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VIA EMAIL comentarios@energia.pr.gov

Mr. Edison Avilés-Deliz
Chairman
Puerto Rico Energy Bureau
World Plaza Building
268 Ave. Muñoz Rivera
Nivel Plaza Suite 202
Hato Rey, PR 00918

RE: **Comments by SESA on proposed EE and DR Transition Period Plan, Docket No. NEPR-MI-2022-0001**

Comes now, the Puerto Rico Solar Energy Industries Association Corp., d/b/a/ Solar and Energy Storage Association of Puerto Rico (hereinafter, "SESA") the non-for-profit association that represents Puerto Rico's solar and energy storage industries. SESA advocates for solar and storage technologies at all scales as a central solution to the energy needs of Puerto Rico, promotes public policy that benefits the growth of these industries, brings awareness and understanding of these technologies to both government policymakers and the public, and facilitates collectively beneficial collaboration and good business practices within the industry.

SESA reiterates its appreciation to the Honorable Energy Bureau (hereinafter "PREB" or "the Bureau") for the opportunity granted to stakeholders to provide comments to the above-captioned proceeding.

I. Background

SESA's focus is accelerating the deployment of battery storage and solar energy at all scales in Puerto Rico. While all forms of energy efficiency and demand response are of interest to us at SESA, given that these technologies all comprise a concept of "smart buildings" which are powered by solar, have battery backup, and also operate

efficiently. However, our main focus in this proceeding, and the focus of these comments, is on the battery storage component of Demand Response.

Law 17 creates the mandate that Puerto Rico implement large-scale Energy Efficiency & Demand Response (EE & DR) programs which result in a lowering of the amount of electricity used in Puerto Rico by 30%, by the year 2040. In accordance with the law, the Integrated Resource Plan (IRP) finalized in 2020 assumes dramatic savings will be occurring starting in 2021 due to such large-scale EE & DR programs existing. However, no such EE or DR programs exist in Puerto Rico today. No programs are launched, no savings are occurring, and the process of beginning to ramp up to large-scale deployment of EE & DR savings has not yet begun.

Meanwhile, our estimate is that over 300 Megawatts of modern batteries are already installed across tens of thousands of homes in Puerto Rico, practically all of which would be eligible to participate in a Demand Response program if one were to exist. Well designed and administered, battery-inclusive Demand Response programs would enable LUMA to "push a big green button" to activate the batteries of thousands of households and batteries which have subscribed to receive financial compensation for allowing the utility to do so.

While such programs can provide immediate bill reductions for all ratepayers (since programs are designed to offset the need for the most expensive peaking plants to operate), in Puerto Rico they also have the very real potential to prevent costly and dangerous brownouts and blackouts.

II. General Comments

We applaud this honorable Energy Bureau's recent initiation of Market Baseline and Potential Studies for EE & DR in Puerto Rico, and LUMA for their development of this proposed 2-year plan for EE & DR. While waiting for the next year or two for these studies to be performed, we encourage LUMA's proposed suite of "quick-start" Energy Efficiency and Demand Response programs to:

- **Move forward as quickly as possible**

We are experiencing constant, daily threats of blackouts in Puerto Rico, with no prediction of that situation changing for years to come. Any new forms of centralized power generation take years to construct and come online. Thus, there is an unusual urgency to, and value of, EE & DR programs being launched as soon as possible.

- **Be fully funded**

EE & DR programs routinely have a cost of around 2 or 3 cents per kWh of savings. This is compared with the current retail rate of over 33 cents per kWh. The cost of EE & DR programs is dramatically lower than any form of centralized power generation, and is unquestionably the quickest, most effective way to lower everyone's power bills in Puerto Rico. Thus, we should not let budget constraints hamper LUMA's ability to ramp up these crucial initial EE & DR programs.

LUMA notes several times in their filing the need for additional funding, explaining on P. 16 of the filing:

> "To recover the cost of customer incentives, the Energy Bureau will need to establish an Energy Efficiency fund, as EE incentives are not covered within the base rate. LUMA estimates an EE Rider of $0.00032/kWh would recover the cost of program incentives. For perspective, this amounts to less than $0.20 per month for the average residential customer."

The cost impact is further elaborated on P. 81, which shows that even for a residential customer with a relatively large consumption of 1,000 kWh/month, the cost impact would be only $0.32 per month (less than the retail cost of one kWh of electricity today), adding up to under $4 per year.

We encourage this Honorable Energy Bureau to move forward immediately, or as soon as practical, with implementation of a Systems Benefits Charge, to provide all the funding necessary to move forward with EE & DR programs in these crucial early years.

- **Include an extraordinary focus on stakeholder engagement and stakeholder education**

Given that utility-administered Energy Efficiency or Demand Response programs, have never before existed in Puerto Rico there is very little awareness of what they are, and how effective of a tool they are at lowering customer rates.

Another important factor to note is that there has been almost no engagement from organizations representing energy consumers in Puerto Rico thus far in EE & DR proceedings, which means that very few actual energy consumers are aware of what EE & DR programs are and their dramatic potential to lower rates.

Thus, we recommend that both LUMA and the Energy Bureau budget and plan for a very large, broad stakeholder engagement and education program to build awareness and support, encourage early customer adoption, and provide the amount of energy savings education needed to result in the political support necessary for very large-scale programs being launched as soon as possible upon completion of the Market Baseline & Potential Studies.

- **For the battery-based Demand Response program to be designed together with SESA and other members from the industry, based on best practices already being implemented in other jurisdictions, and be among the first programs to move forward.**

Just two weeks ago, the California utility PG&E announced a new program in conjunction with Tesla and other industry experts, to pay customer s$2 per kWh of battery storage activated during peak times, providing both a financial incentive for the participating customers as well as a savings for all customers, since the $2 per kWh paid provides savings that exceed the program's cost, via fuel and other cost savings.[1]

These sorts of programs are already successful in other jurisdictions, and we encourage the first similar programs to be designed together with the solar & storage industry and launched as soon as possible.

Notably, LUMA's proposed plan includes waiting until Year 2 (2023-2024) to launch these battery-based DR programs. This delay may seem, and may be necessary if

[1] https://www.utilitydive.com/news/pge-tesla-launch-program-to-use-customers-powerwall-batteries-to-tackle/626297/

LUMA is too constrained for funding. However, given that large amounts of storage have already been deployed, and much or all of the technology to deploy and monitor such programs already exists within the batteries themselves, we encourage making battery-based DR programs a top priority, and finding a way to begin them in Year 1 rather than Year 2.

- **Begin with residential storage**

The proposed plan seems to indicate a preference to begin battery-focused DR programs being offered initially only to Commercial & Industrial customers. We instead encourage to begin with a focus on Residential customers – or at a minimum, including residential customers in initial programs which are offered in tandem to C&I customers.

There is already over 300MW / 750MWh of residential storage deployed today in Puerto Rico. Many of these systems are owned by a few companies that could already act as demand response aggregators today, potentially being able to launch and scale up quickly, and provide an impact at least equal to the potential of storage deployed with C&I customers.

Additional Specific Comments

Pages 37-41 of the filing are titled: “Battery Demand Response Program”, and go into very helpful detail in describing initial details and considerations. In general, we applaud LUMA’s thoughtful approach to what is penciled out in this program description. We also offer the following suggestions for changes or improvements:

1. On Page 38: The MARKETING STRATEGY paragraph states: *“Marketing for the Battery DR Program will be conducted by an Implementation Contractor, with oversight from LUMA.”*

   While contracting of an Implementation Contractor may be a necessary and efficient step in the process, we would request consideration that the Demand Response Aggregators themselves may be best poised to handle marketing of this program, directly to their own customers with the storage demand potential they’re aggregating.

While this may happen in conjunction with an Implementation Contractor (and/or with LUMA itself), we would encourage not constraining marketing to happen only via one LUMA-chosen Implementation contractor, but rather to consider, allow and encourage the Demand Response aggregators themselves to either handle entirely or else be heavily involved in promotion of the program.

2. On Page 39: Under "BENEFITS: ESTIMATED PEAK DEMAND SAVINGS AND PROGRAM COSTS", the proposed plan states: *"The savings estimates assumed that 5% of residential customers with BTM batteries in Year 2 enroll in the program and shift their whole house load to batteries during DR event periods."*

   The following illustrative table is also included:

Table 4-13. Estimated Savings, # Participants, and Costs for Battery DR Progra

Description	Yr. 1 Estimate	Yr. 2 Estimate
Total Peak Demand Savings (MW)	-	3.5
Planned Participants	-	2,000
Total Costs ($)	-	**$610,034**

   Again acknowledging available-funding constraints (and the need to address them), we encourage:

   a. Shifting the launch of this program to Year 1 rather than Year 2
   b. Designing participation estimates and projections via a collaborative process involving companies that have been involved in installing and financing large amounts of the already-deployed storage.

On Page 40: Under "PROGRAM TIMEFRAME", the proposed plan states: "The Battery Demand Response Program is expected to launch in Year 2 of the TPP, as this program is expected to require additional time for administrative startup and technology enablement…", and includes the following timetable illustration:

Table 4-14. Program Timeframe - Battery Demand Response Program

Pre-Launch Activities	Q1	Q2	Q3	Q4	Q5+
Engage Implementation Contractor					
Finalize Program Design Details and Program Operational Requirements					
Begin Customer Outreach and Enrollment					
Program Launch & Implementation					

**Launch and Implementation contingent on selection of platform provider.*

We encourage and request that this timeline be accelerated to begin before the end of 2022, and to leverage a collaborative process with industry companies and experts to expedite program designed based on already-deployed programs happening in other jurisdictions. Early pilot programs launched in Puerto Rico will provide valuable data that can be used for program expansion.

SESA-PR reaffirms its gratitude to the Bureau for the opportunity to comment in this docket and looks forward to continued engagement in the same.

Cordially,

[signed]

Patrick J. Wilson
President
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