

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

NEPR

Received:

Aug 25, 2025

4:55 PM

In Re:
INTERCONNECTION REGULATIONS

Case no. NEPR-MI-2019-0009

Subject: Request for Approval of LUMA's
Revised Smart Inverter Settings Sheets

**OPPOSITION TO LUMA'S MOTION REQUESTING APPROVAL OF LUMA'S REVISED
SMART INVERTER SETTING SHEETS**

TO THE HONORABLE ENERGY BUREAU:

COMES NOW, the **PUERTO RICO SOLAR ENERGY INDUSTRIES ASSOCIATION CORP. DBA SOLAR AND ENERGY STORAGE ASSOCIATION OF PUERTO RICO** ("SESA"), represented by the undersigned legal counsel and respectfully states as follows:

I. Relevant Procedural Background

1. On November 7, 2024, the PREB issued a Resolution and Order ("November 7th Order") approving with requested modifications, among others, the Smart Inverter Settings Sheets submitted by LUMA on September 17, 2024¹.

2. Additionally, in the November 7th order, the PREB also established the Smart Inverter Working Group ("SIWG") to address the implementation and possible modifications, while evaluating the comments from stakeholders, of the approved Smart Inverter Settings Profile. The PREB also scheduled meetings for the SIWG to discuss, evaluate, and comment on different topics such as customer protections for system curtailment, high voltage management, normal ramp up rate specifications, the development of site-specific utility-required settings profiles and the compensation structure for grid services. Also, comment periods were established for each of the scheduled SIWG meetings.

3. On November 15, 2024, LUMA submitted to the Energy bureau the final version of LUMA's technical bulletin 2024-0001 regarding the Smart Inverter Settings Sheets in

¹ See Motion to Submit Revised Technical Bulletin regarding Smart Inverter Settings Sheets and Request to Substitute Exhibits 1 and 2 Submitted on September 13, 2024.

compliance with the November 7th order.

4. On December 11, 2024, the Puerto Rico Office of Independent Consumer Protection (“OIPC”) filed comments regarding the first meeting of the SIWG, focused on customer protections related to system curtailment. In its filing, the OIPC underscored that although the November 7, 2024 PREB Resolution approved new inverter programming functionalities based on IEEE 1547-2018, significant controversy remained over the Volt-Watt function, particularly due to uncertainty about its impact on consumers. The OIPC stressed that the condition of high voltage in Puerto Rico’s grid frequently stems from deficiencies in LUMA’s own distribution infrastructure rather than from distributed generators (“DGs”). Accordingly, the OIPC highlighted that LUMA cannot be absolved of its responsibility as grid operator to correct such infrastructure problems—such as inadequate line upgrades, lack of voltage regulator adjustments, and insufficient capacitor banks—before shifting burdens onto consumers through inverter functionalities. The OIPC further warned of the risk of excessive reduction in generation output, which could diminish consumer compensation and damage appliances, and therefore emphasized the need for robust monitoring, reporting, and consumer protection mechanisms. OIPC recommended specific measures, including the development of a centralized reporting portal under PREB oversight, establishment of clear metrics for curtailment, and direct accountability from LUMA to ensure transparency and consumer safeguards.

5. During late 2024 and early 2025, three virtual SIWG meetings were held on November 21, 2024, January 14, 2025, and March 11, 2025, respectively. Following the meetings, several SIWG stakeholders filed comments to the PREB regarding the subjects discussed in the meetings.² The following paragraphs contain a reference to stakeholder filings

² See Enphase Energy, Inc. *Comments to PREB Smart Inverter Working Group re: Customer Protections for System Curtailments under the Volt-Watt Smart Inverter Function* filed on December 11, 2024; *Initial Feedback/ram the Solar & Energy Storage Association of Puerto Rico (SESA)* filed on December 11, 2024; *Comentarios Suplementarios de la Oficina Independiente de Proteccion (OIPC) al Consumidor Sobre lo Discutido en el Primer Taller Sobre "Smart Inverters"* filed on December 26, 2024; *Input regarding real-world impact of new Smart Inverter Settings since going into effect January/-", 2025, and Request/or Urgent Modifications to required Smart Inverter Settings* filed on February 10, 2025; and *SESA Re-Filing of Smart Inverter Settings Recommendations* filed on April 25, 2025. 16 See *Motion to Submit LUMA 's Comments on Subjects Discussed During Smart Inverter Working Group Meetings* filed on April 25, 2025; *Enphase Energy, Inc. Comments to PREB re: Smart Inverter Working Group Filings* filed on May 7, 2025; *Comments of the Solar and Energy Storage Association of Puerto Rico (SESA) Regarding Urgent Need for Immediate Action on Smart Inverter Settings* filed on May 14, 2025; and *Enphase Energy, Inc. Comments to PREB re: Smart Inverter Working Group Filings* filed on May 7, 2025; *Comments of the Solar and Energy Storage Association of Puerto Rico (SESA) Regarding Urgent Need/or Immediate Action on Smart Inverter Settings* filed on May 14, 2025; *LUMA 's Notice of Intent to File Comments in Response to Comments Presented by Enphase and SESA and to Submit LUMA 's Proposal Regarding the Smart Inverter Settings Sheets*, filed on May 24, 2025; and

and the comments and/or objections that we respectfully submit LUMA has not appropriately addressed in its revisions of the Smart Inverter Sheets submitted on June 20, 2025.

6. On April 25, 2025, LUMA filed its responses to stakeholder comments regarding the January 2025 Smart Inverter Settings Sheets. In this filing, LUMA acknowledged issues raised by Enphase, SESA, and other participants, and reiterated its position that the originally proposed settings were necessary to address widespread voltage violations and ensure reliable grid operation. LUMA stated that its approach was supported by simulations, operational experience, and alignment with IEEE 1547-2018.

7. On April 25, 2025, SESA re-submitted its recommendations regarding the Smart Inverter Settings, originally filed on February 10, 2025. SESA explained that subsequent real-world operational experience had confirmed the negative impacts previously identified, noting that under LUMA's mandated settings many solar customers were unable to operate their systems during grid conditions that are normal in Puerto Rico, leading to economic harm, reduced renewable energy generation, and weakened grid resilience. In its filing, SESA included a full track-changes version of the proposed settings to show precisely the adjustments sought, emphasizing that its approach aligned with the flexibility afforded under IEEE 1547-2018 and better reflected Puerto Rico's grid realities. SESA reported that, although technical discussions with LUMA had been held and some progress made, consensus had not been reached. Accordingly, SESA reiterated its strong opposition to the premature activation of Volt-Watt functionality, warning that mandatory adoption would cause unjust curtailment of production without any compensation mechanism, potentially raising legal and constitutional issues by imposing uncompensated financial harm tantamount to a regulatory taking. Instead, SESA proposed a framework where changes could be piloted only with voluntary customer participation and mutual agreement with LUMA. The filing concluded by urging the Energy Bureau to adopt SESA's proposed revised settings to safeguard consumers, protect distributed generation, and enhance grid reliability.

8. On May 7, 2025, Enphase Energy, Inc. filed comments objecting to LUMA's April 25, 2025 submission. Enphase stated it was "surprised and disappointed" that LUMA's filing disregarded SIWG progress and reverted to unilateral positions that, if approved, would harm customers and appear illegal and unconstitutional. Specifically, Enphase criticized LUMA's proposal to retroactively apply default inverter settings, including Volt-Var and Volt-Watt, to all

SESA's Urgent Request Regarding LUMA 's "Notice of Intent to File Comments in Response to Comments by Enphase and SESA to Submit LUMA 's Proposal Regarding the Smart Inverter Settings" dated May 27, 2025.

DER systems installed after 2018, noting PREB has no jurisdiction over original equipment manufacturers (OEMs) and that retroactive changes would violate customer contracts and data privacy rights. Enphase warned that OEMs could be exposed to liability if forced to update settings that curtailed production, and emphasized that LUMA lacks a standardized method for reporting voltage issues. It further condemned LUMA for abandoning collaboration in favor of attempting to “strong-arm” customers and industry, and urged PREB to reject LUMA’s recommendations in favor of SESA’s proposals.

9. On May 14, 2025, SESA filed urgent comments warning that the current Smart Inverter Settings were causing widespread curtailment and financial harm to more than half of the 18,000 customers interconnected since January 1, 2025, while also undermining grid stability. SESA denounced LUMA’s April 25 filing as a surprise departure from the collaborative process mandated by the Energy Bureau, noting that LUMA abruptly abandoned technical discussions days before its filing and introduced unilateral proposals never vetted in the stakeholder process. SESA highlighted that LUMA’s recommendations were unprecedented, abnormal, and likely illegal: specifically, LUMA sought unilateral authority to change inverter settings without PREB oversight; proposed retroactive application of settings to systems installed since 2018, raising serious due process and constitutional concerns; rejected any obligation to compensate customers for curtailment, contrary to emerging best practices in other U.S. jurisdictions; demanded free, perpetual access to private customer inverter data, raising privacy and cybersecurity issues; misrepresented stakeholder discussions to mandate the use of EPRI’s Common File Format without precedent or clarity; and admitted to preparing undisclosed changes to core settings without transparency. SESA urged immediate Bureau action to approve its proposed changes or, alternatively, convene an expert-led workshop, stressing that continued delays caused by LUMA’s actions were imposing senseless harm on Puerto Rican families and denying urgently needed grid support.

10. On May 24, 2025, LUMA filed a Notice of Intent requesting additional time to respond to the May 7, 2025 comments of Enphase and the May 14, 2025 comments of SESA, both of which opposed aspects of LUMA’s April 25 filing. LUMA stated that it disagreed with the conclusions of those stakeholders, reaffirmed its commitment to grid safety and reliability, and announced its intent to prepare a response with supporting data and simulations. LUMA requested that the Energy Bureau grant it until June 20, 2025 to submit its response and proposals regarding the January 2025 Smart Inverter Settings Sheets.

11. On May 27, 2025, SESA filed a reply opposing LUMA’s May 24 “Notice of Intent”

to delay its response and submit new proposals on Smart Inverter Settings until June 20, 2025. SESA emphasized that no PREB order authorized such a procedure and reminded that the November 7, 2024 Resolution required a collaborative SIWG process, not unilateral regulatory filings. SESA argued that LUMA's request would undermine the collaborative process, pull stakeholders further apart, and create unnecessary delays at a time when urgent action is needed. It warned that allowing LUMA's filing would push the process into hurricane season and effectively prevent PREB from hearing and considering stakeholder input before the June 30 deadline. SESA urged PREB to reject LUMA's attempt to bypass collaboration and reaffirmed its commitment to consensus-based, joint recommendations, while cautioning that LUMA's approach threatened both stakeholder interests and PREB's regulatory authority.

12. On June 20, 2025, LUMA submitted a motion titled "Motion to Submit LUMA's Revised Smart Inverter Sheets and Responses to Stakeholder Comments to LUMA's Comments of April 25, 2025". In this filing, LUMA provided proposed revised Smart Inverter Settings Sheets, responses to comments previously filed by Enphase and SESA, and background documentation explaining the proposed revisions. LUMA stated that its updated settings were informed by stakeholder feedback from the SIWG, system-level data, simulations, operational experience, and alignment with IEEE 1547-2018 and industry practices, and requested that the Energy Bureau approve the revised settings to take effect as soon as possible.

13. On June 23, 2025, SESA filed an urgent motion objecting to LUMA's June 20, 2025 unilateral filing of "Revised Smart Inverter Sheets and Responses to Stakeholder Comments". SESA emphasized that the Bureau's November 7, 2024 Order required joint, consensus-based recommendations through the SIWG, and that LUMA's unilateral submission violated both the letter and spirit of that mandate. SESA noted that LUMA's filing not only ignored but also contradicted stakeholder input, repeating disputed claims and advancing new proposals that could further disrupt Puerto Rico's distributed energy ecosystem while reducing available grid-support functions. Importantly, SESA highlighted that several of LUMA's assertions sought Energy Bureau approval of measures that were plainly illegal and unconstitutional. Given LUMA's abandonment of collaboration and the serious technical concerns raised by leading inverter manufacturers, SESA urgently requested the Bureau to convene a technical workshop under direct Commission supervision by June 30, 2025, to resolve contested issues and ensure consensus-based outcomes consistent with the Bureau's prior orders.

14. On August 20, 2025, LUMA filed a motion requesting the Energy Bureau's approval of the revised Smart Inverter Settings Sheets that it had previously submitted on June 20, 2025. LUMA stated that the revisions were the result of extensive discussions in the SIWG, multiple stakeholder comment periods, and additional direct meetings. LUMA stated that the updated settings were based on stakeholder feedback, simulations, operational data, and alignment with IEEE 1547-2018, and argued that adoption was urgent to address widespread voltage violations caused by rapid DER growth. LUMA again requested that the Energy Bureau approve the revised settings without delay so they could take effect as soon as possible.

15. SESA hereby reiterates and incorporates by reference all the substantive objections, technical recommendations, and revisions presented in their prior filings before this Bureau and referenced in this motion. Despite the breadth of stakeholder participation, including detailed submissions but not limited to those on April 25, May 7, May 14, May 27, and June 23, 2025, LUMA has categorically refused to adopt or meaningfully address these concerns. Instead, LUMA unilaterally submitted its revised Smart Inverter Settings Sheets on June 20, 2025, and later, on August 20, 2025, requested their wholesale approval by the Bureau, effectively disregarding the extensive stakeholder input provided throughout this process.

16. Respectfully, SESA urges the Energy Bureau to reject what would amount to "window-dressing," namely giving an outward appearance of participatory governance while hollowing out its substantive value. Although LUMA formally complied with the Bureau's directive to be present during the SIWG meetings hosted by the Energy Bureau, and to respond to stakeholder comments, its filings demonstrate that such compliance was largely cosmetic. By systematically ignoring or minimizing the technical recommendations of stakeholders, LUMA converted what should have been a genuine process of consensus-building into a procedural façade—one that satisfies form but evades substance.

17. In addition, LUMA's proposed activation of the Volt-Watt function raises serious constitutional concerns, as it would directly diminish the compensation received under the net metering agreements entered by photovoltaic system owners. These agreements, duly submitted to LUMA to participate in the net metering program, confer vested property interests upon the participants. Such property rights are protected by the Due Process Clause, which prohibits the State from enacting measures or authorizing actions that unreasonably, arbitrarily, or capriciously interfere with individuals' property or liberty interests. See *Hernández v. Secretario*, 164 DPR 390 (2005); *McConell v. Palau*, 161 DPR 734 (2004). In this respect, approval of the Volt-Watt function without genuine consideration of stakeholder objections would

constitute an unconstitutional impairment of protected property rights.

18. Moreover, procedural due process imposes upon the State the duty to ensure that any interference with property or liberty is carried out through a fair and equitable procedure. See *Rivera Rodríguez & Co. v. Stowell*, 133 DPR 881, 883 (1993). The Due Process Clause establishes the minimum procedural guarantees that must be afforded before an individual's property or liberty can be adversely affected. *Hernández v. Secretario*, supra; *McConell v. Palau*, supra. As the Puerto Rico Supreme Court held in *Hernández Colón v. Policía de Puerto Rico*, 177 DPR 121 (2009), "acquired rights, regardless of their origin—whether by legislation, by contract, or by common law—enjoy the same protection as any constitutional right." Accordingly, any regulatory approval that results in the impairment or reduction of the value of customer-sited solar energy would be subject to strict constitutional scrutiny and is highly vulnerable to invalidation.

19. From the standpoint of substantive due process, the State is constitutionally prohibited from approving laws or taking actions that unreasonably, arbitrarily, or capriciously interfere with an individual's property or liberty interests. In this substantive dimension, the courts examine the validity of a law or governmental action considering the relevant constitutional principles, with the purpose of safeguarding fundamental rights. *Zapata et al. v. Zapata et al.*, 156 DPR 278, 300–301 (2002). Thus, any approval by the State of LUMA's proposed settings—where such approval would impair or diminish the acquired rights of participants under net metering agreements—would constitute precisely the kind of unreasonable and arbitrary interference that substantive due process forbids. See *Hernández v. Secretario*, supra; *McConell v. Palau*, supra.

WHEREFORE, SESA and stakeholders respectfully requests that the Honorable Energy Bureau **take notice** of the aforementioned and **issue** a Resolution and Order (i) denying LUMA's request for approval of its submitted Smart Inverter Setting Sheets dated June 20, 2025, and August 20, 2025; (ii) ordering LUMA to meet collaboratively with SESA and other SIWG members, making a genuine good faith effort to incorporate all concerns, and (iii) establish a deadline for LUMA to revise and resubmit its proposed changes to the current Smart Inverter Setting Sheets only as a Joint Stipulation, proposed not only by LUMA but by all possible SIWG stakeholders, in a manner that fully incorporates and responds to the ample stakeholder input submitted into the docket and during ongoing technical discussions, ensuring compliance with principles of transparency, due process, and protection of acquired property

rights.

Respectfully submitted, on August 25, 2024, in San Juan, Puerto Rico.

We hereby certify that we filed this motion using the electronic filing system of this Puerto Rico Energy Bureau and that copy of this motion was notified to Agustin.irrizary@upr.edu; javrui@sesapr.org; hrivera@jrsp.pr.gov; contratistas@jrsp.pr.gov; aconer.pr@gmail.com; john.jordan@nationalpfg.com; Lionel.santa@prepa.pr.gov; arivera@gmlex.net; mvalle@gmlex.net; laura.rozas@us.dlapiper.com; valeria.belvis@us.dlapiper.com; julian.angladapagan@us.dlapiper.com; pjcleanenergy@gmail.com; gcordero@crmjv.com; steven.rymscha@sunrun.com; jberdner@enphaseenergy.com; jalmodovar@enphaseenergy.com; markb@enphaseenergy.com; mrosenfeldt@enphaseenergy.com; gferrer@enphaseenergy.com; kkock@tesla.com; Andrew.cote@generac.com; john.jordan@nationalpfg.com.

McCONNELL VALDÉS LLC
Counsel for Solar and energy Association of Puerto Rico
PO Box 364225
San Juan, Puerto Rico 00936-4225
270 Muñoz Rivera Avenue
San Juan, Puerto Rico 00918
Phone Numbers: (787) 250-5669, (787) 250-5623
Fax Number: (787) 759-9225
www.mcvpr.com

/s/ Carlos J. Fernandez Lugo
Carlos J. Fernandez Lugo
PR Supreme Court ID no. 11,033
cfl@mcvpr.com

/s/ Manuel G. Quintana Soler
Manuel G. Quintana Soler
PR Supreme Court ID no. 23,364
mqs@mcvpr.com