

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

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IN RE:
PUERTO RICO ELECTRIC POWER
AUTHORITY'S PERMANENT RATE

CASE NO.: NEPR-MI-2020-0001

SUBJECT: Comments Proposing Program
Launch Milestones for the Emergency
Demand Response Program under LUMA
EE/DR Transition Period Plan

**COMMENTS PROPOSING PROGRAM LAUNCH MILESTONES
FOR THE BATTERY EMERGENCY DR PROGRAM UNDER LUMA EE/DR
TRANSITION PERIOD PLAN**

TO THE HONORABLE PUERTO RICO ENERGY BUREAU:

COME now DR Third Party Aggregators to respectfully submit supplemental comments building on the submission of July 20, 2023, by the Solar and Energy Storage Association of Puerto Rico (“SESA”).¹ The DR Third Party Aggregators reiterate SESA’s request that the Energy Bureau of the Puerto Rico Public Service Commission Regulatory Board (“Energy Bureau”) authorize funding so that LUMA Energy, LLC and LUMA Energy ServCo (collectively, “LUMA”) can move forward with achieving milestones that are necessary prerequisites to launching the emergency Virtual Power Plant (“VPP”) under its Battery Emergency Demand Response Program (“BEDRP”). In this filing, the DR Third Party Aggregators provide insights into what achieving these necessary milestones will entail once the funding for the BEDRP/emergency VPP is authorized. To some degree, we propose that certain activities be completed immediately and concurrently while funding concerns are still being resolved. We urge the Energy Bureau and LUMA to collectively align on the importance of achieving these milestones expeditiously to get

¹ See *SESA Reiterated Request for PREB Funding Authorization for LUMA to move forward with EE/DR programs and Further Requests for Clarity of Emergency DR Program Details*, NEPR-MI-2020-0001/NEPR-MI-2022-001 (Filed July 20, 2023).

ahead of any further potential delays and to boost grid reliability by launching the emergency VPP for this summer and fall.

I. Overview of Comments

DR Third Party Aggregators respectfully submit that the BEDRP envisioned under the Energy Bureau's recent orders is a fairly simple demand response program structure with the feature of paying Puerto Ricans to export stored energy at their option. This includes the option for customers to opt-out of specific events and toggle how much energy they will contribute during an event. The BEDRP program would enable thousands of customers to discharge their battery to help the grid during declared emergency/grid stress conditions. The implementation and launch for the emergency/quick-start BEDRP requires no major information technology ("IT") changes to LUMA systems, no sophisticated technical integration between utility and aggregator platforms to consume LUMA dispatch instructions, and no major physical equipment upgrades nor software upgrades to enroll and enable customers to participate in these programs. The initial enrollment-ready customer base is a community of potentially thousands of residents in Puerto Rico who already pair solar with residential batteries – the batteries have built-in sub-second smart metering to track and calculate grid contributions from stored solar during LUMA-declared VPP events. However, contractual and program design technicalities must be acknowledged and completed in a timely manner for this program to launch and immediately begin mitigating daily summer capacity reserve shortfalls and the rolling blackouts. The following milestones must be achieved concurrent with, or subsequent to, the authorization of initial funding to the BEDRP:

Steps and Milestones for Emergency Solar-Storage VPP Support in Puerto Rico²

ID	Short Description of Action	Est. Duration Proposed by DR Third Party Aggregators	Responsible Parties	Impacted Party or Objective	Additional Information
1	Authorization of initial funding via EE Rider	Should occur asap	PREB	LUMA-Aggregator Program Agreement Execution, Customer Enrollment, Launch, Grid Support to Puerto Rico	SESA’s filing of July 20, 2023, describes funding uncertainty as the core blocker to proceeding with VPP launch.
2	Finalize process for data exchange between aggregators and LUMA for enrollment information and program administration	14 days Concurrent progress is possible	LUMA, Aggregators	Customer Enrollments	The data exchange process will be memorialized in LUMA’s eventually published BEDRP terms and/or aggregator program agreements with LUMA. Customer enrollment in VPP cannot occur without this action.
3	Finalize process for LUMA to notify aggregators of BEDRP Events (emergency or constraint conditions that result in notice calling on VPP capacity)	14 days Concurrent progress is possible	LUMA, Aggregators	Aggregators; Customer-Participants	A simple version of this could be an online announcement of declared events (similar to CAISO Flex Alerts); email notices, etc. Aggregators will use existing technology to surface notifications to customers.
4	Publish program terms or other material information about the BEDRP on LUMA website or in PREB Docket, etc.	5 days Subsequent to prior noted steps 1-3	LUMA	Aggregators; Customer-Participants	Program terms must be published consistent with the Energy Bureau’s requirements; the Energy Bureau has explicitly called for a program, not a procurement. This will entail terms being published and LUMA entering into specific bilateral agreements with eligible aggregators based on

² Note: This sheet has been structured to mirror the data set for commissioning a Virtual Power Plant that has been published by the Texas/ERCOT RTO for its Virtual Power Plant pilot program, available here: <https://www.ercot.com/files/docs/2022/12/19/ADER-Resource-Registration-Steps-and-Milestones-12-16-22-1645.docx>

					published program terms. The program terms may be published as a Master Agreement, similar to that published for the California equivalent of this program. See, e.g., Aggregator Agreement masters (program terms as a master contract) for SCE and PG&E , available online. The program may also be published by the utility or by the Bureau to state overarching terms, similar to this publication by the utility regulator in California.
5	Finalize bilateral agreements between LUMA and aggregator based on published program terms/published master agreements	Subsequent to prior noted steps 1- 4	LUMA and Aggregators	Aggregators; Customer-Participants	Aggregator agreements similar to those executed for the California Emergency Load Reduction Program (ELRP) VPP program including incorporating the requisite customer enrollment, data exchange, and event dispatch information as well as the feedback from market stakeholders that LUMA has.
6	Commence Enrollment of Customers	5 days Subsequent to prior noted steps 1-5	Aggregators	Customers	Surfacing the program experience for the initial batch of customer-participants will include showing an enrollment agreement electronically, executing, creating test dispatch instructions, and immediately cadencing VPP dispatch notices to customers based on LUMA notices about grid events that fit the program definitions.
7	Authorization of supplemental external funding – grants from federal, state, other sources	6 months – 1 year	LUMA; External Funding Sources	Customers/ Puerto Rican homeowners – boost participation and compensate customers; added new customers and added new LMI customers resulting from more deployment of solar and storage.	Customer must be motivated to increase contribution and sufficient funds must exist to increase enrollments or increase grid support event quantity over time. “Stop and start” funding or a stagnant funding pool does not provide equitable outcomes. More customers should have the opportunity to enroll as the program grows, and LMI customers who receive these systems should not be locked out because initial program funds have depleted.

II. Procedural History and Background

On February 16, 2023, the Energy Bureau issued a Resolution and Order in *In re: Energy Efficiency and Demand Response Transition Period Plan*, stating its determinations on LUMA's filed proposal for an Energy Efficiency and Demand Response Transition Period Plan ("EE/DR TPP").³ The Resolution and Order included firm deadlines for LUMA to meet certain BEDRP milestones, including enrolling customers by April 15, 2023, and demonstrating capability to call BEDRP events by May 15, 2023.

On March 8, 2023, LUMA filed a Motion requesting that the Energy Bureau reconsider the deadlines set forth in its February 16 Resolution and Order.

On April 3, 2023, the Energy Bureau issued a Resolution and Order modifying certain program deadlines, including ordering LUMA to file proof of customer enrollment by June 9, 2023, and to demonstrate capability to call BEDRP events by July 14, 2023.

On April 11, 2023, LUMA filed a Motion to Submit EE Rider with estimated program costs and rate calculation.

On June 5, 2023, LUMA filed to request clarification on the applicability of several terms on the Regulation for Demand Response Regulation 92461 to the BEDRP. LUMA also requested that the Energy Bureau extend the deadline for enrolling customers in the BEDRP by at least 30 days from the date of issuance of an order providing clarification.

On June 5, 2023, DR Third Party Aggregator filed a motion for clarification of the requirements of the DR Regulation and Regulation 8701 with respect to certification of aggregators.

³ See Resolution and Order, Determination of LUMA's June 21, 2022, Proposed Transition Period Plan, Case No. NEPR-MI-2022-001 (issued Feb. 16, 2023) (citing and approving with modifications, LUMA's Proposed Transition Period Plan).

On June 15, 2023, the Energy Bureau issued a Resolution and Order waiving certain sections of the Regulation 8701 and establishing a deadline of December 1, 2023, for aggregators participating in the BEDRP to apply for certification.

On June 29, 2023, LUMA filed an urgent motion requesting that the Energy Bureau provide a determination regarding implementation of LUMA's Revised EE Rider Petition.

On June 30, 2023, the Energy Bureau issued a Resolution and Order in Case No. NEPR-MI-2020-0001, suspending the EE Charge for July 2023.

On June 30, SESA filed a request in Case No. NEPR-MI-2020-0001 for the Energy Bureau to authorize LUMA to move forward with EE/DR TPP implementation.

On July 1, 2023, the Energy Bureau issued a Resolution in Case No. NEPR-MI-2020-0001, clarifying that it did not suspend the Energy Efficiency and Demand Response Programs, and ordering LUMA to continue with the implementation of the TPP and the EE/DR programs. In that Resolution, the Energy Bureau assured LUMA that the required funds for the EE/DR programs would either be identified by the Governor or collected through the EE Rider.

On July 14, 2023, LUMA filed a response to LUMA's July 1, 2023, Order, requesting that the Energy Bureau suspend LUMA's deadline for enrolling customers and its deadline for demonstrating capability to call events in the BEDRP, in light of the Energy Bureau's suspension of the EE Charge.

On July 20, 2023, SESA filed a supplemental comment on LUMA's responsive filing, reiterating a request for authorization of the EE rider funding.

III. Comments

There remain several essential, yet incremental, programmatic implementation milestones that need to be completed prior to launch of the BEDRP. We urge the Energy Bureau to take action

quickly on the EE Rider to support the timely completion of critical next steps. We also request transparency be provided regarding expected timelines for completion of these milestones. Delays in implementing these steps could ultimately result in further prolonging of the program commencement. The milestones include:

- 1. Authorization of initial funding via EE Rider.** As LUMA stated in its July 14, 2023, filing, essential program implementation milestones remain unachievable without secure funding. Aggregators cannot enroll customers into the BEDRP without material terms, conditions, protections, and disclosures being executed between LUMA and aggregators that include the terms of guaranteed Payments for Performance to customers. Without enrolled customers, LUMA cannot reasonably demonstrate the capability to call BEDRP events, which is a requirement from the Energy Bureau in its prior orders. The steps of customer enrollment and event dispatch demonstration likely will continue to be delayed until LUMA is provided with funding certainty for the BEDRP.
- 2. Finalize process for data exchange between aggregators and LUMA for enrollment information and program administration.** A clear understanding of data exchange protocols for customer enrollment processes and for ongoing program data exchange is needed so that aggregators can adequately modify their technical processes to communicate seamlessly with customers and accommodate LUMA's expectations for information and the Energy Bureau's expectations for transparency and audit-ready information. Additionally, to ease the burden of enrollment for LUMA and its customers, aggregators can use smartphone apps to enroll customers into the BEDRP without the need for customers to fill out extensive paperwork. Providing this service has been shown elsewhere, including in California's Emergency Load Reduction Program, to encourage broader program uptake and reduce barriers to enrollment.

However, to facilitate this effectively, aggregators need to have a firm understanding of the process of enrolling customers into the program, how applications will be reviewed, and how decisions will be communicated back to aggregators to allow for the quick approval of customers. Aggregators must also understand the technical specifics of how enrollment information may be securely shared with LUMA and how the results of the enrollment reviews will be securely passed back to the aggregator.

- 3. Finalize process for LUMA to notify aggregators of BEDRP Events (emergency or constraint conditions that result in notice calling on VPP capacity).** Finalizing the process for how LUMA will call dispatch events is necessary to ensure that aggregators are prepared to receive and act on LUMA's signal. Similarly, it is necessary for LUMA to be capable and familiar with how it will be selecting and calling events so that it can meet another milestone ordered by the Energy Bureau: testing the capability to call BEDRP events. While LUMA will not be able to test its ability to call dispatch events until customers are enrolled in the BEDRP, finalizing the event-calling process is a necessary step toward that achievement.
- 4. Publish program terms or other material information about the BEDRP program on LUMA website or in the Energy Bureau Docket.** Finalizing the master program terms (which may be equivalent to a master aggregator agreement), would incorporate the requisite customer enrollment, data exchange, and event dispatch information as well as the feedback from market stakeholders that LUMA has already received.
- 5. Finalizing bilateral agreements between LUMA and aggregator based on published program terms/published master agreements.** Completing the aforementioned milestones will provide LUMA with the information it needs to finalize aggregator agreements that are based on publicly available program terms. Prior to aggregators enrolling customers into

LUMA's BEDRP, aggregators will be required to sign this agreement that specifies program terms and conditions, parties' respective obligations, and other legal requirements to support a well-functioning program. These legal requirements include customer protections and stipulations guaranteeing that funds are available to pay customers and pay the aggregators who are undertaking administration and customer-facing interactions 24x7 to provide LUMA emergency capacity. Until this document is finalized and signed by aggregators, the BEDRP cannot launch – primarily and critically, because commitments to customers cannot be executed without this step.

- 6. Commence Enrollment of Customers.** The signed aggregator agreements will contain terms that protect and educate customers on their rights and obligations, which the aggregators will then be obligated to surface in their enrollment agreements. In order to ensure consistency, transparency, and fairness across any aggregator-run VPP programs, the material terms around notice and process that customers see must flow from the aggregator agreements signed between the aggregator and LUMA.
- 7. Authorization of supplemental external funding – grants from federal, state, and other sources.** In order for the emergency VPP program to grow in scale and include more customers including populations of LMI customers, external funding from resiliency programs and grants is critical. Enabling EE Rider/LUMA tariff funding is just the “first domino” in a series of wins for Puerto Rico that can be achieved if there is early success in a quick-start VPP program. Firstly, scaling LMI deployments of solar and storage should necessarily be accompanied by increases to the available VPP funding pool so that aggregators can enroll more customers and ensure levelized payments to all customers over time. For example, average payments should not fall to each incremental customer because of new customers joining – the pool of funds

available must grow with the customer count. Additionally, the program can grow by adding more services that customers can provide to LUMA from the same systems without any compromise to the customer experience. This concept of “value stacking” grid services from batteries means that in addition to providing the first service contemplated by the BEDRP – emergency reserve exports from batteries – additional sophisticated balancing services like primary frequency response can be provided from the same systems. Compensating customers for these additional services will not be possible without additional funding sources, at least for the first few years of the program. Primary frequency response from tens of thousands of batteries on the island has the capability to prevent daily outages and unit trips that cause millions of dollars of economic loss. If the LUMA program is not capable of compensating this service, third party funding should be made available to supplement the compensation and allow aggregators to deliver value to customers for providing this service. Finally, external funding is a critical bridge to insure against “stop and start” signaling to aggregators and customers and is thus critical to retaining customer trust and aggregator participation. Any irregularities in steady funding from an EE rider or alternate tariff component can be smoothed out by designating supplemental funds to keep the program going regardless of what happens in a future ratemaking docket. The DR Third Party Aggregators look forward to participating in conversations with policymakers that could support these outcomes to boost customer satisfaction and inclusion while increasing support to the Puerto Rican grid.

IV. Conclusion

While LUMA has taken steps to achieve each of these milestones, none are currently complete, and all are necessary to launch the Emergency VPP/BEDRP. We look forward to working with LUMA to hasten completion of as many of these key milestones as possible even in

the absence of funding certainty. Doing so will help ensure that the BEDRP can be operationalized soon after funding is secured for the program. Faster operationalization in turn will hasten the ability of aggregators to help mitigate Puerto Rico's frequent blackouts, forestall load shed events, and provide overall greater grid stability.

Respectfully Submitted.

/s/ Evan Dube

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On Behalf of DR Third Party Aggregators

Certificate of Service

It is hereby certified that, on this same date, I have filed the above document with the Clerk of the Energy Bureau using its Electronic Filing System at <https://radicacion.energia.pr.gov/login>, and I will send an electronic copy of the filing to: PREPA through its attorneys at jmarrero@diazvaz.law, kbolanos@diazvaz.law; LUMA through its legal representatives at margarita.mercado@us.dlapiper.com and laura.rozas@us.dlapiper.com; the Independent Office for Consumer Protection at hrivera@jrsp.pr.gov; and agraitfe@agraitlawpr.com, info@sesapr.org, elevin@veic.org.

In Cary, North Carolina this 1st day of August 2023.

/s/ Blake Elder
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