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

NEPR

Received:

Oct 28, 2024

9:22 PM

ENERGY EFFICIENCY AND DEMAND RESPONSE TRANSITION PERIOD PLAN CASE NO.: NEPR-MI-2022-0001

**SUBJECT:** Motion to Submit FY2024 Consolidated Transition Period Plan and Demand Response Administrative Cost Annual Report and Request for Approval of Template for these Annual Reports

#### MOTION TO SUBMIT FY2024 CONSOLIDATED TRANSITION PERIOD PLAN AND DEMAND RESPONSE ADMINISTRATIVE COST ANNUAL REPORT AND REQUEST FOR APPROVAL OF TEMPLATE FOR THESE ANNUAL REPORTS

#### TO THE HONORABLE PUERTO RICO ENERGY BUREAU:

COME now LUMA Energy, LLC ("ManagementCo"), and LUMA Energy ServCo,

LLC ("ServCo"), (jointly referred to as "LUMA"), and respectfully state and request the

following:

#### I. Introduction

As the Transmission and Distribution system operator, LUMA is responsible for facilitating the implementation of Puerto Rico's public energy policy, including key customer initiatives such as Energy Efficiency ("EE") and Demand Response ("DR") Programs, which are required by law and mandated by the Puerto Rico Energy Bureau ("Energy Bureau"). With this motion, LUMA is submitting to the Energy Bureau, in *Exhibit 1*, a consolidated annual report for the 2024 fiscal year ("FY") providing information and data on progress, performance, and costs associated with the implementation of the EE and DR programs developed by LUMA and

information on DR program administrative costs that are recovered through the Purchase Power Charge Adjustment ("PPCA"), all as per the Energy Bureau's directives.

As discussed in detail in *Exhibit 1*, LUMA's commitment to advancing sustainable energy practices is reflected through a range of successful programs designed to maintain and expand DR resources, as well as drive EE across Puerto Rico. The Customer Energy Battery Sharing ("CBES") Program saw steady growth reaching 5,709 customers and 18 MW of capacity. The Business EE Rebates boosted market awareness and participation by offering strategic incentives to help businesses adopt energy-efficient solutions. The In-Store EE Discount Program provided instant savings at the point of sale, delivering energy-efficient products to customers and setting the stage for expanded offerings in FY2025. LUMA's Residential EE Kits Program saw over 41,800 households embrace energy-saving measures, with kits consistently in high demand, while the Business EE Kits Program introduced commercial customers to energy management tools, with plans for expanded reach this year. These achievements have been made possible through careful Program Management and Implementation, including proactive budget strategies and collaborative partnerships, ensuring a foundation for long-term impact and demonstrating LUMA's dedication to transforming Puerto Rico's energy landscape.

LUMA's EE and DR programs are designed to build a more reliable and resilient energy system for the people of Puerto Rico and advance the energy efficiency marketplace in the region. The information included in *Exhibit 1* covers the period from July 1, 2023, to June 30, 2024.

LUMA is also requesting the Energy Bureau's approval of the template used in the attached report for future annual TPP reports, as further discussed in this motion.

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#### II. Relevant Background and Procedural History

1. On June 21, 2022, LUMA filed with the Energy Bureau, in Case No. NEPR-MI-2021-0006, In Re: Demand Response Plan Review, Implementation, and Monitoring, a proposed Energy Efficiency and Demand Response Transition Period Plan containing the description of various quick-start EE and DR Programs to be implemented by LUMA during a two (2)-year Transition Period and associated budgets for FYs 2023 and 2024 ("Proposed TPP"). See Motion Submitting Proposed EE/DR Transition Period Plan in Case No. NEPR-MI-2021-0006, In Re: Demand Response Plan Review, Implementation and Monitoring of that date and its Exhibit 1. The EE and DR Programs in the Proposed TPP included an Education and Outreach Program; a Residential EE Rebate Program, providing a prescriptive incentive to customers purchasing energy efficient equipment from a list of qualified measures, a Business EE Rebate Program, offering incentives to businesses for eligible energy efficiency measures; an In-Store EE Discount Program, providing a point-of-sale discount for eligible energy efficiency measures and geo-targeting of stores in low-income areas to provide low-income customers with greater access to energy efficiency opportunities; an Economic Demand Response Program, including voluntary load reduction and/or load shifting during DR events triggered by economic conditions; an Emergency DR Program, targeting commercial and industrial customers for customers to voluntarily reduce load and/or shift load to back up generators during DR events; and a Battery DR Response Program targeting residential customers with behind the meter batteries and providing incentives for load shifting to batteries during DR event periods.

2. On February 16, 2023, this Energy Bureau issued a Resolution and Order in the instant proceeding (the "February 16<sup>th</sup> Order") in which it considered, amended, and approved the Proposed TPP (as approved, the "TPP"). Among others, the Energy Bureau established deadlines

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and performance incentive indicators for several activities under the TPP (*see id.* at pages 20, 21, 23, 27 and 30 and Table 2), as well as reporting requirements and deadlines (*see id.* at page 18 and Table 1). The Energy Bureau also ordered LUMA to deliver annual reports and quarterly reports as per the reporting schedule in Table 1 of the February 16<sup>th</sup> Order, titled "Transition Period Report and Filing Schedule" ("Table 1"). Table 1 provided for the filing of annual reports within one hundred and twenty (120) days following the end of the program year (each a "TPP Annual Report" and, collectively, "TPP Annual Reports") and quarterly reports within sixty (60) days of the end of each quarter (each a "TPP Quarterly Report" and collectively, "TPP Quarterly Reports"), terms that are consistent with the requirements of the Energy Bureau's Regulation for Energy Efficiency Regulation, Regulation 9367<sup>1</sup>. *See id.* at page 18. In addition, the Energy Bureau ordered LUMA to review and provide input on the Energy Bureau's data reporting templates for the TPP Quarterly Reports and TPP Annual Reports and "until such time as the reporting templates are available, report on all metrics identified in Section 6 of the Proposed TPP". *See* February 16<sup>th</sup> Order on page 19.

3. On March 8, 2023, LUMA filed a motion requesting reconsideration of certain requirements in the February 16<sup>th</sup> Order relating to performance targets. *See Motion for Reconsideration of Resolution and Order of February 16, 2023, and Request to Vacate Deadlines* of that date ("March 8<sup>th</sup> Motion").

4. On April 3, 2023, the Energy Bureau issued a Resolution and Order ("April 3<sup>rd</sup> Order") in which, among others, it vacated the performance target requirements in the February

<sup>&</sup>lt;sup>1</sup> Section 2.02(E) of the EE Regulation requires that quarterly reports on the TPP be filed within sixty (60) days of the end of each quarter and annual reports on the TPP be filed within one hundred and twenty (120) days following the end of each of the Program Years.

16<sup>th</sup> Order, modified the deadlines for certain requirements under the February 16<sup>th</sup> Order, and ordered LUMA to file a petition for approval of the EE Rider on or before April 11, 2023.

5. On April 11, 2023, LUMA submitted a petition for approval of the EE Rider ("EE Rider Petition"). *See Motion to Submit EE Rider* filed on that date. *See id*. Exhibit 1 at page 7.

6. On May 19, 2023, LUMA filed a revised EE Rider Petition<sup>2</sup> in which, among others, it combined the TPP Emergency DR and Battery DR programs into one program. *See Motion to Submit Revised Exhibit 1 to EE Rider Petition and Translation Thereof, in Compliance with Bench Order of May 5, 2023,* filed on May 19, 2023, Exhibit 1, Sections 2.1 and 2.3.

7. On July 31, 2023, the Energy Bureau issued a Resolution and Order in the Permanent Rate Case ("July 31<sup>st</sup> Resolution and Order"), in which it determined, among others, that the cost of DR programs will not form part of the EE Rider and ordered LUMA to contemplate the DR programs as part of the proposal of factors corresponding to the PPCA. *See* July 31<sup>st</sup> Resolution and Order on pages 8 and 10.

8. On August 11, 2023, the Energy Bureau issued a Resolution and Order ("August 11<sup>th</sup> Order") in which, among others, it ordered LUMA to file on or before August 23, 2023, for the Energy Bureau's approval, estimated costs associated with the Battery Emergency DR Program of the TPP (now referred to by LUMA as the Customer Battery Energy Sharing Initiative or "CBES") to be recovered through the PPCA. *See* August 11<sup>th</sup> Order on page 3.

9. On August 23, 2023, LUMA submitted to the Energy Bureau the proposed estimated costs associated with the CBES. *See Motion to Submit Costs Associated with Emergency DR Program in Compliance with Resolution and Order of August 11, 2023, and Request for Confidential Treatment* filed August 23, 2023 ("August 23<sup>rd</sup> Motion").

<sup>&</sup>lt;sup>2</sup> This in compliance with an Energy Bureau bench order of May 5, 2023.

10. On August 29, 2023, the Energy Bureau issued a Resolution and Order ("August 29<sup>th</sup> Order") accepting the CBES budget proposed by LUMA and determining that administrative costs for DR Programs will be recovered through the PPCA. *See* August 29<sup>th</sup> Order on page 3. Relatedly, the Energy Bureau required LUMA to submit reports quarterly, within forty-five (45) days after each quarter of a fiscal year closes (each a "DR Administrative Costs Quarterly Report" and, collectively, "DR Administrative Costs Quarterly Reports") meeting the requirements set forth the August 29<sup>th</sup> Order. *See id.* at pages 3 and 4. The Energy Bureau also indicated that the Q4 report was to include the year-end report ("DR Administrative Costs Year-End Report"). *See id.* footnote 8.

11. On August 29, 2023, LUMA submitted the FY2023 Q4 Quarterly TPP Report, in compliance with the February 16<sup>th</sup> Order. *See Motion to Submit FY 2023 Q4 TPP Report* of that date.

12. On September 22, 2023, the Energy Bureau issued a Resolution and Order in Case *In re LUMA's Initial Budgets*, Case No. NEPR-MI-2021-0004 ("September 22<sup>nd</sup> Budgets Order") in which it decided that the costs of the EE programs of the TPP would be recovered through base rate revenues, rather than through the EE Rider. *See* September 22<sup>nd</sup> Budgets Order on page 9.

13. On September 29, 2023, the Energy Bureau issued a Resolution and Order in the Permanent Rate Case in which it indicated, based on the September  $22^{nd}$  Budgets Order, that the charge for the EE Rider for FY2023 was eliminated (*See* September 29<sup>th</sup> Rate Order on page 8) and ordered LUMA to include in the customer invoices an EE Rider charge equal to zero (0) (*see id.*).<sup>3</sup>

<sup>&</sup>lt;sup>3</sup> The Energy Bureau had previously suspended the EE charge for July 2023 in a Resolution and Order issued on June 30, 2023, in the Permanent Rate Case ("June 30<sup>th</sup> Resolution and Order"). *See* June 30<sup>th</sup> Resolution and Order on page 11.

14. On October 30, 2023, LUMA filed a motion requesting this Energy Bureau to extend for an additional fiscal year the TPP, with the same cadence of quarterly and annual reporting as in the TPP, and to delay the schedule for the Three-Year EE and DR Plan by one year. *See Request to Extend by One Additional Year the Deadline to File the Three-Year Plan, Concomitant Deadlines and Extend the Term of the Transition Period Plan for An Additional Fiscal Year* ("October 30<sup>th</sup> Motion") of that date, pages 15-16 and Exhibit 1.

15. On October 30, 2023, LUMA filed a *Motion to Submit TPP FY2023 Annual Report* in compliance with the February 16<sup>th</sup> Order.

16. On November 14, 2023, LUMA submitted the FY2024 Q1 DR Administrative Costs Quarterly Report in compliance with the August 29<sup>th</sup> Order. *See Motion to Submit First Quarterly Report on Administrative Costs and Expenditures of TPP DR Programs* filed on November 14, 2023.

17. On November 29, 2023, the Energy Bureau issued a Resolution and Order ("November 29<sup>th</sup> Order") granting LUMA's request to extend the TPP by one year and delay the schedule for the Three-Year EE and DR Plan by one year. *See* November 29<sup>th</sup> Order on page 7. The Energy Bureau also ordered LUMA to file by December 8, 2023, a revised TPP with the information specified in the November 29<sup>th</sup> Order.

18. On November 29, 2023, LUMA submitted the FY2024 Q1 Quarterly TPP Report, in compliance with the February 16<sup>th</sup> Order. *See Motion to Submit FY2024 Q1 TPP Report* of that date.

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19. On December 20, 2023, LUMA submitted to the Energy Bureau the revised version of the TPP ("Revised TPP") and the information requested under the November 29<sup>th</sup> Order.<sup>4</sup> *See Motion to Submit Revised TPP and Other Information Requested Under the Resolution and Order of November 29, 2023 filed on December 20, 2023 ("November 20<sup>th</sup> Motion")* and its Exhibit 1 (*which is the Revised TPP*). The Revised TPP maintained the same requirements pertaining to the TPP Quarterly Reports and TPP Annual Reports for FY2024, while extending these to FY2025, and added the DR Administrative Costs Quarterly Reports. *See id*. Exhibit 1, Section 6.0. The Revised TPP also updated the portfolio of quick-launch programs, adding to the existing programs a new Energy Efficiency Kit program to be quickly launched in Q3 of FY2024 and provide basic EE measures free of charge to a large number of customers. *See id*.

20. On February 14, 2024, LUMA submitted the FY2024 Q2 DR Administrative Costs Quarterly Report and requested the Energy Bureau to consolidate the DR Administrative Costs Quarterly Reports and the TPP Quarterly Reports into a single quarterly report to be filed within forty-five (45) days of the end of each fiscal quarter, commencing with the reports for Q3 FY2024 and to consolidate the DR Administrative Costs Year-end Reports and the TPP Annual Reports into a single annual report to be filed within one hundred and twenty (120) days following the end of the fiscal year, commencing with the annual report for FY2024. See *Motion to Submit Second Quarterly Report on Administrative Costs and Expenditures of TPP DR Programs and Request to Consolidate Reporting Requirements*.

<sup>&</sup>lt;sup>4</sup> The deadline to submit the revised TPP and other information required under the November 29<sup>th</sup> Order was extended by the Energy Bureau by Resolution and Order of December 12, 2023, in attention to a request for extension filed by LUMA on December 7, 2023 (*see Request for Extension to Comply with the Order for LUMA to Provide Information Under the Resolution and Order of November 29, 2023*, filed by LUMA on December 7, 2023).

21. On February 29, 2024, LUMA filed the FY2024 Q2 TPP Quarterly Report in compliance with the February 16<sup>th</sup> Order. *See Motion to Submit FY2024 Q1<sup>5</sup> TPP Report* filed on February 29, 2024.

22. On March 21, 2024, the Energy Bureau issued a Resolution and Order ("March 21<sup>st</sup> Order") granting LUMA's request to consolidate the TPP and DR Administrative Cost Quarterly Reports into a single filing ("Consolidated TPP and DR Administrative Cost Quarterly Report") which are to be filed within forty-five (45) days of the end of each quarter, beginning with FY2024 Q3 and LUMA's request to file its annual DR Administrative Costs Year-end reports as part of the TPP Annual Reports which are to be filed one hundred and twenty (120) days following the end of the fiscal year. *See* March 21<sup>st</sup> Order on page 2.

23. On May 15, 2024, LUMA filed the FY2024 Q3 Consolidated TPP and DR Administrative Cost Quarterly Report in compliance with the February 16<sup>th</sup> Order, the August 29<sup>th</sup> Order and the March 21<sup>st</sup> Order. *See Motion to Submit FY2024 Q3 Consolidated Transition Period Plan and Demand Response Administrative Cost Quarterly Report, Inform on Processing of Energy Efficiency Rebates, and Request Confidential Treatment* filed on May 15, 2024.

24. On June 11, 2024, the Energy Bureau issued a Resolution and Order ("June 11<sup>th</sup> Order") in the Permanent Rate Case No. NEPR-MI-2020-0001 approving the implementation of the EE charge to cover the EE program costs for FY2025.

25. On June 21, 2024, the Energy Bureau issued a Resolution and Order ("June 21<sup>st</sup> Order") ordering LUMA to answer requirements of information regarding to the FY2024 and FY2025 budgets for the EE programs.

<sup>&</sup>lt;sup>5</sup> Please note that the title refers to Q1 instead of Q2 due to inadvertent error.

26. On June 29, 2024, LUMA submitted a *Motion in Compliance with Resolution and Order of June 21, 2024*, with responses to the Request of Information issued to LUMA in the June 21<sup>st</sup> Order.

27. On August 13, 2024, LUMA filed the FY2024 Q4 Consolidated TPP and DR Administrative Cost Quarterly Report in compliance with the February 16<sup>th</sup> Order, the August 29<sup>th</sup> Order and the March 21<sup>st</sup> Order. *See Motion to Submit FY2024 Q4 Consolidated Transition Period Plan and Demand Response Administrative Cost Quarterly Report and Request for Approval of Template for these Quarterly Reports.* 

28. On October 23, 2024, the Energy Bureau issued a Resolution and Order ("October 23<sup>rd</sup> Order") in which it made several determinations in attention to motions submitted by LUMA. In what is relevant to this Motion, the Energy Bureau approved the template for the Consolidated TPP and DR Administrative Cost Quarterly Reports conditioned on the administrative costs report being supplemented with additional information and including modifications to two tables in the report, all as specified in that Resolution and Order. The Energy Bureau also indicated that these changes are to be implemented in future reports.

#### III. Submission of FY2024 Consolidated TPP and DR Administrative Costs Annual Report and Request for Template Approval

29. In compliance with the February 16<sup>th</sup> Order, the August 29<sup>th</sup> Order, and the March 21<sup>st</sup> Order, LUMA herein submits its FY2024 Consolidated TPP and DR Administrative Costs Annual Report. *See Exhibit 1*. This Report covers the period from July 1, 2023, to June 30, 2024. It discusses LUMA's activities and achievements during the program year, covering implementation experience, stakeholder consultations, research efforts, and collaboration with key strategic groups. It also addresses program strategies, funding sources and market performance. In

addition, the report highlights customer education and outreach efforts, participant enrollment, performance data, program costs, and outlines the next steps for future initiatives.

30. The FY2024 Consolidated TPP and DR Administrative Costs Annual Report covers the period from July 1, 2023, to June 30, 2024. It discusses LUMA's activities and achievements during the program year, covering implementation experience, stakeholder consultations, research efforts, and collaboration with key strategic groups. It also addresses program strategies, funding sources and market performance. In addition, the report highlights customer education and outreach efforts, participant enrollment, performance data, program costs, and outlines the next steps for future initiatives.

31. As outlined in the attached report, LUMA's energy efficiency programs have demonstrated significant progress, enhanced customer engagement and reduced energy consumption. Through strategic program management and strong partnerships, these initiatives have made a substantial impact on reducing energy consumption and increasing efficiency across Puerto Rico. LUMA remains committed to continuing this momentum and further transforming the island's energy landscape.

32. LUMA herein informs that it has revised the format that it used in the past to file the TPP Annual Report and developed a template that it proposes to use going forward for its Consolidated TPP and DR Administrative Costs Annual Reports. Since as of this date the honorable Energy Bureau has not yet established a template for the TPP Annual Reports (as was mentioned in the February 16<sup>th</sup> Order), LUMA respectfully requests the Energy Bureau to consider the template used in the *Exhibit* 1 herein for approval as the established template for future filings. This template was organized to generally follow the order and substance of the requirements in Section 6.0 of the Revised TPP, with some adjustments to expand on certain TPP program requirements and/or separately address DR program details to address the requirements in the August 29<sup>th</sup> Order relating to DR program costs.

WHEREFORE, LUMA respectfully requests that the Energy Bureau (i) take notice of the aforementioned; (ii) accept the FY2024 Consolidated DR Administrative Costs and TPP Annual Report in *Exhibit 1* in compliance with the February 16<sup>th</sup> Order, as modified by the August 29<sup>th</sup> Order and further modified by the March 21<sup>st</sup> Order and deem LUMA in compliance with the FY2024 annual reporting requirements under such orders; and (iii) and consider and approve the template used for the FY2024 Consolidated DR Administrative Costs and TPP Annual Report in *Exhibit 1* herein as the template to be used for future Consolidated DR Administrative Costs and TPP Annual Reports.

#### **RESPECTFULLY SUBMITTED.**

In San Juan, Puerto Rico, this 28<sup>th</sup> day of October 2024.

We hereby certify that we filed this Motion using the electronic filing system of this Energy Bureau and that we will send an electronic copy of this Motion the Independent Office for hrivera@jrsp.pr.gov; PREPA at arivera@gmlex.net: Consumer Protection at and and agraitfe@agraitlawpr.com, info@sesapr.org, bfrench@veic.org, mvalle@gmlex.net; shanson@veic.org, evand@sunrun.com, jordgraham@tesla.com, forest@cleanenergy.org, javrua@sesapr.org. customerservice@sunnova.com. picleanenergy@gmail.com. and mrios@arroyorioslaw.com.



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#### Exhibit 1

FY2024 Consolidated TPP and DR Administrative Costs Annual Report



Consolidated Transition Reriod Plan and Demand Response Administrative Costs

FY2024 Annual Report

NEPR-MI-2022-0001 OCTOBER 28, 2024

#### NEPR-MI-2022-0001

# Consolidated Transition Period Plan and Demand Response Administrative Costs

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# Consolidated Transition Period Plan and Demand Response Administrative Costs

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#### Introduction

LUMA is fully committed to working with the Puerto Rico Energy Bureau and helping implement Puerto Rico's public energy policy, including driving sustainable energy practices and key customer initiatives, such as energy efficiency (EE) and demand response (DR) programs.

This annual report provides a comprehensive overview of LUMA's progress on its Transition Period Plan (TPP) during Fiscal Year 2024 (July 1, 2023, to June 30, 2024). During this period, LUMA launched multiple EE and DR programs and projects that raised customer awareness about energy efficiency and energy savings, which are directly contributing toward Puerto Rico's energy efficiency targets established in the Puerto Rico Energy Transformation and RELIEF Act (Act 57-2014).

During FY2024, LUMA made progress on the following programs and initiatives:

- Energy Efficiency Rebates: Issuing over 1,200 residential EE rebates, helping to incentivize customers in purchasing energy efficient appliances from a list of qualified measures, including air conditioners, solar and tankless water heaters, and refrigerators. LUMA is also preparing business EE rebates for 17 eligible measures, such as efficient lighting, HVAC, and water heating equipment designed to help businesses reduce energy consumption and costs.
- Energy Efficiency Kits: Distributing over 41,800 free EE kits to both residential and business
  customers to help them reduce their monthly energy usage and bills and keep their home
  appliances safe with surge protectors.
- Customer Battery Energy Sharing (CBES) Initiative: Launching and enrolling over 5,700 customers in CBES, resulting in an additional 18 MW to increase the supply of critical energy available during peak demand periods, improving day-to-day service reliability and minimizing the impact of load shedding.
- Community Streetlight Initiative: Replacing over 88,300 streetlights with LED lights to improve safety and increase energy efficiency while building a more modern and resilient grid across communities.
- In-Store Energy Efficiency Discounts: Building partnerships with Home Depot and product manufacturers including Philips, Leaderson, ETI, and KLite, establishing a point-of-sale discount for eligible energy efficiency measures and geo-targeting of stores in low-income areas to provide low-income customers with greater access to energy efficiency opportunities.

While much remains to be done, LUMA has made measurable progress in modernizing the system and the over 4,000 men and women of LUMA will continue working hard every day building the brighter energy future that LUMA's 1.5 million customers expect and deserve.



#### **Regulatory Background**

On June 1, 2022, LUMA submitted to the Energy Bureau the EE and DR Transition Period Plan (2022 TPP)<sup>1</sup>, which describes the various quick-start EE and DR Programs to be implemented by LUMA during a two-year transition period ending on June 30, 2024. By Resolution and Order of February 16, 2023 (February 16, 2023, Resolution and Order) the Energy Bureau approved (with some modifications) the 2022 TPP. Subsequently, by Resolution and Order of November 29, 2023, the Energy Bureau approved the extension of the approved 2022 TPP for an additional year. On December 20, 2023, LUMA prepared and submitted to the Energy Bureau a revised TPP (Revised TPP); as used hereinafter in this report, TPP refers to this Revised TPP) updating the TPP Programs and extending them until June 2025.

This report encompasses the period from July 1, 2023, to June 30, 2024, and is presented by LUMA in adherence to the requirements of the Energy Bureau's February 16, 2023, Resolution and Order to submit annual reports on the indicators set forth in Section 6 of the 2022 TPP, which requirements remained unchanged in the Revised TPP. In addition, this report complies with the requirements set forth in the Energy Bureau's Resolution and Order of August 29, 2023 (August 29, 2023, Resolution and Order), requiring LUMA to report annually on specified data regarding the administrative costs for the implementation of the CBES Initiative that forms part of the TPP. The Energy Bureau approved the consolidation of these two annual reporting requirements by Resolution and Order of March 21, 2024 (March 21, 2024, Resolution and Order).

<sup>&</sup>lt;sup>1</sup> See Motion Submitting Proposed EE/DR Transition Period Plan filed on June 21, 2022, in Case No. NEPR-MI-2021-0006, In Re: Demand Response Plan Review, Implementation and Monitoring, and its Exhibit 1.



# **1.0 Description of LUMA's Activities and Achievements in the Program Year**

#### **1.1 Summary of Program Implementation Experience and Progress**

This section provides a high-level summary of the activities, achievements and implementation experience and progress to date for each EE and DR program and initiative. Table 1: *Activities and Achievements for FY2024* below, summarizes the activities, achievements, and status of the various programs under the TPP. Sections 1.2 and 1.3 cover the description of these activities, achievements, and progress per program, for EE and DR, respectively.

TPP PROGRAM	INITIATIVES	DESCRIPTION AND EXPERIENCE	STATUS
Education and Outreach Sec. 4.2 of TPP	Customer Education	During FY2024, improvements were made to the content of the LUMA Energy Saving Tips <sup>2</sup> section of the webpage. Information and tips were added to help customers save energy. Additional enhancements include a resources section with links to Energy Star, the Public Energy Policy Program, and others. Furthermore, a downloadable Energy Efficiency Calculator was added to help customers estimate the operating costs of their current equipment and potential savings from upgrading to energy-efficient appliances. LUMA's calculator estimates costs for the following equipment: refrigerators/freezers, lighting, water heaters, windows, and mini split air conditioners.	Completed

#### Table 1: Activities and Achievements for FY2024

<sup>&</sup>lt;sup>2</sup> https://lumapr.com/residencial/ahorrando-energia-y-dinero/

TPP PROGRAM	INITIATIVES	DESCRIPTION AND EXPERIENCE	STATUS
Education and Outreach Sec. 4.2 of TPP	Customer Education	During FY2024, two new landing pages were launched for the Residential and Business Incentive Programs, including sections on Residential and Business Rebate, EE Kits Programs <sup>3</sup> , and Energy Savings Tips. Additionally, two new brochures were developed for the Residential and Business Programs, which feature cross-promotion with other programs.	Completed
Education and Stakeholder Outreach Sec. Outreach 4.2 of TPP		In FY2024, LUMA actively participated in industry events such as the Puerto Rico Energy Week, the Solar and Energy Storage Association of Puerto Rico Summit, and the Grupo Unido de Importadores de Automóviles (GUIA) Annual Meeting. During these events, LUMA representatives discussed EE and DR pilots and their impacts, distributed educational materials to further raise awareness and engaged with stakeholders regarding next steps and collaboration opportunities. During these events, the focus was to raise awareness about energy efficiency and demand response strategies. Representatives distributed educational materials to inform attendees about the benefits of these programs, which are designed to empower customers to manage their energy consumption more effectively.	Completed
Education and Outreach Sec. 4.2 of TPP	Stakeholder Outreach	Recurring participation in the webcast <i>"Martes Informativo</i> " with Dr. Power, where the CBES and Business Rebate Programs were discussed <sup>4</sup> .	Completed

<sup>&</sup>lt;sup>3</sup> For residential programs: LUMA., *Programas de incentivos para clientes* from <u>https://lumapr.com/programas-incentivos-clientes/</u>. For commercial programs: LUMA, *Programas de incentivos para negocios* from <u>https://lumapr.com/programas-incentivos-negocios/</u>.

<sup>&</sup>lt;sup>4</sup> See Episodio 234: Estatus de Programa Battery Emergency Demand Response (BEDR) en Puerto Rico" from the webcast series Martes Informativo with Dr. Power. Available at: <u>https://www.youtube.com/live/Fndxs5RUCSI?si=2LoWBwtfavB19yiU</u>.

TPP PROGRAM	INITIATIVES	DESCRIPTION AND EXPERIENCE	STATUS
Education and Outreach Sec. 4.2 of TPP	Stakeholder Outreach	LUMA developed and published comprehensive marketing materials for the implementation contractors, including detailed marketing guidelines and an email template. These resources were provided to the contractors to support and enhance their marketing efforts. As a result, contractors were better prepared to promote the programs effectively, leading to increased customer engagement and higher participation rates.	Completed
Education and Outreach Sec. 4.2 of TPP	Stakeholder Outreach	Promotional materials for the Residential and Business Rebate Programs were developed and printed, which have been subsequently included in the billing statements mailed to all LUMA customers in July 2024 Billing Cycle.	Completed
Customer Battery Energy Sharing Program Section Sec. 4.4 of TPP	Pilot Program	The CBES Pilot Program, launched in mid-Q2 FY2024, saw steady growth in customer enrollment and available demand response capacity, reaching 5,709 customers and 18 MW of capacity by the end of Q4. However, a divergence emerged between customer growth and capacity, prompting LUMA to investigate participation rates and conduct surveys to better understand the factors influencing customer behavior and improve future program design.	Ongoing
Residential Rebate Program Sec. 4.3 of TPP	Pilot Program	Provided customers with a financial incentive for purchasing and installing high-efficiency eligible equipment and appliances, 1,218 customers participated in FY2024 and received reimbursements for qualifying measures in less than a full quarter of implementation.	Ongoing

TPP PROGRAM	INITIATIVES	DESCRIPTION AND EXPERIENCE	STATUS
Business EE Rebates Sec. 4.7 of TPP	Pilot Program	Provided commercial customers with a financial incentive for purchasing and installing eligible equipment and appliances. Since its launch, the focus has been on increasing market awareness and educating potential customers about rebate availability through contractor and association networks. Additionally, direct outreach efforts have been made via email and direct mail to this customer segment. Initial FY2025 figures indicate that positive uptake from this customer class is a direct result of the transformation initiatives implemented during FY2024 Q4. These initiatives included targeted program enhancements and improvements designed to increase participation and benefits. To support these efforts and account for anticipated success, LUMA accrued funding in anticipation of the program's positive outcomes. This approach was informed by the successful results observed with the Residential Rebate Program, which demonstrated the potential for similar achievements. The accrued funding was intended to facilitate expected reimbursements and ensure the sustainability of the Program.	Ongoing

TPP PROGRAM	INITIATIVES DESCRIPTION AND EXPERIENCE		STATUS
In-Store EE Discount Pilot Program Program Section 4.5 of TPP		Offered customer point-of-sale (POS) discounts on eligible products at participating retail stores. Initial Manufacturer's Memorandum of Understanding (MOU) obtained for POS discount and reimbursement processes, continuing the growth of measure and brand availability for customers in store to secure energy management and saving measures. The program launched in July 2024 at ten (10) Home Depot locations across Puerto Rico, offering instant discounts when paying at the cash register on qualifying lighting products. Additional measures, such as window AC units, ceiling fans, washers and dryers, along with more stores and regions will be added in FY2025, further expanding access and equity for customers throughout Puerto Rico.	Ongoing
EE Kits Program Sec. 4.6 of TPP (Residential)	Pilot Program	LUMA provided free mail-order "kits" containing typical EE measures and educational materials. A total of 41,826 customers across Puerto Rico ordered these kits in FY2024. Each round of kits distribution received immediate and full uptake, with all available kits being claimed within days of the Program's launch.	Ongoing
Business EE Kits Pilot Program Sec. 4.6 of TPP		Commercial customers were provided with a free mail-order kit that included typical EE measures and educational materials. In FY2024, LUMA distributed 62 kits. To build on this, LUMA will implement additional strategies in FY2025 to enhance awareness and distribution, with the goal of increasing the reach and impact of this measure.	Ongoing
Street Light Conversion Program Sec. 4.8 of TPP	Street Light Conversion Program	During FY2024, LUMA saved 8,486,856 kWh as the result of replacing over 88,300 streetlights, demonstrating its commitment to looking at its work holistically, combining EE and infrastructure modernization.	Ongoing

TPP PROGRAM	INITIATIVES	DESCRIPTION AND EXPERIENCE	STATUS
Program Management and Implementation Strategies Sec. 5.0of TPP	Implementation Contractor Onboarding	Multiple Service Agreements for administering the customer education, efficiency rebates, and demand response programs were signed, and a kickoff meeting was completed with the Implementation Contractor for the EE and DR programs.	Completed

### 1.2 Energy Efficiency Programs

#### 1.2.1 Residential Energy Efficiency Kits Program

During FY2024, the Residential EE Kits Program was launched, providing free mail-order kits to **41,826** residential customers. These kits resulted in a significant annual energy savings total of **16,581 MWh<sup>5</sup>**, which is conservatively equivalent to the annual electricity<sup>6</sup> use of **3,454 homes.** These kits contained common EE measures such as LED bulbs, smart power strip, and LED nightlights. Additionally, to assist customers with the setup and gather their feedback, each kit included an easy-to-follow installation guide and a satisfaction survey postcard.

During FY2024 Q4, LUMA made significant progress in its Residential EE Kits Program, achieving its milestones of distributing these kits to the public and enhancing accessibility, particularly for low-income customers. To cater to the high demand, LUMA adjusted the contents of the energy efficiency kits to include only electrical measures. This strategic decision allowed the program to reach a larger number of customers without compromising the quality or impact of the energy-saving tools provided. The second offering included the following measures: six (6) A19 LEDs, One (1) Advanced Power Strip and One (1) LED Night Light.



#### Figure 1: Second EE Kit Product Offerings

Throughout the last quarter, LUMA successfully distributed a total of **32,765 Residential EE Kits** to the public. The initial distribution round saw **8,080 kits** launched, which quickly ran out within **48 hours** due to

<sup>&</sup>lt;sup>6</sup> The average usage of a residential customer class is 400 kWh per month or 4,800 kWh per year.



<sup>&</sup>lt;sup>5</sup> The total energy savings of 16,581 MWh were calculated by multiplying the number of distributed energy-efficient kits by the average energy savings per kit. In the first round, 9,061 kits achieved savings of 0.586 MWh per kit, while subsequent rounds saved 0.344 MWh per kit, contributing to the overall total of 16,581 MWh.

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high demand. To improve accessibility, particularly for low-income customers, LUMA implemented a strategy to distribute these kits through its Regional Customer Service Centers.

Following this success, subsequent rounds of distribution included **7,889 kits**, which were exhausted in just **seven days**, and another **6,686 kits**, which ran out in only **three days**. Recognizing the ongoing demand, LUMA ordered **10,110 additional units** to be distributed through multiple service centers. Moreover, LUMA allocated **1,400 units** to three Community-Based Organizations to ensure effective outreach and distribution to low-income households.



Darker color indicates more kits distributed

#### Figure 2: FY2024 Residential EE Kit Distribution by Municipality

#### 1.2.2 Home Efficiency Rebates Program

The Home Efficiency Rebates Program, launched in FY2024 Q3, provides customers with financial incentives for purchasing and installing eligible high-efficiency equipment and appliances. Since its inception, the program has made strides in processing and reimbursing residential EE rebates, reflecting an increasing customer interest in energy-saving equipment.

The program started with solar heater rebates as the first measure. Later in the quarter, it expanded to include five additional measures: mini-split air conditioners, window air conditioners, Energy Star refrigerators, Energy Star freezers, and tankless water heaters. The expansion also introduced higher incentive levels for low-income-eligible customers, along with a new dynamic application to facilitate rebate requests. **77** applications were reimbursed during FY2024 Q3.

During the last quarter of FY2024, applications reimbursed reached **1,141**, demonstrating an impressive **1,380% increase** from the previous quarter. This surge indicates growing awareness and demand for the benefits associated with incentives for energy-efficient equipment.





#### Figure 3: FY2024 Weekly Residential Rebate Application Count

With a total of **1,218 applications** reimbursed during FY2024, the program has demonstrated significant reach and impact. Looking ahead to FY2025, the program is well-positioned to maintain its upward trajectory. Plans to further enhance accessibility, boost marketing efforts, and collaborate with community organizations will help meet the growing demand for energy-efficient solutions. See Table 2: *Rebates Processed FY2024* below.

#### Table 2: Rebates Processed FY2024

CUSTOMERS	APPLICATIONS	REBATES	REBATE
SERVED	PROCESSED <sup>7</sup>	ISSUED	SPEND
1,515	1,218	1,218	\$911,1176

During FY2024, LUMA's Residential Rebate Program has witnessed customers installing a diverse range of energy-efficiency measures, with the Mini-Split Air Conditioner and Solar Water Heater emerging as the most popular choices. For a detailed breakdown of the measures and their distribution, refer to Table 3: *Measures Installed* below.

<sup>&</sup>lt;sup>7</sup> One application allows for more than one measure.



Table 3: Measures Installed

MEASURE	QTY (#)	PERCENTAGE
Solar Water Heater	534	43.84%
Energy Star <sup>®</sup> Tankless Water Heater	10	0.82%
Energy Star <sup>®</sup> Refrigerator	84	6.90%
Energy Star <sup>®</sup> Freezer	10	0.82%
Mini-Split Air Conditioner	554	45.48%
Energy Star <sup>®</sup> Window Air Conditioner	26	2.13%
Total	1,218	100%

#### 1.2.3 Business Energy Efficiency Kits Programs

In FY2024 Q4, LUMA launched the Business EE Kits Program, aimed at supporting businesses, including small and medium enterprises (PYMES), in reducing energy consumption and operational costs, thereby contributing to Puerto Rico's economic development. With **6,000 kits** tailored for four types of businesses—Retail, Restaurant, Office, or a Lighting-only alternative—this program provides customized solutions to help businesses reduce energy consumption, cut operational costs, and promote sustainable growth with local economy. Although the program officially began in the latter part of FY2024, LUMA is committed to laying a strong foundation for future success. This includes efforts to enhance education, outreach, and community-based market transformation in FY2025.

The program's early success was marked by the shipment of **62 Business EE Kits** by the close of FY2024 with the Office Kit emerging as the most popular choice among the businesses.

Additionally, during FY2024, LUMA also allocated **600 kits** to the Puerto Rico Chamber of Commerce for distribution among its members, expanding the program's reach. This collaboration demonstrates LUMA's commitment to partnering with stakeholders to maximize the impact and effectiveness of the Business EE Kits Program.

Looking ahead, LUMA is committed to achieving energy savings goals in FY2025. Key strategies include boosting participation through business-focused events and expanding social media marketing efforts to raise program awareness. With over **2,000 Business EE Kits** already shipped for FY2025, the program is poised for strong growth in the coming year.

Through these efforts, the Business EE Kits Program has laid the groundwork for continued success in supporting small businesses across Puerto Rico in their journey toward energy efficiency. LUMA remains



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dedicated to helping businesses implement sustainable energy solutions, driving both economic and environmental benefits in the long term.

#### 1.2.4 Business Energy Efficiency Rebates Program

In FY2024 Q4, LUMA launched the Business EE Rebates Program, designed to help businesses reduce energy consumption and costs. The program's comprehensive guidelines established a clear framework for eligibility and rebate procedures. With **17 eligible measures**, LUMA offered businesses a range of incentives to adopt energy-saving upgrades. Additionally, customer service representatives received training to effectively assist businesses, and the rebate application was enhanced with auto-calculation features, making it easier for participants to apply for rebates and manage their EE projects.

Since its launch, LUMA has actively promoted the program among contractors, anticipating that word-of mouth will further boost participation. The program has also expanded outreach through emails, social media, and partnerships with local business-focused organizations to increase awareness. As a result, at the start of FY2025, several business rebates and pre-approvals have already been processed, with some businesses reaching the **\$75,000** annual program cap per business. This cap limits the total amount of incentives any single business can receive within the fiscal year.

LUMA expects program awareness to continue growing as these efforts gain traction in Program Year 2, positioning the program for strong success in FY2025.

#### 1.2.5 In-Store Discounts Program

LUMA's work in FY2024 for the In-Store Discounts Program centered around preparation and execution of necessary agreements with initial participating stores (Home Depot) and product manufacturers, such as Philips, Leaderson, ETI, and KLite. The initial quick launch of this program will support lighting measures and work to expand to other measures in FY2025 as aligned to portfolio and market goals.

Lighting as a first launch measure is a very accessible and impactful approach, whereby most customers will have an opportunity to purchase it within a calendar year for their home or business needs.

Initial launch activity in FY2025 has shown promising uptake of anticipated measure spend and opportunities to cross promote other potential in-store discount measures or supporting EE Programs allowing customers to stack value and energy savings together. Exciting new partnerships are being established and LUMA looks forward to continuing to report on the progress of this program.

#### 1.3 Demand Response: CBES

The CBES Pilot Program was launched in mid-Q2 of FY2024 and has demonstrated consistent growth and success. Starting with fewer than **2,000** enrolled customers and an available DR capacity of approximately **12.5 MW**, the program saw steady, proportional increases throughout Q3 and early Q4. By the first month of Q4, enrollment had doubled, reaching **3,948** customers, with the available capacity rising to **25.2 MW**.

As the program continued to expand, by the end of Q4, enrollment had grown significantly to **5,709** customers, underscoring strong customer interest and engagement. However, available capacity for DR events did not increase proportionally during the same period, reflecting a divergence between customer



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growth and capacity growth. This shift was primarily driven by aggregators reporting lower-than-expected capacity during the summer months, despite the continued increase in customer participation.

LUMA has identified customer participation rates as a key factor influencing DR capacity. Initial data highlights customer engagement during events but does not yet fully explain the motivations behind their participation or non-participation. Several factors, such as the timing, duration, and specific day of DR events, as well as external influences, may play a role. Moreover, customer behavior remains dynamic, with participants making real-time decisions about battery energy reserves and event participation.

To further optimize the program and enhance capacity forecasting, LUMA is launching targeted customer surveys. These surveys will provide valuable qualitative insights into the factors driving customer behavior during DR events, enabling the program to continuously refine its design and ensure even greater alignment between customer participation and capacity outcomes.

# 1.4 Other Stakeholder Consultations, research, collaborations, streetlighting

#### **Stakeholder Consultations**

LUMA's engagement with federal agencies, organizations, and programs has been a cornerstone of its efforts. LUMA has actively sought collaboration with key federal agencies, including the Department of Energy (DOE) and the Environmental Protection Agency (EPA), to identify funding and support. These discussions have clarified eligibility requirements and streamlined application processes, allowing LUMA to leverage opportunities such as the EE and Conservation Block Grant Program and various Energy Star incentives. Additionally, consultations with the DOE's Office of Energy Efficiency and Renewable Energy (EERE) have provided valuable technical assistance, helping LUMA refine pilot designs and align with best practices in EE. Collaborative initiatives with federal programs will enable LUMA to showcase innovative energy solutions and benefit from cutting-edge research and technologies.

Furthermore, LUMA continues to meet on a biweekly schedule with the Department of Economic Development and Commerce (DDEC), facilitating coordinated efforts regarding the launch of EE kits and educational initiatives for both organizations to launch their respective programs while addressing different customer sectors across the island, addressing challenges with engagement and market penetration, and ensuring alignment with broader economic development goals. Overall, these engagements have significantly advanced LUMA's projects, equipping the organization with the necessary resources and support to drive impactful change and enhance operational effectiveness.

#### **Research Activities**

As part of its research efforts, LUMA is completing surveys with the recipients of the EE kits with the intent to learn more about their home energy consuming equipment. A survey is being included with each kit to learn about the type of home cooling and water heating equipment that each customer has in their home. In addition, LUMA is ranking the most popular EE pilot measures to provide feedback for the three-year plan.

LUMA is conducting a consumer research survey for the CBES Pilot Program to gather feedback from participants about their pilot program experience. The survey will be distributed to a randomly selected



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sample of households participating in the program, consisting of approximately over 300 participants. It will explore key areas such as customer motivations for joining, participation frequency, and overall satisfaction with program events. The insights gained will help LUMA refine the pilot program by addressing participant concerns and improving future energy service offerings for demand response programs. Additionally, the feedback will assist in optimizing the integration of the pilot program into Puerto Rico's grid, ensuring a positive impact for participants and the broader community.

#### Key findings and analyses from the research

Due to the recent launch of the EE Programs, LUMA expects to have a larger and more significant amount of data to complete the analysis and draw appropriate conclusions in future reports and as a part of the inputs during the TPP implementation. As the research is still underway, LUMA currently does not have available data to report on the CBES Pilot Program. Once the data collection phase is complete LUMA will be able to provide more detailed information and analysis on the pilot program's performance and impact.

#### **Collaboration with Key Strategics Groups**

LUMA has established a collaborative partnership with Puerto Rico's Chamber of Commerce to enhance the promotion of Business Rebates and EE Kits Programs. This collaboration leverages the Chamber of Commerce extensive network of **600** members, including various business organizations, to broaden the reach of LUMA's initiatives. The Chamber of Commerce has demonstrated a strong interest and enthusiasm for LUMA's Business Programs, recognizing them as beneficial for its diverse membership base. The Chamber of Commerce utilizes multiple communication channels, such as email blasts, newsletters, social media, and events, which will be key in promoting LUMA's Programs.

As part of this collaboration, the Chamber of Commerce Marketing, Sales, and Member Service Director invited LUMA to participate in these communication avenues, including their Annual Energy Symposium, convention, and digital TV show. LUMA has committed to provide **600** business kits designated under a unique code<sup>8</sup> to the Chamber of Commerce to support their outreach efforts. This partnership aims to effectively disseminate information about LUMA's EE programs, increase community involvement, and ultimately promote EE efforts across Puerto Rico.

LUMA continued its Contractor Outreach initiatives, focusing on engaging local contractors specialized in business solar water heating, HVAC, lighting, and appliances. In FY2024 Q4, over **100** contractors were contacted to promote the Residential and Business EE Rebates Programs. The response from the contractors has been positive, with many expressing zeal about these programs and recognizing the benefits they offer to their customers.

As an important component of DR engagement, Quarterly meetings are conducted with key CBES stakeholders, including the Solar and Energy Storage Association (SESA), DR Aggregators, developers, and others to go over the vision and updates of the CBES Pilot Program, event preparation, new initiatives, areas of improvement, answer questions and have open discussions. Collaboration with the

<sup>&</sup>lt;sup>8</sup> An alphanumeric code stamped on a card, used to identify and track individual items or records uniquely.



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Department of Energy (DOE) has been integral in strategizing the enrollment of their distributed generation (DG) granted projects into various programs, such as CBES and EE initiatives.

Additionally, LUMA has maintained its ongoing engagement with local government agencies, including the DDEC and its Energy Policy Program (EPP). This collaboration has been instrumental in the creation and dissemination of educational materials and joint outreach efforts. Discussions regarding strategy and marketing research for EE and DR branding will continue as the TPP is implemented and input is incorporated. By working closely with these agencies, LUMA ensures that its EE initiatives are well-supported and effectively communicated to a broader audience.

#### Focus on Equity and Access

To enhance the equity of its EE programs, LUMA offered higher incentive amounts for low-income applicants. This strategy aims to address the unique challenges faced by low-income households, providing them with increased financial support to access energy-saving resources. Eligibility for these low-income incentives is based on the applicant's estimated combined yearly income and household information, which undergoes careful review to ensure that assistance reaches those most in need. By adjusting the incentive levels for this customer segment, LUMA seeks to bridge the gap in access to energy efficiency, alleviating the financial burden on low-income families and facilitating the implementation of energy-saving measures.

In fiscal year 2024, LUMA allocated a total of **\$280,577** worth of incentives specifically for low-income customers, accounting for **31%** of the total FY2024 incentive expenditure for rebates. This funding supported the installation of **324** energy-saving measures for **302** low-income customers. This tiered incentive structure not only promotes equity and inclusiveness within LUMA's programs, but also recognizes the significant impact of financial constraints on household's ability to invest in energy-efficient upgrades. By fostering greater participation across diverse income groups, LUMA contributes to broader community benefits, improving overall energy efficiency and reducing utility costs for vulnerable populations. See Table 4: *Measures Installed for Low-Income Costumers*, below.

MEASURE	QTY #
Solar Water Heater	80
Electric Tankless Water Heater	0
Energy Star <sup>®</sup> Refrigerator	18
Energy Star <sup>®</sup> Freezer	9
Energy Star® Air Conditioner – Window	13
Air Conditioner – Mini-Split	204

#### Table 4: Measures Installed for Low-Income Costumers



MEASURE	QTY #
Total	324

#### **Funding Sources and Cost Recovery**

LUMA continues to explore the potential to expand its program's reach and impact through additional funding sources such as the DOE and the Central Office for Recovery, Reconstruction and Resiliency (COR3) partnerships. Particularly, LUMA has been working with COR3 to obtain one-time funding to further expand its CBES Program to allow for increased participation, testing and flexibility in addition to the currently budgeted funds for the pilot program, thereby increasing the effectiveness and impact of the pilot program.

Additionally, LUMA is actively engaged in discussions with key stakeholders, including the State Office of Public Energy Policy, Fortaleza, and the DOE. These discussions are vital for aligning efforts and ensuring comprehensive support for LUMA's initiatives. The collaboration with these entities is ongoing, with a dedication to fostering strong partnerships to advance its objectives.

#### **Marketing Performance**

Feedback from LUMA customers on the EE programs has been highly favorable. Customers have frequently shared their appreciation during interactions with LUMA's Customer Service, particularly praising the complimentary kits provided through these programs. Many have also taken the initiative to assist others, such as helping elderly relatives and friends place orders, thereby extending the program's reach within their communities. This positive response reflects the success of LUMA's marketing initiatives and highlights the impact of its EE programs.

In addition, there was an increase in website traffic, rising from about **7,727** views in FY2024 Q2 to **256,477** views by the close of FY2024. This represents impressive growth of approximately **526**%, indicating a surge of interest in LUMA's EE offerings. The boost in online engagement suggests that LUMA's digital resources are effectively reaching a wider audience.

The combination of positive customer feedback and the notable rise in website visits underscores the success of LUMA's promotional efforts and demonstrates the significant value that these programs bring to the community.

#### **Customer Education and Outreach Performance**

During the entire year LUMA participated in a significant number of events as shown in Table 5: *Customer Education and Outreach Indicators* below. A total of approximately eighteen (18) events have been conducted to increase customers' education and awareness. LUMA's main energy webpage had 214,323 views during FY2024.

#### **Table 5: Customer Education and Outreach Indicators**

PROGRAM EVENT EVENT DESCRIPTION MONTH	PROGRAM	EVENT	EVENT DESCRIPTION	MONTH
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ASORE (Association		
of Restaurants of Puerto Rico	Energy Savings Tips brochures distributed.	October 2023
SESA Summit (Solar and Energy Storage Association)	CBES presentation to audience during main event. Energy Savings brochures distributed at booths.	November 2023
IRP Stakeholders Meeting	Energy Savings Tips brochures distributed.	October & November 2023
Contractors Outreach	Develop relationships with local contractors to engage in the market, establish trust, and distribute program information and updates. Approximately 130 contractors have been approached in person or by email.	Q3 & Q4
Social Media Post	Tips to save energy at home.	November 2023
GUIA Educa	Energy Efficiency and Demand Response initiatives presented during this event.	February 2024
Puerto Rico Energy Week	Energy Savings Tips brochures distributed.	March 2024
"Martes Informativo" with Dr. Power	Participation on YouTube webcast	May 2024
Contractor Marketing Guidelines	Assist contractors in effective promotion of EE programs to customers.	Q4
Business Focus Email Campaign	Aimed to promote the availability of EE kits and rebates, targeting approximately 6,000 businesses.	June 2024
Glenn International's training session	A training session to promote Business EE Rebates program among electrical contractors.	January 2024
	of Restaurants of Puerto Rico SESA Summit (Solar and Energy Storage Association) IRP Stakeholders Meeting Contractors Outreach Social Media Post GUIA Educa Social Media Post GUIA Educa Puerto Rico Energy Week 'Martes Informativo" with Dr. Power Contractor Marketing Guidelines Business Focus Email Campaign	of Restaurants of Puerto RicoEnergy Savings Tips brochures distributed.SESA Summit (Solar and Energy Storage Association)CBES presentation to audience during main event. Energy Savings brochures distributed at booths.IRP Stakeholders MeetingEnergy Savings Tips brochures distributed.Contractors Outreach Contractors OutreachDevelop relationships with local contractors to engage in the market, establish trust, and distribute program information and updates. Approximately 130 contractors have been approached in person or by email.Social Media PostTips to save energy at home.GUIA EducaEnergy Savings Tips brochures veekPuerto Rico Energy WeekEnergy Savings Tips brochures distributed."Martes Informativo" with Dr. PowerParticipation on YouTube webcastContractor Marketing GuidelinesAssist contractors in effective promotion of EE programs to customers.Business Focus Email CampaignAimed to promote the availability of EE kits and rebates, targeting approximately 6,000 businesses.Glenn International's training sessionA training session to promote Business EE Rebates program

#### 1.4.1 Streetlights Conversion Program

LUMA is poised to significantly enhance public safety and EE in Puerto Rico over the next three years with its ambitious plan to install **300,000** streetlights. This initiative will not only improve safety for residents but also boost EE across communities.

In FY2024, LUMA has achieved EE savings of **8,486,856 kWh** and repaired over **88,300** streetlights, reflecting its commitment to maintaining and upgrading existing infrastructure.



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The installation of new streetlights features next-generation LED lights. These LEDs are highly efficient, consuming approximately **65%** less energy and lasting four times longer than traditional streetlight bulbs. This upgrade represents a significant advancement in energy conservation and operational longevity.

# **2.0 Participants Enrolled**

### 2.1 Energy Efficiency Programs

During FY2024, LUMA's EE programs have shown significant progress, reflecting a growing commitment from participants to embrace energy-saving initiatives. In FY2024 Q3, a total of **9,138** participants engaged with various EE programs, while in FY2024 Q4, this number increased to **33,968**, showcasing a substantial rise in interest and involvement, with a total of **43,106** participants. Table 6: *Number of participants enrolled or receiving incentives in each EE program during FY2024* presents the total number of participants who have enrolled to receive rebates or obtain other types of incentives.

The Residential EE Rebate Program was a standout performer, processing a total of **1,218** applications across both quarters—**77** in Q3 and **1,141** in Q4. This strong uptake indicates a robust demand among residential customers for energy-efficient upgrades. Conversely, the Business EE Rebates Program did not register any participants, primarily due to its recent launch. This highlights a potential area for growth, as ongoing outreach efforts can enhance market awareness and drive future participation.

The Residential EE Kits Program recorded impressive engagement, with a total of **41,826** kits distributed across the two quarters—**9,061** in Q3 and **32,765** in Q4. This remarkable response underscores the program's effectiveness and popularity, particularly among residential customers eager to enhance their energy efficiency. Meanwhile, the Business EE Kits Program had a modest but steady participation of **62** businesses in Q4, indicating a foundation for increased interest in energy-saving measures within the business sector.

The energy savings generated by these initiatives further illustrates their impact. In total, the Commercial, Industrial, and Agriculture (C&I) sector, encompassing both the Business EE Kits and Business EE Rebates Programs, achieved energy savings of **71** MWh. Additionally, the Residential Low-Income Sector saved **302 MWh**, reaching **16%** of its annual target, while the Residential Non-Low-Income Sector exceeded expectations with **17,885 MWh**, surpassing its target by **130%**. In both quarters, the total energy savings for FY2024 amounted to **18,258** MWh, which is **55%** of the annual goal. These achievements not only lead to substantial cost reductions for participants but also contribute to broader economic growth and sustainability.

Note that no information is provided on the In-Store Discount Program currently because it launched after the conclusion of FY2024 Q4, specifically in July 2024. As the program started following the end of the fiscal year, there are no relevant data points or indicators available within FY2024 reporting period. LUMA will include data and analysis for this Program in subsequent reports starting from FY2025 Q1 to ensure comprehensive and accurate representation of its impact and performance.

Overall, the total number of participants across LUMA's EE programs during FY2024 reflects a strong community commitment to energy efficiency. As LUMA continues to enhance its outreach efforts and program offerings, there is significant potential for even greater participation and impact in FY2025.



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Table 6: *Number of participants enrolled or receiving incentives in each EE program during FY2024* below, includes the number of participants enrolled or receiving benefits in the EE programs by program to date (limited to those programs where customer enrolled or received the rebates and/or incentives).

PROGRAM	PARTICIPANTS FY2024	
Residential Rebates	1,218	
Low-Income	302	
Non-Low-Income	916	
Business Rebates	0	
Residential EE Kits	41,826	
Business EE Kits	62	
Total	43,106	

 Table 6: Number of participants enrolled or receiving incentives in each EE program during FY2024

Table 7: *Installed Measures by Sector, Segment, and Program (FY2024)* provides an overview of the installed measures by sector, segment, and program for FY2024. It details the types and quantities of energy-efficient measures implemented across different residential and commercial segments.

Table 7: Installed Measures by	v Sector S	Segment	and Program	(FY2024)
Table 7. Installed Measures b	y Seciol, .	Segment,	and Frogram	(1 1 2 0 2 4)

SECTOR	SEGMENT	PROGRAM	INSTALLED MEASURE	QUANTITY
Residential	Single-Family Homes	Residential EE Rebate Program	Air Conditioners (Window / Mini-Split)	661
Residential	Single-Family Homes	Residential EE Rebate Program	Solar Water Heaters	547
Residential	Single-Family Homes	Residential EE Rebate Program	Tankless Water Heaters	11
Residential	Single-Family Homes	Residential EE Rebate Program	Refrigerators	98



SECTOR	SEGMENT	PROGRAM	INSTALLED MEASURE	QUANTITY
Residential	Single-Family Homes	Residential EE Rebate Program	Energy Star Freezers	18
Residential	Single-Family Homes	EE Kits Program	LED Bulbs	250,956
Residential	Single-Family Homes	EE Kits Program	Advanced Power Strip	41,826
Residential	Single-Family Homes	EE Kits Program	LED Night Light	41,826
Residential	Single-Family Homes	EE Kits Program	Showerhead	9,061
Residential	Single-Family Homes	EE Kits Program	Faucet Aerators	9,061
Commercial	Small Business	Business EE Kit Program	Retail Kit	7
Commercial	Small Business	Business EE Kit Program	Office Kit	39
Commercial	Small Business	Business EE Kit Program	Restaurant Kit	10
Commercial	Small Business	Business EE Kit Program	Lighting Kit	9
Commercial	Small Businesses	Business EE Rebate Program	Efficient Lighting	0
Commercial	Small Businesses	Business EE Rebate Program	HVAC Units	0
Commercial	Small Businesses	Business EE Rebate Program	Water Heaters	0
Commercial	Small Business	Business EE Rebate Program	Refrigerators	0



SECTOR	SEGMENT	PROGRAM	INSTALLED MEASURE	QUANTITY
Commercial	Small Business	Business EE Rebate Program	Cooking Equipment	0

### 2.2 Demand Response Programs

Table 8: *Number of participants and total MW available in each DR program during FY2024* below, includes the number of participants enrolled in the CBES Pilot Program to date by program and sector/segment and total MW enrolled.

Customer enrollment in the CBES Pilot Program has experienced encouraging growth, reflecting strong interest in the initiative. While the available capacity per DR event currently stands at **18 MW**, compared to the enrolled capacity of **37 MW**, this presents an opportunity for LUMA to enhance the program and optimize capacity in future events.

SECTOR	SEGMENT	PROGRAM	TOTAL PARTICIPANTS ENROLLED (FY2024)	TOTAL MW AVAILABLE (FY2024) *	TOTAL MW ENROLLED (FY2024)
Residential	Residential Housing	Customer Battery Energy Sharing	5,655	18.2	36.2
Commercial	Small Business	Customer Battery Energy Sharing	68	0.2	0.4
Totals			5,723	18.4	36.6

Table 8: Number of participants and total MW available in each DR program during FY2024



## 3.0 Performance

#### 3.1.1 Energy Efficiency Performance Energy and Peak Demand Savings by Sector

**Error! Reference source not found.**, includes the preliminary estimates of energy (MWh) and peak demand savings (MW) achieved during the year for each sector and subsegment and as it relates to annual targets. Given the shortened timeframe of program launch and execution, many of the targets exceeded the annualized pace of achieving set targets – which serves as a good indicator of the momentum in the FY2025 programs, which will continue to build upon on the successful launch of the portfolio in the latter half of FY2024.

Table 9: Energy and Peak Demand Savings Performance by Market Sector and Subsegment

MARKET SECTOR N	SUBSEGMENT	ANNUAL ENERGY SAVINGS TARGET (MWh)	FY2024 ENERGY SAVINGS (MWh)	ACTUAL SAVINGS (%) OF ANNUAL TARGET	PEAK DEMAND SAVINGS TARGET (MW)	FY2024 PEAK DEMAND SAVINGS (MW)	ACTUAL PEAK DEMAND SAVINGS (%) ANNUAL TARGET	FY2024 LIFETIME ENERGY SAVINGS TARGET (MWH)	FY2024 LIFETIME ENERGY SAVINGS (MWH)	FY2024 GROSS LIFETIME GHG SAVINGS (MT OF CO2)*	% OF GHG TARGET
Residential Sector	Low-Income	1,896	302	16%	4.4	0.05	1.17%	21,165	5,031	3,874	24%
Residential Sector	Non-Low- Income	13,771	17,740	130%	6.9	3.70	53.67%	171,155	275,423	212,099	161%
Commercial, Industrial and Agriculture (C&I) Sector	Small Business	3,951	71	2%	4.7	0.01	0.77%	42,655	3,014	2,321	7%
Commercial, Industrial and Agriculture (C&I) Sector	Other Commercial/Ind ustrial and Agricultural Sector	13,600	0	0	0	0	0%	146,828	0	0	0%
Government/ Public	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Portfolio Total		33,218	18,113	55%	16.0	3.76	24%	381,805	283,468	218,294	74%

#### 3.1.2 Energy and Peak Demand Savings by Program

Table 10: *Energy and Peak Demand Savings Performance*, provides the preliminary estimates of energy (MWh), peak demand (MWh), and Green House Gas (GHG) savings achieved during the year for each program, and how they compare to annual targets.

Annual targets were established based on a 12-months operating period for achieving both energy savings and demand targets. However, delays in funding and other factors, such as the time required for the procurement and contracting of a portfolio administrator, resulted in a loss of operational time. With programs only launching in early Q3, LUMA's performance when adjusted for these factors, exceeds annual targets in many categories.

Looking ahead, LUMA anticipates that a full year of program operation will provide a clearer validation of its portfolio and program designs, confirming their effectiveness in meeting Puerto Rico's energy savings and peak demand reduction goals.



Table 10: Energy and Peak Demand Savings Performance

PROGRAM	ANNUAL ENERGY SAVINGS TARGET (MWh)	FY2024 ENERGY SAVINGS (MWh)	FY2024 ENERGY SAVINGS (%)	FY2024 PEAK DEMAND SAVINGS TARGET (MW)	FY2024 PEAK DEMAND SAVINGS (MW)	FY2024 PEAK DEMAND SAVINGS (%)	FY2024 SPEND (\$)	\$/kWh	FY2024 GROSS LIFETIME GHG SAVINGS (MT OF CO <sub>2</sub> )
Residential EE Rebates	10,902	1,461	13%	6.9	0.26	3.77%	1,954,501	1.22	1,021
Residential EE Kits	4,765	16,581	348%	4.4	3.51	80%	2,384,873	0.14	11,581
Business EE Rebates	10,015	0	0%	3.7	0	0%	226,035	0.00	0
Business EE Kits	7,536	71	1%	0.9	0.01	0.94%	162,540	0.02	49
Total	33,218	18,113	55%	15.9	3.78	23.79%	4,727,949	\$0.26	12,651

### 3.2 Demand Response Performance

#### 3.2.1 CBES Performance for FY2024

Table 11: *Demand Response Performance Values*, presents the peak demand savings (MW) achieved throughout the year, compared to the annual targets.

As mentioned above, annual targets were established based on a 12-months operating period for achieving both energy savings and demand targets. Even with DR programs only launching in late FY2024 Q2, LUMA's performance when adjusted for these factors, exceeds annual targets in many categories.

Looking forward, LUMA is committed to leveraging a full program year that will better validate the effectiveness of its portfolio and program designs in meeting Puerto Rico's energy savings and peak demand reduction goals.

PERFORMANCE	FY2024
Enrolled Customers (#)	5,723
Enrolled Power per Event (MW)	36,621
Enrolled Energy per Event (MWh)	65,539
Events Dispatched (#)	53
Average Customer Response (%)	87.5
Average Dispatched Battery Power per Event (MW)	11.0
Average Dispatched Battery Energy per Event (MWh)	22.1
Peak Demand Savings Target (MW)	26.2
Peak Demand Savings (MW)	18.4
YTD Peak Demand Savings (%)	70.4

#### Table 11: Demand Response Performance Values



#### **Program Parameters**

Table 13: *CBES Parameters*, provides a comprehensive comparison between the forecasted and actual performance parameters of the CBES Pilot Program for FY2024. This analysis highlights key variances that have emerged throughout the operational year, shedding light on both successes and areas for improvement.

#### 3.2.2 Understanding Demand Response Variances<sup>9</sup>

As illustrated in Table 13: *CBES Parameters*, significant variances in the program indicators have arisen due to discrepancies between initial program estimates and actual performance. The original estimates assumed that customer enrollment would increase in a linear fashion, leading to a proportional rise in both available capacity and energy per DR event. This model predicted that as more customers enrolled, the program would naturally experience greater capacity and energy availability during each event, thereby allowing for higher incentive payments.

However, data received from aggregators revealed that the actual available capacity and energy were lower than initially projected. This variance is primarily due to fluctuations in customers' participation and changes in their battery reserves. Specifically, customer engagement in DR events did not align with the expected linear increase. Furthermore, variations in the amount of energy stored in customer batteries resulted in less available energy than initially forecasted.

Because of these factors, the total amount of incentive payments per DR event has decreased. Initially it was expected that incentive payments would increase in line with the growing capacity and energy availability. However, the reduction in actual available capacity and energy has led to lower incentive payments per event than anticipated, reflecting the gap between the forecasted and actual program performance.

Table 12: *Program Parameters Definitions*, provides definitions for the program parameters within the CBES Pilot Program to clarify the purpose of Table 13: *CBES Parameters*. These parameters include metrics such as the number of enrolled customers, total enrolled load, and average battery capacity, which offer insights into the scope and scale of customers' participation. Additionally, it outlines details on battery reserve levels, impacts of DR events, and customer response rates, providing a clear understanding of how the program operates and the level of engagement from participants. Financial elements, such as incentive payments and administrative costs, are also defined to offer a complete view of the program's cost structure.

<sup>&</sup>lt;sup>9</sup> See Resolution and Order Re: LUMA August 23, 2023, Motion filing its Emergency Demand Response Program Cost and Timeline, issued on August 29, 2023, in Case No. NEPR-MI-2022-0001, In Re: Energy Efficiency And Demand Response Transition Period Plan, on page 3, which specifies that annual reports must include explanations for any significant variances exceeding 10%.



#### Table 12: Program Parameters Definitions

PROGRAM PARAMETERS	DEFINITIONS
Enrolled Customers (#)	The total number of approved participants in the CBES Pilot Program.
Enrolled Load (kW)	The sum of the approved customers' battery nameplate capacities.
Average Battery Capacity (kWh/battery)	The average energy storage capacity of approved customers' batteries, accounting for reserve levels.
Average Battery Reserve (%)	The average percentage of battery storage that customers agree to reserve for DR events.
Average Impacts per Event (kW)	The average capacity utilized during each DR event, which may vary quarterly.
Aggregate Seasonal/Annual Impacts (kW)	The total average capacity utilized across all DR events, with variations possible each quarter.
Impacts as % of Enrolled Load	The ratio of the Average Impacts per Event (kW) to the Enrolled Load (kW), showing the actual capacity used for DR events compared to the total enrolled capacity.
Average Event Response (%)	The weighted average of customer participation per aggregator in each DR event.
Average Event Duration (Hours)	The average duration, in hours, of Demand Response events.
Events (#)	The total number of DR events conducted.
Capacity per Event (kW)	The weekly available capacity reported by aggregators for potential use in DR events.



Estimated Energy per Event (kWh)	The weekly available energy reported by aggregators for potential use in DR events.
Total Energy Delivered (kWh)	The total energy dispatched during all DR events.
Incentive Payments (\$)	The total incentive payments, calculated as the total energy delivered multiplied by the fixed cost of 1.25.
Administrative Costs (\$)	The total costs incurred for program administration, excluding incentive payments.
Total program costs (\$)	The sum of incentive payments and administrative costs.

Table 13: *CBES Parameters*, compares the forecasted and actual values for the CBES Pilot Program parameters for FY2024. It presents data on enrolled load, event capacity, energy delivery, and associated costs, enabling a side-by-side analysis to identify any variances between the forecast and actual outcomes. This comparison helps assess the accuracy of the initial projections and highlights areas where the program may have exceeded or fallen short of expectations, guiding future planning and improvements.

PROGRAM PARAMETERS	FY2024 FORECAST (A)	FY2024 ACTUAL (B)	VARIANCE BETWEEN FY2024 FORECAST AND ACTUAL FY2024  (A-B)
Enrolled Customers (#)	6,500	5,723	777
Enrolled Load (kW)	21,125	36,621	15,496
Average Battery Capacity (kWh/battery)	13	11.5	1.5
Average Battery Reserve (%)	50	31.3	18.7
Average Impacts per Event (kW)	21,125	10,960	10,165



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Aggregate Seasonal/Annual Impacts (kW)	21,125	10,960	10,165
Impacts as % of Enrolled Load	100.0	29.9	70.1
Average Event Response (%)	N/A	87.5	0
Average Event Duration (Hours)	2	2	0
Events (#)	50	53	3
Capacity per Event (kW)	21,125	18,443	2,682
Estimated Energy per Event (kWh)	42,250	41,045	1,205
Total Energy Delivered (kWh)	3,168,750	1,173,851	1,994,899
Incentive Payments (\$)	3,960,938	1,467,314	2,493,624
Administrative Costs (\$)	1,100,000	963,476	136,524
Total program costs (\$)	5,060,938	2,430,789	2,630,149



## Consolidated Transition Period Plan and Demand Response Administrative Costs

# 4.0 Costs

### 4.1 Energy Efficiency Program Costs

During FY2024, LUMA has made strategic investments in the launch and management of pilot programs designed to enhance energy efficiency and provide valuable support to both residential and business customers. These efforts include funding six types of Residential EE Rebates that empower households to adopt energy-saving measures, as well as distributing free Residential EE Kits that equip customers with essential tools and information for improving their energy consumption practices. Additionally, LUMA has allocated resources to develop Business EE Rebates and Business EE Kits, enabling commercial entities to integrate energy-efficient solutions.

LUMA has also prioritized Education and Outreach initiatives, which play a pivotal role in raising awareness and educating residential and business customers on the benefits of energy efficiency and available programs. Furthermore, cross-cutting areas such as Planning, Administration, and Evaluation have also received attention and funding. This includes expenses related to professional services, salaries for staff involved in these initiatives, and the ongoing assessment of the measures that have been implemented to gauge their effectiveness. For a more detailed breakdown of costs associated with each Energy Efficiency Program, please refer to Table 14: *EE Budget and Costs*, which outlines the expenditures for FY2024.



#### Table 14: EE Budget and Costs

PROGRAM	PROGRAM BUDGET FY2024	CUSTOMER INCENTIVES COSTS	PP&A COSTS	OUTSIDE SERVICES COSTS	OTHER COSTS
Residential Rebates	\$4,218,750	\$911,176	\$56,126	\$987,200	\$0
In-Store Discounts	\$100,000	\$0	\$0	\$129,672	\$0
Residential EE Kits	\$676,700	\$2,090,045	\$0	\$294,828	\$0
Business Rebates	\$3,588,165	\$0	\$10,422	\$215,613	\$0
Business EE Kits	\$630,585	\$7,139	\$0	\$155,401	\$0
Education & Outreach Cost (Marketing)	\$1,125,000	\$0	\$31,800	\$600,270	\$0
Cross-Cutting Planning, Administration & Evaluation Costs	\$1,125,000	\$0	\$21,537	\$207,204	\$0
Total Portfolio	\$11,464,200 <sup>10</sup>	\$3,008,360	\$119,885	\$2,590,188	\$0

<sup>&</sup>lt;sup>10</sup> By inadvertence, the Motion to Submit Revised TPP and Other Information Requested under the Resolution and Order of November 29, 2023, filed on December 20, 2023, incorrectly stated the budget as \$11,464,200. The correct amount, as approved in the Resolution and Order Re: Determination of Request for Partial Revision on the FY2024 Annual Budgets by LUMA, GENERA and PREPA, issued in Case No. NEPR-MI2021-0004, In Re: Review of LUMA's Initial Budgets, on September 22, 2023, on page 8, should have been \$11,531,250.

Table 15: FY2024 Program Financial Overview provides a detailed breakdown of the year-to-date costs, total budget, and percentage of total program budget for various initiatives in FY2024.

#### Table 15: FY2024 Program Financial Overview

PROGRAM	FY 2024 YTD COSTS	TOTAL PROGRAM BUDGET FY2024	% OF TOTAL PROGRAM BUDGET
Residential EE Rebates	\$1,954,501	\$4,218,750	46.33%
In-Store Discounts	\$129,672	\$100,000	129.67%
Residential EE Kits	\$2,384,873	\$676,700	352.43%
Business EE Rebates	\$226,035	\$3,588,165	6.30%
Business EE Kits	\$162,540	\$630,585	25.78%
Education & Outreach	\$632,071	\$1,125,000	56.18%
Cross-Cutting Planning, Administration & Evaluation Costs	\$228,741	\$1,125,000	20.33%
Total Portfolio	\$5,718,433	\$11,464,200	49.88%

#### 4.1.1 Shifts in funds between programs

With the limited time the programs have been available in FY2024, LUMA recognizes the importance of evaluating potential reallocation of funds between programs. As more data becomes available, LUMA will assess the need for any adjustments over the next six (6) months to optimize savings, performance, and market uptake of the initiatives, ensuring that resources are directed where they can have the greatest impact.

#### 4.1.2 Managing Budget Variations Above 20 Percent

In FY2024, most program costs reflected significant underspending primarily due to the delayed implementation of several initiatives. However, the Residential EE Kits Program and the In-Store Discounts initiative experienced budget variations, driven by strategic decisions to enhance program reach and effectiveness.

The Residential EE Kits Program recorded the most significant overspend, with actual costs amounting to \$2,384,873—exceeding its allocated budget of \$676,700 by approximately **252.43%**. This substantial overrun was the result of LUMA's decision to distribute a larger number of kits, driven by strong customer demand and positive feedback from earlier program phases. The accelerated rollout underscored the kits' effectiveness in promoting energy efficiency and customer savings, justifying the increased expenditure.

Similarly, the In-Store Discounts initiative exceeded its budget, spending \$129,672, which is about **29.67%** over its allocated \$100,000. This overspend was a strategic move by LUMA to make the most of the FY2024 budget, ensuring the initiative could continue effectively into FY2025. Higher-than-expected development and administrative costs following its launch in July 2024 contributed to this overspend, prompting a review to recalibrate future budget plans.

Overall, the total costs incurred across programs were lower than budgeted, as most were initiated later in the fiscal year. See Table 15: *FY2024 Program Financial Overview* above for more information.

### 4.2 Demand Response Program Costs

During FY2024, LUMA incurred various costs associated with the launching and management of the CBES Pilot Program. Program costs are divided into six main activities: (1) program management, (2) system operations, (3) customer service, (4) professional services, (5) program evaluation, and (6) other expenses.

The report provides a summary of program information indicators for the same periods, aligning these with the initial assumptions and highlighting any significant variances from the approved budget.

Further, the actual inflows in FY2024 from the Power Purchase Charge Adjustment (PPCA) compared to the budgeted inflows are also presented, along with the cost of incentives paid to customers and the DR fund balance at fiscal year-end.



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#### 4.2.1 Program Administrative Costs

#### Table 16: DR Budget and Costs

CATEGORIES	COSTS FOR FY2024
Program Management	\$425,440
System Operations	\$0
Customer Service	\$0
Professional Services	\$1,914,711
Program Evaluation	\$0
Other Expenses	\$90,637
Total	\$2,430,789

#### 4.2.1 CBES FY2024 PPCA Fund Inflows and Balances Comparison

Table 17: *FY2024 CBES Costs and PPCA Fund Annual Overview* provides an overview of LUMA's financial performance by comparing the actual fund inflows received against the budgeted inflows specified in the PPCA. It also includes the fiscal-year-to-date actual fund balance, offering a clear view of how actual receipts align with the planned budget and how they impact the overall fund balance for the year. This detailed comparison helps assess the accuracy of budgeting, identify any discrepancies, and ensure that financial operations are in line with the August 29, 2023, Resolution and Order requirements.

#### Table 17: FY2024 CBES Costs and PPCA Fund Annual Overview

FY2024 ESTIMATED BUDGET INFLOWS FOR CBES FROM THE PPCA	CBES FY2024 ACTUAL COSTS	PPCA FISCAL YTD ACTUAL FUND BALANCE
\$6,206,821.34	\$2,430,789	(\$462,727.72) <sup>11</sup>

<sup>&</sup>lt;sup>11</sup> The forecasted collections for June were \$1,238,522.23 while actual costs were \$1,701,249.95, resulting in a difference of (\$462,727.72). This indicates a need to recover this deficiency in future billing cycles if the Puerto Rico Energy Bureau approves updated factors.



Consolidated Transition Period Plan and Demand Response Administrative Costs

# 5.0 Transition Period Plan Conclusions and Recommendations from FY2024

### 5.1 Next Steps

EE programs are designed to leverage a "snowball effect," where initial investments in infrastructure, customer engagement, and market participation create a foundation for greater impacts in the future. As these programs gain traction, they build momentum, leading to increased adoption and deeper energy savings over time. The TPP's two-year ramp-up period is specifically designed to allow this gradual yet accelerating impact to unfold. The ability to carry over unspent FY2024 funds is essential to maintaining this momentum, as it ensures that resources continue to fuel the growth and effectiveness of these programs, enabling them to reach their full potential in subsequent years<sup>12</sup>.

Research, analysis and program implementation results are continually being operationalized to drive continual improvement. For example, even with a late start to TPP programs, the rapid growth in customer demand for residential EE programs, is an indicator of the effectiveness of the TPP education and outreach activities as well as the customers desire to reduce their energy costs. The Residential EE Kits were especially effective not only for saving energy but also for educating customers about energy saving opportunities in their homes, and how their purchase decisions can save them money. LUMA will continue to drive its education and outreach strategies for this sector with the objective of accelerating customer demand even more in FY2025.

Another insight from the success of residential EE programs is that the program is well positioned to expand the portfolio of incentivized measures and programs that offer customers additional ways to manage their homes energy costs. To expand the EE offering during FY2025 LUMA is already working to add fans, air conditioners, washers, and dryers to the In-Store Discount pilot program.

However, a slow uptake following the recent launch of the Business EE Rebates and Business EE Kits shows a need for more investment in the education and outreach activities for this critical sector. In addition to continuing current strategies, LUMA plans to explore and deploy enhanced efforts to accelerate market awareness via social media and community events. LUMA also plans to strengthen engagement with local partners – such as associations and trade alleys – to enlist their support in encouraging businesses to take advantage of available incentives to save energy.

In the continued absence of foundational analysis incorporating data from the Puerto Rico market, increase efforts will be made to capture additional granular data on households and businesses engaging in EE/DR programs and to invest in systems to translate this data into insights on emerging opportunities to drive EE savings and measure selection. In eager anticipation of the finalization by the Energy Bureau of Puerto Rico's first Market Baseline and Potential Study by the end Q2 of FY2025, the program stands

<sup>&</sup>lt;sup>12</sup> See Exhibit 1 of the Motion Requesting Approval for Rollover of Unspent FY2024 Energy Emergency Program Funds to the FY2025 Budget for Energy Efficiency Programs, filed on October 9, 2024, in Case No. NEPR-MI-2022-0001, In Re: Energy Efficiency and Demand Response Transition Period Plan.



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ready to evaluate the study's insights when released to determine whether related FY2025 program implementation plan adjustments are feasible.

For Demand Response LUMA is focused on increasing customer participation rates. With this in mind, LUMA will launch in Q1 FY2025 a CBES consumer survey to better understand consumer behavior and preferences during actual CBES emergency events. This survey will provide empirical data, offering valuable insights into customers' participation patterns, decision-making processes, and the factors influencing engagement during CBES events. By gathering direct feedback, LUMA can more accurately pinpoint the drivers of consumer behavior, enabling us to refine program strategies and enhance the effectiveness of future DR events. By mobilizing insights from the survey, LUMA hopes to increase enrollment and increase participation in events while achieving excellence in customer service aspects for the participants.

Another key area that LUMA will be evaluating during FY2025 includes the design and deployment of a Distributed Energy Resource Management System (DERMS) to optimize the CBES Pilot Program. This specific technology will improve communication, control, and coordination of resources across different locations in Puerto Rico. With technology like this in place, LUMA should be able to target specific areas where infrastructure issues may be affected, and therefore mitigate power issues with the support of local batteries. Launching such technology will be established as a solid foundation for scaling up and transitioning to a larger and more robust program into the future.

The progress presented in this FY2024 Annual Report serves as a strong indicator of the momentum heading into FY2025, as the foundation laid during the latter half of FY2024 will support further advancements. The accelerated pace achieved thus far suggests that the upcoming programs will benefit from the groundwork already established, enabling continued growth and success as the portfolio evolves and expands.



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# 6.0 Appendix A: Customer Education & Outreach Materials



Figure 4: Customer and Business Incentives Program Landing Page



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Figure 5: Residential and Business Rebate Program Brochures





Figure 6: Energy Saving Tips Webpage and Energy Savings Tips Calculator



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Figure 7: Social Media Post - Home Energy Savings Tips



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## Power Up Your Business with **LUMA**! Get Your **FREE** Energy Efficiency Kit

**LUMA** is bringing free Energy Efficiency Kits directly to your business. These kits will help you save energy and money on your electricity bill.

Get yours today! Enter the unique code below to claim your **FREE** Kit:

### NEGOCIO24

Act fast, quantities are limited.

Scan the QR code or call 1-800-989-2922 For more information visit lumapr.com

Figure 8: Postcard – Business EE Kits Program



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Figure 10: Contractor marketing Guidelines



Figure 11: YouTube Webcast 'Martes Informativo"



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en LUMA estamos comprometidos con un Puerto Rico mas limpio y eficiente, y no podemos lograrlo sin su ayuda. Queremos apoyar a las empresas en todo Puerto Rico para que ahorren dinero a través de la eficiencia energética. ¡Un aumento general en la eficiencia energética puede ayudar a reducir los costos de energía para todos y crear una red eléctrica más estable y confiable!

Para comenzar su camino hacia la eficiencia energética, LUMA le ofrece un kit GRATIS a los clientes comerciales para ayudar a que sus negocios sean más eficientes energéticamente. Las cantidades son limitadas, jasí que actúe rápido, solicite su kit hoy mismo y asegúrese de usar el código de cupón **NEGOCIO24** al finalizar su orden!

#### ¡HAGA CLIC AQUI para pedir su kit empresarial!

¿Interesado en ahorrar más dinero? Puede llevar la eficiencia energética al siguiente nivel con nuestro Programa de Reembolsos para la Eficiencia Comercial, que ofrece dinero en efectivo al comprar equipos nuevos y más eficientes. ¡Además, hay reembolsos similares disponibles para mejoras en el hogar!

¿Tiene preguntas sobre los programas de eficiencia energética de LUMA? Llámenos al 1-800-989-2922 o envíenos un correo electrónico a EE@lumapr.com.

Figure 92: Business Email Campaign

