

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

ENERGY EFFICIENCY AND
DEMAND RESPONSE TRANSITION
PERIOD PLAN

CASE NO.: NEPR-MI-2022-0001

SUBJECT: THE INDEPENDENT
CONSUMER PROTECTION OFFICE'S
COMMENTS TO APPENDIX A OF THE
ENERGY BUREAU'S OCTOBER 12, 2022
RESOLUTION AND ORDER.

**INDEPENDENT CONSUMER PROTECTION OFFICE'S
COMMENTS TO APPENDIX A OF THE ENERGY BUREAU'S
OCTOBER 12, 2022, RESOLUTION AND ORDER**

COMES NOW, THE INDEPENDENT CONSUMER PROTECTION OFFICE
(hereinafter, "ICPO"), through the undersigned attorneys, and very respectfully STATES
and PRAYS:

I. INTRODUCTION

1. On October 12, 2022, the Energy Bureau of the Puerto Rico Public Service
Regulatory Board (hereinafter, "Energy Bureau") issued a Resolution and Order in the
captioned case requesting stakeholder's comments to Appendix A by October 28, 2022.

**II. STANDING OF THE INDEPENDENT
CONSUMER PROTECTION OFFICE ("ICPO")**

2. The Independent Consumer Protection Office was created by Act 57-2014,
supra, to educate, advise, assist, and represent customers of the services under the

jurisdiction of the Puerto Rico Public Service Regulatory Board, such as power service customers in the Commonwealth of Puerto Rico.

3. Within the powers and duties enumerated in Section 6.42 of Act 57-2014, *supra*, the ICPO shall have the followings:

- (a) *Educate, inform, and provide orientation and assistance to customers on their rights and responsibilities with regard to the electric power service and the public policy on savings, conservation, and efficiency, telecommunication services, and those under the jurisdiction of the Transport and other Public Services Bureau;*
- (b) *Evaluate the impact that the rates, public policy, and any other issue may have on electric power, telecommunications, and transport services customers in Puerto Rico;*
- (c) *Defend and advocate for the interests of customers in all matters brought before the Energy Bureau, the Telecommunications Bureau, the Transport and other Public Services Bureau or being addressed by the Energy Public Policy Program of the Department of Economic Development with regard to electric power rates and charges, the quality of the electric power service, services provided by electric power service companies to their customers, resource planning, public policy, and any other matter of interest for customers;*
(...)
- (e) *Participate in the rate adoption or modification process for issues affecting electric power, telecommunications, and transport services' customers;*
- (f) *Make independent recommendations to the Bureaus regarding rates, bills, public policy, and any other issue that may affect services' customers in Puerto Rico;*
- (g) *Request and advocate for just and reasonable rates for the consumers represented by the Office;*
- (h) *Participate or appear as intervenor in any action brought before a government agency of the Government of Puerto Rico or the Federal Government with jurisdiction, in connection with rates, bills, public policy, and any other issue that may affect electric power, telecommunications, and transport services' consumers and/or customers;*
(...)

4. Consequently, the ICPO has the legal power and duty to submit comments for the benefit of electric power customers.

III. ICPO'S COMMENTS

5. Fulfilling its duties, the ICPO hereby submits its comments on the Appendix A of the October 12, 2022, Resolution and Order, included as an annex to this Motion.

WHEREFORE, it is respectfully requested from the Energy Bureau to take notice of the ICPO's comments.

Respectfully submitted, in San Juan P.R. this 28 day of October 2022.

CERTIFICATE OF ELECTRONIC FILING AND SERVICE

I HEREBY CERTIFY that on this date copy of this motion has been electronically filed with the Clerk of the Puerto Rico Energy Bureau which will give notice to all participants in the instant case.

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APPENDIX A: REQUESTS FOR INFORMATION FOR ALL STAKEHOLDERS (INCLUDING LUMA)

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

Everything in general is appealing except the issue we will discuss in question number 2.

We suggest though that LUMA and PREB pay special attention to the development of consumer education and outreach sub-programs and demonstration projects. These are the fundamental tasks that will promote overall EE and DR success.

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

The aspect that we are concerned about are LUMA's contradictory statements. In some instances, in the PPT document LUMA does not recommend the introduction of the EE Rider during what they called "present economic conditions". Meanwhile most of the document is dedicated to promoting and justifying the EE & DR program and measures. For example, they stated the following in a text box on page 7:

"Value of Energy Efficiency:

- Reduces electric bills and business operating costs
- Creates local jobs
- Reduces dependence on imported fuel
- Helps improve grid reliability and reduce infrastructure costs
- Reduce emissions and air pollution."

Then on page 16, Section 2.5 entitled Summary of Proposed Funding Sources, LUMA makes the following contradictory statement:

"A reliable and long-term source of funding is required for successful planning and delivery of energy efficiency (EE) programs to meet Act 17 objectives. LUMA has investigated funding sources such as federal funding, which can provide grant

funding for individual EE projects, but do not provide funding directly to utilities for the ongoing operation of EE programs. Utility-sponsored energy efficiency programs require a stable annual source of funding established by the regulator, recovered through utility rates. However, rates are a sensitive topic in the current economic environment and the decision about introduction of an EE Rider requires careful consideration by the Energy Bureau. LUMA will support the Energy Bureau in making an informed decision by providing relevant data and analysis, as requested. LUMA does not recommend the introduction of the EE Rider during present economic conditions."

However, on same page, in the next paragraph, LUMA states:

"LUMA estimates that a total of approximately \$10M will be needed to fund Program Year 1 operations, to meet the energy savings targets set by the Energy Bureau. LUMA has allocated approximately \$5M of internal budget for initial program startup costs and for the Education and Outreach program, which does not include customer incentives. 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."

At the bottom of page 18, in the section entitled "EE Rider Activated for Program Funding", LUMA states:

"The decision about the introduction of the EE Rider requires careful consideration. LUMA does not recommend the introduction of an EE Rider during present economic conditions."

And at the bottom of page 81:

"While the EE Rider's impact per customer is negligible, customers are very sensitive to any increase in energy cost, where the electricity rates are more than double the U.S. Mainland average. The decision about timing of introduction of an EE Rider requires careful consideration and is the Energy Bureau's decision to make. LUMA does not recommend introducing an EE Rider during present economic conditions."

While in the previous paragraph LUMA states:

"To understand the financial impact on the average residential customer, a 4-case scenario analysis has been developed as illustrated in the table below. The estimates

present the hypothetical monthly and annual bill impact under four kWh consumption scenarios. As observed below the financial impact of an EE Rider of \$0.00032 represents an annual bill increases of roughly \$1-4 per year."

ICPO would like to have more details from LUMA concerning their direct recommendation to not establish a value of an EE Rider due to what they called "present economic conditions", especially considering that EE programs reduce electricity bills, that they improve grid reliability (i.e., power outages avoidance), and that our utility rates are more than double the U.S. mainland average.

We believe energy efficiency make sense to all consumer classes, even more as rates increase. This also applies if the consumer has, or has plans to get, solar panels and storage for net metering or gensets to run during power outages, since the investment in solar, energy storage, or generator and fuel will also be reduced.

3. Regarding the education and outreach program, outreach efforts could be expanded to reach the local workforce so that contractors are aware of both the benefits of efficient technologies and upcoming incentive opportunities and can convey them to customers. Demonstration projects could focus on conveying benefits to contractors and potential participants.

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

We believe that much of the workforce related to energy and appliances that are applicable to the TPP are educated and conscious of commercially available high efficiency technology. It's more a matter of market stimulation as the consumer becomes more knowledgeable regarding energy efficiency, and therefore will become more demanding of efficient products and services from suppliers, retailers, and contractors.

4. As for the education and outreach program, LUMA should ensure marketing efforts resonate with customers. The Energy Bureau is considering requiring LUMA to frame programs as increasing affordability, resiliency, and job creation. In addition, LUMA could consider developing marketing materials in Spanish and translating to English, rather than the reverse. Further, LUMA could consider additional ways to best maximize participation and buy-in, such as developing a separate brand for EE programs distinct from LUMA and partnering with community organizations.

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

New EE specific brand.

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

Active communities that are engaged in energy related initiatives or programs such as solar communities and microgrids would be good partners. In addition, professional organizations, associations, and clubs that may be related or appeal to energy matters such the CIAPR, CAAPR, CPPR, CCPR, AIPR, among many others, could be good partners.

5. As for 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. This program helps customers maximize benefits from other funding sources, particularly those funded by the IRA and other recent Federal laws.

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

We consider that part of LUMA's job is to seek for additional funding. There might be a budget needed for administrative compliance of the new federal funds; however, at this point in time the details of these administrative costs and who is in charge to do that task are not clear. It might be the Public Energy Policy Program (PEPP). Regarding technical assistance, this is something already included in LUMA scope of work of the Rebate sub program.

6. Regarding residential demand response, Solar and Energy Storage Association of Puerto Rico (SESA-PRJ indicates in its comments⁴ that there is a substantial untapped residential battery energy storage resource, and that the lack of a DR program is resulting in underutilization of this resource. Based on this finding, 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. For example, the batteries could charge during the solar peak between 10 am and 2 pm daily and discharge between 6pm and 10pm. No dispatch would be required or expected when a storm warning is issued. The Energy Bureau would particularly value answers to these questions from potential battery aggregators, such as the firms that have leased many of the distributed batteries deployed in Puerto Rico.

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

The program can be open for both residential and commercial customers by default. As stated in Section 4.4.2 Emergency Demand Response Program and Section 4.4.3 Economic Demand Response Program, both programs for the C&I sector include batteries as eligible measures. Aside from this, however, it has to be clarified whether the residential battery demand response program is intended either for load shifting, as demand signals may require, or as a scheduled dispatch, as considered by the PREB for power exportation through the grid.

Load shifting will be easier to implement than exporting power to the grid, although exporting will be more effective because not all homes or commercial or industrial facilities will necessarily have the load demand that matches all the available stored energy to be deployed.

Parts of the PPT on this topic that cause confusion for us are, for example, on page 37, Section 4.3.2- Battery Demand Response Program at Program Summary, on third sentence which states "*Participants will be provided with an incentive for incremental load shifting to batteries during DR event periods (beyond their baseline load shift patterns).*"

Also, on page 39 on Section titled Benefits: Estimated Peak Demand Savings and Program Costs, the third sentence states; "*The saving 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. Participants receive an incentive for shifting their load to batteries and are compensated based on system marginal generation cost during the peak period.*"

We consider that many residential customers with BTM batteries have energy storage available to cover only or mostly their critical loads. Many of those customers will need more energy storage capacity, additional hardware, and installation changes to make their energy storage equipment able to cover the entire house load.

In addition, many customers are getting energy storage to cope with frequent and highly probable grid outages, not only from storm damage, but also by insufficient available generation or grid equipment failure. Those customers may be reluctant to sign up for a demand response program if they felt anxious that the energy they will be supplying to the

grid might be later on the same day be needed by them to run their critical loads due to a power outage.

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

For this initial transition period, it may be better to start with individual battery owners, and later on be open for both individual battery owners and aggregators. Aggregators could attract customers by providing any incentive or added value to the customer rather than presenting themselves as the only option to participate in such program.

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?

It seems that a monthly payment is better option as stated in the question.

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

For the residential sector, a fixed value from the current Rider value seems more appropriate. At large C&I system-level fuel cost savings from daily arbitrage may be better.

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

Not if the storage equipment located near the critical facility is not able to create an intended islanding and sustain service of the transmission or distribution line that provide power to that facility.

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

We believe two years is long enough to provide stability to the utility and short enough to adjust from changing customer or utility conditions.

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?

We think that the Battery Demand Response Program is the program whose budget should be reduced, if necessary, because a similar outcome of this program is underway on the RFP Tranches for Renewable Energy which includes VPPs.

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. How should the proposed budget for this program be reallocated?

We suggest reallocating the program that shows more demand from the consumers. At this early stage we believe it might be residential and commercial rebates.

8. Regarding the rebate program, the Energy Bureau agrees that the programs should serve existing residential and commercial customers and target specific end uses likely to comprise a significant portion of baseline energy use on the island such as lighting, water heating, refrigeration, and heating/ventilation/air conditioning (HVAC). 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?

No.

b. Should rebates for heat pump water heaters be added to the program?

Yes. This is an article not common on the island.

c. Are there any other promising products and/or end-uses that are missing from the proposed program?

Induction ranges or cooktops.

d. If so, is there any information on what proportion of energy consumption those products/end -uses currently account for?

From all PPT listed measures, solar water heaters have the highest rate of return of investment for consumers. They are durable, and many of them

are manufactured on the island, which further stimulates our economy, promotes maintaining the population healthy, and helps to comply with the renewable portfolio standard established by Act 17-2019.

9. Regarding the rebate program, the Energy Bureau agrees with LUMA that low-income customers should be eligible for higher incentives than non-low-income customers. However, the Energy Bureau notes that the incentive levels cover 30 to 50 of the incremental cost. 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?

Yes.

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?

Rather than trying to gain participation of low-income customers, especially at this transition period, coordination with other programs from the PEPP and PRDOH should be promoted.

10. As for the rebate program, the Energy Bureau notes that LUMA has a concern with high participation levels and spending that exceeds budget. The Energy Bureau agrees that program continuity is important and does not want programs to ramp down or cease if interest exceeds budgets. The 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?

It may be when PPCA and FCA Riders revision are due, if necessary.

b. What threshold(s) for notification are important for program stability and will allow for mitigation of cost underruns or overruns?

We think that a pre-determined percentage amount of deviance from the original budget will work.

11. Regarding the rebate program, the Energy Bureau notes that IRA/f 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. As mentioned in an earlier question, the Energy Bureau is also considering requiring the addition of technical assistance to enable customers to estimate and claim IRA incentives.

a. What opportunities exist to coordinate LUMA rebates with IRA rebates implemented by the Public Energy Policy Program (PEPP)?

PREB should be supportive in the coordination of IRA rebates as well as other similar programs such as WAP.

b. What other entities should LUMA coordinate with when engaging to provide technical assistance to customers to access IRA funding?

PRDOH and the Department of the Family

12. As for financing, the Energy Bureau agrees with LUMA's approach to not offer financing in the first few years of the program given the complexity of this offering and lack of structures in place in Puerto Rico. However, financing can take time to develop and gain consumer trust. The Energy Bureau is considering requiring that LUMA begin 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?

Usually, the commercial and industrial sector is continuously seeking alternatives to increase energy efficiency in order to reduce their operational costs. Therefore, LUMA can set pay-as-you-save programs on willing commercial and industrial customers for EE or DR specific measures, as LUMA facilitates with private financing, assistance for grants, or guaranteed loans from the Small Business Administration or other

federal or local incentives. LUMA may also assist with seeking reliable products and services providers.

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

It could be a trust fund administered by the DDEC and founded by related private and government funding (state or federal) that are applicable for such purposes.

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) GHG emission reductions.

a. Are there any concerns with these potential metrics?

No.

b. Are there any metrics missing that need to be added?

Amount of peak generation fleet capacity displaced. Amount of energy displaced in general and at peak hours.

c. Is there a resilience/reliability impact metrics that LUMA should report?

Savings related to lowered energy delivered or capacity required from the utility as a direct effect of EE or DR program should be reported. Outage reduction or avoidance that can be accounted from EE and DR program or specific measures should also be reported.

14. As for 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?

1. Time of process completion and acceptance for a rate payer application to each EE or DR program measure, i.e., Residential Rebate Program, Commercial Rebate Program, etc.

2. EE & DR Program Plan milestone completion.

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.

Among the previous two performance targets, number 2 will measure higher than number 1.

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?

Yes indeed, as current regulations state.

f. Should a bonus incentive be offered for exceeding expectations? If so, how would the Energy Bureau establish that LUMA had exceeded expectations?

It depends on the exceeded expectations we are talking about. If there is more ratepayer participation driven by higher utility rates, we consider it not appropriate. However, if ratepayer participation is higher despite lower utility rates attained by EE&DR and other efficiencies from LUMA, it will be appropriate.

15. Regarding funding sources and mechanisms, the Energy Bureau is considering the following.

- For FY23: (1) LUMA budget funds support all activities, including marketing, outreach, and education program implementation, up through and including incentive program lounge, (2) EE rider collection starts after incentive program lounge at a level intended to recover the appropriate share of the budget for FY23, and (3) LUMA and EE Rider funds are not segregated in this year.
- 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 incentives costs only.

(a) Given uncertainty in incentive programs lounge day, how do we best set the EE Rider value to cover the remaining funds require 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?

Yes, the specific amount can be annually set with possible adjustments during PPCA and FCA Rider adjustment periods if needed.

What is the appropriate definition of “wide availability” of rebate programs that can be a trigger for the collection of the EE Rider?

Easy redemption for cash from program rebates that overcome the extra cost of higher energy efficiency options on goods and services widely available in the island to all consumer classes. It is important that LUMA inform the Department of Consumer Affairs about the program development and any particular situation that may cause products and services covered in the rebate program to have unjustified increases in their cost from the suppliers or services providers.

s/Gerardo Cosme Núñez
Gerardo Cosme Núñez, PE, CPI
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