

**BEFORE THE PUERTO RICO ENERGY BUREAU
CASE NO. NEPR-MI-2019-0009**

**COMMENTS OF THE SOLAR AND ENERGY STORAGE ASSOCIATION OF
PUERTO RICO (SESA) REGARDING URGENT NEED FOR IMMEDIATE ACTION
ON SMART INVERTER SETTINGS**

To the Honorable Commissioners:

SESA submits these brief but urgent comments to request the Energy Bureau take action in the short term regarding Smart Inverter Settings, given that the existing Smart Inverter Settings are causing significant curtailment of power, causing two alarming problems: 1) ongoing financial harm to more than 55% of the 18,000 customers who have interconnected solar systems since January 1st 2025, and 2) since their systems can't provide grid-support functions when they're turned off (curtailed), the current settings which have proven to be overly and needlessly restrictive are also resulting in less time when Volt-Var and other important smart inverter functions are able to support voltage and frequency stabilization of Puerto Rico's fragile power grid.

LUMA's April 25th filing came as a surprise to — not just in substance, but also in approach. It marked a clear departure from the collaborative process the Energy Bureau has mandated. In addition to participation in each of the recent three Energy Bureau-hosted workshops on these topics, we have also engaged in weeks of friendly and productive technical conversations with LUMA focused on specific potential changes to the smart inverter settings which have been required since January 1st. These conversations have happened in the context of a shared goal to come to an agreement by April 25th to a shared set of specific changes which could be jointly presented to the Energy Bureau, and agreeable as beneficial to all involved parties. Unfortunately on or around April 22nd, 2025, LUMA ceased constructive communication with industry and apparently began focusing on drafting of what became their surprise April 25th filing.

By abandoning bilateral discussions, LUMA has delayed progress on urgently needed setting modifications—delays that are now directly harming families across Puerto Rico. Several of LUMA's most substantial and alarming recommendations in their April 25th filing were not even discussed as part of the stakeholder process which has been intended to result in joint, mutually agreed to recommendations from impacted participants.

This is senseless harm. The technology is ready. The customers are ready. The grid desperately needs more stability. Yet the specific settings which are concerning – as detailed in SESA's Feb 10th and April 25th filings – are causing harm because they're not allowing customer solar and battery systems to operate during Puerto Rico's actual normal day-to-day grid conditions.

We therefore respectfully ask the Energy Bureau to take two immediate actions, and note the substantive concerns detailed in Appendix 1:

1. **Approve the Specific Changes to Smart Inverter Settings as Proposed by SESA.**
SESA's recommended adjustments—originally filed on February 10th and refiled on April 25th—reflect real-world operational experience and have been vetted with major inverter manufacturers. SESA's proposed changes would reduce customer curtailment and increase grid support. We also respectfully ask that the Energy Bureau extend the deferral of any Volt-Watt activation until at least **June 30, 2026**, recognizing that premature activation would create unjustifiable financial harm to customers without any compensation mechanism in place.
2. **Alternatively, Convene an Expert-Facilitated Workshop in the Immediate Term.**
If the Bureau chooses not to order the adoption of SESA's proposed changes to current smart inverter settings outright, we urge the scheduling of a professionally facilitated workshop—led by an entity with demonstrated broad expertise in IEEE 1547-2018 implementation and smart inverter settings—focused solely on short-term adjustments to address the customer harm and reduced grid support currently caused by the overly-restrictive current smart inverter settings.

We reiterate our respect for LUMA's perspective, but their surprise April 25th filing has caused the process to stall at the exact moment when urgent action is needed. Had our dialogue continued, we believe a joint recommendation could have been reached by now. That opportunity still exists, and we will continue to attempt direct collaboration with LUMA and any other impacted stakeholders on these matters.

Meanwhile, real people—many of them low-income and relying on critical energy services—are suffering economic harm and denied the ability to contribute to grid resilience. Puerto Rico cannot afford this delay.

We urge LUMA to resume constructive bilateral engagement with SESA and our member companies immediately. But given the silence to date, we now ask the Energy Bureau to exercise its role as regulator and intervene decisively.

Respectfully submitted,

PJ Wilson

Executive Director

Solar and Energy Storage Association of Puerto Rico (SESA)

May 14, 2025

APPENDIX 1: SUBSTANTIVE CONCERNS WITH LUMA’S APRIL 25th FILING

Below, SESA outlines a series of fundamental concerns with the direction, assertions, and omissions present in LUMA’s April 25th filing. Each of these items deviates from regulatory norms and stakeholder expectations, and taken together, reflect a troubling move away from transparency, collaboration, and customer protection.

1. LUMA Seeks Unilateral Authority to Revise Inverter Settings Without Industry Collaboration Nor Bureau Oversight

Paraphrased: LUMA suggests that future inverter setting changes be implemented internally, outside of the Bureau’s authority, and outside any sort of stakeholder-driven structure.

SESA Response: What LUMA proposes would be abnormal, unprecedented, likely illegal, and in direct conflict with the Bureau’s consistent past orders that LUMA is not to make any changes to required smart inverter settings without express Bureau approval. In every known U.S. jurisdiction, smart inverter settings are adopted or modified via regulatory processes with public input and final regulator approval. LUMA’s approach appears to propose to remove necessary and legally required checks and balances, and expose customers and developers to arbitrary technical requirements at unpredictable times, in a way that could only be harmful and unworkable to all involved.

Quotes from LUMA Filing:

“LUMA recommended updating DER study thresholds and integrating inverter settings as part of a long-term grid planning strategy.” (p. 3)

“LUMA supports revisions and a phased implementation approach, provided these changes are informed by actual system data and aligned with technical feasibility.” (p. 3)

2. LUMA Proposes Retroactive Application of Smart Inverter Settings to All Systems Since 2018

Paraphrased: LUMA suggests mandated retroactive application of an unclear modification of the current smart inverter settings to all DERs installed after 2018—even though those systems were interconnected legally under different regulatory terms.

SESA Response: What LUMA suggests in their filing is unprecedented, highly problematic, and likely not legal. Both Hawaii and California regulators reviewed the idea of retroactive enforcement and ultimately rejected it due to legal, technical, and fairness concerns. Forcing retroactive changes raises serious due process and constitutional questions.

What might be possible is some sort of regulator-approved retroactive activation of mutually agreed-go smart inverter settings *on a voluntary basis* - if it's done in such a way that causes no financial harm to customers nor solar developers; or, includes compensation for any costs incurred with or resulting from such voluntary activations.

Quote from LUMA Filing: “LUMA recommends applying Smart Inverter Settings retroactively to all inverter-capable DER systems installed after 2018.” (p. 8)

3. LUMA Asserts That No Compensation Is Owed for Curtailment Caused By to Inverter Settings

Paraphrased: LUMA asserts a blanket rejection of any obligation to ever compensate customers for lost energy production due to mandated inverter behavior like Volt-Watt or Volt-Var.

SESA Response: The absence of a stable power grid is not a reason to deny customers compensation for lost energy exports, but rather should be a motivation to fix the power grid so that safe dependable consistent power is available for all. Especially given the over \$16 billion of unspent FEMA funding which is currently available specifically for the purpose of modernizing Puerto Rico's power grid, we urge a focus on deployment of those funds, and a prioritization of clearly budgeting a significant amount of these funds to address any current and forecasted hosting capacity concerns.

LUMA's apparent position is also out of alignment with emerging national best practices. For example in Hawaii, HECO recently filed a compensation mechanism for curtailment resulting from Volt-Watt activation, based on a methodology developed by NREL and already in use in California, which compensates customers for any curtailment resulting in \$50 or more of economic harm to any individual customer across any 3-month timeframe. LUMA's suggestion that they refuse compensation while increasing curtailment is a harmful policy combination.

Quotes from LUMA Filing:

“The applicable legal, regulatory, and contractual framework does not create a right to compensation for non-exported energy.” (p. 11)

“Neither statute nor regulation contemplate compensation for energy that could have been exported but was curtailed to protect system integrity.” (p. 12)

4. LUMA Demands Real-Time Access from Private Companies to Inverter Operational Data

Paraphrased: LUMA seems to suggest that developers should provide LUMA with real-time inverter data, for free, forever.

SESA Response: The data in question is proprietary, and owned by confidential agreements between customers, solar developers, and inverter companies. LUMA’s suggestion is unprecedented and raises serious data privacy, cybersecurity, and operational cost issues. Real-time data access is a service—not something developers or manufacturers can or should provide for free.

Quotes from LUMA Filing:

“LUMA recommends that developers provide real-time access to operational data.” (p. 9)
“Given these existing capabilities, LUMA believes that developers should provide ongoing access to DER operational data through their monitoring networks.” (p. 10)

5. LUMA Misrepresents the Role and Use of EPRI’s Common File Format

Paraphrased: LUMA seeks to make EPRI’s Common File Format (CFF) mandatory and enforceable for all developers, alongside proof-of-setting compliance.

SESA Response: LUMA’s position seems to reflect a misunderstanding of past stakeholder conversations. SESA has encouraged LUMA to *publish* its smart inverter settings in CFF format to improve clarity and reduce implementation costs. However, mandating CFF submission from all developers is unnecessary and unworkable. There is no industry precedent or regulatory mandate for such a requirement. Especially given the multiple typos, errors, and lack of clarity in the current document showing required smart inverter settings, we urge LUMA’s priority to be attaining documentation which is clear from all parties’ perspectives. Accompanying the publication of the next version of smart inverter settings with an EPRI CFF expression of those settings is something that would be helpful for all.

Quotes from LUMA Filing:

“LUMA recommends that the use of the Common File be made mandatory for all developers.” (p. 10)
“Developers should be required to provide evidence of the applied settings upon request.” (p. 10)

6. LUMA Is Preparing Undisclosed Changes to Core Smart Inverter Settings Without Transparency

Paraphrased: LUMA indicates it is actively considering changes to voltage and frequency ride-through settings, but has shared no specific values.

SESA Response: This lack of transparency creates uncertainty for installers, manufacturers, and regulators. Worse, LUMA's apparent sudden withdrawal from stakeholder collaboration suggests these analyses are being done in isolation, inconsistent with best practices and counterproductive to building stakeholder consensus on technically sound reforms.

Quote from LUMA Filing: "Revisions are being considered for abnormal voltage and frequency ride-through settings, enter service thresholds, and associated delay periods." (p. 6)