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

**IN RE:** ENERGY EFFICIENCY AND DEMAND RESPONSE TRANSITION PERIOD PLAN

**CASE NO: NEPR-MI-2022-0001** 

SUBJECT: Emergency Load Reduction

Program Approval

## **RESOLUTION AND ORDER**

## I. Procedural Background

On October 23, 2024, the Energy Bureau of the Puerto Rico Public Service Regulatory Board ("Energy Bureau") issued a Resolution and Order ("October 23 Resolution") through which the Energy Bureau, among other determinations, ordered LUMA¹ to file a proposed backup generators emergency demand response ("DR") program to be implemented by June 2025. The Energy Bureau also ordered LUMA to submit monthly status reports on or before the 15th of each month, beginning January 15, 2025, detailing its efforts to design and implement the program.

On January 15, 2025, February 15, 2025, and March 17, 2025, LUMA submitted monthly reports on the status of the development of the backup generators emergency DR program.

On April 3, 2025, the Energy Bureau issued a Resolution and Order ("April 3 Resolution") through which the Energy Bureau scheduled a Technical Conference for April 24, 2025, to discuss, in part, the status of LUMA's backup generator emergency DR program.

On April 15, 2025, LUMA submitted a *Motion to Submit April 2025 Report on the Development* of the *Pilot Emergency Backup Generators Demand Response Program* in which LUMA provided an update on the status of the development of the backup generators emergency DR program.

On April 24, 2025, the Energy Bureau held a Technical Conference. LUMA representatives provided information on the agenda items listed in the April 3 Resolution, including status of the backup generator emergency DR program and potential for a cogeneration demand response program.

On April 30, 2025, the Energy Bureau issued a Resolution and Order ("April 30 Resolution") ordering LUMA to submit a full proposal for its proposed backup emergency generator program, or the Emergency Load Reduction Program ("ELRP").

On May 14, 2025, LUMA submitted a *Motion to Submit May 2025 Report on the Development* of the *Pilot Emergency Backup Generators Demand Response Program* in which LUMA provided an update on the status of the development the ELRP.

On May 21, 2025, LUMA submitted a *Motion to Submit Proposal for Emergency Load Reduction Program in Compliance with Resolution and Order of April 30, 2025* ("May 21 Motion"). LUMA submitted as Exhibit 1 its proposal for the ELRP ("ELRP proposal"). LUMA requests a budget of \$8.9 million covering the fourth quarter of FY2025 and all of FY2026, to be recovered through the quarterly Power Purchase Cost Adjustment ("PPCA").

On June 13, 2025, submitted a Motion to Submit June 2025 Report on the Development of the Pilot Emergency Backup Generators Demand Response Program in which LUMA provided an update on the status of the development of the ELRP. LUMA noted that it has been in periodic communication with the United States Environmental Protection Agency ("EPA") and the Puerto Rico Department of Natural and Environmental Resources ("DRNA") to facilitate customer participation in the ELRP. Additionally, LUMA has begun collecting generator information from potential participants to address the information requirement established.

<sup>&</sup>lt;sup>1</sup> LUMA Energy, LLC as Management Co., and LUMA Energy ServCo, LLC (collectively, "LUMA").

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by the EPA. However, LUMA notes that EPA has not yet addressed the air permitting limitations that prevent customers from participating in the program.

#### II. Discussion

LUMA's proposed Emergency Load Reduction Program compensates customers for temporarily reducing their load during emergency demand response events ("DR Events") by shifting their load to onsite backup generators or other resources.<sup>2</sup> LUMA is targeting enrollment of 50 MW of firm capacity, and assumes a program start date in mid-June 2025.<sup>3</sup> Customers will receive a monthly capacity payment of \$6.00 per kW of load reduction commitment and a per-event participation payment of \$0.25 per kWh of load reduction during emergency DR events. Customers are paid quarterly through a bill credit. LUMA estimates 75 emergency DR events from June 1 through October 31, 2025, lasting an average of 5.5 hours each. LUMA's requested budget of \$8,875,000 reflects customer capacity and event participation payments, plus \$2,218,750 of internal LUMA administrative costs.

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To be eligible to enroll in the ELRP, customers must be able to commit a firm amount of load reduction during each emergency DR Event, have at least 1 MW of peak demand, and have current air permits in good standing with DRNA and EPA. Additionally, customers must work with LUMA to create a Firm Load Reduction Commitment plan, which documents the amount of demand the customer can reduce during an emergency DR event and communication methods for receiving dispatch instructions, among other information.



Once enrolled, customers will begin receiving Emergency DR Event notifications from LUMA. Customers are notified a minimum of six hours in advance of the DR Event and must confirm their participation. If the customer is not able to meet their load reduction commitment, the customer must immediately inform LUMA.

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The Energy Bureau has acknowledged that the summer period of this year is expected to be a challenging period for resource adequacy in Puerto Rico. LUMA projects 93 generation shortfall events during the summer (May 1 through October 31, 2025), which will require manual load shed. Exacerbating events, such as an extended heat wave or additional loss of a baseload generation plant, would increase the number of outage events.

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The Emergency Load Reduction Program is designed to reduce the magnitude of generation shortfall and thus reduce or eliminate the number of customers who lose power due to manual load shedding. The program will compensate customers with backup generators who reduce their load during an Emergency Demand Response event by shifting their load to onsite backup generators. LUMA estimates that every 1.5 MW of backup generation deployed during an emergency demand response event would reduce the number of customers experiencing outages due to a load shed event by 1,000.

LUMA notes "the costs associated with this resource are reflective of the situational peak demand and lack of availability of traditional supply during grid emergencies; while more costly than the blue-sky base load generation resources- the cost reflects the nature and need for the resource as a last resort for generation availability."

The ELRP is a potential energy resource for maintaining reliability in Puerto Rico during an expected period of resource constraints. While this resource is not without cost, it is expected to contribute to keeping the lights on for Puerto Ricans, which is a benefit that merits the costs. If LUMA is able to secure the full 50 MW of emergency capacity and deploy it 75 times from July to October of this year, the estimated total cost per residential customer (over all four months) would be less than \$3. In exchange, over 30,000 customers would avoid each outage, up to a potential of over 13 million customer-hours of avoided

<sup>&</sup>lt;sup>2</sup> LUMA defines an Emergency Demand Response event as "conditions of actual or imminent system generation" shortfall when demand on the electric grid is expected to exceed generation capacity."

<sup>&</sup>lt;sup>3</sup> Target start date assumes Energy Bureau program approval by May 30 and determinations from the EPA and DNRA that resolve air permitting barriers.

**outage.** The Energy Bureau sees the ELRP costs as a temporary means for improved reliability while the Energy Bureau, LUMA, and stakeholders work to procure and deploy more generation resources.

The magnitude and quantity of the projected load shed events for the upcoming summer present a clear emergency for Puerto Rico. LUMA's proposed ELRP has the potential to prevent thousands of Puerto Ricans from losing power this summer.

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At the April 24 Technical Conference, LUMA explained that EPA and DNRA air permits limit the number of hours a generator can run, which presents a barrier for participation in the ELRP.<sup>4</sup> While LUMA is working with EPA and DNRA, until these regulatory barriers are addressed, LUMA will be unable to implement the program.<sup>5</sup> Additionally, LUMA's proposed budget of \$8.875 million assumes monthly capacity payments for participants from June 1, 2025 through October 31, 2025 and event payments for 75 events.



## III. Conclusion

For the reasons discussed above, the Energy Bureau **APPROVES** LUMA's proposed Emergency Load Reduction Program through October 31, 2025. The Energy Bureau further **REQUIRES** LUMA to respond to the requirements of information included in **Attachment A** of this Resolution and Order **on or before July 15, 2025**. LUMA **SHALL** continue to actively pursue implementation while it prepares responses to these questions.

Due to the ongoing uncertainty around when and if LUMA will be able to enroll participants, the number of months and events and associated budget is also uncertain. Therefore, the Energy Bureau **FINDS** it is premature to collect the ELRP budget and does **NOT APPROVE** the collection of funds through the PPCA for the ELRP at this time.

LUMA **SHALL CONTINUE** to file monthly status reports to the Energy Bureau on the ELRP's status. Once LUMA finds a path to implement the ELRP, it **SHALL FILE** with the Energy Bureau a revised budget and timeline for program implementation. That filing should contain, at a minimum, the following information to support LUMA's requested budget: the information on page 12 of LUMA's ELRP proposal from the May 21 Motion, the expected number of participants and their capacity, and detail on the composition of administrative costs. Once program costs are incurred or its revised budget is approved, LUMA **SHALL** file its costs and justification to include in the quarterly PPCA process.

The Energy Bureau WARNS LUMA that, in accordance Art. 6.36 of Act 57-2014:6

- (i) noncompliance with this Resolution and Order, regulations and/or applicable laws may carry the imposition of fines and administrative sanctions from ten thousand dollars (\$10,000) up to one hundred twenty-five thousand dollars (\$125,000) per day; and
- (ii) for any recurrence of non-compliance or violation, the established penalty shall increase to a fine of not less than fifteen thousand dollars (\$15,000) nor greater than two hundred fifty thousand dollars (\$250,000), at the discretion of the Energy Bureau.

Be it notified and published.

<sup>&</sup>lt;sup>4</sup> LUMA. May 8, 2025. Motion to Submit Proposal for Expanded Customer Battery Energy Sharing Program and Revised Technical Conference Presentation in Compliance with Resolution and Order of April 30, 2025.

<sup>&</sup>lt;sup>5</sup> LUMA. June 13,2025. *Motion to Submit June 2025 Report on the Development of the Pilot Emergency Backup Generators Demand Response Program.* 

<sup>&</sup>lt;sup>6</sup> Known as the Puerto Rico Energy Transformation and RELIEF Act, as amended ("Act 57-2014").

Edison Avilés Deliz Chairman

Lillian Mateo Santos Associate Commissioner

Ferdinand A. Ramos Soegaard Associate Commissioner

Sylvia B. Ugarte Araujo Associate Commissioner

Antonio Torres Miranda Associate Commissioner

## **CERTIFICATION**

I certify that the majority of the members of the Puerto Rico Energy Bureau has so agreed on June 20, 2025. Chairman Edison Avilés Deliz and Associate Commissioner Ferdinand A. Ramos Soegaard did not intervene. I also certify that on June 20, 2025 a copy of this Resolution and Order was notified by electronic mail to RegulatoryPREBorders@lumapr.com; katiuska.bolanos-lugo@us.dlapiper.com; margarita.mercado@us.dlapiper.com; laura.rozas@us.dlapiper.com; lionel.santa@prepa.pr.gov, hrivera@jrsp.pr.gov; javrua@sesapr.org; mrios@arroyorioslaw.com; jordgraham@tesla.com; forest@cleanenergy.org; customerservice@sunnova.com; pjcleanenergy@gmail.com; agraitfe@agraitlawpr.com, info@sesapr.org; cfl@mcvpr.com; mqs@mcvpr.com. I also certify that on June 20, 2025, I have proceeded with the filing of the Resolution and Order issued by the Puerto Rico Energy Bureau.

I sign this in San Juan, Puerto Rico, on June 20, 2025.

Sonia Seda Gaztambide Clerk

## **Attachment A**

- 1. Refer to pages 4 and 12 of LUMA's ELRP proposal. LUMA states it is targeting enrollment of 50 MW of firm capacity. How many participants does LUMA expect this corresponds to?
- 2. Refer to pages 4 and 13 of LUMA's ELRP proposal. The Energy Bureau understands that both event participation payments and capacity payments are issued to customers on a quarterly basis as a bill credit. Please confirm this understanding.
- 3. LUMA's estimate for administrative costs is \$2,218,750. Provide support for this estimate. As part of this response, identify the specific costs and any assumptions LUMA used to estimate this budget.
- 4. Refer to page 11 of LUMA's ELRP proposal.
  - a. If a customer provides advance notice of non-participation for three or more events, will the customer face (1) reduction or elimination of the monthly capacity payment and/or (2) potential removal from the program?
  - b. How many events can customers opt-out of before they will be removed from the program?
- 5. If LUMA calls an Emergency DR event during a time in which a customer has no or low load, can the customer inject energy onto the grid and still earn the ELRP event participation incentive?
- 6. Refer to page 14 of LUMA's ELRP proposal. Confirm LUMA expects it will take approximately 2 weeks to begin ELRP implementation once it receives Energy Bureau approval to collect the ELRP budget. Can LUMA begin implementation as soon as air permits and customer signups allow, and recover the ELRP costs through the next quarterly PPCA process?
- 7. Refer to page 3 of LUMA's ELRP proposal, where it states "LUMA's estimates indicate that every 1.5 MW of backup generation deployed during an Emergency DR Event would reduce the number of customers impacted by a load shed event by one thousand."
  - a. Please elaborate on how LUMA estimated this impact.
  - b. How will LUMA ensure that ELRP resources are only deployed at times when a load shed event would otherwise occur?
- 8. Has LUMA estimated the dollar benefits to customers associated with avoiding a load shed event?
- 9. Refer to page 12 of LUMA's ELRP proposal. Please explain how LUMA estimated 75 emergency events.
- 10. Refer to pages 3, 4, and 12 of LUMA's ELRP proposal. Please explain whether an emergency event could last longer than the six hours between 5:00 p.m. and 11:00 p.m., or whether LUMA would end the event after a certain number of hours or a specific time.

