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August 14, 2026

Hon. Edison Avilés Deliz
President
Puerto Rico Energy Bureau
Puerto Rico Public Service Regulatory Board
World Plaza Building
268 Muñoz Rivera Avenue
Plaza Level, Suite 202
San Juan, Puerto Rico 00918-1925

RE: COMMENTS ON DISTRIBUTED GENERATION AND MICROGRID INTERCONNECTION REGULATION - CASE NO. NEPR-MI-2019-0009

Dear Present Avilés:

The undersigned respectfully submits the following comments and recommendations regarding the Revised Preliminary Draft of the Distributed Generation and Microgrid Interconnection Regulation issued by the Puerto Rico Energy Bureau.

These recommendations are intended to promote the safe and reliable integration of distributed generation, energy storage, community solar, and microgrids while eliminating unnecessary restrictions that could prevent customers from maximizing renewable energy installations behind the meter. In particular, the recommendations seek to establish a clear distinction between a facility's total installed generating capability and the amount of power that the facility is technically capable of exporting to the Electric Power System (EPS).

The Revised Preliminary Draft already recognizes this distinction through its definitions of "Nameplate Rating," "Export Capacity," "Limited Export," and "Non-Export," as well as through the export control provisions in Section 7.09. The following amendments would apply that distinction consistently throughout the Regulation.

COMMENTS AND RECOMMENDATIONS

I. ARTICLE 1, SECTION 1.11, B - ITEM (27) - TECHNICAL INTERCONNECTION REQUIREMENTS

REGULATORY REFERENCE

Item (27), defining "Interconnection Agreement," states in pertinent part:

"For the Simplified Process, the Interconnection Agreement is incorporated into Simplified Process Notification form, provided as Attachment X to the Technical Information Requirementsis Regulation."

TECHNICAL AND REGULATORY BASIS

The Resolution and Order and other provisions of the Revised Preliminary Draft identify the separate technical document as the "Technical Interconnection Requirements," commonly abbreviated as "TIR." The phrase "Technical Information Requirements" in Item (27) is therefore inconsistent with the defined terminology used throughout the proceeding.

RECOMMENDATION

Item (27) should be amended by replacing "Technical Information Requirements" with "Technical Interconnection Requirements." The final sentence should be revised.

II. ARTICLE 1, SECTION 1.11, B - ITEM (40) - DEFINITION OF "NAMEPLATE RATING"

REGULATORY REFERENCE

The Revised Preliminary Draft defines "Nameplate Rating" as follows:

"(40) 'Nameplate Rating' - means the sum total of maximum rated power output of a Distributed Generation System, Community Solar, or Microgrid's constituent generating units or Energy Storage system, as identified on the manufacturer's nameplate, regardless of whether it is limited by export controls pursuant to Section 7.09 and Section 7.09.A."

TECHNICAL AND REGULATORY BASIS

For inverter based generating facilities, the definition should be aligned with the National Electrical Code. For solar inverter based facilities, Article 691.2 of the 2017 edition of NFPA 70 (current edition for Puerto Rico) defines "Generating Capacity," as the sum of the parallel-connected inverter rated maximum continuous output power at 40°C in kilowatts (kW).

The 2026 edition of NFPA 70 expands this approach by defining "Inverter Generating Capacity" in Article 100 as the sum of the parallel-connected inverter maximum continuous output power at 40°C, expressed in watts, kilowatts, volt-amperes, or kilovolt-amperes.

Read together, the 2017 and 2026 NEC provisions support determining the generating capacity of an inverter-based facility from the aggregate maximum continuous AC output of all parallel-connected inverters at 40°C, rather than the nameplate continuous AC output. The revised definition should preserve this calculation methodology while recognizing the expanded units and broader application established in the 2026 NEC.

The definition should continue to distinguish Nameplate Rating from Export Capacity. Nameplate Rating identifies the generating equipment's total capability, while Export Capacity identifies the maximum power that can be delivered across the Point of Common Coupling after applying an approved export control scheme.

RECOMMENDATION

Item (40) should expand the definition:

(40) "Nameplate Rating" – means the sum total of maximum rated power output of a Distributed Generation System, Community Solar, or Microgrid's constituent generating units or Energy Storage system, as identified on the manufacturer's nameplate, regardless of whether it is limited by export controls pursuant to Section 7.09 and Section 7.09.A.

For an inverter-based system, the Nameplate Rating shall be based on the Inverter Generating Capacity, determined as the sum of the maximum continuous output power at 40°C of all parallel-connected inverters. The rating may be expressed in watts, kilowatts, volt-amperes, or kilovolt-amperes, as applicable, and shall be determined in accordance with the edition of the National Electrical Code adopted in Puerto Rico, as subsequently amended or superseded. For a regulatory threshold expressed in kW or MW, the maximum continuous active power output at 40°C shall be used.

III. SECTION 2.01 – PROCESS OVERVIEW

REGULATORY REFERENCE

Section 2.01(C) provides:

"Study Process: This is for all applications to interconnect that do not meet the eligibility requirements for either the Simplified or Fast Track Process. Such applications shall be evaluated under the Study Process in Article 5. The Study Process may include a feasibility study, a system impact study, a Transmission System impact study, and a facilities study."

The following paragraph further provides:

"For Microgrids with a Nameplate Capacity above five (5) MW, Interconnection Customers must apply to interconnect to the Transmission System and must be approved by the Energy Bureau in a process that includes citizen participation in Section 6.03."

TECHNICAL AND REGULATORY BASIS

Requiring every microgrid with a Nameplate Rating above 5 MW to interconnect to the Transmission System does not account for a microgrid that consumes most of its generation internally and uses certified export controls to limit the power delivered to the EPS.

Section 7.09(A) expressly recognizes Limited-Export and Non-Export systems. Section 7.09(E) also requires interconnection studies to evaluate a project according to its proposed operation and instructs the EPS Operator to use Export Capacity except when Nameplate Rating is technically appropriate, such as when evaluating fault-current contribution.

A study-based determination would allow the EPS Operator to evaluate the factors that actually affect the Distribution System, including maximum export, reverse power flow, voltage regulation, thermal loading, protection coordination, fault current, stability, equipment duty ratings, and failure of the export-control system.

The use of Export Capacity does not mean that Nameplate Rating should be disregarded. Nameplate Rating remains relevant for fault-current, protection, stability, and equipment-duty evaluations. The appropriate approach is to consider each value for the particular technical issue it represents.

RECOMMENDATION

The paragraph immediately following Section 2.01(C) should be deleted and replaced with the following:

"A Microgrid proposing to interconnect at a distribution voltage up to and including 13.2 kV shall not be required to interconnect to the Transmission System solely because its Nameplate Rating exceeds five (5) MW. A Microgrid with a Nameplate Rating above five (5) MW and an Export Capacity not exceeding five (5) MW may request interconnection to the Distribution System through the Study Process, provided that it uses an acceptable export-control method pursuant to Section 7.09.

The Interconnection Customer shall submit sufficient technical information to demonstrate the proposed export limitation, including the Microgrid's single-line diagram, equipment ratings, Host Load information, Operating Profile, export-control and protection settings, control-system response upon equipment or communications failure, and a verification and commissioning plan.

The EPS Operator shall study the Microgrid according to its proposed design and Operating Profile. Export Capacity shall be used when evaluating steady-state power flow, reverse power flow, voltage, and thermal impacts. Nameplate Rating may be used when evaluating fault-current contribution, protection coordination, system stability, equipment-duty ratings, and other conditions for which the total generating capability is technically relevant.

Interconnection at distribution voltage may be approved when the applicable studies demonstrate that the proposed interconnection will not cause adverse impacts to the Electric Power System, or when any identified impacts can be mitigated through reasonable Interconnection Facilities, operating requirements, or upgrades. This provision does not eliminate any Energy Bureau review or public participation requirement otherwise applicable under Section 6.03; it eliminates only the automatic requirement to interconnect to the Transmission System based exclusively on Nameplate Rating."

IV. SECTION 9.01 - NET METERING ELIGIBILITY BASED ON EXPORT CAPACITY

REGULATORY REFERENCE

Section 9.01(A) provides:

"A Distributed Generation System fueled by Renewable Energy Sources may participate in net metering if it is:

(1) Not more one (1) MW for commercial, governmental, industrial or agricultural customers, or educational institutions or medical-hospital facilities connected to distribution voltages (up to 13.2kW); and

(2) Not more than five (5) MW for commercial, governmental, industrial, or agricultural customers, or educational institutions or medical-hospital facilities connected to subtransmission or transmission voltages (38kW or 115kW)."

TECHNICAL AND REGULATORY BASIS

The voltage units in this provision are incorrect. Distribution, subtransmission, and transmission voltage levels must be expressed in kilovolts (kV), not kilowatts (kW). The correct values are 13.2 kV, 38 kV, and 115 kV.

Sections 1.11 and 7.09 distinguish between Nameplate Rating and Export Capacity. Section 7.09 provides technical mechanisms through which a facility may reliably limit exports across the Point of Common Coupling. Consequently, the amount of generation installed behind the meter does not necessarily equal the maximum power imposed on the EPS.

Allowing a customer to install generation sized to its internal Host Load, while limiting exports to the applicable net metering threshold, would promote greater renewable energy deployment without automatically increasing the maximum power delivered to the grid.

RECOMMENDATION

Section 9.01(A) should be amended to read as follows:

"A. A Distributed Generation System fueled by Renewable Energy Sources may participate in a Net Metering Program if its Export Capacity is:

(1) Not more than one (1) MW for commercial, governmental, industrial, or agricultural customers, educational institutions, or medical-hospital facilities connected at distribution voltages up to and including 13.2 kV; and

(2) Not more than five (5) MW for commercial, governmental, industrial, or agricultural customers, educational institutions, or medical-hospital facilities connected at subtransmission or transmission voltages of 38 kV or 115 kV."

A Distributed Generation System may have a Nameplate Rating greater than the applicable Export Capacity limit when an acceptable export-control method under Section 7.09 limits the maximum export across the Point of Common Coupling. Such a facility shall remain subject to all applicable interconnection studies, protection requirements, equipment ratings, commissioning tests, and operating restrictions.

V. SECTION 9.02 - BASIC NET METERING PROGRAM

REGULATORY REFERENCE

Section 9.02(A) provides:

"In the Basic Net Metering Program, a Distributed Generation System connected to the Distribution System shall have a maximum installed AC capacity of twenty-five (25) kW for residential customers and one (1) MW for commercial, governmental, industrial, agricultural, educational institutions and hospital medical facilities. Generating Facilities connected to the subtransmission or transmission systems shall have a maximum installed AC capacity of 5 MW for commercial customers, governmental, industrial, agricultural, educational institutions and hospital medical facilities."

Section 9.02(B) provides:

"Net metering for a Distributed Generation System whose maximum installed AC power capacity does not exceed twenty-five (25) kW shall be reflected in the customer's monthly bill not later than thirty (30) days after the receipt of notice of their certification of the distributed generator installed by a professional engineer or expert electrician."

TECHNICAL AND REGULATORY BASIS

If Section 9.01 is amended to use Export Capacity, Section 9.02(A) should use the same standard. Otherwise, one section would determine eligibility based on Export Capacity while another would continue to impose the same limits based on installed AC capacity.

RECOMMENDATION

Section 9.02(A) should be amended to read as follows:

"A. In the Basic Net Metering Program, a Distributed Generation System or Microgrid connected to the Distribution System shall have a maximum Export Capacity of twenty-five (25) kW for residential customers and one (1) MW for commercial, governmental, industrial, or agricultural customers, educational institutions, and medical-hospital facilities. A Distributed Generation System or Microgrid connected to the Subtransmission or Transmission System shall have a maximum Export Capacity of five (5) MW for commercial, governmental, industrial, or agricultural customers, educational institutions, and medical hospital facilities."

Section 9.02(B) should be deleted and replaced with the following:

"B. The EPS Operator shall credit every participant in the Basic Net Metering Program promptly and expeditiously. The applicable credit shall be clearly reflected in the customer's monthly bill beginning with the next billing cycle following installation of the Meter and no later than thirty (30) days after receipt of notice of the certification of the Distributed Generation System or Microgrid by a licensed and duly registered professional electrical engineer or licensed and duly registered expert electrician."

In the alternative, if the Energy Bureau elects to retain the 25 kW condition in Section 9.02(B), the phrase "maximum installed AC power capacity" should be replaced with "Export Capacity."

VI. SECTION 9.03 - EXPANSION OF THE AGGREGATE NET METERING PROGRAM

REGULATORY REFERENCE

Section 9.03(A) provides:

"The Aggregate Net Metering Program applies only to governmental Entities and non-profit academic institutions."

The related provisions state:

"C. All locations with service agreements that take advantage of this program must be included in the same account."

“D. The locations may be interconnected to primary distribution, secondary distribution, subtransmission, or transmission systems. However, all participating locations must receive service at the same voltage level.”

“E. The service agreements to which the energy is to be accredited must be (1) within the same location where the Distributed Generation System is installed or (2) in other locations interconnected to the same power line at a distance not greater than two miles from the Distributed Generation System.”

TECHNICAL AND REGULATORY BASIS

Limiting Aggregate Net Metering to governmental entities and nonprofit academic institutions prevents private entities from installing renewable generation at the location within their portfolio that has the greatest available area or solar resource and allocating the resulting credits to other nearby properties.

Private industrial parks, commercial campuses, healthcare campuses, agricultural operations, and owners of multiple nearby properties may have large roofs, parking areas, or undeveloped spaces suitable for renewable generation. Other buildings within the same portfolio may lack adequate installation area but may have significant electrical consumption.

Allowing aggregation among nearby accounts can promote the maximum technically feasible use of renewable energy while retaining reasonable electrical and geographic limitations. The existing requirements that participating locations receive service at the same voltage level, be interconnected to the same power line, and be located within two miles provide a foundation for such an expansion.

Merely adding private entities to Section 9.03(A), however, would not fully accomplish the intended result. The definition of “Aggregate Net Metering Program” in Article 1 and Section 9.03(C) currently require the service agreements to be under the same name or account. Conforming amendments are therefore necessary.

In addition, the allocation of net-metering credits should not, by itself, be characterized as the physical sale or resale of electricity to third parties. Any physical distribution or retail sale of electricity by a private microgrid remains subject to the other applicable legal and regulatory requirements.

RECOMMENDATION

Section 9.03(A) should be deleted and replaced with the following:

"A. The Aggregate Net Metering Program shall be available to governmental Entities, nonprofit academic institutions, and private Entities, including industrial parks, commercial or institutional campuses, agricultural operations, and customers that own or control multiple properties. Eligibility shall be subject to the technical, electrical, geographic, metering, and credit-allocation requirements established in this Section."

Section 9.03(C) should be deleted and replaced with the following:

"C. Participating service agreements may include:

(1) service agreements held under the same customer name;

(2) service agreements for properties under common ownership or control; or

(3) with the written consent of each participating customer, service agreements located within an eligible industrial park, campus, or Microgrid and included in a credit-allocation schedule approved by the EPS Operator."

Section 9.03(D) should retain the requirement that all participating locations receive service at the same voltage level. Section 9.03(E) should retain the requirement that remote participating locations be interconnected to the same power line and be located no more than two (2) miles from the Distributed Generation System or Microgrid.

The definition of "Aggregate Net Metering Program" in Article 1 should be amended to remove the restriction requiring every participating service agreement to be under the same name. The definition should instead recognize service agreements that qualify under Section 9.03(C).

Section 9.03(B) should also be conformed to the Export Capacity approach by replacing "maximum installed AC capacity" with "maximum Export Capacity,".

The Regulation should clarify that Aggregate Net Metering authorizes the allocation of billing credits and does not, by itself, authorize the unregulated sale or resale of electricity to third parties. If the Energy Bureau determines that accounts belonging to separate industrial-park customers are more appropriately addressed under the Shared Net Metering Program, it should amend Section 9.04 to provide those customers with equivalent eligibility rather than excluding them from both programs."

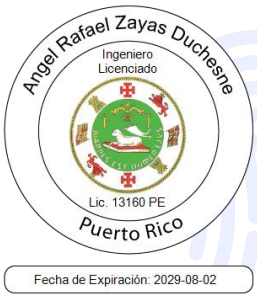
CONCLUSION

The proposed amendments would create a consistent regulatory framework in which Nameplate Rating identifies the total generating capability of a facility, while Export Capacity identifies the maximum power the facility may deliver to the Electric Power System.

This distinction would allow customers to size renewable generation and energy storage according to their internal Host Load while preserving the EPS Operator's authority to evaluate export limits, fault current, protection coordination, voltage, thermal loading, equipment ratings, and system reliability.

For the foregoing reasons, the undersigned respectfully requests that the Puerto Rico Energy Bureau consider and adopt the recommendations presented herein.

Respectfully submitted,



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