



November 9, 2022

Via e-mail: comentarios@jrsp.pr.gov

Sr. Edison Avilés Deliz, Chairman
Puerto Rico Energy Bureau

Re: Response to Appendix A of October 12, 2022 Resolution & Order
Case No.: NEPR-MI-2022-0001

Dear Chairman Avilés Deliz:

VEIC, an administrator and advisor for leading energy efficiency (EE) and clean energy programs, appreciates the opportunity to respond to the Energy Bureau's Resolution and Order in the cited proceeding. VEIC understands that its comments will help inform the Energy Bureau in its preparation for the upcoming Technical Conference and development of the final Order regarding LUMA's Proposed Transition Period Plan (TPP).

VEIC previously submitted brief comments on the TPP on July 13, 2022. We now expand on those comments and respond to the specific questions posed by the Bureau in Appendix A.

Comments on Appendix A Requests for Information

1. What aspects of the Proposed TPP do you like? What about these aspects appeal to you and why?

As noted in our previous comments, VEIC appreciates the approach the Bureau has taken by creating a two-year Transition Period to build market readiness prior to beginning a full-scale, comprehensive portfolio on a standard three-year program cycle. LUMA's proposed Transition Period Plan is thoughtfully designed to include a small set of initial programs that will generate positive customer and market experience; deliver energy, peak demand, and cost savings; and inform the development of future EE and DR programs.

VEIC supports the Transition Period Plan and sees the proposed program portfolio as a logical starting point, given Puerto Rico's nascent EE market and need to build energy efficiency literacy. It makes sense to begin with an Education and Outreach program while phasing in additional programs through years 1 and 2. The Residential and Business Rebate Programs and In-Store Discount Program are standard program models that support customer adoption of energy-efficient

products and equipment. These programs can be rapidly scaled up to meet market demand, as program budgets allow.

With the importance of grid reliability and resilience, we also strongly support the coordination of EE and DR programs, and inclusion of several DR programs during the Transition Period. We have seen in Hawaii the potential to leverage the growing fleet of residential batteries to support load shifting and reduce peak demand, and are pleased to see a similar program proposed for Puerto Rico.

2. What aspects of the Proposed TPP do you have concerns about? What are your concerns?

Our primary concern is that the proposed Transition Period Plan is only partially funded, with LUMA able to fund \$5M of the approximately \$10M needed to fully fund Year 1 operations. We agree with the Bureau and other stakeholders that a reliable and long-term source of funding will be critical to delivering full-scale EE and DR programs in Puerto Rico. Nationally, successful EE programs have a stable mechanism in place to collect funds from ratepayers, most commonly via a system benefits charge or through the utility rate base. We encourage the Bureau to work with the utility and stakeholders to demonstrate the many benefits of EE and build public support for an EE Rider.

We would like to see a firmer plan for stakeholder engagement during the Transition Period. The description of the Education and Outreach Program notes that one potential activity is “initiatives to support the development of a local stakeholder advisory group” (pg. 28). VEIC’s prior comments on the Energy Efficiency Regulation have emphasized the importance of robust stakeholder engagement in EE planning and implementation. Stakeholder engagement will be particularly important in Puerto Rico, which needs to build local capacity and knowledge around energy efficiency, and gradually earn trust and buy-in for the EE programs. The Departamento de Desarrollo Económico y Comercio (DDEC) may be open to taking on a larger role in stakeholder convening. We encourage the Bureau to work closely with LUMA and DDEC to set expectations for stakeholder engagement and support the creation and ongoing involvement of a stakeholder advisory group or collaborative to guide the design and implementation of utility EE and DR programs.

3. Regarding the education and outreach program:

a. What specific barriers or workforce knowledge gaps should LUMA focus on addressing in outreach efforts to contractors, suppliers, etc.?

The TPP must strike the right balance between programs that provide immediate customer benefits, such as rebates and DR compensation, with investment in market development activities that support the long-term success of Puerto Rico’s EE market, such as workforce development, financing, and market transformation. We encourage LUMA, the Bureau, DDEC, the Green Energy Trust, and other entities to co-fund and collaborate on these activities.

Specific workforce development needs can be informed by the Market Baseline and Potential Study that is currently underway. One key opportunity is working with Puerto Rico solar installation companies to incorporate energy efficiency into their businesses.

4. Regarding the education and outreach program:

a. How should programs be branded? (e.g., LUMA, Energy Bureau, or new EE specific brand?)

VEIC believes that an overarching brand for EE and DR, similar to [EmPOWER Maryland](#) or [Mass Save](#), could work well in Puerto Rico. A common brand would support collaboration across multiple agencies and partners on EE and DR efforts and could reduce customer confusion. However, it is most important that branding decisions be informed by market research and consumer insights to ensure that the brand and marketing strategy are effective with customers. It may take time to get this right, and LUMA should be able to move forward with Transition Period implementation in the meantime. We also caution against instituting cumbersome approval processes for marketing materials. It is important that the program be able to act nimbly and flexibly to respond to market changes and customer interests.

b. What community organizations could be good partners to help maximize customer participation and buy-in?

LUMA and its partners should collaborate with community-based organizations working on resilience projects, including solar, storage, and microgrids, to highlight the value of EE and DR to customers and in improving project economics. Youth organizations are also important partners in energy education and training.

5. Regarding the education and outreach program, the Energy Bureau is considering requiring LUMA to expand the technical assistance program given the passage of the Inflation Reduction Act ("IRA") in the time since the Proposed TPP was prepared.

a. How much budget is appropriate to direct toward this program, both generally and for technical assistance?

We encourage LUMA to collaborate with DDEC on EE/DR initiatives, including customer education, stakeholder engagement, and workforce development. However, given that the TPP programs are only partially funded, we discourage redirecting LUMA budget towards IRA technical assistance programs at this time. Many IRA programs will not yet be rolled out during the Transition Period, and for those that are, we believe DDEC is the more appropriate funder and lead for technical assistance.

During the Transition Period, the most important step is for LUMA and DDEC to set up a strong framework for collaboration on program planning and implementation, to determine how to stack government and utility funding and coordinate efforts to maximize EE/DR benefits for Puerto Rico residents and businesses. This should include proactive planning for home electrification and EE rebates that may be available to customers in 2024.

6. Regarding residential demand response... the Energy Bureau is considering requiring the replacement of the proposed residential battery demand response program with a scheduled dispatch program for both residential and commercial customers.

a. Should the program be open to both residential and commercial customers?

VEIC supports the inclusion of scheduled dispatch in the DR program. Scheduled dispatch is a good starting point to educate distribution engineers and customers about what to expect from a battery DR program. Ideally, the program could be designed to allow customers to both participate in scheduled dispatch and have an option to respond to active events for additional compensation.

Both residential and business customers should be eligible to participate in battery DR programs, but it is important to recognize the different needs of each sector. For residential customers, peak energy use is likely to match the proposed charge and discharge schedule, whereas businesses' energy use may peak in the middle of the day and dip toward the end of the day. Depending on the residential/business mix, individual feeders may also peak at different times. It is important to understand system needs and site peak shifting or reduction potential to evaluate the impact of a blanket policy and avoid unintended consequences.

b. Should the program be open to individual battery owners, or only through aggregators?

For many batteries, the charge and discharge cycle can only be managed by their OEMs. As DR programs roll out for the first time in Puerto Rico, it will be critical to have very simple enrollment processes with clear, curated language that customers can understand. That points to working with only one or a very small number of OEMs or aggregators during the Transition Period.

c. Should the program provide a monthly payment (proportional to daily energy charge/discharge in kWh) instead of an upfront payment to better align payments with savings?

In general, the programs should be designed to incentivize ongoing participation rather than providing upfront payment. However, it is most important to measure the dispatch accurately so that customers trust the payment amount.

d. Should the payment amount be based on estimated system-level fuel cost savings from daily arbitrage?

Transition Period programs should be fairly basic to start, with additional options added over time as Puerto Rico builds out its DERMS and regulatory framework for DERs. LUMA should proceed with the proposed DR programs and implement feasible designs immediately, gain traction and enrollments, and continue to improve the program design to target more sophisticated goals.

e. Should the program provide a larger payment for batteries in critical facilities or which serve more vulnerable customers?

Such a program could be considered as long as the system impacts are well-understood.

f. How many years' commitment should be required to participate in the program?

At least a 2-year commitment should be required during the Transition Period. A 4 or 5-year commitment period would provide more market stability and extended grid benefits.

7. If funds are directed to a scheduled dispatch program and to additional technical support to harness federal efficiency funds, and assuming that the overall budget is fixed, that would require reductions in the budget for other programs.

a. Which budgets should be reduced, and by how much?

Ideally, the scheduled dispatch program could be funded within the budget for the proposed Residential and C&I DR programs. If additional funding is needed, a small portion (no more than 20%) of the Education and Outreach budget could be reallocated.

b. LUMA proposes a commercial economic demand response program that could utilize backup generators. The Regulation for Demand Response does not allow such a program; it only allows backup generators to be used for demand response in an emergency situation. How should the proposed budget for this program be reallocated?

We do not believe this budget should be reallocated, since the commercial economic demand response program also includes shifting loads to other storage devices on-site, such as thermal energy storage or batteries. C&I process shedding and curtailment should also be considered.

8. Regarding the rebate program... the Energy Bureau is considering requiring several changes to the product list within the water heating end use.

- a. **Should rebates for tankless water heaters be removed from the program?**
- b. **Should rebates for heat pump water heaters be added to the program?**
- c. **Are there any other promising products and/or end-uses that are missing from the proposed program?**
- d. **If so, is there any information on what proportion of energy consumption those products/end-uses currently account for?**

We do not believe the Energy Bureau should mandate the inclusion or exclusion of specific measures within the Residential and Business Rebate programs. This is a level of program design detail that should be left to the discretion of the program administrator. LUMA and its implementation contractor should be responsible for managing the program to achieve the targets, factoring in customer demand, stakeholder input, and market conditions (such as supply chain impacts). The measure list will be also informed by the results of the Market Baseline and Potential Studies, once available.

9. The Energy Bureau is considering requiring that the planned incentive levels cover 100 percent of the total costs for low-income residents as this has been shown to be required for participation and this approach is similar to the approach adopted in other jurisdictions.

- a. **Should low-income incentives (after accounting for federal rebates, if available) be 100 percent of total costs to enable participation?**
- b. **If not, should any increase in the proposed structure for low-income incentives be considered?**
- c. **Are any other supports necessary to gain participation by low-income customers?**

While VEIC supports providing EE measures to low-income residents at no cost, we are mindful that LUMA designed its Transition Period portfolio to fill market gaps. The Weatherization Assistance Program (WAP) already provides comprehensive upgrades to low-income households and is anticipated to expand with the infusion of additional federal funding from the Bipartisan Infrastructure Law (BIL). We believe that LUMA should provide targeted low-income programs during the Transition Period with an eye towards expansion in the Three-Year Program Period. Targeted low-income programs can be designed to complement WAP with lighter-touch participation options. For example, the In-Store Discount program could be adapted to provide free measures, such as LEDs and faucet aerators, through food banks. VEIC has deployed this type of program across many states with great success. LUMA could also explore connecting low-income bill assistance customers and customers in arrears with free EE measures to drive down their energy costs.

10. Energy Bureau is considering requiring a system of program overspending and underspending notifications and a mechanism for adjustments that would allow programs to continue operating. The Energy Bureau is considering a notification system that dovetails with the quarterly reporting process and is triggered based on one or more thresholds. The Energy Bureau is also considering a fully reconciling funding mechanism that allows for approved over and/or under spending to roll into the EE/DR budget for the subsequent year.

- a. What timing for notification would best allow for discussion with the Energy Bureau and mid-course adjustments?**
- b. What threshold(s) for notification are important for program stability and will allow for mitigation of cost underruns or overruns?**

VEIC supports allowing considerable flexibility to shift funds between programs and years. This type of flexibility enables program administrators to respond to changing market conditions and customer interests and maintain program continuity. It is particularly important to avoid boom and bust cycles, where programs run out of money and have to stop unexpectedly, as programs are getting started and building the market for energy-efficient products and services. Stops and starts are very disruptive to the contractors and vendors who are key partners in EE implementation. We support notification mechanisms that allow for proactive adjustments to maintain program operations, as well as rolling over- and under-spending into the EE/DR budget for the following year.

11. Regarding the rebate program, the Energy Bureau notes that IRA funding opportunities came about after the Proposed TPP filing. The Energy Bureau is considering requiring an adjustment to TPP rebate programs to account for IRA funding.

- a. What opportunities exist to coordinate LUMA rebates with IRA rebates implemented by the Public Energy Policy Program ("PEPP")?**
- b. What other entities should LUMA coordinate with when engaging to provide technical assistance to customers to access IRA funding?**

Please see response to Question 5.

12. Regarding financing... the Energy Bureau is considering requiring that LUMA begin the process of developing a pay-as-you-save or similar program and design and implement an on-bill repayment process.

- a. What other entities should be consulted or involved in this endeavor?**

b. Please provide suggestions regarding the structure of such a program, and suggestions of potential sources of capital or reserve funds.

As noted in our response to Question 3, VEIC believes that the TPP must strike the right balance between programs that provide immediate customer benefits with investment in market development activities that support the long-term success of Puerto Rico's EE market, such as financing. We believe it is appropriate for LUMA to begin planning for financing offering(s) that could be offered when full-scale programs are launched under the Three-Year Plan. This should be done in close coordination with the Green Energy Trust and DDEC, and should consider leveraging the BIL Revolving Loan Fund and the IRA Greenhouse Gas Reduction Fund. We are also aware of a successful program that was developed by the Caguas Business Development Cooperative (BADECO) to finance EE measures for commercial enterprises.

13. Regarding performance metrics, the Energy Bureau is considering requiring an expansion of the reported metrics to include estimates of (1) customer energy savings as a percent of usage, (2) bill savings, (3) participation rates by geography, and (4) Greenhouse Gas ("GHG") emission reductions.

- a. Are there any concerns with these potential metrics?**
- b. Are there any metrics missing that need to be added?**
- c. Is there a resilience/reliability impact metric that LUMA should report?**

Each of these metrics would be beneficial to track. In addition, we recommend tracking peak demand reduction (MW) as a key reliability and resilience metric. Additional metrics can be identified over time, but tracking during the Transition Period should remain relatively simple while LUMA puts its tracking and reporting systems in place.

14. Regarding performance targets, the Energy Bureau is considering developing a list of activities and associated timing. Rewards and penalties can be administered based on whether the activities were completed as described and on time.

- a. What activities should be included? What timeframes are reasonable for each activity?**
- b. How much should each activity be worth (in terms of the reward/penalty)? If respondents choose not to recommend specific dollar values, recommendations on relative weights would be welcome.**
- c. How much should all activities be worth (in terms of the total pool of potential rewards/penalties)?**

- d. How should the total pool of potential rewards/penalties be established (as a fixed dollar amount, percent of total EE budget, percent of the available incentive funds in LUMA's contract, etc.)?**
- e. Should there be penalties as well as rewards?**
- f. Should a bonus incentive be offered for exceeding expectations? If so how would the Energy Bureau establish that LUMA had exceeded expectations?**

LUMA notes in Section 2.7 of its TPP that “the Transition Period is an opportunity to learn more about EE and DR markets and program implementation and how to effectively overcome barriers to EE adoption in Puerto Rico.” For that reason, LUMA proposed to defer performance targets and incentives during the Transition Period. VEIC agrees with this reasoning and recommends against instituting any system of performance incentives and penalties that could discourage experimentation and learning. Furthermore, the major program offered during the Transition Period will be Education and Outreach, the impact of which can be difficult to measure. Instead, we encourage initiating binding performance targets, incentives, and penalties in the Three-Year Plan starting in 2024, following the TPP and informed by the Market Baseline and Potential Studies. If performance incentives are offered at all during the Transition Period, we agree with Southern Alliance for Clean Energy that they should “relate specifically to the proposed two-year energy savings targets and basic metrics around establishing core operational capabilities on which future programs will rely” (SACE Comments, October 28, 2022).

15. Regarding funding sources and mechanisms... For FY24 and subsequent years, the Energy Bureau is considering a structure in which: (1) LUMA uses its budget for planning and administration costs and (2) the EE Rider funds incentive costs only.

- a. Given uncertainty regarding incentive program launch date, how do we best set the EE Rider value to cover the remaining funds required in FY23? If the Energy Bureau fixed the EE Rider at a set value (e.g., 0.1 cents/kWh) would that be sufficient for program funding and certainty?**
- b. What is an appropriate definition of "wide availability" of rebate programs that can be used as a trigger for the collection of the EE Rider?**

We do not have comments at this time on the specific value and mechanics of an EE Rider. We do, however, underscore our previous comments that a sustainable source of funding is crucial to the long-term success of EE programs. Successful EE programs have a stable and dedicated mechanism in place to collect funds from ratepayers, either via a system benefits charge or through the utility rate base. We generally support timing the rollout of an EE Rider or similar funding mechanism to coincide with the launch of widely available EE and DR programs that deliver real customer value.

We do not support splitting funds such that program administration and planning costs are funded from a non-dedicated source (LUMA's general budget) while incentives alone are funded by a dedicated EE Rider. We believe that funds from an EE Rider should be dedicated to support the full costs of EE programs, with the program administrator having the flexibility to determine the best mix of spending on customer incentives, technical assistance, marketing and outreach, and administration to achieve the performance targets.

VEIC believes the TPP is a vital milestone in achieving Puerto Rico's goal of meeting 30 percent of its energy needs with energy efficiency by 2040. We appreciate the opportunity to respond to the Energy Bureau's Resolution and Order and support the development of an EE/DR plan that delivers significant economic benefits to customers while advancing a more resilient, reliable, and affordable energy system. We are excited to be part of the effort and look forward to working with the Energy Bureau and other stakeholders to support the success of these EE/DR initiatives.

Sincerely,



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