

**STATE OF MINNESOTA
BEFORE THE
MINNESOTA PUBLIC UTILITIES COMMISSION**

Katie Sieben	Chair
Joseph Sullivan	Vice-Chair
Valerie Means	Commissioner
Hwikwon Ham	Commissioner
John Tuma	Commissioner

In the Matter of Impacts of the “Capacity”
Definition in Minn. Statutes, Section
216B.164 and Associated Rules on Net
Metering Eligibility for Rate-Regulated
Utilities.

DOCKET NO. E-111/M-18-7711,
E-999/CI-16-521,
CI-24-200

Kristi Robinson:

STATE OF MINNESOTA)
) SS
COUNTY OF OTTERTAIL)

[¶1] I, Kristi Robinson, declare under penalty of perjury as follows:

1. I am a Professional Engineer, licensed in multiple states including Minnesota, and the Director of Operations at STAR Energy Services LLC. I have worked in the electric cooperative domain for over twenty-two (22) years. I have assisted with creating DER interconnection processes for rural electric cooperatives in Iowa, Minnesota, North Dakota, South Dakota and Wisconsin.

2. I have been an active participant in the Minnesota Public Utilities Commission’s (MPUC’s) Distributed Generation Work Group (DGWG) since its formation. I am commonly the

chair of the DGWG's technical subgroup, addressing issues brought up by stakeholders to improve the interconnection of distributed energy resources (DERs) in Minnesota.

3. I have reviewed and am familiar with Minnesota's Cogeneration and Small Power Production statute, the pertinent distributed generation interconnection process, Cogeneration and Small Power Uniform Contract agreements, net metering, including average retail utility energy rate guidelines, and the proceedings and issues in the above-entitled matter.

4. 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. That has always been true in all contexts, including interconnection and net metered retail rate eligibility. Electric utilities in other state jurisdictions also recognize a qualifying facility's capacity as the aggregate nameplate capacity for determinations related to interconnection, rate tariffs and incentive programs.

5. Specifically for solar qualifying facilities, it is the industry standard for their capacity to be determined by the aggregated nameplate ratings of the inverters associated with those facilities. A solar qualifying facility's inverters convert the Direct Current (DC) capacity of the solar panels to Alternating Current (AC) capacity for use by consumers. The nameplate AC ratings of the inverters establish the associated solar qualifying facility's usable production capability – hence it's capacity.

6. The interconnection process adopted in Minnesota allows qualifying facilities, with permission from the electric utility, to use fixed inverter settings to de-rate a qualifying facility's generation capacity – i.e., set the inverter to operate at a lower production capacity than its nameplate rating. In my experience, the use of inverter settings to de-rate a qualifying facility

Exhibit A to MREA Initial Comments – Declaration of Kristi Robinson, P.E.
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has been within 5% of the inverter's nameplate. In lieu of further de-rating of inverter capacity, a different inverter size is utilized to save on costs.

7. Using the amount of energy exported to the grid to determine a qualifying facility's capacity conflicts with prevailing industry practice or engineering standards.

8. Nameplate rating provides a fixed and verifiable measure of a qualifying facility's capacity. A facility's capacity defined as grid exports would vary with the net-metered member's usage, which is not a fixed quantity. This would jeopardize the certainty associated with using a facility's nameplate rating, which does not vary with a member's usage.

9. Using a qualifying facility's nameplate rating for both interconnection and net metered rate eligibility provides essential consistency and certainty to ensure a cost-effective, safe and reliable grid.

10. Minnesota's adopted interconnection process appropriately uses nameplate rating as the measure of a DER facility's capacity for interconnection. When a DER facility is proposed to be interconnected to the system, the nameplate rating and other grid parameters drives engineering decisions regarding infrastructure build-out and system design to protect the reliability and safety of the grid. Using a different measure of capacity for net metering rate eligibility than the one used for interconnection purposes would cause confusion and uncertainty in relation to those critical utility engineering decisions.

11. With two different definitions of capacity, utilities engineers will have to make assumptions as to exactly what the facility's capacity actually is. Utility engineers may take a conservative approach, designing and sizing the system to a higher threshold to ensure, safety and reliability. This approach could result with additional electrical infrastructure, causing costs

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that would be paid by the interconnection customer or by the cooperative utility's members. The end result would be a more costly, less efficient electrical grid. Alternatively, utility engineers could rely on a lower capacity measure used for net metering purposes. This approach could potentially result in under-sizing the electrical infrastructure or missing changes to electrical protection devices. This approach would increase the probability of the electric grid not operating in a safe and reliable manner.

12. Having multiple definitions of capacity, (one for interconnection, another for net metering), could lead to the miscoordination of grid sectionalizing devices, which are used to minimize the number of electric services affected by an outage (reliability) and are used to quickly de-energize a power line when an accidental contact occurs (safety). Clearly understood and consistent application of industry standards and terms such as capacity is essential amongst electric utility workers to maintain safety for themselves and the public.

FURTHER YOUR DECLARANT SAYETH NOT.

I declare under penalty of perjury that the foregoing is true and correct.

Dated this 3rd day of September, 2024.

Kristi Robinson
Kristi Robinson (Sep 3, 2024 12:49 CDT)

Kristi Robinson

I DECLARE UNDER PENALTY OF PERJURY THAT EVERYTHING I HAVE STATED IN THIS DOCUMENT IS TRUE AND CORRECT.

Dated: September 3, 2024

/s/
Kristi Robinson