

# PSC 119 Update – May 1, 2024

## Overview

This document is a guide for how We Energies and Wisconsin Public Service (WPS) are interpreting the updated PSC 119 to provide clarity to our customers and installers. Please understand that our interpretation of the new PSC 119 rules may change as we receive more information and formal interpretation of the intent of the rules.

Please keep in mind that only PSC 119 has been updated, the tariffs for each company have not been affected by this update. The system size according to PSC 119 will be calculated differently than the system size according to the customer owned generation tariffs. All new applications received on or after May 1, 2024 will be required to follow the updated PSC 119 rules, including using the Form 6031. All applications received on or after May 1, 2024 not using Form 6031 will not be accepted. All in process applications that have commissioning scheduled before May 1, 2024 will be grandfathered into the old process. All others may be subject to the new rules for the remaining steps including commissioning fees which will be based on the previously established category size. The applicant does have the option to withdraw their old application and resubmit under the new rules if they wish to have the system category sized under the new rules.

## System Sizing

System size calculations for PSC 119 are changing from generator capacity to generator export capacity. The export capacity definition is listed below. The generator export capacity is either the nameplate rating (see definition below) or a limited amount if using an approved means. Currently We Energies and WPS do not have any approved means to limit the generator capacity, so the nameplate rating will be used for sizing. Please submit documentation for any system that is designed to limit the export capacity for review and approval. Documentation must have sufficient detail to show how the system limits the export capacity and must also provide testing data showing the system is able to limit the export capacity of the system. Upon review of the provided documentation We Energies or WPS will make the determination if the means of export capacity limitation is an approved means. Below are examples of NOT approved means of limitation:

1. Load subtraction – using customer load as a means to limit the export capacity to the utility system.
2. DC system limitations – limiting the inverter by having less than the nameplate capacity of DC energy sources connected.
3. Electronic limiting – software change that will reduce the output rating of the inverter. The current version of SPS 316 requires the conductors to be sized for the maximum continuous output current of the inverter with no exceptions for electronic limiting of the inverter. If the inverter has a maximum continuous apparent power (kVA) rating the system size will be calculated assuming unity power factor.

*PSC 119.02 (17m) "Export capacity kW in alternating current" means the amount of power that can be transferred from the DG facility to the distribution system. Export capacity is the lesser of the following: (1) the nameplate rating. (2) if limited using any approved means, that limited amount.*

*PSC 119.02 (27m) "Nameplate rating alternating current" means the sum total of maximum continuous rated power (kW) output while grid connected of all of a DG facility's constituent*

# PSC 119 Update – May 1, 2024

*generating units or energy storage systems, or both, as identified on the manufacturer nameplate, regardless of whether it is limited by any approved means.*

We Energies and WPS definition of a non-exporting energy storage system is an energy storage system that is limited by approved means from exporting power to the utility system. We Energies and WPS do not currently have any approved means to limit the energy storage system from exporting power to the utility system. Please submit documentation for any energy storage system that is designed to prevent export for review and approval. Documentation must have sufficient detail to show how the system limits the export capacity and must also provide testing data showing the system is able to prevent export to the system. Upon review of the provided documentation We Energies or WPS will make the determination if the means of export limitation is an approved means.

*PSC 119.02 (4) “Category 1” means a DG facility with an export capacity of 20 kW or less. A DG facility comprised of a resource no larger than 20 kW with a non-exporting energy storage system no larger than 20 kW shall be considered a Category 1 system.*

*PSC 119.02 (5) “Category 2” means a DG facility with an export capacity of greater than 20 kW and not more than 200 kW. The nameplate rating shall be used instead of the export capacity for this definition if the non-exporting energy storage system is larger than 20 kW.*

*PSC 119.02 (6) “Category 3” means a DG facility with an export capacity of greater than 200 kW and not more than 1 MW. The nameplate rating shall be used instead of the export capacity for this definition if the non-exporting energy storage system is larger than 200 kW.*

*PSC 119.02 (7) “Category 4” means a DG facility with an export capacity of greater than 1 MW and not more than 15 MW.*

## **Tariff Sizing**

The systems will continue to be sized based on the tariffs for each company. Generally they will be sized as follows:

Total system size = (DC system size)\*0.77 + AC battery size (max continuous output power)

DC system size = (number of panels)\*(panel wattage) + (DC battery max continuous output power)

## **System Size – Insurance**

The table for insurance requirements (PSC 119.05-1) has not been updated to reflect the generator export capacity. The generator capacity will be determined using the nameplate capacity definition.

## **Energy Storage System Requirements**

New requirement that all energy storage systems to be UL 9540 listed. We Energies and WPS will require documentation showing that an energy storage system is UL 9540 listed and it should also be noted on the one-line diagram.

## **Examples**

Below are examples of different situations to give the applicant an idea of how the tariff size may differ from the PSC 119 Category. We are assuming that there could be some installations that would meet

# PSC 119 Update – May 1, 2024

the requirements of an approved limiting means which is why there is an example with non-exporting inverters. We Energies and WPS have not reviewed any installations with approved limiting/non-exporting means.

<b>Example 1</b>		<b>qty</b>	<b>watts/unit</b>	<b>kW-dc</b>	<b>kW-ac</b>
	Panel	50	450	22.5	17.3
	Inverter	50	350		17.5
	<i>We Energies &amp; WPS Tariff Eligibility</i>			17.3	
	<i>PSC 119 Category Eligibility</i>			17.5; Cat 1	

<b>Example 2</b>		<b>qty</b>	<b>watts/unit</b>	<b>kW-dc</b>	<b>kW-ac</b>
	Panel	50	450	22.5	17.325
	Inverter	50	390		19.5
	Battery (non-exporting)	1	4000		4
	<i>We Energies &amp; WPS Tariff Eligibility</i>			21.3	
	<i>PSC 119 Category Eligibility</i>			19.5; Cat 1	

<b>Example 3</b>		<b>qty</b>	<b>watts/unit</b>	<b>kW-dc</b>	<b>kW-ac</b>
	Panel	50	450	22.5	17.325
	Inverter (exporting)	3	5000		15
	Inverter (non-exporting)	2	5000		10
	Battery (non-exporting)	1	5000		5
	<i>We Energies &amp; WPS Tariff Eligibility</i>			22.3	
	<i>PSC 119 Category Eligibility</i>			15; Cat 1	

In this example, only the Exporting Inverter is included in the PSC eligibility sizing.

<b>Example 4</b>		<b>qty</b>	<b>watts/unit</b>	<b>kW-dc</b>	<b>kW-ac</b>
	Panel	50	450	22.5	17.325
	Inverter	3	5000		15
	Battery (exporting)	5	5000		25
	<i>We Energies &amp; WPS Tariff Eligibility</i>			42.3	
	<i>PSC 119 Category Eligibility</i>			40; Cat 2	

In this example, the inverter size is less than 20 kW, however the energy storage system is exporting and greater than 20 kW. PSC sizing defaults to nameplate; this pushes the system into Category 2.

<b>Example 5</b>		<b>qty</b>	<b>watts/unit</b>	<b>kW-dc</b>	<b>kW-ac</b>
	Panel	50	450	22.5	17.325
	Shared Inverter (Battery and Solar)	1	11,500	11.5	11.5
	Inverter (Solar)	1	5000		5
	<i>We Energies &amp; WPS Tariff Eligibility</i>			28.8	
	<i>PSC 119 Category Eligibility</i>			17.5; Cat 1	

In this example, the battery and solar have a shared inverter that exports to the grid. The battery can supply the full nameplate without the solar so the battery size for the Tariff calculation is 11.5kW. The PSC 119 sizing is less than 20kW so it is considered a Category 1, however the Tariff calculation is over 20kW due to the solar and battery.