oct. 30, 2014).*

³⁰ *Id.* (Emphasis added).

³¹ *In the Matter of Possible Amendments to Rules Governing Cogeneration and Small Power Production, Minnesota Rules, Chapter 7835, Dkt. 13-729, Minn. Pub. Util. Comm., STATEMENT OF NEED AND REASONABLENESS, p. 4 (Dec. 29, 2014) (citations omitted) (emphasis added).*

*area electric power system (the customer's system) is connected to an area electric power system (the utility's system).*³²

In summary, it was repeated so many times that no reasonable person³³ could argue that, consistent with the Commission's interconnection standards, the capacity of a system is measured at any other point than the point where the customer's system is connected to the utility's system, which is referred to as the Point of Interconnection/Common Coupling. This point is indisputably after the customer's load, not before it.

Original Rule Language Only Relevant if Bi-Directional Meter not Installed.

With regard to retaining the existing rule language, which stated the "capability to produce, transmit, or deliver electric energy," the Staff Briefing Papers noted,

The capability to produce, transmit, or deliver electric energy is existing rule language and *is relevant if the number of megawatts (output) cannot be measured, such as in situations where the customer's metering system reads only net input.* Retaining the existing language ensures that capacity can be determined by using nameplate capacity, i.e., the system's capability.³⁴

In other words, retaining the existing rule language was only meant to allow nameplate capacity to be used in situations where a bi-directional meter was not present because it would not be possible to measure a system's capacity at the Point of Interconnection/Common Coupling between the customer's system and the utility's system. In situations where a bi-directional meter is present, the Point of Interconnection/Common Coupling between the customer's system and the utility's system is where the capacity of the customer's system is measured. Or, to put it another

³² *In the Matter of Possible Amendments to Rules Governing Cogeneration and Small Power Production, Minnesota Rules, Chapter 7835*, Dkt. 13-729, Minn. Pub. Util. Comm., ORDER ADOPTING RULES, p. 4 (July 17, 2015).

³³ See Minn. R. 7829.0250 ("A person who signs a pleading, motion, or similar filing, or enters an appearance at a commission meeting, by doing so represents that the person is authorized to do so, has a good faith belief that statements of fact made are true and correct, and that legal assertions are warranted by existing law or by a nonfrivolous argument for the extension or reversal of existing law or the modification or establishment of rules.")

³⁴ *In the Matter of Possible Amendments to Rules Governing Cogeneration and Small Power Production, Minnesota Rules, Chapter 7835*, Dkt. 13-729, Minn. Pub. Util. Comm., STAFF BRIEFING PAPERS, p. 4 (June 15, 2015) (emphasis added).

way, it is the customer's system's capability to produce, transmit and deliver electric energy to the utility's system, which, with a bi-directional meter, is measured at the Point of Interconnection/Common Coupling between the customer's system and the utility's system, that determines its capacity under Minn. Stat. § 216B.164.

The Staff Briefing Papers also noted that “[t]he statute defines capacity as the number of megawatts alternating current at the point of interconnection between a facility and a utility’s electric system. And although this requires measuring capacity (*rather than using nameplate capacity*), the statute does not prescribe whether capacity is measured over standard 15-minute intervals or in some other manner, such as using a daily or monthly average. Some committee members suggested a definition, or multiple definitions, that measure capacity based on standard 15-minute time intervals. Others suggested measuring capacity based on net input.”³⁵ Staff noted that they did not incorporate a 15-minute interval for measuring capacity, “in part because a 15-minute standard is not applicable to all rule parts where the term is used and because it raises compliance issues that are not addressed in the draft. Further, industry practice is to specify in tariffs that standard 15-minute intervals are used for measuring capacity to determine applicable billing rates.”³⁶ This discussion, of course, highlights that capacity is measured as net output, in some time interval, not as nameplate capacity or the system’s maximum capability.

Minnesota Law Promotes Installing DER and Being a Small Power Producer.

Minn. Stat. § 216B.164, subd. 1, states, “This section shall at all times be construed in accordance with its intent *to give the maximum possible encouragement to cogeneration and small power production* consistent with protection of the ratepayers and the public.” (Emphasis added).

³⁵ *In the Matter of Possible Amendments to Rules Governing Cogeneration and Small Power Production, Minnesota Rules, Chapter 7835*, Dkt. 13-729, Minn. Pub. Util. Comm., STAFF BRIEFING PAPERS, p. 3-4 (Oct. 30, 2014).

³⁶ *Id.* at p. 4.

The Staff Briefing Papers also recognized that “[t]he statute’s policy objective is to encourage customers to offset their energy use by generating their own energy, *but the statute does not require that a facility be sized to match generation to load.*”³⁷ In its comments, Commerce noted that limiting “the capacity of small power cogeneration by aggregating the nameplate capacity of each DER system component to calculate the capacity of that system, *rather than calculating the DER capacity as the export capacity at the point of common coupling . . .* runs contrary to Minn. Stat. § 216B.164, subd. 1), Minn. Stat. § 216B.1611, subd. 1 (5), and Commission Order.”³⁸

The Commission’s Interconnection Standards Provide Additional Clarity to the Point of Common Coupling.

As noted above, when the Commission updated Minn. R. 7835.0100, subp. 4, it relied on both the statutory language and its interconnection standards. The interconnection standards in effect at the time this rule was changed were adopted on September 28, 2004 in docket 01-1023.³⁹ While the prior interconnection standards do not provide the level of detail and clarity that the current standards do, they provide more than enough clarity and are consistent with the current Interconnection Standards and Minnesota Rules.

The State of Minnesota Interconnection Process for Distributed Generation Systems (“Interconnection Process”) provides a list of definitions. “Area EPS is defined “as an electric power system (EPS) that serves Local EPS’s.”⁴⁰ “Local EPS” is defined as “an electric power system (EPS) contained entirely within a single premises or group of premises.”⁴¹ And “Point of

³⁷ *Id.*

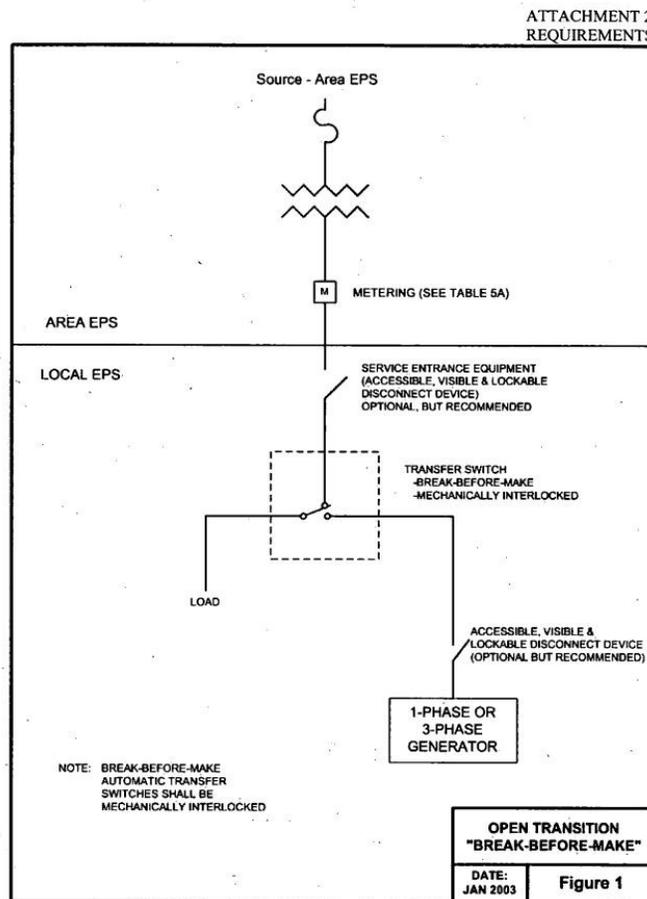
³⁸ *In the Matter of Updating the Generic Standards for the Interconnection and Operation of Distributed Generation Facilities Established Under Minn. Stat. § 216B.1611*, Dkt. 18-711, Minn. Dept. of Commerce, INITIAL COMMENTS, p. 5-6 (Jan. 12, 2024) (emphasis added) (citation omitted).

³⁹ *See In the Matter of Establishing Generic Standards for Utility Tariffs for Interconnection and Operation of Distributed Generation Facilities under Minnesota Laws 2001*, Chapter 212, Dkt. 01-1023, Minn. Pub. Util. Comm., ORDER ESTABLISHING STANDARDS (Sept. 28, 2004).

⁴⁰ *Id.*, Attachment 1, p. 2 (PDF p. 31).

⁴¹ *Id.*

Common Coupling” is defined as “the point where the Local EPS is connected to an Area EPS.”⁴² The definitions found in the State of Minnesota Distributed Generation Interconnection Requirements (“Interconnection Requirements”) mirror those found in the Interconnection Process.⁴³ The Interconnection Requirements, however, provide a useful figure,⁴⁴ provided below, that can illustrate exactly where the Point of Common Coupling is located.



This figure shows that where the Area EPS connects with the Local EPS is after Load. But, most importantly, the box with the M inside it refers to Table 5A, and Table 5A states, “Bi-

⁴² *Id.*, p. 3 (PDF p. 32).

⁴³ *Id.*, p. 4 (PDF p. 54)

⁴⁴ *Id.* p. 25 (PDF p. 75)

Directional metering at the point of common coupling.”⁴⁵ This clearly shows that the Point of Common Coupling, as the Commission understood it when they amended the rules, is at the bi-directional meter.

And if the Commission’s prior Interconnection Standards were not clear enough, the current Interconnection Standards provide additional clarity. The MN DIP has a Glossary of Terms.⁴⁶ It defines Area EPS as “the electric power distribution system connected at the Point of Common Coupling.”⁴⁷ It defines the Point of Common Coupling, or PCC, as the “The point where the Interconnection Facilities connect with the Area EPS Operator’s Distribution System. See figure 1. Equivalent, in most cases, to ‘service point’ as specified by the Area EPS Operator and described in the National Electrical Code and the National Electrical Safety Code.”⁴⁸ The service point is where the bi-directional meter would be installed. It also defines Point of DER Connection, or PoC, stating, in part, “When identified as the Reference Point of Applicability, the point where an individual DER is electrically connected in a Local EPS and meets the requirements of this standard *exclusive of any load present* in the respective part of the Local EPS (e.g. terminals of the inverter when no supplemental DER device is required).”⁴⁹ And it defines Distributed Energy Resource, or DER, as a source of electric power that is not directly connected to a bulk power system. DER includes both generators and energy storage technologies capable of exporting active power to an EPS. An interconnection system or a supplemental DER device that is necessary for compliance with this standard is part of a DER.”⁵⁰ Figure 1, below, once again, shows that the Point of Common Coupling is located after Load.

⁴⁵ *Id.*

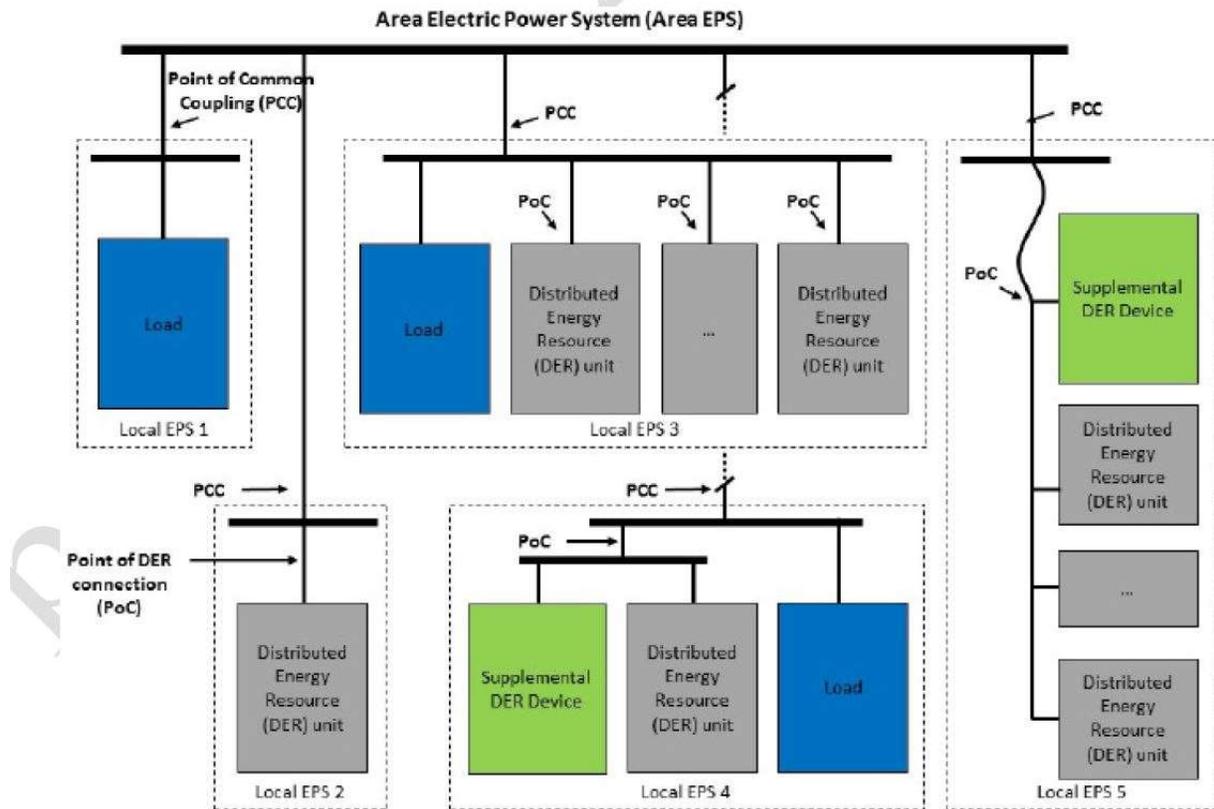
⁴⁶ MN DIP, p. 1.

⁴⁷ *Id.*

⁴⁸ *Id.*, p. 4.

⁴⁹ *Id.*, p. 5 (emphasis added).

⁵⁰ *Id.*, p. 1



Like the prior Interconnection Standards, this figure clearly demonstrates that the Point of Common Coupling is located after Load, where the customer’s system (aka, the Local EPS), connects to the utility’s system (aka, the Area EPS). It also shows that where the customer’s inverter or supplemental DER device connects to his or her electrical system is the Point of DER Connection, which is before the Load. This point does not connect to the utility’s system. It is on the customer’s private property.

The relevant definitions in the TIIR are found in Section 3.2. “Area EPS” is defined as the “electric power distribution system connected at the Point of Common Coupling.”⁵¹ “Local EPS” is defined as an “EPS contained entirely within a single premises or group of premises.”⁵² The

⁵¹ TIIR, p. 10.

⁵² *Id.*, p. 13.

“Point of Common Coupling” or PCC is defined as the “point of connection between the Area EPS and the Local EPS.”⁵³ It references the MN DIP Glossary of Terms and Figure 2, which is provided below.⁵⁴ It also states, like the MN DIP, that it is “[e]quivalent in most cases, to ‘service point’ as specified in the National Electrical Code and the National Electrical Safety Code.”⁵⁵ And it defines the “point of DER connection” or PoC as the point where a DER unit is electrically connected in a Local EPS and meets the requirements of this standard exclusive of any load present in the respective part of the Local EPS.”⁵⁶ It also references the MN DIP Glossary of Terms and Figure 2.⁵⁷ To help visualize what these words describe, the TIIR provides the most effective figure demonstrating the difference between the PCC and the PoC in relation to Load. The examples in Local EPS 3 and Local EPS 4 provide the best examples of the most relevant configurations.

⁵³ *Id.*, p. 15.

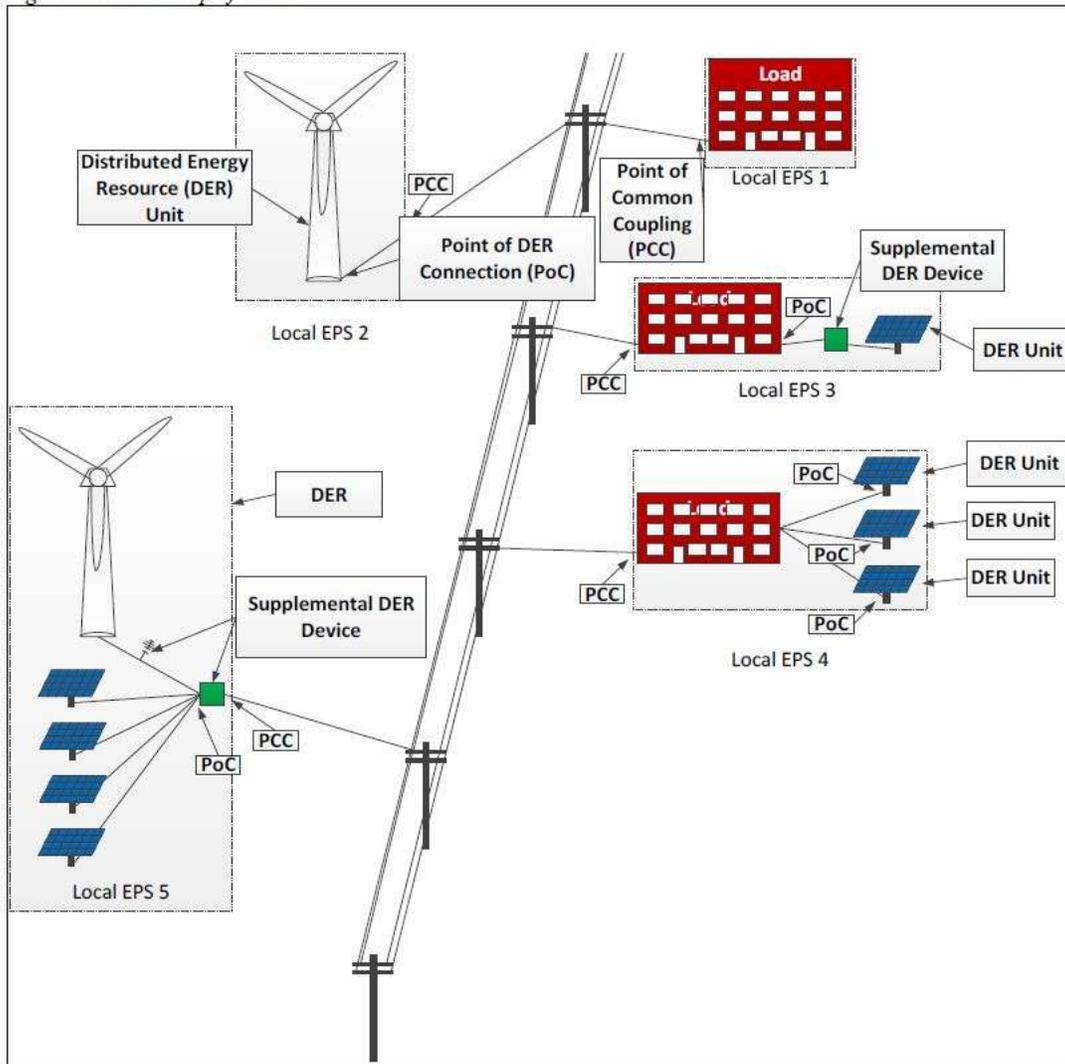
⁵⁴ *Id.*

⁵⁵ *Id.*

⁵⁶ *Id.*

⁵⁷ *Id.*

Figure 2. Relationship of Terms



What is evident from this figure is that Load, represented by the large red building in the upper right-hand side of the figure, is part of the Local EPS and that the PCC is located after it, while the PoC is before it. This means, consistent with Minnesota law and the Commission's Interconnection Standards, capacity, for the purposes of the average retail utility energy rate, is measured at the Point of Interconnection/Common Coupling between the customer's system (aka, Local EPS) and the utility's system (aka, Area EPS). It is not nameplate capacity or any other

capability or rating that is measured before Load. Commission Staff agreed with this analysis stating:

Staff believes **Figure 2** is intended to communicate that the point of common coupling and the point of DER connection are different locations in both MN DIP and in Minnesota law. That the point of common coupling (the PCC in Figure 2) is where the qualifying facility is interconnected with the utility's electric system and that the customer's load is behind the point of common coupling. Further, Staff understands that **Figure 2** is consistent with the proposed interpretation with the application of a power control system which can limit the export capacity of multiple DERS at the point of common coupling to less than 40 kW and, therefore, making the DERs eligible for net-metering compensation.⁵⁸

This is reasonable because it is the electricity that is actually exported to the utility's distribution system that has both a physical and financial impact on the utility. Which is why MnSEIA objected to DE's TSM that misstated how capacity was determined for the purpose of determining a system's eligibility for the average retail utility energy rate under Minn. Stat. § 216B.164, subd. 3(d), and why the MERA oppose any change to the Minnesota rules that alter where capacity is measured.

The Proposed Change to the Rule Would Violate Minnesota Law, and Past and Present Commission Interconnection Standards.

The proposed change to the rule would be a clear violation of both Minn. Stat. 216B.164, subd. 2a(c) and Minn. R. 7835.0100, subp. 4, which state that capacity is measured at the Point of Interconnection/Common Coupling between the customer's system (aka, Local EPS) and the utility's system (aka, Area EPS), and both the past and present Commission Interconnection Standards, which clearly demonstrate that the Point of Common Coupling is after the customer's load, not before. The proposed change moves where capacity is being measured from the Point of Interconnection/Common Coupling, to the Point of Connection. The proposed rule explicitly states

⁵⁸ *In the Matter of Impacts of the "Capacity" Definition in Minn. Stat. § 216B.164 and Associated Rules on Net-Metering Eligibility for Rate-Regulated Utilities*, Dkt. 24-200, Minn. Pub. Util. Comm., STAFF BRIEFING PAPERS, p. 19 (Oct. 30, 2024).

that capacity is measured before load and no reasonable person could argue that the Point of Common Coupling occurs before the customer's load. In fact, the proposed rule is effectively adopting the nameplate capacity/rating argument that the Commission moved away from when it updated the rules in 2015 because the capacity of the inverter, power control system, or supplemental device at the Point of DER Connection is effectively its nameplate rating. As such, the proposed change clearly conflicts with statutory definition of capacity, the Commission's Interconnection Standards and the existing language of the rule.

The Proposed Change Discourages the Development of DERs by Small Power Producers in Violation of Minnesota Law and Policy.

As noted by Commission staff in their briefing papers when Minn. R. 7835.0100 was amended, and by Commerce in its comments, Minnesota law and policy encourage small power production by distributed energy resources. Limiting qualifying facilities to producing only 40 kW before their load to receive the average retail utility energy rate will not further Minnesota's policies and goals to "encourage ... renewable energy use,"⁵⁹ "give the maximum possible encouragement to ... small power production consistent with protection of the ratepayers and the public,"⁶⁰ "provide cost savings and reliability benefits to customers,"⁶¹ "enhance both the reliability of electric service and economic efficiency in the production and consumption of electricity,"⁶² and "promote the use of distributed resources in order to provide electric system benefits during periods of capacity constraints."⁶³ Any ratepayer who needs a system larger than 40 kW to offset their own load would no longer be able to do so and receive the average retail utility energy rate. Instead,

⁵⁹ Minn. Stat. § 216B.03

⁶⁰ Minn. Stat. § 216B.164, subd. 1.

⁶¹ Minn. Stat. § 216B.1611, subd. 1.

⁶² *Id.*

⁶³ *Id.*

they would receive the avoided cost rate, which is significantly lower and would make it considerably more financially difficult to install a DER. This is surely not encouraging renewable energy use. Accordingly, it would also violate Minn. Stat. § 216B.03, which requires that the Commission set rates that, to “the maximum reasonable extent . . . encourage energy conservation and renewable energy use and to further the goals of sections 216B.164.”⁶⁴

Minnesota wants and needs all of its citizens to produce as much renewable energy as possible. A DER owner who is only allowed to offset their own load, or maybe not even their own load, is not providing excess generation that can be used by their neighbors, which eliminates or reduces the need for their utility to generate electricity at a distant location and transport it through its transmission and distribution system. Generating electricity locally minimizes the need for new capital-intensive transmission lines and reduces the wear and tear on the utility’s electric system, which should reduce the cost to maintain the electric system. It can also reduce congestion and the need to purchase expensive energy during peak times because the electricity is being generated and used locally. In this way, distributed generation is very similar to energy conservation or demand response, which the United States Supreme Court noted reduces the need to buy expensive electricity during peak periods while simultaneously easing pressure on the grid and, “thus protecting against system failures.”⁶⁵ Whether a customer is turning up their thermostat themselves during summer months or down during winter months, letting someone else do it, or generating the extra electricity necessary to serve their load, the result for the utility is the same – less demand for additional electricity from that customer, and maybe their neighbors.

⁶⁴ A rate is broadly defined by Minn. Stat. § 216B.02, subd. 5, to be, among other things, any rules or practices affecting a utility’s compensation, charges, fares, tolls, rentals, tariffs, or classifications.

⁶⁵ See *FERC v. Elec. Pwr. Supp. Assoc.*, 577 U.S. 260, 270 (2016).

The Minnesota Legislature has determined that allowing small amounts of generation by utility customers is in the public interest. Resources, both financial and spatial, will usually limit most DER owners' ability to install a system that can export anywhere near 40 kW, but that doesn't mean the legal rights that the Minnesota Legislature provided to DER owners should be limited by the Commission because utilities want them limited.

The TIIR Explicitly Recognizes that Small Power Producers Can Limit Power Export to Maintain Eligibility for Certain Rates or Minimize Upgrade Costs.

In addition to defining where the Point of Common Coupling is located, as noted by Commerce,⁶⁶ the Commission's Interconnection Standards provide additional guidance regarding why a customer may want to limit their export of electricity to the utility's system, the Area EPS. If capacity was measured before load, this language would be unnecessary.

The TIIR explicitly recognizes that a customer who owns a DER may limit the export of the DER system to be eligible for certain rates, stating,

The DER Operator may choose to limit the AC capacity of a DER system using Power Controls. Power Controls may also be used to limit DER system export levels to the Local EPS and/or the Area EPS. *There are many possible reasons for implementing Power Controls, including meeting specific tariff terms or to mitigate the maximum level of power which can flow on the Local or Area EPS.*⁶⁷

The TIIR then goes on to state:

Using Area EPS Operator's approved Power Control methods, the DER Operator may limit the DER AC capacity. *The limited DER AC capacity value may be used by the Area EPS Operator when performing impact studies if the means of limiting capacity is determined to be adequate by mutual agreement. Some of the reasons the DER Operator may choose to limit DER AC capacity include, to avoid system upgrades or to size the DER to be compatible with programs or tariffs.*⁶⁸

⁶⁶ Commerce, Reply Comments, p. 6.

⁶⁷ TIIR 11.1 (emphasis added).

⁶⁸ TIIR 11.2 (emphasis added).

Additionally, the footnote to this paragraph states, “The applicable programs or tariffs eligibility may be based on a nameplate capacity rather than a configured value. Consult the tariff or program rules of interest to determine if the nameplate capacity governs any aspects of the interconnection.”⁶⁹ Thus, the TIIR explicitly recognizes that while the nameplate capacity of a DER may be relevant, one must consult the actual language of the relevant provisions to determine what should be used for impact studies and tariff eligibility. And, as discussed above, the plain language of the law uses the capacity of the system measured at the Point of Interconnection/Common Coupling between the DER and the Area EPS, not the nameplate rating of the DER.⁷⁰ And while limiting the export of a system is reasonable to either maintain eligibility for a particular tariff rate or minimize utility upgrade costs, it would be unreasonable to limit the production capacity of a facility before a customer’s load because that would limit the customer’s ability to offset its load.

The Proposed Rule Violates Minn. Stat. § 216B.164 Because There is only One Definition of Capacity, not Two.

While the proposed change states it is limited “for purposes of eligibility for net-metering in Minn. Stat. § 216B.164, subd. 3(d),” the definition of capacity under Minn. Stat. § 216B.164, subd. 2a(c), is a definition of general applicability, which applies equally to all subdivisions of Minn. Stat. § 216B.164. Subdivision 2a explicitly states, “For the purposes of this section, the following terms have the meanings given them.” Thus, creating a different definition of capacity in the rules just for facilities under Minn. Stat. § 216B.164, subd. 3(d), would be inconsistent with the explicit language of Minn. Stat. § 216B.164. The Minnesota Legislature has already determined

⁶⁹ *Id.*

⁷⁰ *See* Minn. Stat. § 216B.164, subs. 2a(c) & 3(d); Minn. R. 7835.0100, subp. 4; Minn. R. 7835.3300, subp. 1; Minn. R. 7835.4013, subp. 1.

that the definition of capacity applies to all facilities, both over and under 40 kW, and that decision cannot be overridden by the Commission.

Moreover, it would seem to be inconsistent with Minn. Stat. § 216B.03 and the public interest to change how capacity is measured for certain facilities, but not others. If there is a difference between classes of ratepayers based on their type of project, some would presumably be treated less favorably than others. And that treatment would be less favorable for customers who wanted to receive the average retail utility energy rate, which would discourage the adoption of renewable energy, rather than encouraging it.

Finally, it should be noted that Minn. Stat. § 216B.164, subd. 3(d), applies to all qualifying facilities, not just ones that generate electricity through inverters. Many other types of qualifying facilities generate electricity without inverters. This inconsistency with Minnesota laws and interconnection standards further demonstrates how unreasonable the proposed change is.

CONCLUSION

Minnesota's clean energy future depends on everyone, at every scale, participating in it. The Minnesota Legislature recognized this and provided every Minnesotan with the right to be part of Minnesota's clean energy economy. The proposed change eliminates the ability of every school, church, farmer, small business, or other small power producer who needs a system over 40 kW to offset their own load and receive the average retail utility energy rate, which is financially necessary for many, if not most, small power producers to install a small system. It also limits the right of every Minnesotan to be a small power producer, which is what Minnesota needs to meet the extraordinary energy demands that the future is bringing. Small systems can be installed significantly faster than larger systems at no cost to the utility. Most importantly, the proposed change is inconsistent with existing Minnesota law, policy and Interconnection Standards. As such, it is both unlawful, unreasonable and not in the public interest. Accordingly, the Commission

should not initiate a rulemaking to make any changes to Minn. R. 7835.0100, subp. 4, or any other rule that changes where the capacity of a facility is measured. Thank you for your time and consideration of this important issue.

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