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

IN RE:

INTERCONNECTION REGULATIONS

SUBJECT: SESA's "Opposition to LUMA's Motion Requesting Approval of LUMA's Revised

Smart Inverter Settings Sheets"

CASE NO. NEPR-MI-2019-0009

LUMA'S RESPONSE TO SESA'S "OPPOSITION TO LUMA'S MOTION REQUESTING APPROVAL OF LUMA'S REVISED SMART INVERTER SETTINGS SHEETS"

TO THE PUERTO RICO ENERGY BUREAU:

COME NOW LUMA Energy ServCo, LLC and LUMA Energy, LLC (jointly referred to as "LUMA"), through the undersigned legal counsel, and respectfully state and request the following:

I. Introduction

1. LUMA is submitting this Motion to reaffirm its request for the Puerto Rico Energy Bureau of the Public Service Regulatory Board ("Energy Bureau") to approve the proposed revisions submitted by LUMA on June 20, 2025¹ to the current Smart Inverter Settings Sheets ("January 2025 Settings Sheets"). LUMA's request is just and warranted, implements industry standards and best practices and is the culmination of an extensive stakeholder engagement effort that achieved alignment and resolution across numerous topics. LUMA's request is made in good faith and in furtherance of the orderly and structured evolution of Puerto Rico's energy system. LUMA therefore seeks the Energy Bureau's intervention, as the independent and professional

¹ See Motion to Submit LUMA's Revised Smart Inverter Sheets and Responses to Stakeholder Comments, filed on June 20, 2025 ("June 20th Motion").

regulator of the Island's energy industry, to address the only remaining topic for which agreement was not reached amongst the parties.

- 2. On August 25, 2025, the Puerto Rico Solar Energy Industries Association Corp., DBA Solar and Energy Storage Association of Puerto Rico ("SESA") submitted a motion titled SESA's Opposition to LUMA's Motion Requesting Approval of LUMA's Revised Smart Inverter Settings Sheets ("August 25th Motion"). In that motion, SESA requested the Energy Bureau deny LUMA's request for approval of the proposed revisions submitted by LUMA on June 20, 2025² to the January 2025 Settings Sheets and order LUMA to meet collaboratively with stakeholders and submit revised settings as a joint stipulation with these stakeholders, among others. SESA attempted to justify these requests on allegations that LUMA's participation in this process was not meaningful and alleged adverse effects on customers' vested rights over net metering, including alleged procedural and substantive due process deficiencies.
- 3. As discussed in detail herein, SESA's allegations regarding LUMA's participation in this process are baseless and are intended solely to disrupt any change that SESA, in its narrow perspective, believe is counterproductive to the interests of its members. Failure to agree on every issue is not equivalent to a lack of meaningful participation or cooperation. LUMA actively and cooperatively participated in the stakeholder engagement process and duly and fully evaluated and considered SESA's and other stakeholders' technical comments, in some instances, adopting some of the comments and suggestions received.
- 4. SESA's contention that a consensual agreement is a necessary prerequisite to, not only the implementation of updated system standards, but to the mere request to the Energy Bureau to approve the implementation of those standards is self-serving and unsupported by applicable

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² See id.

administrative law principles and common sense. Acquiescing to such a proposal would be equal to granting any stakeholder veto power. A stakeholder benefiting from the *status quo* could then exercise that power to block any action that goes against their narrow interests, to the detriment of the greater good. Under the disguise of "consensus", SESA intends to avail itself of such veto rights. Such outcome is contrary to the authority granted to the Energy Bureau to ensure the continued evolution and modernization of Puerto Rico's electric system.

5. LUMA also emphasizes that the right of distributed generation ("DG") systems to participate in the net energy metering program is subject to compliance with the eligibility and interconnection requirements set forth in the law and applicable regulations.³ LUMA's commitment and responsibility to Puerto Rico is to continue working openly and constructively with the regulator and the solar industry to ensure that every connection is made in a fair, transparent, and responsible manner, always protecting the stability of the electric system. The smart inverter settings, which are based on stakeholder feedback, operational data and simulations and follow industry standards and compliance with Regulation 8915 and IEEE Std. 1547-2018,⁴ are part of the interconnection requirements to ensure grid safety and reliability. As such, these settings lawfully interact with the net energy metering program participation rights. Any

³ See Act No. 114-2007, Act to Order and Authorize the Puerto Rico Electric Power Authority to Establish a Net Metering Program, art. 2, 22 L.P.R.A., § 1012, which provides that DG systems must meet specific technical and operational criteria to be eligible for net metering, such as meeting capacity limits (25 kW for residential, 1 MW for commercial), having an operation that is compatible with the existing PREPA transmission and distribution facilities and having a certified installation. See also Regulation No. 8915, Regulation for the Interconnection of Generators with the Electric Power Authority's Distribution System and Participation in Net Metering Programs, January 2017 ("Regulation 8915"), secs. III(H) & IV(D), which require that all DG systems be evaluated and approved by the utility prior to interconnection and outline detailed eligibility criteria for expedited review, including inverter certification, system capacity, and compatibility with the distribution network.

⁴ See June 20th Motion, pp. 2 and 5.

allegations of infringement of these rights due to the application of widely accepted industry requirements are therefore meritless.

6. SESA's own motion acknowledges the broad participation seen throughout the stakeholder engagement process and fails to raise any specific deficiency in how such process was conducted by the Energy Bureau. The stakeholder engagement process served its purpose: it narrowed the parties' differences, achieving broad alignment across a majority of topics, and generated sufficient information for the Energy Bureau to now possess an abundant record that will allow it to ratify any agreements reached and issue a determination on the specific topic currently under consideration. LUMA respectfully submits that it is now incumbent upon the Energy Bureau to evaluate the information in the record and issue the determination that best aligns with the law, public policy, and the needs of the electric system. Accordingly, LUMA is respectfully requesting the Energy Bureau to deny SESA's requests and proceed with such determination.

II. Relevant Procedural Background

7. On November 7, 2024, the Energy Bureau issued a Resolution and Order ("November 7th Order") approving, among others, the Smart Inverter Settings Sheets submitted by LUMA on September 17, 2024⁵, with a modification providing, among others, that the Volt-Watt settings would be deactivated for at least six months, after which the Energy Bureau would consider approving through Resolution the activation of this function.⁶ The Energy Bureau also ordered LUMA to, within five (5) business days of the notification of the November 7th Order, file

⁵ 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.

⁶ See November 7th Order, p. 6.

the final modified version of the Smart Inverter Settings and to make this version effective January 1, 2025.⁷

- 8. In the November 7th Order, the Energy Bureau also established a "Smart Inverter Working Group ["SIWG"] process […,] to address the implementation and possible modification to the approved Smart Inverter Settings Profile" and directed the SIWG to discuss a list of issues set forth in the November 7th Order in virtual meetings to be held in accordance with a schedule set forth therein.⁸
- 9. On November 15, 2024, LUMA submitted to the Energy Bureau a final version of Smart Inverter Settings Sheets with an effective date of January 1, 2025 ("January 2025 Settings Sheets"), in compliance with the November 7th Order.⁹
- 10. SIWG meetings were held on November 21, 2024, February 11, 2025, and April 3, 2025, with the participation of LUMA, various stakeholders, including SESA, and Energy Bureau consultants, including the Electric Power Research Institute ("EPRI"). Following each meeting, some SIWG stakeholders, including SESA, submitted comments to the Energy Bureau regarding the subjects discussed in the meeting.¹⁰ Additional comments were submitted by LUMA and

⁷ See id.

⁸ See id., pp. 6-7.

⁹ See Motion to Submit Final Technical Bulletin Regarding Smart Inverter Settings Sheets in Compliance with Resolution and Order of November 7, 2025, and Request for Agenda for Workshop Scheduled for November 21, 2024.

¹⁰ 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 from the Solar & Energy Storage Association of Puerto Rico (SESA) filed on December 11, 2024; Comentarios Suplementarios de la Oficina Independiente de Protección (OIPC) al Consumidor Sobre lo Discutido en el Primer Taller Sobre "Smart Inverters" filed on December 26, 2024; Input regarding realworld impact of new Smart Inverter Settings since going into effect January 1st, 2025, and Request for 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.

stakeholders, including SESA, after this process.¹¹ In particular, LUMA submitted comments on April 25, 2025, on subjects discussed during the SIWG meetings, including comments from stakeholders.¹²

11. Throughout this process, LUMA engaged in direct discussions with stakeholders on at least five separate occasions, ¹³ including representatives from SESA, PowerSolar, Sunnova, Maximo Solar, and others. These meetings addressed a range of topics, such as the technical and regulatory basis for supplemental studies, the proposed implementation of smart inverter functions (including Volt-Watt and Volt-Var), cost allocation principles, consumer protection considerations, and the distinction between retroactive and prospective application of interconnection requirements. During these meetings, LUMA not only made multiple presentations that included its technical analysis and rationale, but also actively listened to stakeholder concerns, including those related to customer impacts, transparency, and the need for prospective application of new requirements. Stakeholders were encouraged to share their perspectives through structured exercises and open dialogue, and LUMA demonstrated a

¹¹ 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; Enphase Energy, Inc. Comments to PREB re: Smart Inverter Working Group Filings filed on May 7, 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 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.

¹² See Motion to Submit LUMA's Comments on Subjects Discussed During Smart Inverter Working Group Meetings filed on April 25, 2025, Exhibit 1.

¹³ See June 20th Motion, Exhibit 1, p.5.

willingness to consider alternative approaches, clarify technical assumptions, and explore solutions.

- 12. During this process, SESA submitted multiple comments to the January 2025 Settings Sheets and LUMA's proposals, including in filings on December 11, 2024, February 10, 2024, April 25, 2025, May 14, 2025, May 27, 2025, June 23, 2025, and August 25, 2025¹⁴, some of which are discussed more specifically below. Among these filings, SESA submitted its own proposal for revised settings sheets ("SESA's Proposal").¹⁵
- 13. On June 20, 2025, LUMA submitted to the Energy Bureau proposed revisions to the January 2025 Settings Sheets ("Revised Settings"), a document responding to comments from stakeholders that participated in the meetings of the SIWG, including SESA, and a document explaining the Revised Settings. ¹⁶ LUMA explained that, in preparing the Revised Settings, it had considered the input obtained from stakeholders during the SIWG meetings and other separate discussions, as well as system-level data, simulation results, operational experience, alignment with industry standards, and best practices. ¹⁷ LUMA further noted that all values were selected to

¹⁴ See Initial Feedback from the Solar & Energy Storage Association of Puerto Rico (SESA) filed on December 11, 2024; Input regarding real-world impact of new Smart Inverter Settings since going into effect January 1st, 2025, and Request for Urgent Modifications to required Smart Inverter Settings filed on February 10, 2025; SESA Re-Filing of Smart Inverter Settings Recommendations filed on April 25, 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; 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; Urgent Motion Requesting Technical Workshop Overseen by Honorable Energy Bureau filed on June 23, 2025; and SESA's August 25th Motion.

¹⁵ See Input regarding real-world impact of new Smart Inverter Settings since going into effect January 1st, 2025, and Request for 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 June 20th Motion, Exhibits 1, 2 and 3.

¹⁷ See id., pp. 2 and 5, Exhibit 1, pp. 2-3.

remain within the limits established by Regulation 8915, specifically those required under IEEE Std. 1547-2018.¹⁸ LUMA also explained that it had endeavored to appropriately balance accommodating the capabilities of commercially available inverter technologies and maintaining the safety, reliability, and operational integrity of the transmission and distribution system.¹⁹

14. In Exhibit 3 of the June 20th Motion, LUMA addresses technical comments provided by SESA and other stakeholders and includes a table summarizing its proposed revisions and comments from SESA, Enphase, and EPRI regarding these provisions with LUMA's responses.²⁰ For example, LUMA noted that certain higher voltage thresholds for inverter reconnection proposed by SESA would effectively require LUMA to operate outside of ANSI C84.1 Range B voltage limits.²¹ This is in line with a widely recognized industry standard. LUMA declined SESA's proposals, citing safety concerns and the risk of enabling DERs to reconnect at voltage levels already considered dangerous.²² LUMA also acknowledged comments from Enphase and EPRI regarding ensuring that no overlap between the point at which Volt/Var ends and when, and suggested settings to eliminate overlap in control curves.²³ Similarly, LUMA considered other comments regarding the frequency enter-service settings, enter service time, and frequency droop settings, and provided responses based on system data, simulation results, and alignment with IEEE 1547-2018.²⁴

¹⁸ See id.

¹⁹ See id., p. 5.

²⁰ *See id.*, Exhibit 3, pp. 8-12.

²¹ See id., Exhibit 3, pp. 6, 9-10.

²² See id.

²³ See *id.*, Exhibit 3, pp. 6 and 9.

²⁴ See id, Exhibit 3, pp. 7, 10-12.

15. On June 23, 2025, SESA filed a motion referencing LUMA's June 20th Motion and alleging that LUMA's submission did not constitute a "consensus output" and did not fully address or resolve the concerns raised by SESA in their previous filings.²⁵ SESA also requested that another technical workshop be held to examine and resolve "contested technical proposals", evaluate the "real-world operational impact" of the January 2025 Settings, and set a path forward with "consensus support".²⁶

16. On August 20, 2025, LUMA filed a motion²⁷ ("August 20th Motion") requesting the Energy Bureau approve LUMA's Revised Settings, so that these revised settings could enter into effect as soon as possible.²⁸ LUMA explained, based on data set forth in LUMA's June 20th Motion, that the growth of DG systems in Puerto Rico is occurring at an exponential rate, with a 16% increase to over 165,000 systems in just six months between November 2024 and May 2025, and the rapid proliferation is causing widespread voltage violations across the distribution system.²⁹ LUMA also explained that LUMA's simulation of actual feeders demonstrates the severity of the issue where in one high penetration area, 58% (550 out of 955) of the circuit sections experienced some type of voltage violation without the proposed settings enabled; and that, conversely, these same simulations proved that activating the revised Volt-Var and Volt-Watt functions reduces that number to just around 10%, or 100 out of 955 sections.³⁰ Given the above,

²⁵ See Urgent Motion Requesting Technical Workshop Overseen by Honorable Energy Bureau, pp. 1-2.

²⁶ See id. p. 3.

 $^{^{27}}$ See Motion to Request Approval of LUMA's Revised Smart Inverter Settings Sheets.

²⁸ See id., p. 5.

²⁹ See id., p. 2.

³⁰ *See id.*

LUMA respectfully submitted that adopting the Revised Settings would help protect and maintain the stability of Puerto Rico's electric grid, potentially avoiding costly feeder and substation upgrades that would otherwise be required to manage widespread voltage problems, and that the Volt-Watt setting is important to conserve the operability of the system and provide a cost-effective alternative to large-scale infrastructure investments.³¹

17. On August 25, 2025, SESA filed a motion opposing LUMA's August 20th Motion.³² In this motion, SESA argued, among other things, that "despite the breadth of stakeholder participation [...] LUMA has categorically refused to adopt or meaningfully address" the concerns of stakeholders and that LUMA "unilaterally submitted" the Revised Settings and had requested their "wholesale approval" by the Energy Bureau "effectively disregarding the extensive stakeholder input provided throughout this process".³³

18. In the August 25th Motion, SESA further argued that LUMA's proposed activation of the Volt-Watt function raised constitutional concerns "by diminishing the compensation received under the net metering agreements" which agreements confer "vested property interests" and that "the approval of the Volt-Watt function without genuine consideration of stakeholder objections would constitute an unconstitutional impairment of a protected property right". SESA further argued that the approval of the Volt-Watt settings would allegedly infringe on their procedural and substantive due process rights. 35

³¹ See id.

³² See SESA's Opposition to LUMA's Motion Requesting Approval of LUMA's Revised Smart Inverter Settings Sheets.

³³ *See id.*, p. 6.

³⁴ See id., pp. 6-8.

³⁵ See id., p. 6.

19. Finally, in their August 25th Motion, SESA requested the Energy Bureau to deny LUMA's request for approval of LUMA's Revised Settings, order LUMA to "meet collaboratively with SESA and other SIWG member, making a genuine good faith effort to incorporate all concerns" and "establish a deadline for LUMA to revise and resubmit its proposed changes to the current Smart Inverter Settings Sheets only as a Joint Stipulation, proposed not only by LUMA but by all possible SIWG stakeholder [...]" ³⁶

III. Discussion

- 20. LUMA categorically rejects SESA's characterization regarding LUMA's role in this process and opposes SESA's requests set forth in the August 25th Motion.
- 21. Although SESA acknowledges that LUMA participated in all the SIWG meetings and made various submittals, SESA alleges this participation was not meaningful because LUMA allegedly ignored or minimized SESA's technical comments and did not reach a consensus with them. SESA's allegations are baseless.
- 22. As LUMA has informed in prior submittals, and on this motion, in addition to participating in the three SIWG meetings and making various submittals with LUMA's comments, LUMA met separately with stakeholders on five occasions, three of these meetings being with SESA. In these meetings, LUMA and SESA discussed their respective positions on the proposed settings, as well as the points raised by other stakeholders.
- 23. In addition, in preparing the Revised Settings, LUMA evaluated SESA's technical recommendations to determine suitability and, where suitable, LUMA adjusted the settings to stakeholders' recommendations and, where not suitable, LUMA recommended an alternative setting aligned with IEEE 1547-2018 default settings or accepted industry standards, or a setting

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³⁶ See id., p. 7.

between stakeholders' recommendations and the default values. This is evidenced by the information provided in the June 20th Motion, which, as indicated above, included a discussion of SESA and other stakeholder comments and background information on the proposed Revised Settings.³⁷ There were several areas in which LUMA agreed with SESA and other stakeholders, which resulted in full or partial acceptance of the proposed changes. Specifically, LUMA partially accepted revisions in the areas of Power Control Modes, Enter Service Voltage, and Frequency Droop Settings- meaning that LUMA made the changes as requested but with values that were consistent with the actual system data, results of simulations, or best system practices.³⁸ In addition, LUMA fully accepted changes to the Enter Service Frequency and certain edits to the settings text.³⁹ A point-by-point table summarizing each issue raised by SESA related to the revised settings, among others, along with LUMA's response and the resulting updates to the Technical Bulletin, is included in the June 20th filing.⁴⁰ Enclosed for ready reference is a table containing the summary of the issues raised by SESA and LUMA's responses, consistent with the information in the June 20th filing. *See* Exhibit 1.

24. Notably, such was LUMA's engagement in the process that LUMA sought additional information from SESA regarding their concerns. Specifically, during one SIWG meeting in which SESA discussed SESA's Proposal, LUMA requested SESA to provide the underlying data to support SESA's Proposal. LUMA also requested this information during the separate meetings with SESA and other stakeholders. LUMA also expressed its openness to

³⁷ See June 20th Motion, Exhibits 1 and 3.

³⁸ See id., Exhibit 3.

³⁹ See id.

⁴⁰ See id., p. 9.

reviewing this data in its June 20th Motion. However, to this date, SESA has not provided this supporting data to LUMA nor the Energy Bureau. This absence of supporting evidence is particularly significant given the technical nature of the issues under review. LUMA emphasizes that it based its proposed settings on system-level data, simulations, operational experience, and alignment with industry standards such as IEEE 1547-2018. In contrast, SESA's objections remain unsupported by any verifiable data, despite multiple requests and opportunities to provide such information.

- 25. Moreover, LUMA's responsibility is to operate and plan the transmission and distribution system in a manner that ensures reliability, safety, and the continued integration of DG across the grid. In contrast, SESA's role is to represent the business interests of Puerto Rico's solar and energy storage industry.⁴² While there are areas of alignment between LUMA's system wide responsibilities and SESA's member interests, where those interests diverge, it is the Energy Bureau's role as regulator to determine the appropriate balance.
- 26. As can be noted, LUMA, SESA and other stakeholders conferred and agreed on some of SESA's and other stakeholders' proposals, in whole or in part, relating to revisions to the January 2025 Settings Sheets. This result demonstrates that LUMA effectively listened to and cooperated with SESA and stakeholders in this process. LUMA respectfully submits that cooperation and good faith does not require agreement on all issues or the need to reach consensus on all subjects.

⁴¹ See June 20th Motion, Exhibit 1, pp. 3 and 5.

⁴² Hearing Examiner's Order, Puerto Rico Energy Bureau, NEPR-AP-2023-0003, p. 2 (July 7, 2025) ("SESA describes itself as 'a non-profit trade association representing Puerto Rico's solar and energy storage industries," whose members include companies involved in manufacturing, sales, installation, operation, maintenance, and financing of solar and energy storage systems.").

- 27. LUMA notes that there is no requirement that LUMA and the stakeholders reach a consensus agreement in this process, nor should there be such a requirement, particularly when the matters under discussion pertain to the safety and reliability of the grid. The November 7th Order did not require that any determination with respect to revisions to the January 2025 Settings be "consensus-based" or based on joint recommendations. Rather, it provided that the purpose of the SIWG process was "to address the implementation and possible modifications to the [January 2025 Settings]" and that activation of the Volt-Watt Settings would be considered by the Energy Bureau based, among others, on "recommendations from LUMA and the Working Group regarding system performance". LUMA respectfully submits that, although reaching a consensus may be ideal in some situations, such an approach cannot be taken in this case if it is at the expense of ensuring decisions are data-driven, meet applicable regulatory requirements and industry standards, and promote grid safety and reliability.
- 28. The only reason expressed by SESA to raise an alleged procedural due process deficiency with respect to this process is LUMA's alleged deficient participation, which allegation lacks substance, as discussed above. In making such an argument, SESA also loses sight of the fact that it is incumbent on the government entity, and not another private stakeholder, to provide due process. ⁴⁴ Therefore, even if the due process rights alleged by SESA applied, SESA did not raise any deficiencies in the process held by the Energy Bureau, nor did it have any reason to do so. As described in SESA's own August 25th Motion, there was broad stakeholder participation, there being three SIWG meetings and related comment periods. SESA fully participated, attending

⁴³ See November 7th Motion, pp. 6-7.

⁴⁴ See Gonzalez Aristud v. Hosp. Pavia, 168 D.P.R. 127, 135 (2006), holding that due process of law, as in the case of the majority of the constitutional guarantees, protects persons essentially against the State.

all the meetings and making multiple submittals during the process. In sum, SESA does not have any due process claims to raise against the Energy Bureau, were any such rights applicable.⁴⁵

- 29. Regarding the alleged infringement of a vested right, SESA mischaracterizes the nature of the rights of the DG under the net energy metering program established under Act 114-2007, as amended ("Act 114"). The right to participate in the net energy metering program and export energy into the grid under Act 114 is not unqualified. Rather, there are eligibility and technical interconnection requirements that a DG must meet in order to interconnect and participate in the program.
- 30. Specifically, Act 114 provides that "[t]o be eligible for this benefit" the specified equipment of the DG "must meet with all the requirements established in the federal legislation and regulations applicable to net metering programs that allow for interconnection to the electric power grid." Act 114 also requires that the DG equipment "[c]onduct the operation compatible with the Electric Power Authority's existing transmission and distribution facilities", and that "[a]ll installations shall meet the interconnection and operation requirements set forth in the corresponding regulations." With respect to the latter, Act 114 further provides that "failure to comply with these requirements may result in a suspension from the Net Metering Program". 48

⁴⁵ LUMA questions that SESA has any standing to raise a claim regarding vested rights in net metering agreements as it is not a party to the net metering agreements and therefore not legally entitled to claim the infringement of a contractual right. Similarly, LUMA questions whether SESA has an individual interest at stake which must be present for the application of due process of law in its procedural aspect. *See Meléndez v. Keleher*, 200 DPR 740, 760 (Judgment, Majority Concurring Opinion of Judge Rivera García) ("However, it is indispensable that there be at stake an individual interest. The distinction between the individualized deprivations and the policy-based deprivations of a class is central to understanding the legal system of the United States. The former are protected by due process of the law; the latter are not." (footnotes and citations omitted; translation ours)).

⁴⁶ See 22 L.P.R.A. § 1012.

⁴⁷ See id. 22 LPRA § 1012(c) and (i).

⁴⁸ See id. 22 LPRA § 1012(i).

- 31. To that end, Regulation 8915 expressly provides that the "customer must protect, operate, and maintain the DG in accordance with these Regulations, the signed Agreement and those practices and methods, amended and updated, that are commonly used in engineering and electric utilities to ensure the safe operation of the DG." Among the technical requirements that a DG must meet under Regulation 8915 are "the applicable standards in effect, including but not limited to IEEE 1547". In addition, Article C of Section IV on Power Quality, establishes that "the customer is responsible for ensuring that the DG complies with the power quality requirements specified in standards IEEE 519, IEEE 1453, IEEE 1159, IEEE 1547, UL 1741 and other applicable standards.
- 32. Furthermore, Regulation 8915 expressly empowers PREPA (now LUMA, as its agent) to require customers to install the necessary protective and control equipment, providing as follows⁵²:

The interconnection of the DG is conditioned on its failure to cause voltage or frequency fluctuations outside of the Authority's acceptable parameters, flicker, voltage sags, interruptions, transient phenomena, problems with the quality of the electrical signal, or any unsafe conditions, which may affect customers in the area, other DGs, or the Authority's system. If at any time the DG is found to cause any of these conditions, the Authority may require the customer to modify its design, install the necessary protection and control equipment, limit the operation of the DG, or disconnect it from the Authority's system until the situation is corrected.

⁴⁹ Regulation 8915, Section II, subsection M (translation ours).

⁵⁰ See id., Section IV, Art. B, Paragraph 2 (translation ours).

⁵¹ See id. Article C, Paragraph 1 (translation ours). As mentioned, SESA is not a party to the net metering agreements that it alleges would be infringed in this case. Without implying that such a contractual right would constitute a fundamental right, LUMA submits that, similarly, SESA has not demonstrated that it has a fundamental right that warrants substantive due process protection. See, Aut. Puertos v. H.E.O., 186 DPR 417, 428 (2012) ("[D]ue process of law represents a barrier to state actions that are arbitrary or capricious that affect the fundamental rights of citizens." (citations omitted)); Rodriguez Rodríguez v. ELA, 130 DPR 562, 576 (1992) ("the substantive aspect of the due process of the law, in Puerto Rico as well as in the United States, seeks to protect and save the fundamental rights of a person." (citations omitted)).

⁵² *Id.* Section VI, Article E, paragraph 3, subparagraph b (translation ours; emphasis added).

Identical provisions are incorporated in net metering contracts.⁵³

- 33. In conclusion, net energy metering customers do not have a right to unlimited exports. The right of the DG to participate in the net energy metering program is circumscribed to its interconnection meeting applicable safety and reliability requirements, among others. The proposed Revised Settings are part of these safety and reliability requirements for which the law provides. LUMA's system simulations highlight the importance of these settings. In one area with high DG penetration, 550 out of 955 circuit sections experienced voltage violations when the proposed settings were not applied. When the revised Volt-Var and Volt-Watt functions were enabled, the number of affected sections dropped to just 10% of the total.⁵⁴ As such, these settings are part of the framework for participation in the net energy metering program and therefore cannot at the same time be considered as "impairing" or "diminishing" participation in the program.
- 34. Finally, LUMA opposes SESA's request that the Energy Bureau order LUMA to convene additional meetings with stakeholders and to reach a consensus with all stakeholders on the revised settings. LUMA has carefully reviewed all comments submitted by SESA and other stakeholders in this proceeding and has engaged in multiple meetings where stakeholders were given ample opportunity to present and discuss at length the technical issues in detail. LUMA sees no benefit in holding additional meetings to revisit the same information that has already been thoroughly discussed and evaluated. LUMA respectfully submits that requiring it to engage in further meetings under these circumstances would essentially result in giving a stakeholder veto power over any proposal that may be submitted to the Energy Bureau and depriving the Energy Bureau of its authority to issue decisions that put an end to disagreements between stakeholders.

⁵³ See Regulation 8915, Annex H, page 4, clause 3.6.

⁵⁴ See June 20th Motion, p. 13.

If the stakeholders have reached an impasse, there is no value in pursuing further meetings, and it is up to the Energy Bureau, as energy regulator, to issue a determination that best aligns with the legal requirements, prudent utility practice, overall public policy, and the needs of an everevolving energy system. LUMA respectfully submits that the Energy Bureau has an abundant record in this case, resulting from a robust stakeholder participation process, and is in a position at

WHEREFORE, LUMA respectfully requests the Energy Bureau to take notice of the aforementioned; deny SESA's requests in its August 25th Motion; proceed to issue a determination on the Revised Settings; and make such other determination that may be appropriate in accordance

with applicable law.

RESPECTFULLY SUBMITTED.

this time to issue such a determination.

In San Juan, Puerto Rico, this 18th day of September 2025.

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 will be notified to hrivera@jrsp.pr.gov; arivera@gmlex.net; mvalle@gmlex.net; agustin.irizarry@upr.edu; javrua@sesapr.org; contratistas@jrsp.pr.gov; aconer.pr@gmail.com; john.jordan@nationalpfg.com; cfl@mcvpr.com; and mqs@mcvpr.com.

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Exhibit 1

Changes to Technical Bulletin Compared to Stakeholders Recommendations

Table 2: Changes to Technical Bulletin Compared to LUMA's June 20, 2025 motion included a detailed comparison between the technical changes proposed by Solar and Energy Storage Association of Puerto Rico (SESA) in its April 25, 2025 filing, comments from the Electric Power Research Institute (EPRI)¹, and LUMA's corresponding responses and proposed updates to the Smart Inverter Settings Technical Bulletin (see Table 1: Changes to Technical Bulletin Compared to SESA's Motion of April 25, 2025).²

This table provides a detailed comparison between the technical changes proposed by SESA in its April 25, 2025 filing, comments from EPRI, and LUMA's corresponding responses and proposed updates to the Smart Inverter Settings Technical Bulletin. It demonstrates that LUMA's revised settings were developed through a transparent, data-driven process that incorporated stakeholder input, including direct engagement with SESA, and were informed by operational data, system simulations, and alignment with IEEE Std. 1547-2018 and Regulation 8915.

Table 2: Changes to Technical Bulletin Compared to Stakeholders Recommendations

Section	SESA Proposed Action	EPRI Comments	LUMA Response	LUMA Proposed Update to Bulletin
1.1 Communication Requirements	N/A		N/A	No changes
1.2 Smart Inverter Functions and Control Modes	N/A		N/A	No changes
2.1 Anti-Islanding	N/A		N/A	No changes
2.2 Response to Abnormal Voltage				



¹ EPRI is an independent, nonprofit organization that conducts public interest research and development related to electricity generation, delivery, and use, in collaboration with the electricity sector and stakeholders to enhance grid safety, reliability, affordability, and environmental responsibility. Electric Power Research Institute. *About EPRI*. Retrieved from https://www.epri.com/about.

² LUMA Energy, LLC. (2025, June 20). *Motion to Submit LUMA's Revised Smart Inverter Sheets and Responses to Stakeholder Comments to LUMA's Comments of April 25, 2025*, Case No. NEPR-MI-2019-0009. Exhibit 3, Table 4: Changes to Technical Bulletin Compared to SESA's Motion of April 25, 2025.

Section	SESA Proposed Action	EPRI Comments	LUMA Response	LUMA Proposed Update to Bulletin	
2.2.1 Voltage Trip Settings	N/A		N/A	No changes	
2.2.2 Voltage Ride- Through	N/A		N/A	No changes	
2.3 Response to Abnorm	al Frequency				
2.3.1 Frequency Trip Settings	N/A		N/A	No changes	
2.3.2 Frequency Ride Through	N/A		N/A	No changes	
2.4 Voltage Reactive Power Control Mode	N/A	Volt/Var and Volt/Watt are overlapping over a wide voltage range of (1.06 p.u1.08 p.u.). DER starts to curtail active power when only 1/3 of reactive power capability is utilized to regulate voltage. Recommendation: Shift V4 in Volt/Var to the left, and V1 in Volt/Watt to the right.	Volt/Var and Volt/Watt curve have been adjusted to minimize overlap and maximize usefulness as per Enphase and EPRI suggestion.	Updated curves based on acceptable operational ranges.	
2.5 Voltage Active Power Control Mode	N/A		N/A	No changes	
2.6 Enter-Service Settings					
Enter-service Voltage Max/Min	Increase enter-service maximum value for voltage from 1.06 p.u. (127.2 V) to 1.10 p.u. (132 V) to allow faster resumption of service.	SESA suggests to increase "maximum value" of voltage for enter-service from 1.06 p.u. to 1.10 p.u., while OV1 in Voltage Trip	Maximum Value - LUMA's values are aligned with CA Rule 21 and ANSI 84.1 Range B. Voltage levels higher than that might be	No changes	



Section	SESA Proposed Action	EPRI Comments	LUMA Response	LUMA Proposed Update to Bulletin
	Implement reconnection criteria that enable inverters to resume operation without excessive delays.	setting is kept at 1.10 p.u. This may lead to risk of infinite cycling of inverter tripping à enter-service à tripping. Recommendation: Separate the two voltage levels with enough margin.	considered safety hazard. No changes are suggested. Minimum Values - no changes.	
Enter-service Frequency Max/Min	Minimum Value Lower the enter-service minimum value from 59.5 Hz to at least 59.0 Hz Maximum Value Determine frequency settings using actual LUMA data from substations and feeders. Compose frequency distribution plots to determine the best frequency values for Smart Inverter Settings. SESA's initial recommendation is to increase the enter- service maximum value from 60.1 Hz to 60.5 Hz, with the potential for increasing up to 61.0 Hz (the upper limit tested	LUMA's present frequency range of 59.5~60.1Hz combined with 300s delay time is likely too restrictive. Expanding this range per SESA's suggestion: —Still allows the DER to stay within the "continuous operation" region per the frequency ride-through capability—Doesn't conflict with the frequency trip setting—Has minimum impact to inverter DER, especially those Behind the Meter (BTM) DER without stepup transformers that may saturate under high V/f	Frequency Max/Min values for enter-service were updated based on system data. Two large sets of data were used to update these values; data of regular operations of the system and (2) specific data from system events that show system recovery. This aligns with SESA's comments.	LUMA to update this requirement, consistent with SCADA frequency data observed, to allow MAX = 60.5 Hz and MIN = 59.0 Hz.



Section	SESA Proposed Action	EPRI Comments	LUMA Response	LUMA Proposed Update to Bulletin
	and recommended by IEEE 1547-2018) following an initial evaluation period. The 60.5 Hz value would align Puerto Rico's standard with California's 60.5 Hz reconnection threshold.			
Enter-service Time	Reduce time to 15s.	is a long time. North American Electric Reliability Corporation (NERC) studied a number of transmission system events and concluded that keeping generation sources online or reducing their delay of connection is important to system restoration. In high DER penetration systems, DER sources should be considered more as grid helpers, not troublemaker	The values for enterservice time will remain as per the original bulletin, 300s. This is based on observed system data. See appendix for supporting information.	No changes
2.7 Ramp Rate Settings	Delete duplicative references.		LUMA to delete redundant content.	Deleted repetitive content.
2.8 Frequency Droop Settings	Increase the Frequency-droop deadband from 0.036 Hz (36 mHz) to 0.250 Hz (250 mHz).	SESA suggests to decrease the OLRT of frequency droop response time to 0.5s.	We recognize the usefulness of Frequency-Droop Response to be standardized to industry-	Db - 0.100 Hz (system data) Droop coefficient - 0.05 (IEEE 1547-2018 default



Section	SESA Proposed Action	EPRI Comments	LUMA Response	LUMA Proposed Update to Bulletin
		Additional study may be necessary to evaluate this. Most BTM DER are single-phase inverters whose frequency measurement may be easily affected by local transients such as harmonics and phase shifting, having too aggressive frequency droop response may introduce adverse impact.	acceptable values. LUMA is updating and adopting values, based on SCADA frequency system data and IEEE 1547-2018 suggested values.	value) Response Time - 5s (IEEE 1547-2018 Default)

