

**GOVERNMENT OF PUERTO RICO
PUBLIC SERVICE REGULATORY BOARD
PUERTO RICO ENERGY BUREAU**

NEPR

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**IN RE: INTERCONNECTION
REGULATIONS**

**CASE NO.: NEPR-MI-2019-0009 /
CEPR-MI-2018-0008**

**SUBJECT: Comments on Distributed
Generation and Microgrid Interconnection
Regulation – July 10, 2026 Draft**

**COMMENTS OF CARLOS LÓPEZ MAISONAVE ON THE REVISED
PRELIMINARY DRAFT OF THE DISTRIBUTED GENERATION AND
MICROGRID INTERCONNECTION REGULATION**

TO THE HONORABLE PUERTO RICO ENERGY BUREAU:

Attention: Edison Avilés Deliz, Chairman

COMES NOW Carlos López Maisonave, in his individual capacity as a Professional Engineer licensed in Puerto Rico, a photovoltaic and energy-storage systems designer, and an instructor with approximately fifteen years of experience in the solar industry, and respectfully submits these comments on the Revised Preliminary Draft Distributed Generation and Microgrid Interconnection Regulation published by the Puerto Rico Energy Bureau on July 13, 2026, in the above-captioned proceeding.

The undersigned supports the Energy Bureau's objective of establishing a safe, reliable, efficient, transparent, and nondiscriminatory interconnection process. These comments focus on provisions that could impose avoidable costs, delay, operational uncertainty, or reduced energy value on residential customers, particularly owners of photovoltaic and battery systems with capacities of twenty-five kilowatts or less. The comments also identify targeted revisions that would preserve safety and grid reliability while aligning the final regulation with Puerto Rico's statutory notification-and-certification framework.

I. SECTION 7.04 REQUIRES PRIOR LEGISLATIVE ACTION

Section 7.04 provides that an interconnecting customer may not operate a system in parallel with the Electric Power System without the EPS Operator's prior written authorization. Although this requirement differs from the current automatic-interconnection provisions of Article 9 of Act No. 114-2007, I support its underlying safety and reliability objective. A distributed generation or battery system should not be automatically interconnected when it is unsafe, improperly configured, noncompliant, or capable of adversely affecting the Electric Power System.

Nevertheless, PREB cannot change through regulation the statutory point at which automatic interconnection becomes effective. The Legislature must first amend Act No. 114-2007 to authorize a pre-operation review and approval process. That legislation must be enacted before the new regulation—and particularly Section 7.04—can be implemented.

Requested revision: PREB should condition implementation of the new regulation on the prior enactment of the necessary amendments to Act No. 114-2007. The amended statutory and regulatory framework should replace automatic interconnection with an expedited, objective pre-operation review that includes fixed deadlines, published technical criteria, written notice of any deficiencies, prompt reconsideration after corrections, and access to administrative review. Expiration of a review period should not authorize an unsafe or unreliable system to operate in parallel

II. THE SIMPLIFIED-PROCESS FEE MUST BE FINALIZED, JUSTIFIED, CAPPED, AND CHANGED ONLY THROUGH A TRANSPARENT PROCESS

LUMA's current portal identifies a \$100 nonrefundable processing fee. Article 3.B(1) of the Revised Preliminary Draft instead states that the Simplified Interconnection Notification and Agreement must be accompanied by a "Net Metering Notification Fee of \$300XXX dollars, or an amount subsequently determined through the TIR."

The text is plainly an unresolved drafting placeholder and should not be interpreted as a finalized \$300 charge. It nevertheless signals a possible increase of approximately \$200, does not state a cost basis, establishes no maximum, and would permit the amount to be moved into a Technical Interconnection Requirements document that may be revised more frequently than the regulation. For a small residential installation, a \$200 increase represents a substantial percentage change in the interconnection charge. Customers and installers need a predictable amount when pricing a project.

Requested revision. Delete the placeholder before adoption. State the exact fee and the services it recovers, publish the supporting cost analysis, and establish a fixed maximum for the customer's total simplified-process financial obligation. Any later adjustment should require public notice, an opportunity to comment, and an Energy Bureau resolution and order based on an updated cost record. The final regulation should also clarify that the notification fee does not reopen supplemental-study or grid-improvement charges prohibited for qualifying systems by Joint Resolution No. 5-2026.

III. ARTICLE 3.D(2) DOES NOT STATE THE CONSEQUENCES WHEN A CUSTOMER DECLINES OR DOES NOT PAY AN ASSESSED MODIFICATION COST

Article 3.D(2) allows the EPS Operator, following Supplemental Review, to identify system modifications, including restrictions on the power that the project may transfer to the EPS. The customer then has five business days to elect whether to continue. If the customer proceeds, the EPS Operator must provide an Interconnection Agreement with a nonbinding good-faith cost estimate and construction schedule. The draft also permits Administrative Review of the EPS Operator's cost allocation under Section 13.02.

The draft does not state what occurs if the customer does not elect to proceed within five business days, declines to pay the requested amount, cannot pay it, or remains unwilling to pay after Administrative Review. It does not say whether the notification is deemed withdrawn, the application

is denied or suspended, a lower-export or non-export alternative must be offered, or the customer retains any right to proceed under the automatic-interconnection provisions. That silence creates significant procedural uncertainty and invites inconsistent treatment.

Requested revision. Specify each possible disposition and its prerequisites. The regulation should require written notice of the final itemized assessment, the technical basis for the modification, available operating alternatives, the deadline and method to respond, a reasonable cure period for nonpayment, and the effect of a timely Administrative Review. A project should not be deemed withdrawn or denied by silence without clear notice. For a qualifying system of twenty-five kilowatts or less, the provision must also state that the statutory right to automatic interconnection is not displaced by a utility demand for charges or pre-approval of shared grid improvements.

IV. RESIDENTIAL CUSTOMERS REQUIRE EXPRESS LIMITS ON UPGRADE CHARGES AND UNCOMPENSATED EXPORT RESTRICTIONS

Article 3.D(2) refers generally to reasonableness, proportionality, and benefit received when allocating the cost of system modifications. Those principles are useful but do not tell a homeowner which facilities may be charged, how causation will be determined, or the maximum exposure. Nor does the draft establish a compensation or disclosure framework when the EPS Operator imposes a continuing export restriction after a system has been purchased based on expected net-metering production.

The uncertainty is economically significant. A transformer replacement, secondary-conductor replacement, service modification, voltage-regulation device, or feeder project may benefit multiple present and future customers and may correct an existing utility condition. Charging the entire cost to the last homeowner to submit a notification could negate a material portion of the homeowner's expected savings. Likewise, an export restriction can reduce the customer's expected net-metering credits even if the restriction is imposed to address a broader feeder condition rather than an unsafe customer installation.

Joint Resolution No. 5-2026 directed the cessation of Supplemental Study and grid-improvement charges for systems up to twenty-five kilowatts and directed the development of modern interconnection concepts, including cost-allocation and curtailment protections. Section 9 of Act No. 114-2007 further provides that feeder capacity is not an obstacle to interconnection of qualifying systems and assigns necessary feeder changes to the requesting company. The final regulation should implement those directives in operative, customer-readable language rather than leave the result to case-by-case interpretation.

Requested revision. For residential systems of twenty-five kilowatts or less, expressly identify which costs are prohibited and which, if any, may be assigned to the customer. Address transformer replacement, secondary conductors, customer service work, voltage regulation, and feeder work separately. Require a showing that any permissible charge is caused solely and incrementally by the individual installation; allocate or credit broader grid benefits; establish a maximum customer exposure; and require Energy Bureau approval before a homeowner is billed for a utility-side upgrade. Material export restrictions should be disclosed before the customer is bound, limited to the minimum technically necessary amount and duration, periodically reviewed, and paired with compensation when they materially reduce expected net-metering value for reasons not attributable to customer noncompliance.

V. SECTION 9.01.C SHOULD PREVENT IMPROPER NET-METERING CREDIT WITHOUT BROADLY RESTRICTING LAWFUL BATTERY USES

Section 9.01.C requires an energy-storage device paired with a net-metered system to be programmed with one or both of two restrictions: it may be restricted from exporting beyond Inadvertent Export, and/or it may be charged solely from the customer's Net Metering System rather than from the EPS. The selected restriction must be described in the application and supported by a signed operator attestation. A later change requires a revised attestation and written EPS Operator approval, which may not be unreasonably withheld or delayed.

The phrase "one or both" appears to permit grid charging when the battery is configured as non-exporting. That is an important distinction and should be made explicit. Even so, the present framework may restrict or complicate grid charging for storm preparation, time-of-use operation, future virtual-power-plant participation, demand-response exports, charging from a generator or another permitted onsite source, and ordinary equipment replacement or operating-mode reconfiguration. It may also produce unnecessary programming, attestation, Power Control System, documentation, and installer-visit costs.

The legitimate net-metering concern is narrower: energy previously imported from the EPS should not later be exported and credited as though it were renewable generation eligible for net metering. A broad charging-source restriction is not the only way to address that concern. Certified controls, separate metering, interval-data accounting, non-export settings, or other verified operating configurations can prevent improper credit while preserving valuable backup and grid-service capabilities.

Requested revision. Rewrite Section 9.01.C around the prohibited transaction rather than a blanket battery charging rule. Permit grid charging for backup and storm preparation and preserve participation in any Energy Bureau-approved time-of-use, demand-response, or virtual-power-plant program. Allow charging from other lawful onsite sources. Establish objective, technology-neutral methods to demonstrate that exported energy receiving net-metering credit is eligible renewable generation. For later equipment or mode changes that do not increase Export Capacity or defeat the approved control method, require notice and updated attestation rather than discretionary pre-approval.

VI. COMMISSIONING AND INSPECTION REQUIREMENTS MUST NOT BECOME A NEW PRE-OPERATION BARRIER FOR SIMPLIFIED PROJECTS

For projects outside the Simplified Process, Section 7.03(A)-(C) requires commissioning tests under IEEE 1547 or other applicable standards, at least ten business days' advance notice, testing on a business day, an opportunity for EPS Operator personnel to observe at the EPS Operator's expense, and a written report within five business days. Section 7.03(D) states that Simplified Process projects are governed instead by a limited field inspection and testing list, including inverter verification, certification, labeling, one-line conformity, the electrical inspection sticker, protection settings, field testing, and on-off testing.

Many of these checks are reasonable and already form part of professional installation and certification practice. The concern is how the provisions will be administered together with Section 7.04. If the limited field inspection is interpreted to require a separate utility visit before written

authorization, even a small compliant installation may require an installer return visit, utility-window coordination, additional test equipment or documentation, and correction of immaterial one-line or model-description discrepancies before operation. That result would undermine the automatic-interconnection framework.

Requested revision. PREB should condition implementation of these pre-operation testing, inspection, and authorization requirements—particularly for systems of 25 kW or less—on the prior enactment of the necessary amendments to Act No. 114-2007. Once the statutory framework is amended, the licensed professional’s certification should remain the principal evidence of compliance, while the EPS Operator should be allowed to conduct an expedited and objective pre-operation review sufficient to prevent an unsafe, noncompliant, or unreliable system from operating in parallel.

The review process should include fixed deadlines, published inspection criteria, acceptance of photographic and electronic test documentation when adequate, and written identification of any deficiency that prevents authorization. An onsite utility inspection or witnessed commissioning test should be required only when justified by the system’s characteristics or a specific safety or reliability concern. Minor documentation, one-line-diagram, or equipment-model discrepancies that do not affect safety, code compliance, or system reliability should not delay authorization.

VII. THE DUAL EQUIPMENT-APPROVAL FRAMEWORK SHOULD RECOGNIZE COMPLIANT NRTL-CERTIFIED PRODUCTS PRESUMPTIVELY

Section 8.02 requires renewable-energy equipment to be approved through the Department of Economic Development and Commerce Public Energy Policy Program and also states that inverters and control systems must be evaluated and approved by the EPS Operator. The EPS Operator must maintain an approved-products list, while a manufacturer, distributor, or owner may be required to submit documentation for equipment not already evaluated. The certification framework appropriately references current IEEE 1547-2018, IEEE 1547.1-2020, UL 1741, and NRTL testing concepts.

Equipment approval existed under Regulation 8915, so review is not entirely new. Continued dual review can nevertheless delay new equipment, create uncertainty when an NRTL-certified product is absent from the EPS Operator's list, reduce competition, and force customers to substitute a more expensive listed product. Product safety certification and Puerto Rico-specific field settings are related but distinct matters. The latter should not justify duplicative product certification or an open-ended approval process.

Requested revision. Create a presumption that equipment certified by an NRTL to the applicable IEEE and UL standards is acceptable for interconnection, subject to required Energy Bureau-approved settings. Permit rejection only through a timely, written, product-specific determination identifying a documented technical incompatibility with the Puerto Rico EPS. Establish a fixed review period for new-product submissions, deemed acceptance if the period expires without a determination, a prompt correction process for missing documents, and a continuously updated public list. Do not require duplicative testing when an existing NRTL certification covers the relevant function.

VIII. THE 15 PERCENT FAST TRACK FEEDER SCREEN REQUIRES AN UPDATED PUERTO RICO-SPECIFIC TECHNICAL BASIS

Section 4.02(B)(1) retains the screen under which aggregated Export Capacity on a radial distribution circuit may not exceed fifteen percent of the line section's annual peak load as most recently measured at the substation. Non-Exporting projects and existing facilities adding no new Export Capacity are exempt. The screen is not among the basic eligibility screens in Article 3.A, so it should not ordinarily block a conventional residential project that qualifies for the Simplified Process.

The screen can still affect a home project that does not qualify for the Simplified Process, exceeds the Nameplate Rating threshold because paired battery capacity is counted, has an unusual service configuration, or seeks more than twenty-five kilowatts of export. Failure sends a project toward customer-options discussions, Supplemental Review, or the Study Process, increasing time and expense even when modern controls can limit actual export.

The docket record contains substantial questions concerning the local evidentiary basis for the fifteen-percent threshold. In comments filed October 16, 2024, the Independent Office of Consumer Protection supported reconsideration of the threshold in light of the technical record, industry consensus, and consumer impacts. Other docket materials report that LUMA previously presented analysis supporting an increase from fifteen to thirty percent. The present draft retains fifteen percent without explaining why that record was rejected or how an annual peak-load screen reflects Puerto Rico's current daytime conditions, smart-inverter functions, and export controls.

Requested revision. Replace the static fifteen-percent screen with a validated Puerto Rico-specific methodology based on actual daytime minimum load, hosting capacity, and project Export Capacity. At minimum, the Energy Bureau should publish the data, assumptions, and engineering analysis supporting any retained percentage and explain its treatment of the prior thirty-percent proposal. The screen should be rebuttable, should credit certified export controls and non-export configurations, and should not use paired battery nameplate capacity as a proxy for export when an enforceable Export Capacity limit is lower.

IX. THE FINAL REGULATION SHOULD ESTABLISH AN EXPRESS STANDARDS-BASED PATHWAY FOR METER SOCKET ADAPTERS

Joint Resolution No. 5-2026 specifically directed consideration of meter socket adapters as a modern interconnection technology. The July 13 Resolution and Order identifies meter socket adapters as a topic for later stakeholder workshops, but the Revised Preliminary Draft does not establish a clear right or process to use an approved adapter. Deferral to a future workshop or the TIR, without an operative regulatory standard, leaves customers and installers without a predictable pathway.

The omission has practical cost consequences. Where technically suitable, an approved adapter may avoid replacement of an existing main service panel, installation of a separate service disconnect, extensive work on concrete walls, relocation of service equipment, or major rewiring. Act No. 114-2007 already limits the utility's ability to require relocation of an existing meter base when it satisfies applicable safety standards. A clear adapter pathway would advance that policy while preserving meter security and revenue integrity through objective installation and sealing requirements.

Requested revision. Add an operative section establishing eligibility for an NRTL-listed meter socket adapter that complies with the applicable product standard, is properly rated for the service

and meter socket, and is installed by a qualified licensed professional under an approved sealing and notification procedure. Require the EPS Operator to publish approved products and technical criteria, review new products within a fixed period, and provide written, technically supported reasons for any denial. A compliant adapter should not be rejected merely because the EPS Operator prefers a more extensive service-equipment modification.

X. CONCLUSION AND REQUESTED RELIEF

The undersigned respectfully requests that the Energy Bureau revise the final Distributed Generation and Microgrid Interconnection Regulation as follows:

1. Condition implementation of the new regulation on prior enactment of the necessary amendments to Act No. 114-2007, and replace automatic interconnection with an expedited, objective pre-operation authorization process that prevents unsafe, noncompliant, or unreliable systems from operating in parallel.
2. Replace the \$300XXX fee placeholder with an exact, cost-supported amount, a total customer cap, and a public process for later adjustments.
3. State the consequences, notice, cure rights, alternatives, and appeal effect when a customer does not accept or pay an assessed modification cost.
4. Define and limit residential upgrade charges, require causation and benefit allocation, and protect customers against uncompensated material export restrictions.
5. Narrow the battery rule to prevent improper net-metering credit while preserving storm preparation, lawful onsite charging, and Energy Bureau-approved grid-service programs.
6. After the necessary legislative amendments, retain professional certification as the principal evidence of Simplified Process compliance while allowing an expedited pre-operation review; require an onsite inspection or witnessed test only when justified, and do not delay authorization for immaterial discrepancies.
7. Presume acceptance of compliant NRTL-certified equipment and require timely, technically supported reasons for any product rejection.
8. Replace or technically justify the fifteen-percent Fast Track screen using current Puerto Rico feeder data, actual Export Capacity, and modern control capabilities.
9. Create a clear, objective, and timely pathway for the use of approved meter socket adapters.

These revisions would identify the amendments to Act No. 114-2007 that must precede implementation of the new regulation, preserve the expedited-interconnection policies of Act No. 17-2019 and Joint Resolution No. 5-2026, and establish documented, proportionate measures addressing actual safety and reliability conditions without imposing unnecessary customer costs or delays.

Respectfully submitted,

In San Germán, Puerto Rico, on August 14, 2026



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CERTIFICATE OF SERVICE

I hereby certify that on August 14, 2026, a copy of these Comments was submitted to the Puerto Rico Energy Bureau under the title "COMMENTS ON THE REVISED PRELIM. DRAFT OF THE DIST. GEN. AND MICROGRID INTERCONNECTION REGULATION", addressed to Edison Avilés Deliz, Chairman, through the Energy Bureau's electronic filing tool at <https://radicacion.energia.pr.gov/>.

Carlos López Maisonave