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

IN RE:	**CASE NO.:** NEPR-MI-2026-0002
	SUBJECT: Motion to Comply with Resolution and Order of March 24, 2026
ENERGY EFFICIENCY AND DEMAND RESPONSE THREE YEAR PLAN	

MOTION TO COMPLY WITH RESOLUTION AND ORDER OF MARCH 24, 2026

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:

1. On March 4, 2026, the Puerto Rico Energy Bureau of the Public Service Regulatory Board ("Energy Bureau") issued a Resolution and Order ("March 4th Order") initiating the referenced proceeding for the review of the Three-Year Plan for Energy Efficiency and Demand Response ("TYP") submitted by LUMA on March 2, 2026[1], and setting forth a procedural calendar for such purposes. Specifically, the Energy Bureau scheduled a virtual Technical Workshop for March 17, 2026, for LUMA to present a summary of its proposed TYP and answer questions from the Energy Bureau and stakeholders; established the deadlines of April 7, 2026, for stakeholders

[1] *See Motion to Submit the Three-Year EE and DR Plan* filed by LUMA in Case No. NEPR-MI-2020-0001, *In re: Energy Efficiency and Demand Response Transition Period Plan*. This plan covers the two-year period from July 1, 2026, through June 30, 2028, in accordance with the Energy Bureau's Resolution and Order issued on April 3, 2025, in that same case.

to submit comments, and April 28, 2026, for the submittal of reply comments; and a term for implementation of the TYP of July 1, 2026 to June 30, 2028. *See* March 4th Order, p. 2.

2. On March 16, 2026, LUMA submitted a presentation for the virtual Technical Workshop to be held on March 17, 2026[2], and, on March 17, 2026, the virtual Technical Workshop was held.

3. On March 24, 2026, the Energy Bureau issued a Resolution and Order ("March 24th Order") in which it ordered LUMA to submit, within fourteen (14) calendar days, that is by April 7, 2026: a response to Requirements of Information included in Attachment A of the March 24th Order (the "March 24th ROIs"); a proposal for performance incentive metrics and associated targets for the TYP, in accordance with Section 4.02(D)(6) of the Regulation 9367, Regulation for Energy Efficiency ("EE Regulation"); and a proposed plan to achieve the 2040 goal of 30% savings, in accordance with Section 4.02(B) of the EE Regulation.

4. On March 30, 2026, LUMA requested the Energy Bureau extend the deadline to submit LUMA's response to the March 24th Order until April 20, 2026, and to modify the procedural schedule to address accordingly, as specified in LUMA's request. *See Motion to Extend Deadline to Comply with Resolution and Order of March 24, 2026*.

5. On April 10, 2024, the Energy Bureau issued a Resolution and Order ("April 10th Order") extending the deadline for LUMA to comply with the March 24th Order until April 20, 2026, and modifying the deadlines for stakeholders to submit comments and to submit reply comments to April 28, 2026, and May 12, 2026, respectively.

6. In compliance with the March 24th Order and the April 10th Order, LUMA hereby submits, in *Exhibit 1*, LUMA's responses to the March 24th RFIs, in *Exhibit 2*, a proposal to address

[2] *See Motion to Submit LUMA's Presentation for the Technical Workshop Scheduled for March 17, 2026*.

the performance incentive metrics and associated targets for the TYP in the March 24th Order in alignment with Section 4.02(D)(6) of the EE Regulation, and, in *Exhibit 3*, a proposed plan to achieve the 2040 goal of 30% energy savings in alignment with Section 4.02(B) of the EE Regulation.

WHEREFORE, LUMA respectfully requests that the Energy Bureau **take notice** of the foregoing and **accept** this submittal **in compliance** with the March 4th Order.

RESPECTFULLY SUBMITTED.

In Guaynabo, Puerto Rico, this 20th day of April 2026.

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 to alexis.rivera@prepa.pr.gov; nzayas@gmlex.net; mvalle@gmlex.net; rcruzfranqui@gmlex.net; hrivera@jrsp.pr.gov; javrua@sesapr.org; mrios@arroyorioslaw.com; jordgraham@tesla.com; forest@cleanenergy.org; customerservice@sunnova.com; pjcleanenergy@gmail.com; agraitfe@agraitlawpr.com; info@sesapr.org; cfl@mcvpr.com; mqs@mcvpr.com.

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Exhibit 1

2026-2028 EE and DR Three-Year Plan Requirements of Information

NEPR-MI-2026-0002

Response: RFI-LUMA-MI-2026-0002-20260324-PREB-01

SUBJECT

Budget and cost recovery

REQUEST

1. What is the status of LUMA's efforts to restart the TPP programs after program implementation was stalled due to funding constraints? In addition, explain whether and how this impacts LUMA's ability to begin the TYP programs on schedule.

RESPONSE

LUMA is actively advancing TPP programs following the period in which program implementation was constrained due to funding limitations. To ensure responsible program delivery and effective use of available resources, LUMA has resumed program activity, including Business Rebates, Residential kits, and existing residential rebate applications in queue, with residential rebates achieving full activity in alignment with the portal launch, which will be live in Q4 of FY2026. This allows LUMA to reestablish application processing, especially around residential rebates to allow better tracking, vendor coordination, and customer engagement.

As operational readiness and funding certainty improved, program availability has expanded. This approach supports the restoration of operational infrastructure that will be utilized in the upcoming TYP program portfolio. Importantly, the temporary slowdown in TPP implementation does not prevent LUMA from initiating TYP programs on schedule. As stated in the TYP, the TPP programs form the foundation for the first Three-Year Plan, and this existing delivery framework enables a smooth and uninterrupted transition into FY27, allowing TYP implementation to proceed without interruption.

2026-2028 EE and DR Three-Year Plan Requirements of Information

NEPR-MI-2026-0002

Response: RFI-LUMA-MI-2026-0002-20260324-PREB-02

SUBJECT

Budget and cost recovery

REQUEST

2. LUMA's approved budget for FY26 is about $16 million. Does LUMA anticipate it will be able to spend its full FY26 budget within the FY26 period? Explain why or why not.

RESPONSE

LUMA intends to utilize the approved FY26 budget of approximately $16 million as fully as practicable within the fiscal year, and program activities are being managed with the goal of maximizing the energy efficiency objectives. For this reason, LUMA is advancing program implementation at a pace that supports strong execution while maintaining program quality, operational readiness, and continuity into the TYP period.

2026-2028 EE and DR Three Year Plan Requirements of Information

NEPR-MI-2026-0002

Response: RFI-LUMA-MI-2026-0002-20260324-PREB-03

SUBJECT

Budget and cost recovery

REQUEST

3. Referring to pages 20-21 of the TYP, please explain the following related to budget development.
   a. Explain how LUMA determined the annual budget for EE programs.
   b. Explain how LUMA developed the budgets for each customer sector and program.
   c. Explain how LUMA determined the amount to spend on incentive costs versus PP&A costs.

RESPONSE

a. LUMA developed the overall annual Energy Efficiency budget using a bottom-up, measure-based approach for each of the programs.

As described in the TYP budget section (pp. 20–21), total annual spending reflects the aggregation of forecast program-level costs across the EE portfolio for FY2027–FY2028.

Having first established the core programs to be included in the TYP, the annual budget was then derived by:

1) Forecasting measure-level participation and savings for each program based on:
   - Observed participation trends under the TPP,
   - Assessed market maturity and channel readiness by customer segment,
   - Findings from the Energy Efficiency Market Baseline Study and Energy Efficiency Potential Study as described in the response to question 22; and

2) Estimating total incentive costs and savings by program based on the participation forecasts from Step 1 above and the measure-specific savings and incentive levels.

3) Forecasting the Program Planning & Administrative (“PP&A”) budget for each program comprising:

- A program-specific factor (cents per kWh) based on TPP experience, forecasts and other utilities. Among other things, this factor included forecast application and rebate processing, portal maintenance, monitoring, reporting, planning and EM&V costs.
- The program-specific Market Activation costs based on LUMA's assessment of the channel needs and projections for Program Branding and Communications, Stakeholder Engagement, Strategic Partnerships and Tailored Customer Outreach and Technical Assistance for the program.

4) Aggregating the total incentive costs from Step 2 and PP&A cost from Step 3 across all programs to determine the total annual budget shown in Table 8 (Approximate Budget by Program) and Table 9 (Approximate Incentive and PP&A Budget by Program).

This approach ensures that the annual EE budget is directly tied to expected customer uptake, achievable savings, and implementable delivery capacity.

The total annual budget for EE programs was simply the sum of all EE program budgets as developed using the process and steps described above. The following example illustrates how these steps were applied for the FY27 Residential Rebates program:

1) Measure level participation and savings estimates:

Sector	Program	Measure Name	Deemed annual kWh Unit Savings	Incentive Cost (2026$)	2027 - measure participation estimate
Low-Income	Residential Rebates	Solar Water Heater	1,495	$885	296
Low-Income	Residential Rebates	Ductless Split AC Tier 1	889	$400	3444
Low-Income	Residential Rebates	Ductless Split AC Tier 2	1,429	$571	1334
Low-Income	Residential Rebates	Ductless Split AC Tier 3	1,842	$857	266
Non-Low-Income	Residential Rebates	Solar Water Heater	1,495	$628	897
Non-Low-Income	Residential Rebates	Ductless Split AC Tier 1	889	$286	8385
Non-Low-Income	Residential Rebates	Ductless Split AC Tier 2	1,429	$428	3335
Non-Low-Income	Residential Rebates	Ductless Split AC Tier 3	1,842	$657	666

2) Estimate of program level incentive cost and first year energy savings:

Incentive Cost total = ~7.45 (2026 $M), estimated measure participant levels * per measure incentive cost

First Year Savings = ~16.1 GWh, estimated measure participant levels * per measure annual savings

3) PP&A budget estimate:

Residential Rebates admin cost estimate, 12.5 cents/ first year annual kWh

Admin cost estimate = ~2.02 (2026 $M), based on cents/kWh estimate and savings estimate from 2)

Market Activation cost estimate for residential rebates = 0.24 (2026 $M)

Category	Hours	Other	Category Cost	Estimate
Awareness	416	$48,000	$89,600	8 hours/week for year, 4 k/ month for marketing
Rebating	416		$41,600	8 hours/week for year
Qualified Leads	1,040		$104,000	20 hours/week for year

4) Total cost estimate – for residential rebates program estimates for 2) + 3)

9.70 (2026 $M)

b. The budget for each customer sector was the sum of the budgets for all the EE programs serving the sector.

The budget for each program was developed using the process and steps described in the response to part a) above.

c. The budget for incentives and PP&A costs were developed through steps 1 – 3 of the process described in part a) above as applied for each of the programs included in the portfolio.

In steps 1 and 2, program level incentive costs were calculated using forecast measure participation rates and measure-specific incentive levels.

In step 3, the two unique and independent components of the program level PP&A costs were determined. The first component reflected a program-specific administrative cost factor, expressed as cents per kWh of first-year savings, informed by TPP experience, forecast, and other utilities. The second component reflected program-specific Market Activation costs, based on LUMA's assessment of program channel needs and projected expenditures for Program Branding and Communications, Stakeholder Engagement, Strategic Partnerships and Tailored Customer Outreach and Technical Assistance.

These costs were aggregated across all programs to determine the total incentive costs and total PP&A costs.

2026-2028 EE and DR Three-Year Plan Requirements of Information

NEPR-MI-2026-0002

Response: RFI-LUMA-MI-2026-0002-20260324-PREB-04

SUBJECT

Budget and cost recovery

REQUEST

4. Referring to page 52 of the TYP, please provide average monthly customer rate and bill impacts for the proposed EE rider for each year of the plan. Provide the impacts separately for residential and commercial and industrial customers.

RESPONSE

The EE rider factor for each fiscal year is calculated by dividing the total EE revenue requirement by the estimated annual retail kWh sales. Average monthly customer bill impacts are calculated by multiplying the EE rider factor by the average monthly consumption for each customer class (residential, commercial, and industrial).

FY2027 EE Rider Estimation

Item	Amount	Reference
Incremental Funds Required from EE Rider ($)	$15,600,346	LUMA estimate
Estimated Retail Sales for FY27 (kWh)	15,526,244,490	Load Forecast FY27
EE Rider Adjustment for FY27 ($/kWh)	$0.00100	LUMA estimate / Load Forecast

FY2027 Monthly Customer Impacts – EE Rider

Customer Class	Average Monthly Consumption (kWh/month) *	EE Rider ($/kWh)	Monthly Impact ($/month)
Residential	414	0.00100	$0.41
Commercial	5,108	0.00100	$5.11
Industrial	208,186	0.00100	$208.19

**Average consumption values by customer class were estimated using a 12-month period of historical data through February 2026.*

FY2028 EE Rider Estimation

Item	Amount	Reference
Incremental Funds Required from EE Rider ($)	$15,600,249	LUMA estimate
Estimated Retail Sales for FY28 (kWh)	15,198,043,750	Load Forecast FY28
EE Rider Adjustment for FY28 ($/kWh)	$0.00103	LUMA estimate / Load Forecast

FY2028 Monthly Customer Impacts – EE Rider

Customer Class	Average Monthly Consumption (kWh/month)*	EE Rider ($/kWh)	Monthly Impact ($/month)
Residential	414	0.00103	$0.43
Commercial	5,108	0.00103	$5.26
Industrial	208,186	0.00103	$214.43

**Average consumption values by customer class were estimated using a 12-month period of historical data through February 2026.*

2026-2028 EE and DR Three-Year Plan Requirements of Information

NEPR-MI-2026-0002

Response: RFI-LUMA-MI-2026-0002-20260324-PREB-05

SUBJECT

Budget and cost recovery

REQUEST

5. Referring to page 3 of the TYP, please explain the following regarding low-income Spending.

   a. In its reporting, will LUMA be able to track and report on the total amount spent on low-income customers across all programs?

   b. LUMA states it is "confident that the EE Regulation requirement for 25% of overall spending be for dedicated Low-Income customers can be met in the next Three-Year Plan with additional programs targeting Low-Income customers." Explain the programs LUMA envisions for the next plan, and why it cannot implement those programs now.

RESPONSE

a. LUMA may not be able to fully track and report on the total amount spent on low-income customers across all programs as explained below:

   1) For the Residential Rebates program, applicants need to submit their account number as part of their application. LUMA will then determine whether the applicant is flagged as “Low Income” within the LUMA billing system. The incentives and pro-rata share of the program PP&A costs for all such participants would then be tracked as low-income spending.

   2) For the Residential Kits program, kits will only be distributed to customers flagged as “Low-Income” in the LUMA billing system and so all the Residential Kits spending would be tracked as low-income spending.

   3) For the In Store Discount program, LUMA does not track the customer account number of participants and will not be able to directly identify what portion of the program spending is for low-income customers. However, as part of the EM&V process for the In Store Discount program, it may be possible to identify the percentage of In Store Discount program participants who are low-income and to use this percentage to estimate the low-income spending indirectly based on pro-ration of the total program spending.

b. LUMA is confident that the EE Regulation requirement for 25% of overall spending be for dedicated low-income customers can be met in the next Three-Year Plan with additional programs targeting low-income customers developed by LUMA or through collaborative efforts with organizations that provide access to EE upgrade or financing style programs for low-income customers.

   LUMA is confident that the collective aggregate spending for these new programs, plus the Residential Kits program and any other new dedicated low-income programs would meet the EE Regulation requirement that 25% of overall spending be for programs dedicated to low-income customers.

   Act 83-1941 does not allow PREPA to provide financing to customers. Likewise, the T&D OMA does not allow LUMA to provide these services. Any customer owned equipment after the Point of Delivery (POD) is not a part of the T&D System thus outside of the scope of the O&M Services as defined in the T&D OMA. Therefore, LUMA is barred from performing any work beyond the POD.

2026-2028 EE and DR Three-Year Plan Requirements of Information

NEPR-MI-2026-0002

Response: RFI-LUMA-MI-2026-0002-20260324-PREB-06

SUBJECT

Budget and cost recovery

REQUEST

6. Referring to page 32 of the TYP, please explain the following related to the streetlighting conversion program.

   c. Explain whether the streetlighting conversion program is entirely funded through the $1.2 billion FEMA-funded program, or whether LUMA proposes to use EE rider funding to cover any portion of this program.

   d. Explain whether the federal funding is firm, or whether there is risk that the funding may not come through to LUMA.

   e. Explain how LUMA would proceed with the streetlighting conversion program if federal funding does not materialize.

   f. How many streetlights has LUMA already repaired or replaced? How many cumulative conversions does LUMA anticipate completing by the end of the TYP? In response, provide both (1) the number of streetlights and (2) streetlights as a percentage of total streetlights.

   g. Refer to Section 4.08 B) of the EE Regulation. When does LUMA anticipate achieving 100% streetlight conversion?

RESPONSE

   c. LUMA's streetlighting conversion program is planned to be funded primarily through the approximately $1.2 billion FEMA-funded Streetlighting Modernization Program. However, the currently available $1.2 billion allocation is not sufficient to fully fund the complete replacement and modernization effort required to address the entire streetlighting system owned by PREPA and maintained by LUMA. Additional funding sources will need to be identified to finalize the full program.

   d. Federal funding under the FEMA program has been obligated to Puerto Rico for the streetlighting modernization effort. All FEMA funding remains subject to final validation of project worksheets,

eligibility determinations, and compliance with federal procurement and reimbursement requirements. Additionally, there is an inherent risk that these approvals may be affected by delays in the timeline of funds obligation and the inactivation of Federal Emergency Management Agency (FEMA) Accelerated Award Strategy (FAASt) numbers in the FEMA Grants Portal. As a result, some architecture and engineering work was paused pending resolution of prioritization and the reactivation of FEMA's FAASt numbers.

e. If federal funding does not materialize or is reduced through eligibility determinations, LUMA would reassess the scope, timeline, and available funding alternatives for the streetlighting conversion program. Potential paths forward may include prioritizing the conversion of the highest risk or highest impact streetlights, focusing first on safety critical or reliability critical locations. Seeking supplemental funding sources, including evaluating whether portions of the program align with allowable uses of the Energy Efficiency (EE) Rider. Any use of EE Rider funds would require regulatory approval and would be limited exclusively to activities that meet the eligibility criteria of the EE Regulation. Phasing the project over multiple fiscal years to manage cash flow, funding constraints, and construction capacity. LUMA would not initiate large scale construction activities without a defined, approved, and compliant funding path. Any shift toward EE Rider funding, or any hybrid funding structure, would be presented to the Commission for review and approval.

f. To date, LUMA has repaired or replaced approximately more than 187,000 streetlights. By the end of the current TYP period, LUMA anticipates completing approximately more than 192,000 conversions to LED streetlighting. This represents approximately:

   1) 378,000 streetlights that require intervention, and

   2) 49% of the total streetlighting inventory that requires intervention, based on an estimated 468,000 PREPA owned fixtures.

g. LUMA will continue advancing the streetlight conversion initiative in alignment with the statutory 2030 target. Current projections, reflecting funding as noted in response to C of this request, and other considerations indicate completion in the early-to-mid 2030s.

2026-2028 EE and DR Three-Year Plan Requirements of Information

NEPR-MI-2026-0002

Response: RFI-LUMA-MI-2026-0002-20260324-PREB-07

SUBJECT

Budget and cost recovery

REQUEST

7. Referring to EE regulation Section 4.05 F), what steps has LUMA taken to secure outside funding?

RESPONSE

The EE Rider, implemented by LUMA in June 2024 pursuant to PREB's directive, serves as the primary, stable funding source for EE programs under Act 17-2019. In parallel, per the PREB's August 11, 2023 determination, Demand Response (DR) program costs are recovered through the PPCA, providing a dedicated recovery mechanism for DR.

LUMA has secured approximately $1.2 billion in outside funding from FEMA to support the implementation of Energy Efficient Streetlighting across the Island. This funding, together with the forecasted EE Rider revenues allocated for implementing energy efficiency programs, will enable LUMA to carry out its portfolio of activities throughout the TYP period.

2026-2028 EE and DR Three Year Plan Requirements of Information

NEPR-MI-2026-0002

Response: RFI-LUMA-MI-2026-0002-20260324-PREB-08

SUBJECT

Savings and benefits

REQUEST

8. Provide the Puerto-Rico Cost Tool populated with all of the measure detail and assumptions LUMA used to develop the Plan.

RESPONSE

Please refer to RFI-LUMA-MI-2026-0002-20260324-PREB-08_Attachment 1, which contains the Excel file used for the projections.

2026-2028 EE and DR Three-Year Plan Requirements of Information

NEPR-MI-2026-0002

Response: RFI-LUMA-MI-2026-0002-20260324-PREB-09

SUBJECT

Savings and benefits

REQUEST

9. Provide a table with LUMA's estimated savings broken into gross energy (kwh), net energy (kwh), gross demand (kw), net demand (kw), and net-to-gross ratios (NTG, in %) for each program and for each year of the plan.

RESPONSE

FY 2027:

Programs	Program net-to-gross ratios (%)	Annual Electricity Savings (MWh Net)	Peak Demand Savings (MW Net)	Annual Electricity Savings (MWh Gross)	Peak Demand Savings (MW Gross)
In-Store Discounts	85	788	0.17	928	0.20
Residential Rebates	70	16,124	3.96	23,034	5.66
Residential Kits	95	3,546	0.62	3,733	0.65
Business Rebates	85	7,414	2.40	8,722	2.82

FY 2028:

Programs	Program net-to-gross ratios (%)	Annual Electricity Savings (MWh Net)	Peak Demand Savings (MW Net)	Annual Electricity Savings (MWh Gross)	Peak Demand Savings (MW Gross)
In-Store Discounts	85	793	0.17	934	0.20
Residential Rebates	70	16,228	3.99	23,183	5.70
Residential Kits	95	3,569	0.62	3,757	0.66
Business Rebates	85	7,461	2.41	8,778	2.84

2026-2028 EE and DR Three-Year Plan Requirements of Information

NEPR-MI-2026-0002

Response: RFI-LUMA-MI-2026-0002-20260324-PREB-10

SUBJECT

Savings and benefits

REQUEST

10. LUMA proposed to apply fixed NTG ratios for each program. For each program, explain how the NTG ratio was determined.

    a. Explain how LUMA determined the NTG ratios for each program.

    b. Explain how LUMA's proposed NTG values compare to similar programs in other jurisdictions.

    c. Provide any evaluation studies used to inform LUMA's proposed NTG ratios.

RESPONSE

a. The proposed NTG ratios were developed based on 1) extensive evaluation experience with other utility EE programs, 2) the types of measures and incentives offered in each program, and 3) the relative maturity of the local market for these measures.

   Programs offering higher incentive levels and greater coverage of incremental cost (relative to baseline technologies) and/or targeting measures with lower market penetration (as informed by expected annual sales from the baseline study), were assigned higher NTG ratios. Conversely, programs offering lower incentives or relying on measures that are already widely adopted and mature in the market were assigned a lower NTG ratio.

   Ultimately, LUMA determined that each of the TYP programs fell into one of three possible NTG ratios based on their characteristics:

   - “High” NTG
   - “Medium” NTG
   - “Low” NTG

   Residential Kits was determined to fall into the High NTG ratio category given its program and market characteristics. In-Store Discounts and Business Rebates were determined to fall into the

Medium NTG ratio category given their program and market characteristics. Lastly, Residential Rebates was determined to fall into the Low NTG ratio category given its program and market characteristics.

b. The example provided in the March 2, 2026 TYP, Appendix A – Section A1.2, showed similar trends. Kits programs such as “Res & IE Product Distribution” had a high NTG ratio of 1.0, while rebate programs such as “Business Incentives” and “Res & IE Retail/Online” had NTG ratios of around 0.9. LUMA expects that mature program such as those in IL (which started in 2007) would have a higher NTG ratio than less mature programs such as those offered through the TYP, which is why LUMA proposed more conservative NTG ratios for the TYP than those used in IL.

c. LUMA did not estimate the proposed NTG ratios based on any specific evaluation studies, but did use the IL study, linked above, as a point of comparison in developing the ratios.

2026-2028 EE and DR Three-Year Plan Requirements of Information

NEPR-MI-2026-0002

Response: RFI-LUMA-MI-2026-0002-20260324-PREB-11

SUBJECT

Savings and benefits

REQUEST

11. Referring to the Potential Study at page vi, the study indicates LUMA's program achievable savings are 186,600 MWh in FY2027. Referring to the TYP at page 21, LUMA proposes gross savings of approximately 36,500 MWh in FY2027. Explain why LUMA's proposed savings are only 20 percent of the potential study's estimated program achievable savings.

RESPONSE

There are several key factors that result in the lower estimate of program achievable savings for FY27 and FY28 in the Revised TYP as compared to the Potential Study:

a) The Potential Study program achievable savings projections reflect annual program spending in the range of $56 million as compared to an annual budget of just under $16 million in the Revised TYP, or approximately 28% of the annual spending in the Potential Study. This is likely the largest factor driving the difference as the majority of spending is directly related to incentives which drive participation and overall savings. The lower EE spending in the Revised TYP also results in a lower EE Rider and less cost burden for LUMA customers that that projected in the Potential Study.

b) Approximately 65,000 MWh of the forecast program achievable savings in the Potential Study are related to Home Energy Reports based on experience on the mainland. Given energy usage, end-use equipment stocks and behavior patterns in Puerto Rico, it is unclear the degree to which mainland results would apply in Puerto Rico. Further, the Potential Study appears to assume that this program will have no ramp-up period. The TYP did not include a Residential Behavior (Home Energy Reports) program due to uncertainty around savings and concerns around very low measure life all of which led to significant uncertainty around the cost-effectiveness of such a program in Puerto Rico.

The Potential Study assumes initial program savings for the business (C&I) sector of more than 70,000 MWh / year in FY26 whereas participation from the business sector in LUMA’s TPP program to date been less than 10,000 MWh. LUMA does not believe it is realistic to assume business sector savings will grow as rapidly as forecast in the Potential Study based on our experience to date.

2026-2028 EE and DR Three Year Plan Requirements of Information

NEPR-MI-2026-0002

Response: RFI-LUMA-MI-2026-0002-20260324-PREB-12

SUBJECT

Program design

REQUEST

12. The program descriptions within the TYP indicate example measures for each program (see, e.g., Table 12).

    a. For each EE program, provide the full list of measures LUMA proposes to offer to customers.

    b. For each measure, provide the per-unit annual energy savings (kwh), lifetime energy savings (kwh), demand savings (kw), and incentive offered ($).

    c. As part of the response, highlight measure changes from the TPP, including measures that are new to the TYP and measures that LUMA is no longer offering.

RESPONSE

Parts a. and b.

In-Store Discounts:

Measure	Annual energy savings (kWh)	Lifetime energy savings (kWh)	Demand savings (kW)	Incentive offered ($)
Box Fan	183	1,970	0.047	$36
Tankless Water Heater	119	1,984	0.015	$102
ES Washer/ Dryer	363	4,192	0.064	$180
ES Pool Pump	286	3,079	0.050	$120
Window Air Conditioners	234	1,945	0.060	$120
ES Refrigerator	51	666	0.003	$60
ES Ceiling fans	63	576	0.011	$30

Residential Rebates:

Measure	Annual energy savings (kWh)	Lifetime energy savings (kWh)	Demand savings (kW)	Low-Income Incentive offered ($)	Non-Low-Income Incentive offered ($)
Solar Water Heater	1,495	22,789	0.191	$930	$660
Tankless Water Heater	119	1,984	0.015	$102	$102
ES Pool Pump	286	3,079	0.050	$120	$120
Ductless Split AC Tier 1 (<12000), 21SEER	889	11,620	0.228	$420	$300
Ductless Split AC Tier 2 (12000<X<24000), 20SEER	1,429	18,683	0.367	$600	$450
Ductless Split AC Tier 3 (24000<X<36000), 19SEER	1,842	24,081	0.473	$900	$690

Residential Kits:

Measure	Annual energy savings (kWh)	Lifetime energy savings (kWh)	Demand savings (kW)	Incentive offered ($)
Residential Kit	344	1,653	0.060	$90

*Residential kit is assumed to contain an LED Nightlights, Power strip, Shower head aerator, Faucet Aerator, and ECM Tabletop Fans.

Business Rebates:

Measure	Annual energy savings (kWh)	Lifetime energy savings (kWh)	Demand savings (kW)	Incentive offered ($)
Commercial lighting	229	1,512	0.097	$36
Commercial Mini split HVAC	1,031	13,471	0.216	$600
AC tune-up	72	143	0.015	$12
Other AC	274	3,578	0.057	$90
Combination Oven	Savings and incentive levels for these food services measures are currently under review.			
Convection Oven				
Fryer				
Ice Machine				

*Grouped measures for forecasting:

For business rebates the commercial lighting groups characteristics were set to represent average fixture based on observed historical LUMA rebates and calculated commercial fixture kWh savings. Group of Lighting measures previously offered in TPP include: the linear fluorescent, LED troffer, Omni directional, exit sign, occupancy sensor. Forecasted averages are used for projections due to unknown future measure distribution and business demand. For the other AC group, savings and incentives were calculated on a per-ton basis and reflect rooftop AC units, chillers, AC tune up, and related equipment. Savings and incentive levels for certain commercial food service equipment measures are currently under review.

c. Several measures included in the TYP represent additions or changes relative to the TPP. High efficiency box fans were added to both the residential kits and in-store discounts programs. Energy star washers and dryers and energy start ceiling fans were added to the in-store discounts program. Energy star pool pumps were moved from the business rebates program to the residential sector. AC tune-ups were added to the business rebates program.

   Energy star residential LED lighting is no longer offered in the TYP due to the sunset of energy star standards for residential LED types. Otherwise, the majority of measures offered under the TPP have been carried forward into the TYP. Maintaining continuity across the portfolio was a priority in LUMA's program design and although measures have been moved between programs to streamline delivery.

2026-2028 EE and DR Three-Year Plan Requirements of Information

NEPR-MI-2026-0002

Response: RFI-LUMA-MI-2026-0002-20260324-PREB-13

SUBJECT

Program design

REQUEST

13. Regarding financing programs, please explain the following.

    a. Explain the types of financing programs LUMA considered in developing its plan (e.g., Pay-as-you-save, on-bill tariff, low-interest loans).

    b. Explain whether LUMA contemplated financing programs for C&I customers specifically.

    c. Explain how financing programs could interact with incentive-based programs.

RESPONSE

LUMA notes that Act 83-1941 does not allow PREPA to provide financing to customers. Likewise, the T&D OMA does not allow LUMA to provide these services.

a. Although LUMA is not able to implement financing programs due to statutory constraints established through the T&D OMA, LUMA explored a broad spectrum of types of financing programs in developing the TYP. This included Tariffed On-Bill Programs, On-Bill Loan Programs, as well as third-party administered financing options.

    1) Tariffed On-Bill (TOB) programs or otherwise known as Inclusive Utility Investments (IUI) programs enable a utility to pay for cost-effective energy efficiency or other clean energy upgrades at a customer site. The utility recovers those costs through a fixed, site-specific charge on the customer's monthly utility bill that is less than the estimated savings from energy bill reductions. These include the following examples:

        i. The Pay As You Save (PAYS®) system;[1]

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[1] U.S. Environmental Protection Agency, *Inclusive Utility Investments: Tariffed-On-Bill Programs*, https://www.epa.gov/statelocalenergy/inclusive-utility-investments-tariffed-bill-programs.

ii. Partial-Protection TOB Programs;

iii. non-Savings-Guaranteed Tariffed On-Bill (TOB) Programs; and

iv. Tariffed Repayment without PAYS® Governance.

2) On-Bill Loan Programs[2] allow utility customers to finance eligible energy improvements through low- or zero-interest loans and repay them over time via their utility bills. Unlike tariffed repayment mechanisms, these loans are obligations of the individual account holder, are typically supported by public, ratepayer, or utility capital, and are intended to reduce upfront cost barriers while maintaining customer responsibility for repayment. Examples of these include:

i. On-Bill Repayment (OBR) Programs The utility administers and markets the program, but loan capital is provided by a third-party lender.

ii. On-Bill Financing (OBF) Programs. The utility itself acts as the lender, using ratepayer funds, public funds, or utility shareholder capital to finance customer energy improvements.

iii. Utility-Sponsored On-Bill Loans with Credit Enhancements. Third-party loans delivered through on-bill repayment, backstopped by ratepayer or public funds.

3) Off-Bill Third-Party Administered Programs involve a utility providing upfront capital to an independent financial institution—such as a green bank, credit union, CDFI, or commercial lender—which originates and administers loans for customer energy efficiency upgrades. Loan repayment occurs directly between the customer and the lender, rather than through the utility bill, and utilities may support these programs through capitalization, loan loss reserves, interest rate buydowns, or other credit enhancements. This approach enables utilities to leverage financial expertise and private capital to scale energy efficiency investment while maintaining regulatory oversight and avoiding direct utility ownership of customer debt.

As previously noted, LUMA Energy is not statutorily authorized under the T&D OMA to implement customer financing or on-bill repayment programs for Energy Efficiency initiatives. Moreover on-bill program mechanisms (Items 1 and 2 above) cannot be implemented.

b. LUMA did explore financing programs for C&I customers but were not pursued further given the same constraints as mentioned in the response above.

c. Although LUMA is not statutorily authorized to offer customer financing programs; LUMA views financing programs administered by third parties, such as the Department of Economic Development and Commerce (DDEC), as complementary to incentive-based programs. Such financing mechanisms can play a role in addressing upfront capital cost barriers—particularly for lower-income customers.

[2] U.S. Environmental Protection Agency, *On-Bill Loan Programs*, https://www.epa.gov/statelocalenergy/bill-loan-programs.

2026-2028 EE and DR Three-Year Plan Requirements of Information

NEPR-MI-2026-0002

Response: RFI-LUMA-MI-2026-0002-20260324-PREB-14

SUBJECT

Program design

REQUEST

14. Referring to page 3 of the plan, LUMA states it proposed "a Pay as You Save (PAYS) finance offering; however, LUMA has determined that implementing a financing based program during this Plan period is not feasible given the time and resources required to establish financing partnerships, customer protections, and administrative processes."

    a. Identify the time and resources required to establish financing partnerships, customer protections, and administrative processes. As part of the response, estimate the costs required for each element of a financing-based program.

    b. Explain why it is not feasible to establish these elements during this TYP.

    c. Explain whether LUMA could begin establishing some or all of these elements in this TYP, such that LUMA could start a financing-based program at the beginning of the next TYP. If so, identify the specific steps and associated costs that LUMA could take in this TYP.

    d. Explain whether LUMA could establish enough elements: of a financing program during FY27 such that it could launch a financing pilot in FY28 If so, identify the specific steps that LUMA could take in this TYP and associated cost impacts.

RESPONSE

a. As noted in the response to question 13 above, LUMA is unable to offer a financing program given significant statutory, implementation, and operational constraints. Hence, a financing program would have to be offered by another entity, such as DDEC, that is statutorily allowed to offer such a program.

   LUMA anticipates the following steps would be required by the entity to establish financing partnerships, customer protections, and administrative processes necessary to implement a financing-based program. As shown, this would be expected to take between 15 – 21 months

and cost between $200,000 –$400,000. The costs include internal labor costs plus costs for external experts to support the process.

Step	Approximate Duration (Months)	Approximate Cost (k$)
1. Define objectives of financing program	1	5 - 10
2. Identify potential mechanisms and score the various mechanisms against objectives	1	10 - 20
3. Selected preferred mechanism / desired financing program and define high-level structure of desired financing program	1	10 - 20
4. Develop preliminary term sheet outlining roles and responsibilities of LUMA and financing partners and associated Expression of Interest (EoI)	1 - 2	10 - 20
5. Approach potential partners and discuss opportunity and term sheet	3 - 4	25 - 50
6. Evaluate potential partners that submit EoI and select preferred partner(s)	2	10 - 20
7. Negotiate contracts with preferred partners based on term sheets	4 - 6	50 - 100
8. Execute contracts with preferred partner	0	0
9. Finalize all administrative support requirements • Funding provisions and oversight • Application forms • Collection processes	2 - 4	30 - 60
10. Develop promotional materials (can be done in parallel with Step 9)	2 - 4	50 - 100
11. Financing Program Ready to Launch	0	0
Total	***15 - 21***	***200 - 400***

b. As noted in the response to question 13 above, LUMA is unable to offer a financing program given significant statutory, implementation, and operational constraints.

c. As noted in the response to question 13 above, LUMA is unable to offer a financing program given significant statutory, implementation, and operational constraints. A financing program would have to be offered by another entity, such as DDEC, that is statutorily allowed to offer such a program. LUMA is not in a position to opine on the specific steps such an entity would be able to complete during the TYP.

d. As noted in the response to question 13 above, LUMA is unable to offer a financing program given significant statutory, implementation, and operational constraints. A financing program would have to be offered by another entity, such as DDEC, that is statutorily allowed to offer such a program. LUMA is not in a position to opine when such an entity might be able to offer such a financing program.

2026-2028 EE and DR Three-Year Plan Requirements of Information

NEPR-MI-2026-0002

Response: RFI-LUMA-MI-2026-0002-20260324-PREB-15

SUBJECT

Program design

REQUEST

15. Referring to page 23 of the plan, explain why the In-Store Discounts program will not be at "Full Speed" in FY28.

RESPONSE

LUMA currently has an agreement with a single retail chain covering its participation in the In-Store Discounts program in the TPP.

LUMA and its implementation contractors have actively engaged with all the key retail chains covering Puerto Rico over the course of the TPP to secure their participation in the In-Store Discounts program but, for a variety of reasons, we have not been able to reach a mutually acceptable agreement with any of these additional retail chains.

Leveraging our experience in the TPP and the many lessons learned through these discussions / negotiations with multiple retail chains, the projections for the In-Store Discounts program are based on the conservative assumption that LUMA will only be able to secure a single retail chain to participate in the In-Store Discounts program in the TYP – the same chain that participated in the TPP In-Store Discounts program. It is for this reason that the program is characterized as being in “Ramp Up” mode for the duration of the TYP – there is potential growth in this program to the degree that additional retail chains participate.

LUMA will continue to engage with these additional retail chains and to encourage them to participate in the In-Store Discounts program, but LUMA is not confident that it will be able to reach a mutually acceptable agreement with any of these other retail chains based on our experience to date. However, if we are able to do so with one additional retail chain, then the program would be able to “*Ramp Up*” within the TYP. Even if we are able to reach agreement with all of the key chains during the TYP, then the program would likely still be in Ramp Up mode within the current TYP until the program is fully mature at all of the retail chains (which would likely occur in the next TYP).

2026-2028 EE and DR Three-Year Plan Requirements of Information

NEPR-MI-2026-0002

Response: RFI-LUMA-MI-2026-0002-20260324-PREB-16

SUBJECT

Program design

REQUEST

16. Referring to page 12 of the TYP, besides CBES, what other demand response programs did LUMA consider when developing the TYP? As part of the response, explain why LUMA is not proposing to implement any other demand response or pilot programs during the TYP.

RESPONSE

During the early stages of developing the TYP, LUMA evaluated several potential demand response program concepts in addition to the CBES Program. Among the programs considered in preliminary drafts were an Economic DR program and an ELRP, both of which are commonly used demand response structures in other jurisdictions to provide flexible load reductions during system stress or high market cost periods. These programs were evaluated as part of the broader portfolio design during early internal planning stages. However, during the refinement of the TYP proposal, LUMA determined that certain implementation challenges particularly those related to permitting considerations, program administration complexity and readiness for a pilot could affect the ability to deploy these programs quickly and effectively within the TYP implementation timeline.

As a result, LUMA elected to remove the Economic DR and ELRP concepts from the final TYP proposal to streamline the program portfolio and enable a faster and more reliable deployment schedule. By focusing on programs that can be implemented with a higher degree of operational certainty, and fully ready (either for a pilot or as otherwise outlined above) LUMA is able to prioritize near-term program availability while avoiding potential delays associated with resolving the outstanding challenges associated with these additional new program models and needs. In addition, limiting the initial TYP demand response portfolio to CBES allows LUMA to focus program resources on scaling an existing and operational program, while providing additional time to gather stakeholder feedback and evaluate how other demand response program structures may be adapted in the future.

Accordingly, the decision not to include additional demand response or pilot programs in the current TYP proposal reflects a practical implementation decision intended to support timely program deployment, while preserving the flexibility to revisit and refine additional demand response programs concepts in future program planning cycles as implementation conditions evolve. LUMA will propose a sufficiently

detailed demand response pilot proposal(s) once discussed with relevant stakeholders for the PREB's consideration.

2026-2028 EE and DR Three-Year Plan Requirements of Information

NEPR-MI-2026-0002

Response: RFI-LUMA-MI-2026-0002-20260324-PREB-17

SUBJECT

Program design

REQUEST

17. Please provide a status update for the Emergency Load Reduction Program (ELRP) and LUMA's expectations for the ELRP for the TYP.

RESPONSE

LUMA evaluated the ELRP during the development of the TYP as a potential demand response mechanism to provide additional system flexibility during periods of grid stress. As part of the TYP development process, LUMA conducted preliminary assessments regarding the operational design, administrative requirements, and implementation considerations associated with deploying ELRP in Puerto Rico. While the program concept remains potentially valuable as part of a broader demand response portfolio, LUMA identified several implementation challenges during the planning process, including permitting considerations (EPA) and administrative complexity.

Given these factors, LUMA determined that including ELRP in the initial TYP portfolio could introduce implementation uncertainty and potentially delay the deployment of other programs. As a result, ELRP was not included in the final TYP proposal to support a more streamlined rollout of programs that can be implemented with greater operational certainty, including the CBES Program, which is currently serving as the primary demand response initiative within the TYP framework.

However, ELRP remains a program concept under active consideration. If the implementation challenges identified during the planning process are resolved or materially reduced, LUMA could consider deploying ELRP during the TYP period, but is dependent on factors out of LUMA's control (such as EPA permits). This approach allows LUMA to maintain flexibility to introduce additional demand response programs as conditions evolve, while prioritizing the timely deployment of programs that are currently operationally feasible.

2026-2028 EE and DR Three-Year Plan Requirements of Information

NEPR-MI-2026-0002

Response: RFI-LUMA-MI-2026-0002-20260324-PREB-18

SUBJECT

Program design

REQUEST

18. For the Residential Rebates program, explain how LUMA will balance available budget with customer demand for the program. As part of the response, explain how LUMA would proceed if customer demand exceeds the budget, including when LUMA would notify PREB and stakeholders and whether LUMA would shut down the programs.

RESPONSE

For the Residential Rebates Program, LUMA will balance available budget with customer demand by closely monitoring program activity and adjusting operations as needed during FY2027 and FY2028.

LUMA will track key program measures, such as the level of demand for specific measures within the scope of the program (ie mini-splits), on a regular basis, including the number of applications received for said measure, approved incentives, and remaining available funds. This tracking will help forecast how quickly funds are being used and allow the team to take action before the program reaches its budget limit. When committed funds approach a defined threshold, LUMA will begin implementing demand management actions to ensure the program remains within budget.

LUMA will also align marketing and outreach activities with available funding to help manage demand. In addition, the Residential Rebates application portal will provide more visibility into incoming applications and committed funds. Once the program reaches its funding limit, the portal will stop accepting new applications to prevent the program from exceeding the approved budget.

If customer demand exceeds available funding, LUMA will temporarily pause the acceptance of new applications. At that point, LUMA will communicate program status and application deadlines to customers and stakeholders primarily through the new application portal and the LUMA Contact Center.

LUMA will continue processing and honor all eligible applications submitted before the pause, as long as customers meet program requirements.

2026-2028 EE and DR Three-Year Plan Requirements of Information

NEPR-MI-2026-0002

Response: RFI-LUMA-MI-2026-0002-20260324-PREB-19

SUBJECT

Program design

REQUEST

19. Referring to page 26 of the TYP, please explain the following regarding the online rebate portal.

    a. What is the status and timeline for launching the online rebate portal?

    b. Explain what information will be available on the portal.

    c. Explain whether the rebate portal could eventually indicate close to real-time data, such the status of the program's budget availability and the average wait time for a customer to receive an incentive.

RESPONSE

a. a. Status and Timeline: The online rebate portal is fully developed and on track for launch in the final quarter of FY2026. Customers will benefit from a timely and accessible platform that allows them to engage with rebate programs without delays or confusion, supporting smoother participation.

b. Information Available on the Portal: At launch, the portal will provide customers with clear program eligibility information, improved guidance for submitting applications, and relevant documentation. Customers will also be able to submit and track the status of the submitted rebate applications, giving them confidence and visibility throughout the process.

c. Future Capabilities: While initial functionality focuses on application submission and tracking, LUMA anticipates future enhancements could provide customers with more insights, such as program budget availability and average processing times. These capabilities will further improve transparency, enable better planning for customers, and support a seamless rebate experience as the program matures. Please refers to RFI-LUMA-MI-2026-0002-20260324-PREB-19_Attachment 1.docx that includes a sample from Portal User Interface.

2026-2028 EE and DR Three-Year Plan Requirements of Information

NEPR-MI-2026-0002

Response: RFI-LUMA-MI-2026-0002-20260324-PREB-20

SUBJECT

Program design

REQUEST

20. Referring to page 26 of the TYP, please explain the Low-Income Assistance Initiative.

RESPONSE

The objective of the EE Low-Income Assistance Initiative is to increase awareness of the energy efficiency options and choices available to low-income customers with a special emphasis on the options and choices available through LUMA's Residential Rebates and Residential Kits programs.

This objective will be achieved by 1) working in close collaboration with local community agencies across Puerto Rico, and 2) leveraging social media and communications channels specifically targeting low-income customers via tailored marketing.

By working in close collaboration with local community agencies, LUMA will be able to offer low-income customers with a targeted message through a trusted channel and to leverage the relationships, networks, activities and events of these various agencies. Depending on the resources available through the community agencies, LUMA anticipates that these agencies will also engage low income customers directly and will offer tailored support through the EE Low-Income Assistance Initiative.

Essentially, the Low-Income Assistance Initiative will complement LUMA's mainstream marketing and communications efforts for the Residential Rebates and Residential Kits programs to maximize low-income customer awareness of and participation in these programs.

2026-2028 EE and DR Three-Year Plan Requirements of Information

NEPR-MI-2026-0002

Response: RFI-LUMA-MI-2026-0002-20260324-PREB-21

SUBJECT

Program design

REQUEST

21. For each program in the TYP, explain how LUMA determined the incentive levels to offer customers. As part of the response, explain whether LUMA applied any lessons learned from implementing the TPP that it applied in determining the TYP incentive levels. If so, explain the specific lessons learned and how they informed the TYP incentives.

RESPONSE

In the TYP, incentive levels were informed by a review of the incentive structure applied under the TPP and the relationship between incentive levels and first year energy savings. LUMA reviewed incentives on a measure-by-measure basis. Where this ratio was not aligned with comparable measures, incentive levels were adjusted. For example, window AC incentives were revised downwards based on this review and solar water heater incentives were revised upwards. Incentive levels were also informed by local market conditions and measure costs within Puerto Rico.

LUMA incorporated specific lessons learned from implementing the TPP, particularly for the ductless mini-split heat pumps in the residential rebate program. During the TPP, the mini-split incentives were initially offered at levels that proved to be too high for small mini split systems (Tier 1) as they were uniform across equipment sizes. This approach led to disproportionately high incentive levels and significant demand for Tier 1 system rebates. In response, LUMA introduced size-differentiated incentive levels during the TPP to better reflect cost differences and unit energy savings. These revised incentive levels have been carried forward into the TYP.

2026-2028 EE and DR Three-Year Plan Requirements of Information

NEPR-MI-2026-0002

Response: RFI-LUMA-MI-2026-0002-20260324-PREB-22

SUBJECT

Program design

REQUEST

22. For each program in the TYP, explain how LUMA accounted for the potential study findings when designing the program.

RESPONSE

Program design was informed by a number of considerations and information sources including but not limited to the baseline study and potential study findings, LUMA's TPP experience, TPP market data and local market knowledge.

Specifically, baseline study and potential study findings informed the programs included in the TYP in terms of targeted measures, end-uses, segments and market activation strategies as follows.

- For the In-Store Discounts and Residential Kits programs, we added high-efficiency box fans as a measure as a direct result of the end use breakouts provided by these studies indicating that ventilation was a significant end-use.
- For the Residential Rebates program, we adjusted savings assumptions for mini-split air-conditioning to align with sizing and efficiency criteria as defined in the baseline study.
- For the Business Rebates program, we increased market activation efforts to capture the significant energy savings potential in the business market identified in the potential study as compared to relatively limited savings achieved in the TPP in the business sector.

LUMA also found a paucity of relevant local data in the baseline study and potential study which limited the extent to which these studies could inform the program designs.

2026-2028 EE and DR Three-Year Plan Requirements of Information

NEPR-MI-2026-0002

Response: RFI-LUMA-MI-2026-0002-20260324-PREB-23

SUBJECT

CBES program

REQUEST

23. Provide LUMA's planning assumptions for the CBES program, including:

    a. Number of customers enrolled (broken out by auto-enrolled and opt-in)

    b. Number and duration of events, by month

    c. Total kWh per event

    d. Participation rate

    e. Average reserve level

    f. Administrative cost assumptions, broken out by cost category

    g. Incentive costs

    h. Total budget

    i. Any other planning key planning assumptions

RESPONSE

a. As of March 26, 2026, the CBES program has achieved a total enrollment of 82,421 customers. The composition of this participant base is categorized as follows:

- Auto-enrolled: 67,131 customers
- Opt-in: 15,290 customers

b. The specific monthly breakdown of event frequency: As of March 30, 2026, the information requested above by PREB is not possible to deliver due to lack of updated data that forms part of key input assumptions required to develop the requested forecast analysis. These unavailable key assumptions are aligned with those used for the Fiscal Plan 2027, which is still not available

at this time, and for the requested analysis, these key assumptions are aligned with the ones considered for the Fiscal Plan 2027.

Additionally, we find it unfeasible to forecast events further than FY2027 due to constant changes in scheduled planned outages of Puerto Rico power plants, and constant changes on the CODs of multiple upcoming utility-scale projects that are planned for FY27 and FY28. Any change that occurs principally in one of the previously mentioned items, can considerably affect the forecast of events requested and hence, for an accurate forecast, the recommendation is to forecast as far as one fiscal year (FY2027 in this case).

c. Historical performance data from August 2025, a period where all seven aggregators participated, shows an average discharge of 198,096 kWh per event.

d. The program maintains an average participation rate of approximately 73%. It is important to note that this is a dynamic metric; actual participation fluctuates.

e. The current average reserve level is 72.5%. This parameter is inherently flexible; the program allows participants to adjust their reserve levels at any time.

f. FY27-28 Administrative Budget Allocation, budget ceiling assumptions

Category	Budget Share	Approx. Amount
Program Management	40%	~$1.96M
Professional Services/IT/Vendor/Legal	48%	~$2.35M
Contingency Reserve	12%	~$0.59M

g.

Incentive Costs by FY:

FY27	FY28
$24,509,185.80	$23,964,536.90

Total Budget for each Fiscal Year

FY27	FY28
$29,411,022.90	$28,757,444.28

h. The CBES planning assumptions for Puerto Rico reflect both current enrollment and a strong pipeline of customers ready to join. While reported figures align with confirmed participation for filings, there is a significant number of customers “on deck” that should be considered in planning. This represents a meaningful growth opportunity, in both terms of systems not enrolled but active as well as new systems which will be available throughout the year, which should be acknowledged alongside forecasts, operations, and budgets reflect both current participation and potential scale-up.

2026-2028 EE and DR Three-Year Plan Requirements of Information

NEPR-MI-2026-0002

Response: RFI-LUMA-MI-2026-0002-20260324-PREB-24

SUBJECT

CBES program

REQUEST

24. Why does LUMA expect administrative costs for the CBES program to increase from the $1.5 million budgeted in FY26 to the $4.9 million budgeted in FY27?

RESPONSE

The CBES administrative budget increases from $1.5M in FY26 to $4.9M in FY27 to reflect the program's transition from an initial pilot phase to a fully operational and scalable program capable of supporting significantly expanded enrollment. Puerto Rico has one of the highest penetrations of residential battery storage in the United States, creating a substantial latent pool of eligible participants that may enroll.

The FY26 budget reflected a limited implementation phase where certain functions were supported through shared internal resources. The FY27-28 administrative ceiling reflects the full operational requirements necessary to manage broader participation and higher volumes of enrollment requests, while maintaining low per-participant administrative costs through economies of scale.

LUMA has successfully completed all activities required to support event dispatch, coordination, and performance analysis for CBES without the implementation of a DERMS. These activities, including program design, enrollment coordination, dispatch execution, and reporting, have been executed using existing systems and vendor coordination and have been reported in quarterly filings to the Bureau.

While DERMS was evaluated as a potential future capability, LUMA had determined that it is not required at that stage, with a steady or nearly flat enrollment pace, avoiding estimated implementation costs exceeding $2 million. However, as enrollment expands, additional system enhancements or operational platforms may become necessary to support reliable dispatch, participant coordination, and program analytics at much larger scale.

The administrative budget reflects the transition from a pilot structure to a mature program capable of supporting substantially greater enrollment volumes, anticipating that there may need to be some investment in one or both years to keep up with rapid changes. As part of this transition, the administrative framework contemplates the operational flexibility necessary to support increased participation and evolving program needs. This includes, but is not limited to:

- Improvements to application and incentive processing systems
- Enhanced participant onboarding and enrollment management
- Expanded engineering analysis and operational coordination
- Potential development of technical solutions or system enhancements required to support increased program complexity

These activities will be forecasted and monitored through LUMA's quarterly budgeting and reporting processes, ensuring that administrative expenditures remain transparent and aligned with program activity levels.

Administrative resources scale with participation levels:

- Flat/steady state enrollment: Administrative (Program Management) costs reflect current operational needs, with moderate to light increases in enrollment.
- Significantly increasing enrollment or spikes: Budget supports scaling program management, participant coordination, regulatory reporting, and operational oversight while maintaining low per-participant administrative costs.

FY27-28 Administrative Budget Allocation

Category	Budget Share	Approx. Amount
Program Management	40%	~$1.96M
Professional Services/IT/Vendor/Legal	48%	~$2.35M
Contingency Reserve	12%	~$0.59M

Key Considerations

- Administrative costs are designed to be efficient and scalable, allowing transition from limited enrollment to maximizing enrollment.
- The budget ceiling anticipates latent rapid enrollment growth potential, given Puerto Rico's large installed base of residential batteries.
- Contingency reserves ensure operational flexibility to respond to enrollment surges or evolving program requirements.
- Current systems meet operational needs, with the baseline requirements for program management, while future enhancements remain an option if participation expands significantly.

The FY27-28 CBES administrative budget reflects the program's evolution from pilot implementation to a mature, scalable demand response resource capable of accommodating significantly higher participation levels. The administrative structure ensures program reliability, maintains low per-participant costs, and provides the operational flexibility necessary to support future enrollment growth while maintaining regulatory transparency through quarterly budgeting and reporting.

2026-2028 EE and DR Three-Year Plan Requirements of Information

NEPR-MI-2026-0002

Response: RFI-LUMA-MI-2026-0002-20260324-PREB-25

SUBJECT

CBES program

REQUEST

25. What changes or improvements does LUMA anticipate making to the CBES program in FY27-FY28?

RESPONSE

For FY27–28, LUMA anticipates that the CBES Program will continue to operate under its current framework while seeking opportunities for program improvements and enhancements to increase both customer and system value. LUMA expects administrative and operational refinements to support expanded enrollment and improved application and incentive processing, ensuring the program scales efficiently as more customers participate. In addition, LUMA is evaluating potential future capabilities, including locational dispatch to provide incremental value to the grid and frequency support to help mitigate system instability. These enhancements are not proposed as changes at this time but would be considered in future filings as operational experience and program data allow.

LUMA anticipates that these improvements, along with continued refinement of program operations, will enable broader participation, greater transparency, and more efficient administration while maintaining a low per-customer cost. Overall, FY27–28 is expected to be a period of scaling the program responsibly, gathering operational data, and assessing the feasibility of enhancements that increase program value for both participants and the grid.

2026-2028 EE and DR Three-Year Plan Requirements of Information

NEPR-MI-2026-0002

Response: RFI-LUMA-MI-2026-0002-20260324-PREB-26

SUBJECT

CBES program

REQUEST

26. Has LUMA tested the CBES program for cost-effectiveness based on the Puerto Rico Cost Test?

RESPONSE

LUMA has not tested the CBES program for cost-effectiveness based on the Puerto Rico Cost Test because the primary benefit of the CBES program – reduction in the amount of unserved energy due to generation capacity shortfalls – is not explicitly addressed as a value stream in the Puerto Rico Cost Test. As such, LUMA does not believe that the Puerto Rico Cost Test – as currently defined – accurately assesses the cost-effectiveness of the CBES program.

However, LUMA believes that the reduction in the amount of unserved energy driven by the CBES program could be recognized through some sort of Value of Lost Load (VOLL) calculation reflecting the reduction in Lost Load caused by the CBES program. LUMA could apply the PRCT using avoided capacity and energy costs if CBES transitions into an economic demand response program.

2026-2028 EE and DR Three-Year Plan Requirements of Information

NEPR-MI-2026-0002

Response: RFI-LUMA-MI-2026-0002-20260324-PREB-27

SUBJECT

Evaluation and reporting

REQUEST

27. Refer to Appendix A (pages 40-42) of the TYP. Explain how LUMA envisions collaborating with the Energy Bureau to carry out the proposed EM&V schedule and plan.

RESPONSE

LUMA acknowledges that the EM&V process will be led by the Energy Bureau as stipulated in the EE Regulation and envisions working in close collaboration with the Energy Bureau throughout the EM&V process. The specific areas of collaboration would be determined by the Energy Bureau, but could include any of the following:

- LUMA provides input on the EM&V RFP and program-specific EM&V plans developed by the Energy Bureau.
- LUMA works with the Energy Bureau and the selected EM&V contractor to ensure, to the extent possible, that the necessary program data is collected through the application forms and process to inform the EM&V process.
- LUMA shares all required program and participant data with the EM&V contractor, subject to any customer confidentiality and data protection / privacy requirements, to inform the impact evaluation process.
- LUMA facilitates the execution of any participant / non-participants surveys and implementation contractor / trade ally interviews the EM&V contractor undertakes.
- LUMA meets with the EM&V contractor to share program implementation insights, challenges and success to inform the process and market effects evaluation.
- LUMA reviews a draft of the EM&V report and provide feedback to the EM&V contractor.

The above is not intended to be a complete list of all the potential areas of collaboration, but rather to show how closely LUMA would be able to support the EM&V process as desired by the Energy Bureau.

Although the above is noted as potential areas of collaboration on EM&V it should also be noted that existing performance metrics already provide a clear framework for evaluating outcomes; please refer to the exhibit on metrics. In response to collaboration with the Energy Bureau, key EM&V outputs, energy

savings and demand reduction, can be translated into established metrics tied to energy efficiency and demand response performance. LUMA proposes aligning incentives with existing structures, including defined baselines, targets, and tiered thresholds over time. Given limited historical data, a zero baseline is recommended, with targets aligned to long-term goals and thresholds structured to reflect progress over varying timelines.

2026-2028 EE and DR Three-Year Plan Requirements of Information

NEPR-MI-2026-0002

Response: RFI-LUMA-MI-2026-0002-20260324-PREB-28

SUBJECT

Evaluation and reporting

REQUEST

28. Per the EE Regulation, the Energy Bureau must develop, or hire experts to develop, a Technical Reference Manual (TRM).

    a. Explain how LUMA envisions collaborating with the Energy Bureau to develop a TRM.

    b. Is development of a TRM part of LUMA's proposed EM&V plan?

    c. Has LUMA already developed assumptions that can be used in the development of a TRM?

RESPONSE

a. LUMA envisions several opportunities to collaborate with the Energy Bureau in the TRM development process:

    i. During the TRM scoping stage, LUMA may provide insight into the identification of the highest priority measures with the greatest impact for Puerto Rico to be targeted for research and analysis in the TRM.
    ii. Sharing relevant data to inform TRM development.
    iii. Supporting the development of the structure of the TRM.

b. LUMA's proposed EM&V plan did not include development of a TRM.

    As part of its efforts to estimate energy and peak demand savings for the TYP, LUMA reviewed and updated the savings assumptions for over a dozen measures. These measures were chosen based on historical participation rates and cover most of the savings projected for the TYP. The assumptions around each measure are documented and could be shared with the Energy Bureau to support the Energy Bureau's development of a TRM.

c. Additionally, the Puerto Rico Cost Test cost-effectiveness tool contains savings assumptions for all measures and measure bundles contributing to the projected savings for the TYP.

2026-2028 EE and DR Three Year Plan Requirements of Information

NEPR-MI-2026-0002

Response: RFI-LUMA-MI-2026-0002-20260324-PREB-29

SUBJECT

Evaluation and reporting

REQUEST

29. Provide an updated EM&V schedule that includes the development of a Market Baseline Potential Study and a TRM.

RESPONSE

LUMA expects that the evaluation, measurement, and verification (EM&V) of the energy efficiency programs proposed in the Three-Year Plan will be conducted by an independent third-party EM&V contractor. Consistent with Puerto Rico's Energy Public Policy Act, the Puerto Rico Energy Bureau retains the statutory authority to establish, oversee, and enforce EM&V requirements for utility-administered energy efficiency programs, including approval of EM&V frameworks, methodologies, and reporting, and the ultimate verification of savings and program performance.

At this time, the specific EM&V framework—including procurement approach and contractor responsibilities—has not yet been fully defined, which limits the ability to comment on the optimal structure or timing of a detailed EM&V schedule. With respect to the relationship between the Market Baseline and Potential Study, the Technical Reference Manual (TRM), and the EM&V program, LUMA notes that it would be reasonable for these elements to be developed either by a single qualified third-party contractor or by different contractors, depending on PREB's determination.

LUMA further notes that market potential analyses can be meaningfully informed by early EM&V findings. Accordingly, sequencing the next Market Baseline and Potential Study to follow initial EM&V implementation would allow the study to benefit from empirically observed program uptake and savings performance, resulting in more robust and data-driven planning inputs.

In addition, LUMA recognizes that the Energy Public Policy Program of the Department of Economic Development and Commerce, pursuant to Act 57-2014, holds statutory responsibilities that are central to the development, coordination, and validation of Puerto Rico's energy-efficiency landscape. These responsibilities include developing and promulgating Puerto Rico's public energy policy, establishing energy-efficiency parameters and criteria for government agencies and municipalities, gathering and analyzing energy consumption and conservation data, promoting and overseeing studies that inform policymaking, and administering major federal energy-efficiency programs. Given these duties, the

Department's active participation is essential to ensuring that the Market Baseline and Potential Study, the TRM, and the EM&V framework align with policy directives, leverage consistent technical standards, and integrate the data and insights necessary for accurate forecasting, evaluation, and long-term planning.

For these reasons, LUMA expects and supports a collaborative process in which PREB exercises its regulatory authority while the Department fulfills its statutory role in policy definition, data stewardship, and program alignment—ensuring that the resulting EM&V structure, TRM, and Market Baseline and Potential Study are cohesive, policy-compliant, and grounded in the best available information.

2026-2028 EE and DR Three Year Plan Requirements of Information

NEPR-MI-2026-0002

Response: RFI-LUMA-MI-2026-0002-20260324-PREB-30

SUBJECT

Evaluation and reporting

REQUEST

30. Referring to Section 8 of the TYP on Reporting, indicate whether LUMA is proposing any notable changes from the TPP reports it prepares. Explain LUMA's rationale for any such changes.

RESPONSE

LUMA is evaluating opportunities to streamline reporting, including adjustments to make reports more concise and reduce redundancy where possible. These changes are intended to improve clarity and usability for both internal and external stakeholders while maintaining full transparency and compliance with reporting requirements. Any proposed adjustments would be reflected in future filings and communicated to PREB in alignment with standard reporting practices.

2026-2028 EE and DR Three Year Plan Requirements of Information

NEPR-MI-2026-0002

Response: RFI-LUMA-MI-2026-0002-20260324-PREB-31

SUBJECT

Evaluation and reporting

REQUEST

31. Referring to page 39 of the TYP, provide more information on LUMA's expectations for the annual plan revisions.

    a. What level of information does LUMA expect to include in the annual updates?

RESPONSE

LUMA's annual plan revisions are intended to provide PREB with updated, transparent information on TYP program implementation and operations. Revisions could include data related to participation, enrollment, expenditures, and others; operational adjustments to improve efficiency or responsiveness, and information supporting new program proposals or modifications to existing programs. Updates might also reflect regulatory, funding (rider), or policy changes that affect program delivery and provide projections for participation, budgets, and operational needs to inform program scaling and potential enhancements. These revisions are intended to provide PREB with actionable oversight while allowing LUMA to adapt programs as needed to maintain alignment with TYP objectives.

2026-2028 EE and DR Three Year Plan Requirements of Information

NEPR-MI-2026-0002

Response: RFI-LUMA-MI-2026-0002-20260324-PREB-32

SUBJECT

TYP development

REQUEST

32. Please provide the October 1, 2025 draft TYP. Explain at a high level the changes LUMA made between the October 1 plan and the plan ultimately filed with the PREB, and why LUMA made those changes.

RESPONSE

Please refer to RFI-LUMA-MI-2026-0002-20260324-PREB-32_Attachment 1 that includes a copy of the of October 1, 2025, Draft TYP.

The key change from the October 1, 2025 Draft TYP to the March 2, 2026 Revised TYP is that six programs were removed from the TYP portfolio. The six programs are listed in the table below.

Programs Included in October 1, 2025 Draft TYP that are not included in the March 2, 2026 Revised TYP
Low Income Pay As You Save (PAYS) financing
Residential Direct Install
Behavioral (Home Energy Reports)
Business Direct Install
Custom Rebates
Strategic Energy Management

As explained in the Introduction section of the March 2, 2026 Revised TYP, the changes were made after a critical and objective review of what LUMA can and cannot do over the TYP period based on experience from the TPP and available resources.

Based on this assessment, the six programs were removed to enable LUMA to:

- Focus on the core programs proposed in the March 2, 2026 Revised TYP – with a particular emphasis on increasing participation in the Business Rebates program and expanding this program to the government consumption sector

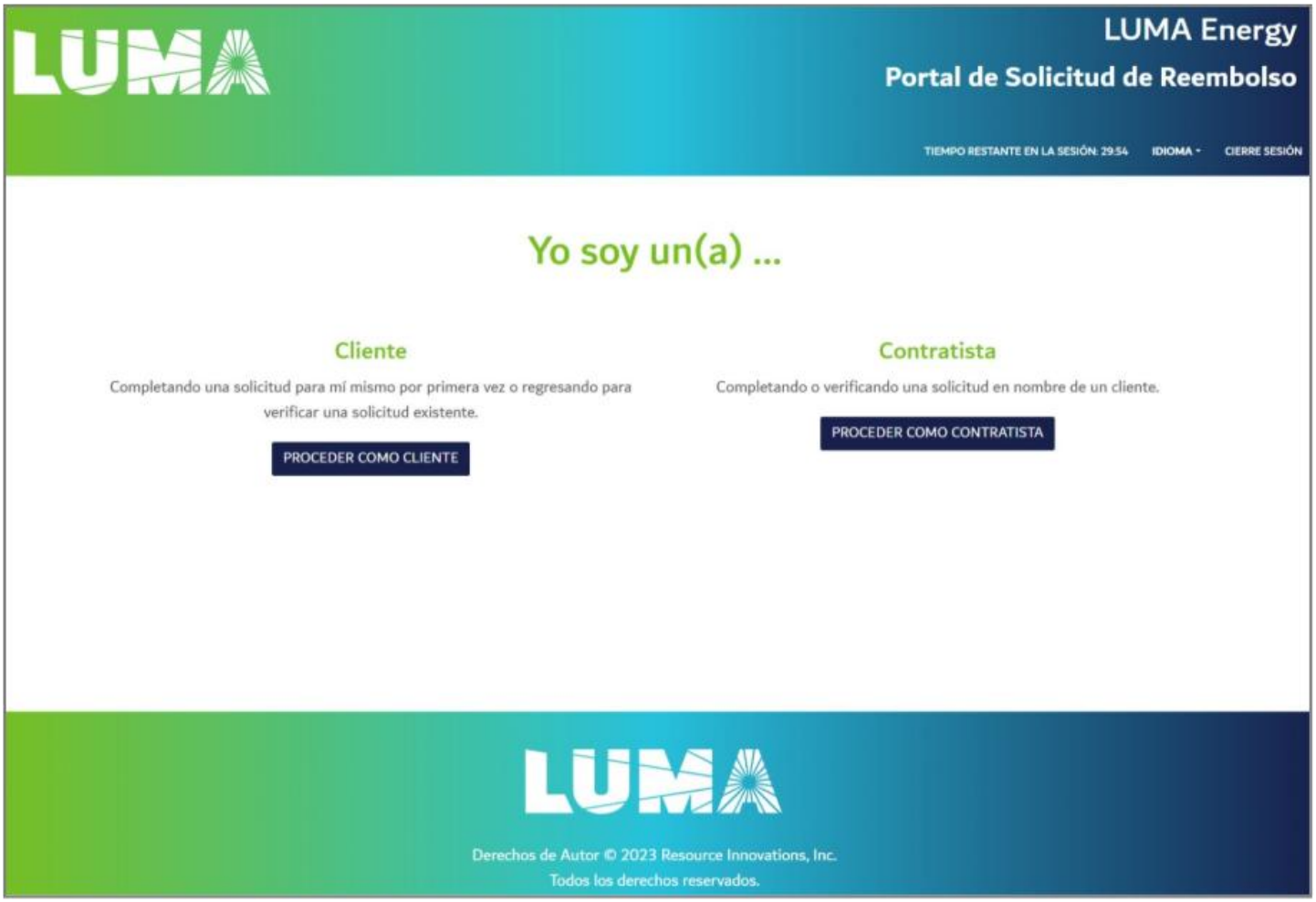
- Strengthen consumer confidence in Puerto Rico's nascent Energy Efficiency ecosystem that had been negatively impacted by the various program pauses described above, and

Re-establish the operational stability necessary to support continuous program activity, enable the collection of comprehensive implementation data, and allow LUMA to develop more accurate, fully informed planning assumptions. This information will, in turn, inform the design of new programs and the development of future portfolios to be proposed to the Energy Bureau following full TYP implementation.

Attachment 1 to Response to RFI 8 of Exhibit 1 (RFI-LUMA-MI-2026-0002-20260324-PREB-08_Attachment 1)

[This document is an Excel table that will be submitted to the Energy Bureau via email]

Sample from Portal User Interface:



LUMA Energy
Portal de Solicitud de Reembolso

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3. Adjunte todos los documentos necesarios según aplique (recibos de instalación y evidencia de pago, formulario W-9 firmado).
4. Haga clic en 'Guardar' antes de pasar a la siguiente página para no perder su información.
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Optional File Upload:

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- AHRI

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Fecha y Hora de documento sometido	Tipo de Archivo	Archivo de Proyectos
16 de marzo de 2026 a las 12:15	ES	IMG_0171.jpg (elimine)
16 de marzo de 2026 a las 12:15	AHRI	IMG_0174.jpg (elimine)
16 de marzo de 2026 a las 12:13	Recibo (con evidencia de pago)	PROOF_OF_PAYMENT.pdf (elimine)
16 de marzo de 2026 a las 11:53	Términos y Condiciones	Acuerdo_del_Programa.pdf

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Attachment 1 to Response to RFI 32 of Exhibit 1 (RFI-LUMA-MI-2026-0002-20260324-PREB-32_Attachment 1)

Three-Year Plan for Energy Efficiency and Demand Response

Draft for Stakeholders

September 30th, 2025

NEPR-MI-2022-0001

Introduction

LUMA is committed to working with the Puerto Rico Energy Bureau (Energy Bureau) and key stakeholders around the island to build a more reliable and resilient energy system for the people of Puerto Rico. As the grid operator, LUMA is responsible for supporting the implementation of Puerto Rico's public energy policy, including critical customer initiatives such as Energy Efficiency (EE) and Demand Response (DR) programs, which are required by law and mandated by the Energy Bureau. This includes developing Three-Year Plans for Energy Efficiency and Demand Response.

Energy efficiency and demand response are complementary tools that play a critical role in rebuilding Puerto Rico's energy system to be more sustainable, affordable, and responsive to customer needs. Energy Efficiency helps customers reduce their electricity consumption through improved technologies, behaviors, and building practices. These reductions lower individual energy bills and reduce overall system costs by decreasing the need for expensive fossil fuel generation. EE also supports equity by providing all customers—especially low-income and underserved communities—with access to tools that help manage energy use and costs.

Demand Response enables customers to shift or reduce their electricity usage during periods of high demand or system stress. This flexibility helps lower capacity and energy costs, enhances grid reliability, and facilitates the integration of renewable energy. DR programs offer participating customers financial incentives or bill savings in exchange for adjusting their usage in response to grid needs. Together, EE and DR contribute to a more flexible, efficient, and customer-centric energy system.

LUMA's role in promoting EE and DR are outlined in its Three-Year Plans for Energy Efficiency and Demand Response. The key deadlines regarding LUMA's first Three-Year Plan, set forth by the Energy Bureau, are as follows:

- October 1, 2025 – Draft plan due to stakeholders
- February 1, 2026 – Final draft due to the Energy Bureau

The expertise, perspectives, and contributions of stakeholders across Puerto Rico's energy community will be essential to developing a plan that meets the unique needs of all customer segments and ensures alignment with existing efforts and initiatives that share common goals to maximize cost-effectiveness.

With this document, LUMA is pleased to share the draft Energy Efficiency and Demand Response Three-Year Plan for stakeholder feedback. The plan covers the two-year period from July 1, 2026, through June 30, 2028 (FY2027 – FY2028). To allow sufficient time for review and incorporation of comments, LUMA requests that stakeholder feedback be submitted by October 31, 2025.

Importantly, LUMA notes this draft does not include EE program energy targets, savings forecasts, or budget figures. The Energy Efficiency Market Baseline and Potential Study is a key input for these elements of the Three-Year Plan, as outlined in the Regulation for Energy Efficiency. The Study was released by the Energy Bureau to LUMA and other stakeholders for comment on September 24, 2025, just six days before the draft plan was due to stakeholders. Additionally, some DR forecast and budget sections of the plan require the forthcoming Integrated Resource Plan as a key input. These missing elements are clearly noted throughout the draft.

Nonetheless, LUMA believes that stakeholder feedback at this stage—particularly on program types and market activation strategies detailed in the draft—will be incredibly valuable. This feedback, along with forthcoming results from the key inputs mentioned above, will help shape the revised final draft of the Three-Year Plan.

Contents

Tables & Figures

List of Acronyms

Acronym	Definition
ADMS	Advanced Distribution Management Systems
ADR	Automated Demand Response
C&I	Commercial, Industrial and Agriculture
CBES	Customer Battery Energy Sharing
CEECN	Community Energy Efficiency Champion Network
C&IEN	Commercial and Industrial Energy Network
COR3	Central Office for Recovery, Reconstruction and Resiliency
CSI	Community Street Lights Initiative
DBESS	Distributed Battery Energy Storage Systems
DDEC	Department of Economic Development and Commerce
DERMS	Distributed Energy Resource Management System
DOE	Department of Energy
DR	Demand Response
EE	Energy Efficiency
EESRP	Energy Efficiency System Remediation Plan
EELIA	EE Low-Income Assistance
ELRP	Emergency Load Reduction Program
EMS	Energy Management Systems
EM&V	Evaluation, Measurement, and Verification
HVAC	Heating Ventilation and Air Conditioning
IRP	Integrated Resource Plan
LED	Light Emitting Diode
ME&O	Marketing, Education, and Outreach
MW	Megawatt
MWh	Megawatt-hour
PEPP	Public Energy Policy Program
POS	Point-of-Sale
PRCT	Puerto Rico Cost Test
PREB	Puerto Rico Energy Bureau
PRHA	Puerto Rico Housing Authority
PREPA	Puerto Rico Electric Power Authority
PP&A	Program Planning and Administrative Costs
PPCA	Power Purchase Charge Adjustment
SEM	Strategic Energy Management
T&D	Transmission and Distribution
TPP	Transition Period Plan
VPPs	Virtual Power Plants

1.0 Regulatory Background

LUMA is committed to working in close collaboration with the Puerto Rico Energy Bureau ("Energy Bureau") and key stakeholders across the island to build a more reliable, resilient, and customer-focused energy system.

A central part of LUMA's effort is the development and execution of Three-Year Energy Efficiency and Demand Response Plans (Three-Year Plans). These plans are grounded in Puerto Rico's energy transformation laws, including Act 57-2014 (Puerto Rico Energy Transformation and RELIEF Act), Act 17-2019 (Puerto Rico Energy Public Policy Act), and Act 38-2017 (Uniform Administrative Procedures Act). These laws, along with the Regulation for Energy Efficiency and the Regulation for Demand Response, establish the legal and regulatory framework for planning, implementing, and evaluating EE and DR programs across the island including requirements for the development of LUMA's Three-Year Plans.

These plans are to outline the programs, budgets, and targets for a three-year period and serve as a roadmap for scaling up both EE and DR initiatives in an integrated and cost-effective manner. Consistent with its integrated Transition Period Plan, LUMA will continue to reinforce synergies among EE and DR by developing integrated Three-Year Plans.

For its first Three Year Plan, the draft of which is detailed in this document, LUMA has built off its experience with the Transition Period Plan. The Transition Period was set forth by the EE Regulation to ramp-up programs in Puerto Rico while providing time for the completion of the first Energy Efficiency Market Baseline and Potential Study. This study assesses current market conditions, quantifies cost-effective EE potential, and identifies opportunities across customer sectors. The results provide the empirical foundation for program design, resource allocation, and long-term planning.

Importantly, LUMA notes this draft does not include draft EE program energy targets, savings forecasts and budget numbers. The Energy Efficiency Market Baseline and Potential Study is a key input for these elements of the TYP as noted in the Regulation for Energy Efficiency. The Study was released by the Energy Bureau to LUMA and other stakeholders for comment on September 24, 2026, six days before the TYP draft was due to stakeholders. Additionally, some DR forecast and budget sections of the TYP require the forthcoming Integrated Resource Plan as a key input per the DR Regulation. These missing elements are noted clearly throughout the draft.

The draft Three-Year Plan, however, responds to all other requirements, presenting a detailed view of a robust portfolio of program proposals aligned with each of the strategic objectives and design principles outlined in the regulations. The final draft of the Three-Year Plan is due to the Energy Bureau on February 1, 2026, which will allow LUMA the opportunity to provide feedback to the Energy Bureau on the results of the Energy Efficiency Market Baseline and Potential Study and to incorporate its final conclusions in the final draft of the Three-Year Plan.

2.0 Overview of Three-Year Plan

An important lever for Puerto Rico's Recovery & Transformation is growing the market for energy efficiency (EE) and demand response (DR) products and services. Investments in EE and DR can deliver significant benefits to Puerto Rico by reducing electricity bills and business operating costs, creating local jobs, decreasing dependence on imported fuel, bolstering grid reliability, lowering emissions, and ultimately contributing to reduced utility infrastructure costs.

LUMA's first Energy Efficiency and Demand Response Three-Year Plan (TYP), which will run for two years from FY2027 through FY2028, builds on the solid foundation established during the Energy Efficiency and Demand Response Transition Period Plan (TPP), which began in FY2024 and continues through FY2026.

The TYP draft was developed to align with the objectives and requirements outlined in the Regulation for Energy Efficiency and the Regulation for Demand Response. In addition to sections on strategic objectives and program design, the TYP draft includes detailed information on LUMA's approach for cost-effectiveness testing, Evaluation, Measurement and Verification (EM&V), portfolio management and reporting, and performance incentives. The remainder of the TYP draft provides detailed descriptions of the individual programs within the portfolio, including each program's target customers, incentive structure, solutions to known market barriers, and tailored market activation strategies.

Selected Programs

Energy Efficiency

The TYP EE program portfolio has been structured to provide comprehensive market coverage, offering new programs and market activation strategies targeting low-income, residential, commercial, and industrial customers. The portfolio reflects a strong commitment to customer equity, cost-effectiveness, and long-term grid resilience, and will deliver energy savings that support near- and long-term progress toward Puerto Rico's energy efficiency goals.

The TYP places special emphasis on dedicated EE programs for low-income customers, offering tailored incentive programs and market activation strategies to ensure sustained education, outreach, engagement, and measurable impact. This emphasis also fulfills the requirement in the EE Regulation that the budget allocated to low-income customer programs comprises no less than twenty-five percent (25%) of the total TYP portfolio budget. This budget allocation is in addition to any EE residential programs in which low-income customers may also participate (e.g., the EE rebate program).

LUMA proposes to carry forward programs launched under the TPP into the TYP, continuing to mature program operations and improve economies of scale as participation grows. Over the past 20 months, these programs have produced over 33,000 MWh of energy savings.

These programs include:

- **Residential and Business Rebates** – Incentives for efficient appliances and equipment, with greater focus on trade ally engagement in the TYP to better reach customers.
- **Low-Income and Small Business EE Kits** – Free energy-saving kits for low-income households, distributed directly by LUMA and in partnership with local organizations and agencies.
- **In-Store Discounts** – Point-of-sale discounts for efficient appliances and equipment, supported by expanded trade ally partnerships.

The TYP also proposes several new EE programs, many of which are designed to better support underserved and harder-to-reach customers:

- **Low-Income Customers**

- **Pay-As-You-Save** – Financing for major upgrades (e.g., solar water heaters, mini-split ACs) in partnership with local financial institutions and organizations such as the Puerto Rico Green Energy Trust.
- **Low-Income Direct Install** – Free provision and installation of simple, common measures delivered through trade allies and community-based organizations.

- **Residential Customers**
  - **Residential Behavioral** – Delivers energy savings by providing residential customers with personalized Home Energy Reports (HERs), which include insights into their energy use along with tailored conservation tips and suggestions. Generates energy savings by providing residential customers with personalized information about their energy use, along with conservation suggestions and tips.

- **Small Businesses**
  - **Small Business Direct Install** – Free provision and installation of efficiency measures for the island's smallest enterprises, delivered through trade allies and local partners.

- **Large Commercial and Industrial (C&I) Customers**
  - **Strategic Energy Management (SEM)** – Training and coaching to help businesses implement energy management systems that produce near-term savings and build a pipeline of future EE projects.
  - **Custom Rebates** – Incentive program for customers pursuing comprehensive retrofits not covered by the Business Rebate program.

Key sections of the TYP outlining EE portfolio savings, budgets, targets and cost-effectiveness will be completed once the Energy Bureau finalizes the results of the final EE Market Baseline and Potential Study (the "Study"), a key input for TYP planning as outlined in the EE Regulation. The Study is also expected to result in revised energy savings targets for the TYP period.

The results of the Study may influence the mix of programs in the TYP portfolio. While awaiting the Study's results, with an eye toward minimizing costs and timeframes associated with portfolio redesign, LUMA took great care to select programs that can more easily adapt and scale up or down based on new priorities and targets revealed by the Study.

Demand Response

LUMA's DR program portfolio will evolve over the TYP from its current focus on emergency DR, which addresses persisting resource adequacy challenges, to a balanced approach that includes both emergency DR and economic DR programs.

Existing emergency DR programs carried forward into the TYP are expected to provide up to 100 MW of capacity through the end of FY2028. These include:

- **Customer Battery Energy Sharing (CBES)** – Already approved through FY2028 by the Energy Bureau via their April 3, 2025, Resolution and Order. Customers with distributed battery energy

storage systems (DBESS) will continue to be supported by aggregator partners who lead customer recruitment, enrollment, and assistance.

- **Emergency Load Reduction Program (ELRP)** – Currently approved through October 2025, ELRP provides incentives to businesses to reduce load during peak events. During the TYP, the focus will be on removing barriers to entry by identifying and piloting additional sources of load reduction, beyond backup generators, that can participate in the program.

LUMA will also prepare to launch the **Economic DR program**, which may provide cost-effective, firm capacity in support of the grid. As resource adequacy improves over time, the number of emergency DR events is expected to decrease compared to recent years, while opportunities for economic DR may increase. Given the significant residential battery capacity in Puerto Rico, LUMA believes that a program targeting residential batteries represents the most promising medium-term economic DR opportunity.

The Economic DR program will leverage existing CBES program infrastructure and the aggregator model to enable cost-effective dispatch of distributed batteries and load reduction, giving customers and aggregators new ways to support the island's energy transformation.

The Energy Bureau's June 26, 2025, Resolution and Order approved a process for LUMA to propose additional DR pilot programs for the Bureau's review and approval. During the TYP, LUMA will propose one or more pilot programs for integrated EE/DR load management strategies, such as autoDR for commercial customers and managed EV charging for EV owners. Initially, these efforts will support the ELRP program capacity growth, but over time, that capacity may also serve the Economic DR program.

Strategic Objectives

Strategic objectives set forth in the EE and DR Regulations served as the "North Star" for the development of LUMA's TYP. Current and potential programs, measures, market activation channels, were evaluated against these strategic objectives, resulting in an aligned TYP portfolio that is well-positioned to meet the final energy savings targets to be set by the Energy Bureau.

The table below outlines how LUMA's TYP portfolio of EE and DR programs addresses all strategic objectives, organized across the four broad themes: Maximize Energy Efficiency and Conservation, Market Transformation, Equitable Access, and Education and Engagement. Further details on individual programs can be found in the program descriptions.

Table 1: Strategic Objectives

EE Strategic Objectives	How Addressed in the TYP
Maximize Energy Efficiency & Conservation	
• Increase efficiency of buildings, appliances, lighting, equipment, products, industrial processes, and other end-uses • Ensure energy conservation and reduce absolute energy use through controls, system sizing, and optimized operations • Balance near-term and long-term resource acquisition to maximize total cost-effective energy efficiency and demand response	Significant ramp-up in number of energy-saving appliances and equipment covered and markets served combined with enhanced channel engagement and activation. The EE portfolio emphasizes balanced resource acquisition with long-lived measures that will deliver near-term savings that will provide sustained impact over time. The inclusion of an economic DR program will create a balanced and flexible DR portfolio that can be optimally deployed to economically serve grid needs as resource adequacy evolves over time.
Market Transformation	
• Prioritize lost opportunity markets. • Pursue market transformation strategies • Pursue innovative approaches to cost-effective acquisition • Encourage compliance with Puerto Rico's energy code	The Custom Rebate program aims to capture lost opportunities not served by other programs in the portfolio. Engagement of market actors' mid-stream and up-stream from retailers will facilitate market transformation ensuring availability of affordable EE product alternatives on the island. The Residential Direct Install, Residential Kits and Business Direct Install programs are innovative ways to deliver low-cost, high-value products to under-served and hard-to-reach segments. Integrated EE/DR pilot programs will provide a solid foundation for new innovative and transformative sources of EE and DR capacity. Market activation working with local government, organizations, and trade allies will increase awareness of Puerto Rico's energy codes and emphasize energy-saving opportunities of code compliance and model codes.

EE Strategic Objectives	How Addressed in the TYP
Equitable Access	
• Provide all customers with the opportunity to participate • Reduce energy burden for low-income residents and small businesses • Provide comprehensive services including education, audits, rebates, and financing	Expanded TYP portfolio offers new tailored, accessible programs for harder-to-reach segments such as low-income or small business customers. At least 25% of the overall TYP EE budget will be allocated to programs exclusively targeting low-income customers as required by the Energy Efficiency Regulation. EE Direct Install and Kit programs will reduce energy burden for participating low-income households and small businesses while helping them identify additional energy-saving opportunities through mini energy audits. Pay As You Save financing program will help customers overcome capital barriers to investing in major equipment such as Solar Water Heaters. Custom Rebate and Strategic Energy Management programs activated through the C&I Network market channel will offer support to guide C&I customers towards more strategic approaches to energy retrofits and energy management.
Education & Engagement	
• Work with service providers to offer contractor training and tools • Provide information and education to empower customers • Coordinate with Public Energy Policy Program (PEPP) and other contributing entities • Seek stakeholder input on cost-effective programs	Collectively, LUMA's extensive market activation efforts across all sectors, segments and channels will build awareness, trust and participation in Puerto Rico's nascent EE and DR market and programs. Market activation efforts include enhanced trade ally support, offering targeted training and streamlined tools to help identify efficiency opportunities and simplify the application process. Extensive program branding and communications will build awareness of EE and DR opportunities across all sectors, segments and channels. LUMA will work closely with PEPP and other entities to leverage respective strengths to maximize savings opportunities across all major sources of EE identified in the EE regulation. Stakeholder engagement is, and will continue to be, a critical priority for LUMA program planning and continual improvement process.

Program Design

The EE Regulation also outlines best practice program design principles, which LUMA used to guide every aspect of the portfolio and program design, alongside the strategic objectives discussed above.

Below are the best practice program design principles outlined in Section 4.02(A) of the regulation, along with how these principles will be addressed through the TYP. Further details on how the TYP portfolio and individual programs address specific program design principles are provided in the program descriptions and elsewhere in this document.

Table 2: Program Design Requirements

Category & Program Design Principle	How addressed in the TYP
Regulatory Alignment	
1. Align with achieving 30% energy savings by 2040 and annual targets	TYP portfolio will go much broader and deeper than the TPP portfolio increasing its contributions to the 30% energy savings target by 2040. LUMA, a contributing entity, is still awaiting assignment of its portion of the 30% target by the Energy Bureau which will inform annual, TYP EE savings targets.
2. Pass at least one cost-effectiveness test (Article 5)	Each TYP program selected for the portfolio, excluding low-income programs and emergency DR programs, will be designed to be cost-effective based on the Puerto Rico Cost Test.
Market Coverage & Equity	
3. Serve all relevant markets	The TYP portfolio will align with the results of the Market Baseline and Potential Study to serve all relevant markets related to various EE measures.
4. Serve all customer classes	The TYP portfolio proposes to serve all customer classes except for Commonwealth and municipal facilities. LUMA will coordinate with the PEPP and other Contributing Entities responsible for energy efficiency in government buildings as well as with the Energy Bureau to clarify LUMA's role in serving this customer class.
5. Address all relevant end-uses	The TYP portfolio will align with the results of the Market Baseline and Potential Study to serve all relevant end-uses such as cooling and water heating.

Category & Program Design Principle	How addressed in the TYP
7. Promote customer equity across all classes	The TYP portfolio provides significantly enhanced and targeted coverage of low-income customers and other hard-to-serve segments. For instance, the EE Direct Install and Kit programs will reduce energy burden for participating low-income residential and small businesses.
8. Ensure Low-Income and Hard-to-Reach customers are marketed and served	The Pay As You Save financing program for low-income customers will overcome capital barriers for major equipment such as Solar Water Heaters.
Market Transformation	
6. Overcome all relevant market barriers	Segment-specific market barriers known through TPP program experience and available local data and research were carefully considered during program design. Further details on known market barriers and how they will be addressed through the TYP are provided in the following section.
9. Leverage trade allies to market, deliver, and install EE/DR measures	Residential AC contractors have been pivotal to the success of the Residential Rebates program. LUMA's extensive market activation efforts will extend beyond Residential AC contractors to cover all key channels and trade allies to build awareness, trust and participation in the EE and DR programs. Trade ally focused market activation efforts include training and tools to help allies and customers identify and implement energy efficiency opportunities and streamline the program application process.
10. Avoid lost opportunities by acting when measures are most cost-effective	Custom Rebate and Strategic Energy Management programs will encourage comprehensive audits of business energy savings opportunities to capture lost opportunities

Market Barriers

Despite the recognized benefits of EE in reducing customer costs and enhancing energy resilience, several market barriers impede the successful implementation and scaling of EE programs in Puerto Rico. Some of these barriers also apply to advancement of the DR market. Effective public policy and coordination among all contributing entities, as outlined in the EE Regulation, will be essential to overcoming these structural barriers. For example, building code compliance and enforcement in the Puerto Rico's building stock is outside LUMA's scope as a contributing entity and, therefore, not part of this TYP. However, LUMA will engage with the responsible contributing entities to explore potential future programs—such as incentives for advanced code compliance in new construction.

The TYP outlines how LUMA will do its part to address the primary barriers through its thoughtful program design and a strong emphasis on stakeholder engagement and market activation.

Table 3: Key Program Barriers

Barrier		Solution offered in the TYP
Financial Affordability	Energy efficiency equipment is more expensive than the standard, less efficient equipment Lack of capital and limited third-party financing for major energy saving equipment and energy upgrades by low-income customers	TYP incentive programs will greatly improve the affordability of energy efficient products and equipment. Direct Install and Residential Kit programs will deliver non-cost, high-value products Pay As You Save financing program for low-income customers will address capital barriers for major equipment such as Solar Water Heaters.
Lack of Knowledge	Limited awareness of the potential savings, health benefits, and comfort improvements associated with EE upgrades	Extensive program branding and communications efforts will build awareness of EE and DR benefits and program opportunities across all sectors, segments and channels. Significantly enhanced trade ally support includes training and tools and partnerships to market programs to customers LUMA's strategic engagement and partnerships with a wide range of stakeholders will support development and deployment of solutions to build greater awareness and trust with customers.
Program Services and Products	Limited local availability of experienced vendors and workforce providing services needed to support LUMA program deployment.	Continued public policy targets and support for the utility role as a contributing entity will provide the market opportunity for EE and DR program services/solutions to grow. LUMA through its procurement, community and market engagement activities will continue to support local market development.

Barrier		Solution offered in the TYP
EE Product Availability	Limited local availability of energy efficient equipment may inhibit program impacts and uptake.	Continued public policy targets and approval of LUMA's TYP incentive programs will spur market growth for energy-efficient products and equipment. The TYP proposes significantly enhanced trade ally engagement which will help further identify key gaps in products availability and create opportunities for collaboration to fill those gaps.
Qualified Workforce for Customer Solutions	Achieving Puerto Rico's long-term energy goals requires a robust local workforce qualified to deliver TYP related services and deploy solutions.	The TYP plan will include collaboration with Trade Allies and other organizations to provide tools, resources and workforce training critical for TYP program delivery.

Market Activation

The energy efficiency (EE) and demand response (DR) markets in Puerto Rico are still in their infancy. TPP programs have been operating in the market for just over a year. As a result, within the TYP, LUMA must continue to pursue significant investments in marketing—or market activation—through key channels that can connect customers with programs and solutions in cost-effective and scalable ways. Engagement with residential heating, ventilation, and air conditioning (HVAC) contractors, for example, has been—and will increasingly be—pivotal in connecting customers with HVAC incentives offered through LUMA's program portfolio.

Market activation will include enhanced efforts in program branding and communications, increased investments in targeted customer outreach and technical support, and the development of strategic partnerships with a wide variety of key stakeholders who already have strong access to and engagement with customers. This includes, but is not limited to, government agencies, contractors, community organizations, trade allies, and aggregators. These channels will be essential to building awareness, trust, and participation in EE and DR programs.

Highlights of the key components of LUMA's market activation strategy are provided below and throughout the TYP.

Table 4: Market Activation Categories and Descriptions

Market Activation	Descriptions
Program Branding and Communications	LUMA will strengthen customer understanding of EE and DR and its benefits through clear, accessible branding and communications. Messaging will highlight how customers can reduce energy bills, improve resilience and comfort, and contribute to grid stability. With approved funding, LUMA will restart stakeholder engagement with PEPP and others with the objective of developing an EE brand under which programs will be marketed. LUMA-led communications will be delivered through various channels such as the website, bill inserts, Regional Service Centers, social media and print media.
Stakeholder Engagement	LUMA will continue regular engagement with a broad-based, and expanding group of stakeholders, whose perspective will be essential for ensuring programs stay relevant to the Puerto Rican market and responsive to customer evolving needs and priorities. Nonprofits, academia, government agencies, federally and locally funded energy program offices, trade allies and customers themselves are examples of key stakeholder groups that LUMA targets for engagement in its work.
Strategic Partnerships	LUMA will deepen and cultivate new strategic partnerships with key market channels: • **Community/Government Agencies**: LUMA will seek to work with local community groups and government agencies to help raise awareness of the benefits of energy efficiency and demand response for households; and to build partnerships with entities to market/deploy LUMA programs in their communities. • **Trade Allies**: LUMA will build the Trade Ally Network which will serve as a one-stop shop for a range of activities including raising awareness of emerging technologies, LUMA programs, and the benefits of EE and DR for their businesses and their customers. The network will also provide opportunities for workforce training and development and working with eligible trade allies to help deploy supporting initiatives (e.g. treasure hunts, energy audits/assessments) that facilitate LUMA program uptake. We will also continue to partner with aggregators to engage, enroll and dispatch customers in LUMA's DR programs.

Tailored Customer Outreach and Technical Assistance	Working across LUMA departments, LUMA will deepen tailored customer outreach approaches via the launch of a C&I Network – a community and resources hub providing information, tools, resources and technical assistance to advance energy efficiency in businesses; and the EE Low-Income Assistance (EELIA) initiative in which LUMA will conduct direct outreach to low-income customers that may benefit from LUMA energy efficiency programs.

Figure 2-1: Example TYP Market Activation Efforts

Cost-Effectiveness

The projected cost-effectiveness for each plan year will be provided at the program, sector, and portfolio levels.

[This information will be included after LUMA has reviewed the EE Potential Study and incorporated new data and insights into the TYP.]

Benefits

The projected benefits for each planned year will be broken down at the program level.

[This information will be included after LUMA has reviewed the EE Potential Study and incorporated new data and insights into the TYP.]

Budget

The projected budget for each planned year will be broken down at the program, sector, and portfolio levels.

[This information will be included after LUMA has reviewed the EE Potential Study and incorporated new data and insights into the TYP.]

Energy Savings

The projected energy savings for each plan year will be broken down at the program, sector, and portfolio levels.

[This information will be included after LUMA has reviewed the EE Potential Study and incorporated new data and insights into the TYP.]

Participants

The projected participant counts for each plan year will be broken down by customer class at the program, sector, and portfolio levels.

[This information will be included after LUMA has reviewed the EE Potential Study and incorporated new data and insights into the TYP.]

3.0 Energy Efficiency Program Offerings

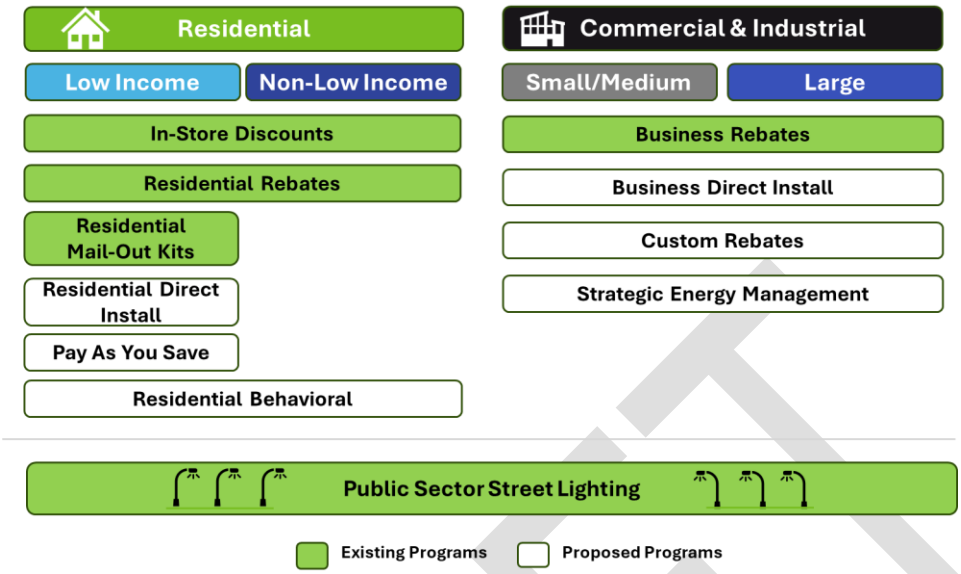
The EE Regulation outlines that the purpose of the TPP is to facilitate the ramp-up of energy efficiency programs in Puerto Rico, while allowing time for the completion of the first Market Baseline Study and Potential Study, and to support the development of the energy efficiency services workforce.

While the Market Potential study is not yet available, LUMA has developed an interim TYP Energy Efficiency portfolio that builds on the foundation established by TPP programs. Since the first program launched in January 2024, these programs have cumulatively achieved 33,000 MWh of energy savings.

LUMA notes this draft does not include EE program energy targets, savings forecasts, or budget figures. The Energy Efficiency Market Baseline and Potential Study is a key input for these elements of the TYP, as outlined in the Regulation for Energy Efficiency. The Study was released by the Energy Bureau to LUMA and other stakeholders for comment on September 24, 2025, just six days before the TYP draft was due to stakeholders. Additionally, some DR forecast and budget sections of the TYP require the forthcoming Integrated Resource Plan as a key input. These missing elements are clearly noted throughout the draft.

An overview of the proposed programs in the TYP EE portfolio is provided in Figure 3-1. Programs highlighted in green are continued from the TPP, while programs highlighted in white are new additions for the TYP. Each program is informed by lessons learned, market insights, and persisting market barriers observed throughout the TPP period.

Figure 3-1: TYP Energy Efficiency Portfolio



The portfolio is aligned with the strategic objectives and design principles of the Energy Efficiency Regulation, and is designed to deliver long-term savings, drive customer engagement, and support Puerto Rico's 2040 energy efficiency targets.

As discussed, Puerto Rico's energy efficiency market is relatively immature, and activation of the various EE market segments necessary to achieve long-term energy savings is a core strategy of the TYP. Market activation is critical to building awareness, fostering consumer confidence, and delivering programs at scale. LUMA also anticipates that these market activation activities will evolve as the program matures to address changing customer needs and market conditions.

LUMA will implement a phased ramp-up strategy by continuing full-speed deployment of existing programs and launching new program pilots in FY2027. By FY2028, most programs are expected to reach full deployment and optimal delivery, as outlined in Figure 3 2.

Figure 3-2: EE Multi-Year Ramp-Up Strategy

The following sections provide details on the proposed EE programs, beginning with Residential programs, followed by Commercial & Industrial programs. Program savings targets, budgets, and the list of program measures included in this draft will be finalized based on the results of the Market Baseline and Potential Study.

Residential Energy Efficiency Programs

The TYP residential EE program portfolio builds on the strong foundation of successful TPP offerings such as In-Store Discounts, Residential Rebates, and Residential EE kits, while expanding offerings to improve uptake among hard-to-reach customers segments through continuous improvement and innovation. The TYP phase introduces new initiatives including Pay-As-You-Save, Residential Direct Install, and Residential Behavioral programs—each designed to meet customers where they are with practical, cost-effective solutions that reduce energy use and lower bills.

LUMA will activate participation through personalized engagement strategies and deliver measurable results across diverse residential customer segments.

In-Store Discounts

Program Description and Services Offered

The In-Store Discounts Program, first launched in July 2024, delivers immediate point-of-sale (POS) savings to customers purchasing high-efficiency products at participating retail locations. Retailers enter into formal agreements with LUMA, committing to stock eligible measures, display program signage, and engage in seasonal promotional efforts. Financial incentives are applied per unit, enabling customers to

choose energy-efficient options at prices comparable to or lower than baseline alternatives—directly supporting reduced electricity consumption and lower utility bills.

In the TYP, LUMA will activate this market through new midstream and upstream partnerships with retail trade allies to enhance availability of energy-efficient products and expand In-Store Discounts to local retail chains, including those located in low-income communities.

Eligible customers

All customers purchasing eligible measures from participating retailers.

Eligible Measures

LUMA currently offers incentives for air conditioners and ceiling fans and is proposing additional new measures. Eligible measures, incentives, and program elements are updated as needed based on market conditions, customer participation, and stakeholder feedback, while maintaining stable program offerings. The results of the Market Baseline and Potential Study will also be a key input to program updates.

Table 5: Example Eligible Measure End-Uses – In-Store Discount

End-Use	Eligible Measures
HVAC	Ceiling fans
	Mini-Split air conditioners
	High efficiency box fans
Water Heating	Tankless water heater
Appliance	Energy Star washer/dryer
Refrigeration	Energy Star refrigerator

Market Barrier and Risk Analysis

Table 6: Market Barrier and Risk Analysis – In-Store Discount

Category	Type	Strategies to Overcome Market Barrier and Risk
Financial	Barrier	Provide incentives on target measures to reduce customer costs. These incentives will reduce efficient measures incremental cost relative to baseline technologies.
Lack of Knowledge	Barrier	Displays in participating stores highlighting the customer cost savings and energy savings of the measure relative to baseline technology. Host high-impact events (HIEs) and both formal and informal staff training at retailers.
Lack of Retailer Participation	Barrier	Increasing outreach and partnerships with retailers, distributors and manufacturers with be key to market activation. The program is open to any retailer, manufacturer or distributor who can offer discounts on eligible measures at the point of sale, and is

Category	Type	Strategies to Overcome Market Barrier and Risk
		able to meet LUMA's program requirements, including requirements for the incentive redemption and data tracking process. Increase trade ally engagement to secure buydown programs at independent, local retailers (i.e., National, Ace Hardware, True Value). To address retailer lack of capacity, work with manufacturers and distributors to discount products upstream before they reach the retailer.
Product Availability	Risk	Coordinate with retailers, distributors and manufacturers for pre-season inventory planning to avoid supply and demand imbalance. Use historical sales data to forecast demand. Ensure the availability of efficient measures in store with good shelf space and update the list of eligible measures in consultation with participating retailers.

Market Activation

Table 7: Market Activation – In-Store Discount

Program Branding & Communications	Stakeholder Engagement	Strategic Partnerships	Tailored Customer Outreach & Technical Assistance
✓	✓	✓ Trade Ally Network	–

Residential Rebates

Program Description and Services Offered

The Residential Rebate Program provides financial incentives to customers for the installation of high-efficiency equipment and measures in their homes. Prescriptive incentives are offered on a per-unit basis for qualifying measures, with incentive levels and eligible equipment reviewed regularly and updated as needed to reflect market conditions and customer demand.

Customers must complete an application to receive incentives. Since its launch in January 2024, LUMA has processed over 25,000 rebate applications and will continue to invest in scaling the program to achieve greater economies of scale during the TYP period. The goal will be to ensure timely customer service while increasing capacity to process growing volumes of applications. Previously, most customers submitted applications via email. As part of the TYP, LUMA will launch an online rebate program portal, which will significantly streamline application processing while maintaining a rigorous review and approval process. LUMA will also explore offering instant payment options (e.g., Venmo, PayPal) for customers with approved applications.

The TYP market activation strategy for the rebate program will continue to focus on program communication and engagement with trade allies. For example, HVAC contractors—who are on the front lines for marketing energy-efficient air conditioners and water heaters—will remain key targets for LUMA's Trade Ally Network activities. LUMA will also explore deeper partnership with these and other installers to facilitate rebate

applications on behalf of customers, further improving program outcomes, operational efficiency, and customer service. In addition, LUMA will seek synergies with the In-Store Discount program, working with trade allies to stock and promote rebate-eligible products sold in stores. Lastly, low-income customers can receive tailored support through the EE Low-Income Assistance Initiative.

Eligible customers

All residential customers.

Eligible Measures

The program will continue to provide incentives for a broad set of energy end uses, such as air conditioning, water heating, and cooking. Eligible measures, incentives, and program elements are updated as needed based on market conditions, customer participation, and stakeholder feedback, while maintaining stable program offerings. The results of the Market Baseline and Potential Study will also be a key input to program updates.

Table 8: Example Eligible Measure End-Uses – Residential Rebate

End-Use	Eligible Measures
HVAC	Mini-Split air conditioners
	Window AC
	AC tune up
Water Heating	Solar water heater
	Tankless water heater
Refrigeration	Energy Star freezer
	Energy Star refrigerator

Market Barrier and Risk Analysis

Table 9: Market Barrier and Risk Analysis – Residential Rebates

Category	Type	Strategies to Overcome Market Barrier and Risk
Financial	Barrier	This program will provide rebate incentives on target measures to reduce customer costs. These incentives will reduce efficient measures incremental cost relative to baseline technologies.
Lack of Knowledge	Barrier	In addition to expanded program communications, LUMA will engage deeply with trade allies to increase contractor awareness of available and emerging energy efficiency measures in the market, the benefits of more energy efficient technologies for customers, and how they can market them.
Equipment Accessibility	Barrier	LUMA will work with Trade Ally Network members to improve stocking and availability of energy efficiency products locally.

Category	Type	Strategies to Overcome Market Barrier and Risk
Qualified Installers	Barrier	LUMA will work with Trade Ally Network members to help make qualified installers more accessible to LUMA customers investing in high efficiency products and equipment.
Application Processing Delays	Risk	Streamline process via online application portal and instant payment options. Improve communication with customers on delays. Daily LUMA and contractor monitoring of application volume and protocols to prevent backlogs.

Market Activation

Table 10: Market Activation – Residential Rebate

Program Branding & Communications	Stakeholder Engagement	Strategic Partnerships	Tailored Customer Outreach & Technical Assistance
✓	✓	✓ Trade Ally Network	✓ EE Low-Income Assistance initiative

Residential Kits

Program Description and Services Offered

The Residential EE Kits Program, launched in February 2024, provides customers with free, easy-to-install products such as advanced power strips, showerhead aerators, and faucet aerators, along with information about LUMA's energy efficiency incentive programs. EE Kits are an effective way to open lines of communication with hard-to-reach customer segments and build interest in other LUMA incentive programs.

For the TYP, this popular program will be available exclusively to low-income customers. A key market activation strategy will involve partnering with government agencies and community organizations to help distribute kits directly to customers. In addition, LUMA will engage customers directly through the EE Low-Income Assistance initiative.

Eligible customers

All low-income residential customers.

Eligible Measures

Eligible measures, incentives, and program elements are updated as needed based on market conditions, customer participation, and stakeholder feedback, while maintaining stable program offerings. The results of the Market Baseline and Potential Study will also be a key input to program updates.

Table 11: Example Eligible Measure End-Uses – Residential EE Kits

End-Use	Eligible Measures
Lighting	LED nightlights
Plug in Load	Power strip

End-Use	Eligible Measures
Water Heating	Shower head aerator
	Faucet aerator
HVAC	ECM tabletop fans

Market Barrier and Risk Analysis

Table 12: Market Barrier and Risk Analysis – Residential EE Kits

Category	Type	Strategies to Overcome Market Barrier and Risk
Financial	Barrier	This program will provide energy efficiency kits to customers for free.
Lack of Knowledge	Barrier	Kits are provided with clear instructions for customer installation of included measures. LUMA is also focusing on working with key community groups and government agencies who can distribute kits directly to low-income communities while providing knowledge about energy efficiency and its benefits, and other LUMA programs.
Non-Installation Risk	Risk	Provide clear, engaging installation instructions. Use follow-up emails and texts to encourage installation as well as working with community agencies for in-home support or verification. Assess non-installation risk with customer satisfaction surveys.

Market Activation

Table 13: Market Activation – Residential EE Kits

Program Branding & Communications	Stakeholder Engagement	Strategic Partnerships	Tailored Customer Outreach & Technical Assistance
✓	✓	✓ Community & Government Agencies	✓ EE Low-Income Assistance initiative

Residential Direct Install

Program Description and Services Offered

The Residential Direct Install Program is a new initiative that provides low-income households with the free provision and installation of cost-effective energy efficiency measures. After installing the measures, installers will conduct a “treasure hunt” to gather information about other equipment in the home. Following the visit, the installer will provide a list of additional energy-saving opportunities and information on relevant LUMA and government programs that may offer further financial support.

LUMA will accelerate market activation by partnering with community organizations, government agencies, and trade allies that have strong ties to low-income communities. These partnerships will help build a network of trained installers who can deliver high-quality service and effective energy savings. In addition,

LUMA will promote the program through targeted communications and direct outreach efforts via the EE Low-Income Assistance initiative.

Eligible customers

The pilot program will be open to low-income residential customers only.

Eligible Measures:

This program will include the provision and installation of easy-to-install measures such as aerators and higher efficiency box fans. The program will make available LED lighting to household where lighting savings opportunities persist. Eligible measures, incentives, and program elements are updated as needed based on market conditions, customer participation, and stakeholder feedback, while maintaining stable program offerings. The results of the Market Baseline and Potential Study will also be a key input to program updates.

Table 14: Example Eligible Measure End-Uses – Residential Direct Install

END-USE	ELIGIBLE MEASURES
Lighting	LED bulbs
HVAC	ECM box fans
Plug in Load	Power strip
Water Heating	Shower head aerator
	Faucet aerator

Market Barrier and Risk Analysis

Table 15: Market Barrier and Risk Analysis – Residential Direct Install

Category	Type	Strategies to Overcome Market Barrier and Risk
Financial	Barrier	This program will provide installation of measures to customers free of charge.
Lack of Knowledge	Barrier	LUMA will provide training to trade allies, community and government agencies to raise awareness among their communities and customers about the program and the benefits of energy efficiency. LUMA will use program communications and direct outreach via the EE Low-Income Assistance initiative.
Limited Delivery Capacity and Quality Installations	Risk	LUMA will work with community and government agencies and trade allies to build a network of installers trained to ensure high-quality service and effective energy savings. Explore efficiencies through mobile and innovative technology solutions that will help standardize "treasure hunts", assessments and program marketing.

Market Activation

Table 16: Market Activation – Residential Direct Install

Program Branding & Communications	Stakeholder Engagement	Strategic Partnerships	Tailored Customer Outreach & Technical Assistance
✓	✓	✓ Trade Allies ✓ Community & Government Agencies	✓ EE Low-Income Assistance Initiative

Residential Behavioral

Program Description and Services Offered

The Residential Behavioral Program is a new initiative designed to help customers save energy by providing regular, personalized information about their energy use, along with practical tips for conservation. As part of this effort, customers receive Home Energy Reports (HERs), which offer tailored insights and comparisons to similar households to encourage energy-saving actions. Communications are based on each household's consumption patterns, allowing customers to compare their usage to similar homes and learn about ways to reduce energy use.

The program implementation approach includes data collection, analysis, and distribution of customized reports and educational materials, along with ongoing outreach to encourage participation. This behavioral approach complements traditional energy efficiency measures by motivating customers to make informed choices that benefit both themselves and the broader energy system. All savings are tracked and verified using standard industry methods that compare customer energy use over time.

While a small percentage of behavioral program participants may also participate in other EE programs, the impact of any potential double counting is expected to be minimal due to the large number of behavioral participants. Any potential double counting will be examined during the Evaluation, Measurement, and Verification (EM&V) process.

Eligible Customers

All residential customers, including low-income and multifamily units.

Eligible Measures

This program will target behavioral measures and measures offered through other LUMA incentive programs. Eligible measures, incentives, and program elements are updated as needed based on market conditions, customer participation, and stakeholder feedback, while maintaining stable program offerings. The results of the Market Baseline and Potential Study will also be a key input to program updates.

Market Barrier and Risk Analysis

Table 17: Market Barrier and Risk Analysis – Residential Behavioral

Category	Type	Strategies to Overcome Market Barrier and Risk
Financial	Barrier	This program will funnel customers to rebates and other LUMA programs providing incentives for energy efficiency measures.

Lack of Knowledge	Barrier	This program's focus is on building knowledge and awareness of the benefits of energy efficiency through tailored HERs, 1-on-1 communications and messaging to customers.
Low Engagement or Response Rates	Risk	Test a variety of messaging using best practice behavioral social science with locally developed content to establish Puerto Rican market best practices for behavioral programs. Explore delivery through a broader range of communication channels informed by local market research.

Market Activation

Table 18: Market Activation – Residential Behavioral

Program Branding & Communications	Stakeholder Engagement	Strategic Partnerships	Tailored Customer Outreach & Technical Assistance
✓	✓	✓	✓ EE Low-Income Assistance Initiative

Pay As You Save

Program Description and Service offered

Pay As You Save (PAYS) is a new targeted financing solution designed to help low-income customers overcome upfront cost barriers to major energy-saving upgrades. Through the program, participants can access high-efficiency technologies—such as solar water heaters and mini-split air conditioners—without any upfront cost.

A low- or zero-interest loan will be offered through a LUMA partner, who will administer the loan approval and repayment process. While LUMA will not be directly involved in loan administration, it will provide the upfront capital to its partner(s). As customers repay their loans, the program funds will be recycled and made available to future participants—extending the impact of the initial investment and maximizing overall energy savings.

This program is designed to work in tandem with incentives available through LUMA's Residential Rebate Program. By combining financial support with program incentives, PAYS brings the upfront cost of qualifying equipment down to zero, making energy savings accessible, equitable, and scalable.

Market activation will be driven by loan partners, trade allies, and community and government agencies serving low-income households. In addition, LUMA will promote the program through targeted communications and direct outreach efforts via the EE Low-Income Assistance initiative.

Eligible Customers

Residential low-income customers.

Eligible Measures

The PAYS program pilot will focus on solar water heaters and potentially mini-split air conditioners. Eligible measures, incentives, and program elements are updated as needed based on market conditions, customer

participation, and stakeholder feedback, while maintaining stable program offerings. The results of the Market Baseline and Potential Study will also be a key input to program updates.

Table 19: Example Eligible Measure End-Uses – Pay As You Save

END-USE	ELIGIBLE MEASURES
Water Heating	Solar water heater
HVAC	Mini-split air conditioners

Market Barrier and Risk Analysis

Table 20: Market Barrier and Risk Analysis – Pay As You Save

Category	Type	Strategies to Overcome Market Barrier and Risk
Financial	Barrier	This program will combine rebates and loan program incentives to help customers overcome upfront cost barriers for major energy efficiency upgrades.
Lack of Knowledge	Barrier	This program's focus is on building knowledge and awareness of the benefits of energy efficiency through tailored 1-on-1 communications and messaging to customers.
Default Risk	Risk	Select loan program partners who offer robust customer engagement, service and support to minimize default risk such as pre-qualifying customers by providing free energy audits.

Market Activation

Table 21: Market Activation – Pay As You Save

Program Branding & Communications	Stakeholder Engagement	Strategic Partnerships	Tailored Customer Outreach & Technical Assistance
✓	✓	✓ Trade Allies ✓ Community Agencies	✓ EE Low-Income Assistance Initiative

Commercial and Industrial Energy Efficiency Programs

LUMA's Commercial and Industrial (C&I) portfolio is designed to deliver meaningful, long-term energy savings while supporting the broader transformation of Puerto Rico's energy landscape. The portfolio encourages customer adoption of more comprehensive approaches to energy management at their facilities. Through a balanced set of offerings—including Business Energy Efficiency Rebates, Custom Rebates, Business Direct Install, and Strategic Energy Management (SEM)—LUMA will provide solutions to serve the broadest range of C&I customers, regardless of where they are in their energy management journey.

Program market activation through targeted communications, the Trade Ally Network, and the C&I Network will help drive customer participation and address key market barriers. Through these channels, LUMA will

deploy integrated marketing of business program options to minimize customer confusion and guide participants to the program that best fits their needs.

LUMA will collaborate with community and government agencies, as well as trade allies, to address workforce development barriers identified during program implementation. These partnerships will help increase the availability and accessibility of a qualified workforce to support customer energy management efforts.

Additionally, LUMA will design streamlined program administration processes and supportive infrastructure to maximize program and portfolio cost-effectiveness, enable program scaling, and ensure a high-quality customer experience.

Business Energy Efficiency Rebates

Program Description and Service offered

The Business Energy Efficiency Rebates Program, launched in May 2024, offers standard financial incentives to all commercial and industrial customers for installing eligible energy-efficient equipment. These prescriptive incentives focus on long-lived measures offered on a per-unit basis for qualifying equipment, with incentive levels and eligible technologies reviewed regularly and revised as needed to reflect market conditions and customer demand.

Customers must apply to have rebate projects pre-qualified. Once approved, they must implement the approved projects within a specified timeframe.

LUMA will continue investing in the program to achieve greater economies of scale during the TYP period. The focus for this phase will be on ensuring timely customer service while increasing capacity to process a growing volume of customer applications. While most customers previously submitted applications via email, LUMA will launch an online rebate portal during the TYP to streamline application processing significantly—while maintaining a rigorous review and approval process.

LUMA will also explore offering instant payment options (e.g., Venmo, PayPal) for customers with approved applications who prefer not to wait for checks to arrive by mail.

Another key focus during the TYP is to increase program uptake from TPP levels. Market activation for the Rebates Program will continue to emphasize engagement with trade allies, while expanding awareness and capacity through the C&I Network and the Strategic Energy Management Program, described further below.

LUMA will also explore deeper partnerships with trade allies who can offer complementary services to their customers—such as application support, energy assessments and audits, and project implementation—to improve program outcomes, operational efficiency, and customer experience.

Eligible Customers

The program is open to all commercial and industrial customers.

Eligible Measures

Eligible measures, incentives, and program elements are updated as needed based on market conditions, customer participation, and stakeholder feedback, while maintaining stable program offerings. The results of the Market Baseline and Potential Study will also be a key input to program updates.

Table 22: Example Eligible Equipment – Business Energy Efficiency Rebates

Eligible Equipment	
Fryer	Window film
Convection oven	Ice machine
Combination oven	Exterior lighting
Commercial refrigerator	Exit sign
Commercial freezer	Solar water heater
Energy Star window air conditioner	Commercial air conditioning
Pool Pump Valuable Frequency Drive (“VFD”)	Mini-split air conditioner
Occupancy sensor	LED troffer replacement
Omni directional LED replacement	Linear fluorescent LED replacement
Chiller	

Market Barrier and Risk Analysis

Table 23: Market Barrier and Risk Analysis – Business Energy Efficiency Rebates

Category	Type	Strategies to Overcome Market Barrier and Risk
Financial	Barrier	The program provides incentives to reduce the up-front cost of high-efficiency equipment.
Lack of Knowledge	Barrier	The program will be delivered through tailored engagement via the C&I Network, and work with trade allies to increase knowledge, awareness of LUMA programs and benefits of energy efficiency.
Qualifier Installers	Barrier	Work with trade allies (i.e. associations, trade schools, unions manufacturers) and community and government agencies to identify skills gaps, and provide workforce training programs to fill those gaps, and certify qualified professionals.

Accessibility to equipment	Barrier	Coordinate with trade allies such as distributors, manufacturers and retailers to ensure stock availability;
Application processing delays	Risk	Streamline process via online application portal and instant payment options. Improve communication with customers on delays. Daily LUMA and contractor monitoring of application volume and protocols to prevent backlogs.

Market Activation

Table 24: Market Activation – Business Energy Efficiency Rebates

Program Branding & Communications	Stakeholder Engagement	Strategic Partnerships	Tailored Customer Outreach & Technical Assistance
✓	✓	✓ Trade Ally Network	✓ C&I Network

Business Direct Install

Program Description and Services Offered

The Business Direct Install Program is a new initiative that will provide and install cost-effective energy efficiency measures for small businesses. After installing the initial measures, installers will conduct a "treasure hunt," gathering information about other energy-using equipment at the business. The installer will then follow up with a list of additional energy-saving opportunities and information on relevant LUMA and government programs that can offer financial support for project implementation.

LUMA will accelerate market activation by partnering with community and government agencies and trade allies who already have strong relationships with small businesses. These partnerships will help build a network of trained installers capable of delivering high-quality service and effective energy savings. In addition, LUMA will promote the program through targeted communications and direct outreach efforts via the C&I Network.

Eligible Customers

The program is open to small businesses which represent the lowest 10th percentile in terms of annual energy use.

Eligible Measures:

LUMA will continue to make available LED lighting to businesses where lighting savings opportunities persist. Eligible measures, incentives, and program elements are updated as needed based on market conditions, customer participation, and stakeholder feedback, while maintaining stable program offerings. The results of the Market Baseline and Potential Study will also be a key input to program updates.

Table 25: Example Eligible Measure End-Uses – Business Direct Install

END-USE	ELIGIBLE MEASURES
Lighting	Multiple LED bulbs
Plug in Load	Power strip
Water Heating	Shower head aerator
	Faucet aerator
HVAC	AC tune-up

Market Barriers

Table 26: Market Barrier and Risk Analysis – Business Direct Install

Category	Type	Strategies to Overcome Market Barrier and Risk
Financial	Barrier	This program will provide rebates to cover labor and installed measures offered in this program.
Lack of Knowledge	Barrier	LUMA will provide training to trade allies, community and government agencies to raise awareness among their communities and customers about the program and the benefits of energy efficiency. LUMA will also use program communications and direct outreach to build customer knowledge.
Limited Delivery Capacity and Quality Installations	Risk	In addition to increasing installer recruitment efforts working with trade allies, community and government agency programs, provide installers with rigorous training for every aspect of the program from customer engagement best practices to installation tutorials for a variety of measures. The program will also provide installers with access to technical support services.
Resource Constraints	Risk	Identify sources of in-kind support and funding to bolster resources available to execute the program. Explore efficiencies through mobile and innovative technology solutions that will expedite installer program data capture, "treasure hunts", assessments and program marketing.

Market Activation

Table 27: Market Activation – Business Direct Install

Program Branding & Communications	Stakeholder Engagement	Strategic Partnerships	Tailored Customer Outreach & Technical Assistance
✓	✓	✓ Trade Ally Network ✓ Community Agencies	✓ C&I Network

Custom Rebates

Program Description and Service offered

The Custom Rebate Program is a new initiative designed to support business customers by providing incentives for energy efficiency retrofit projects that fall outside the list of prescriptive measures eligible under the Business Rebate Program. This enables LUMA to capture lost opportunities for cost-effective energy efficiency investments. The program will leverage as much of the Business Rebate Program's infrastructure and processes as feasible to maximize cost-effectiveness.

Similar to the Business Rebate Program, customers must apply for pre-qualification. Custom Rebate Program applications will require additional documentation to assess the cost-effectiveness of custom projects, including project price quotes from vendors, company cost share, and projected energy and non-energy savings.

LUMA will prioritize processing applications from customers who have completed the Strategic Energy Management (SEM) program (described further below), or who submit results of an energy assessment or audit from a qualified auditor with their application. This program element will help streamline LUMA's application processing by prioritizing projects that have already been rigorously analyzed and evaluated. Additionally, it will encourage greater market uptake of energy management best practices and services, helping drive long-term energy savings.

As with the standard Business Rebate Program, once projects are pre-qualified, customers must implement approved projects within a specified timeframe.

During this TYP period, LUMA will pilot a custom incentive structure based on performance-based savings, typically calculated per kWh saved, and potentially capped at a percentage of the total project cost. Incentives will aim to cover the incremental costs of higher-efficiency equipment retrofits—similar to the Business Rebate Program—and up to a set percentage of costs for projects involving energy management and process improvements. During the pilot, LUMA will evaluate the feasibility of prioritizing applications based on alignment of savings with peak usage, the impact of incentives on cost-effectiveness, and the overall impact of individual applications.

Similar to other business programs, the key market activation channels for this program will be the Trade Ally Network and the C&I Network. While open to all C&I customers, due to the proactive planning and technical requirements involved in developing a successful custom rebate application and executing post-installation requirements, LUMA expects that the majority of businesses able to take advantage of the program in the near term will be those with greater energy management experience and maturity.

In addition to program marketing, a key focus of the new C&I Network—and the Strategic Energy Management program described in more detail below—will be to help customers mature their energy management approach and improve their capacity to take advantage of this program in the future.

Eligible customers

The pilot program during the first TYP is open to all commercial and industrial customers.

Eligible Measures

During this TYP, only retrofit measures resulting in electricity savings in existing facilities will be eligible. LUMA will consider expanding the program to allow for projects in new construction in the future.

Because the program emphasizes broad-based retrofit measure eligibility covering equipment replacement as well as process and facility improvements, a list of eligible measures is not provided. As discussed above, applications will go through a rigorous review process by LUMA, and eligible measures will have to meet the following key qualifying criteria:

- Market maturity of measure and the existence of a widely accepted, credible methodology for calculating and verifying energy savings.
- Cost-effective based on the Puerto Rico Cost Test.

Eligible measures, incentives, and program elements are updated as needed based on market conditions, customer participation, and stakeholder feedback, while maintaining stable program offerings. The results of the Market Baseline and Potential Study will also be a key input to program updates.

Market Barrier and Risk Analysis

Table 28: Market Barrier and Risk Analysis – Custom Rebates

Category	Type	Strategies to Overcome Market Barrier and Risk
Financial	Barrier	The program provides incentives to reduce the up-front cost of equipment and improvements that will deliver cost-effective energy savings.
Lack of Knowledge	Barrier	The key market activation channels for increasing customer awareness and knowledge of the program will be the Trade Ally Network and the C&I Network.
Market Services	Barrier	Through program design and requirements, LUMA will encourage the growth of the energy assessment and audit services market in Puerto Rico. In addition, LUMA will work with community and government agencies
Qualifier Installers	Barrier	Work with trade allies (i.e. associations, trade schools, unions manufacturers) and community and government agencies to identify skills gaps, provide workforce training programs to fill those gaps, and certify qualified professionals.
Program Technical Requirements and Complexity	Barrier	Through the Trade Ally and C&I Networks provide targeted training for customers and trade allies to help them navigate the program requirements effectively. Support them with user-friendly tools like calculators and templates to simplify energy assessments, savings estimates. Encourage customers to join the Strategic Energy Management program which will help customers develop the internal processes and analysis needed to prepare Custom Rebate applications.

Market Activation

Table 29: Market Activation – Custom Rebates

Program Branding & Communications	Stakeholder Engagement	Strategic Partnerships	Tailored Customer Outreach & Technical Assistance
✓	✓	✓Trade Ally Network ✓Community Agencies	✓ C&I Network

Strategic Energy Management

Program Description and Service Offered

The Strategic Energy Management (SEM) program is a new initiative designed to help business customers develop a comprehensive approach to energy management that delivers and sustains long-term energy savings, while also achieving near-term savings that reinforce the business case for SEM.

The program has a strong implementation focus, empowering facility staff with the knowledge and tools to identify, implement and sustain energy improvements. It builds staff and organizational energy management capacity through group training and tools, while also providing one-on-one coaching to implement core SEM practices such as facility energy data analysis, energy modeling and baselining, process assessments and operational controls. By the end of the program period, participating customers will have saved energy and developed a prioritized list of additional energy-saving projects for future investment.

SEM facilities will also benefit from prioritizing access to other LUMA business incentive programs, as well as follow-up trainings and workshops. LUMA will support SEM facilities in tracking year-over-year energy performance improvements and identifying non-energy benefits delivered by the program.

During this TYP period, LUMA will pilot an incentive structure based on facility-wide impact. Since this program targets low-cost and no-cost changes, the incentive structure will likely be smaller than those offered through programs such as Custom. LUMA will cover training costs, as this is the largest financial hurdle to SEM participation.

During the pilot period, LUMA will engage the market through the C&I Network, initially targeting the island's larger energy users and providing program services at no cost. Due to the high value of implementation support provided and the strong leadership commitment required for customer success, company leadership must sign a participation agreement. This agreement commits to the necessary staff time, resources, and leadership support needed to implement and sustain SEM practices at the relevant facility or facilities.

Eligible Customers

Larger energy-using customer facilities that can meet program requirements and commitments.

Market Barrier and Risk Analysis

Table 30: Market Barrier and Risk Analysis – Strategic Energy Management

Category	Type	Strategies to Overcome Market Barrier and Risk
Financial	Barrier	This program will help customers identify low-cost and no-cost measures and facilitate access to other business incentive programs to help defray the costs for more expensive energy-saving projects.
Lack of Knowledge	Barrier	Through the C&I Network, LUMA will share resources and SEM case studies that customers can use to communicate the SEM business case to leadership and secure their commitment to join the SEM program. The program addresses gaps in SEM knowledge by providing free training, tools and coaching to tailor best practice energy management practices to company and facility-specific realities.
Qualified Workforce	Barrier	In addition to training customer facility staff, LUMA will structure SEM program delivery to provide "on the job" training for new local SEM trainers and coaches selected through an application process.

Market Activation

Table 31: Market Activation – Strategic Energy Management

Program Branding & Communications	Stakeholder Engagement	Strategic Partnerships	Tailored Customer Outreach & Technical Assistance
✓	✓	✓ Trade Ally Network	✓ C&I Network

Streetlighting Conversion Program

As a result of natural disasters including hurricanes and earthquakes, it was originally estimated that 70% of the ~ 500,000 streetlights in Puerto Rico are damaged and require repair, replacement, or upgrade. After completing more thorough assessment, it was noted that the findings significantly exceeded the original estimates as nearly 430,00 streetlights across Puerto Rico have been identified as damaged and needing repair, replacement, or upgrade. This program's main objectives are increasing efficiency, enhancing reliability, improving resiliency to withstand extreme weather events, and reducing operation and maintenance costs. This program improves public safety and customer experience by restoring streetlights to working order.

Within this effort, "Community Streetlight Initiative," a $750 million FEMA-funded program, is designed to repair or replace the streetlight infrastructure and upgrade to applicable codes and standards, such as light emitting diode (LED) technology and the use of stronger poles that can withstand 160 mph winds.

By the end of FY2027 LUMA plans on completing nearly 180,000 streetlight repairs under the federally funded initiative. Additional nonfederal capital funding sources would be required for work to continue in FY2028 to complete the remaining repairs identified during the assessments.

Estimated energy savings and Program Costs

Table 32: Estimated Energy Savings and Program Cost – Streetlight Program

Description	FY27 Estimate	FY28 Estimate*	Total
Planned Unit Replacements (#)	14,500	TBD	TBD
Total Costs ($)	**$18.3M**	**TBD**	**TBD**

4.0 Demand Response Program Offerings

LUMA's emergency Demand Response (DR) programs—the Community Battery Energy Sharing (CBES) and Emergency Load Reduction Program (ELRP)—will continue throughout the TYP period, supporting grid reliability as generation resource adequacy challenges persist.

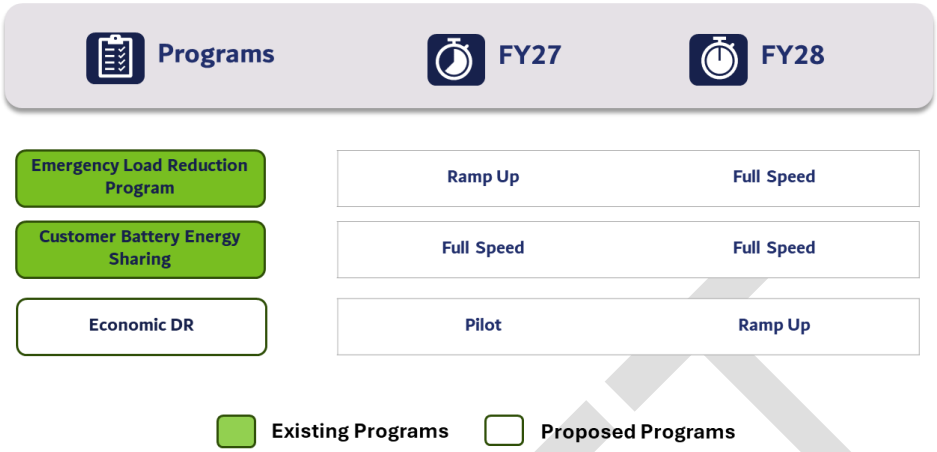
The Customer Battery Energy Sharing (CBES) program, bolstered by LUMA's new Distributed Energy Resource Management System (DERMS) platform, will continue to rely on market activation through its aggregator partners. The Emergency Load Reduction Program also offers significant response potential and LUMA will continue to work with customers to overcome barriers to participation. Additionally, LUMA will pilot further load reduction measures, including integrated EE/DR strategies, to support grid reliability.

As new utility-scale generation and energy storage resources come online, overall grid adequacy will improve, resulting in fewer emergency DR activations. With stronger resource adequacy, market opportunities for economic DR may begin to emerge.

Per the DR Regulation, any economic DR program must demonstrate cost-effectiveness under the Puerto Rico Cost Test, which will certainly mean lower incentive levels compared to LUMA emergency DR programs. Therefore, customer participation in economic versus emergency DR will be driven not by incentive price, but by the scale and timing of economic DR opportunities as resource adequacy improves. Although the pace of these improvements remains uncertain, LUMA considers it prudent to begin positioning the DR portfolio during this TYP to encompass both emergency and economic DR program options.

Given Puerto Rico's substantial residential battery capacity and the positive experience of aggregators and customers with CBES, LUMA views an economic DR program targeting customers with DBESS as the most promising near-term opportunity for economic DR. Accordingly, LUMA proposes an economic DR program that leverages existing CBES infrastructure and aggregator relationships to enable cost-effective dispatch of DBESS and load reduction—giving customers and aggregators new ways to support the island's energy transformation.

Figure 4-1: DR Multi-Year Ramp-Up Strategy



Emergency Load Reduction Program (ELRP)

Program Description and Service offered

LUMA is proposing that the Emergency Load Reduction Program (ELRP), originally approved by the Energy Bureau to help mitigate the Summer 2025 generation shortfall through October 31, 2025, be extended through the end of the first TYP period. The rationale is that near-term resource adequacy will require continued exploration of all potential sources of emergency DR to support the grid during emergency conditions. Load reduction or shifting is another valuable source of demand response (DR) capacity in Puerto Rico that has not yet been fully tapped.

LUMA proposes to continue the structure and incentive levels of the ELRP program approved in June 2025. The ELRP program compensates large commercial and industrial customers for temporarily reducing their electricity use during emergency DR events. Interested customers can enroll by working with LUMA to establish a Firm Load Reduction Commitment plan and signing a participation agreement. If unable to meet their commitment, participants must notify LUMA in advance of events being called.

Enrolling in customer backup generator capacity has been the near-term focus of the program. However, the program was designed to allow customers to use a broader range of eligible load reduction strategies to contribute DR capacity. Since administrative delays and perceived customer risks related to air permitting regulations, enrollment of backup generation DR capacity to date, as a result, LUMA will invest in piloting other load reduction strategies, such as integrated EE/DR load management through autoDR for commercial buildings and managed EV charging. LUMA will also explore the use of load management aggregators that could aggregate residential and smaller C&I loads.

These efforts will be proposed using the DR pilot proposal process approved by the Energy Bureau in their June 26, 2025, Resolution and Order.

Estimated Energy Savings and Program Costs

The total program costs include customer incentives plus the program administration costs. The table below shows the peak demand savings, incentive costs, administrative costs and total costs for each year of the TYP.

Table 33: Energy Capacity and Program Costs – Emergency Load Reduction Program

Description	FY27	FY28
Peak Demand Capacity (MW)	50	50
Incentive Costs	$ 9,318,750	$ 9,318,750
Administrative Costs	$ 2,266,000	$ 2,266,000
Total Costs	$ 11,586,777	$ 11,586,777

Eligible Customers

Large Commercial and Industrial Customers with at least 1 MW of peak load reduction are eligible capacity. Aggregators of customers with 1 MW of peak load reduction capacity may also participate.

Customer Incentive

There are two incentives associated with this program. One incentive is associated with capacity commitment in kW, and the other is associated with actual performance during an event which is measured in kWh. The corresponding incentives proposed are $6 per kW and $0.25 per kWh respectively. Aggregators will have the flexibility to establish their own customer-facing incentive structure. As a result, compensation to individual customers may vary by aggregator, depending on their respective business model and market strategy.

Market Barrier and Risk Analysis

Table 34: Market Barrier and Risk Analysis – Emergency Load Reduction Program

Category	Type	Strategies to Overcome Market Barrier and Risk
Limited controls to manage and shift load	Barrier	Program will explore opportunities with C&I participants, trade allies and potential aggregators for control devices to enable automated control of load reduction resources by either the customer or the utility.
Lower than expected enrollment	Risk	The program will reach this market through LUMA's enhanced C&I Network channel through which it will conduct direct outreach to alleviate customer concerns with using backup generators as a load reduction measure. The C&I network will also be critical for recruiting customers to pilot other sources of load reduction DR capacity.
Event Opt-Out Risk	Risk	Program requires advance notice of non-participation and sets clear limits on opt-out frequency and timing in program participant agreement. Customer case management through the C&I Network will keep in close communication to mitigate opt-out risk, or to define remedial actions.

Category	Type	Strategies to Overcome Market Barrier and Risk
Inability to Meet Firm Load Commitment	Risk	Customer response will be monitored against Firm Load Commitment Plans (FLRP) using interval meter data or other verifiable data sources Customer case management through the C&I Network will keep in close communication with customers to identify any persisting factors that may warrant modification to the FLRP.
Customer Equipment Risk	Risk	Participation in the program may cause additional wear and tears to customer backup generators resulting in costs for repairs and increased maintenance. Customer incentive payments are designed to compensate customers for costs related to these types of risks.
Regulatory Risk	Risk	Customers using backup generation for load reduction may have limited desire or ability to manage additional permissions and reporting requirements that air permitting authorities may require to participate in emergency events.

Market Activation

Table 35: Market Activation – Emergency Load Reduction Program

Program Branding & Communications	Stakeholder Engagement	Strategic Partnerships	Tailored Customer Outreach & Technical Assistance
✓	✓	✓ Aggregators ✓ Trade Ally Network	✓ C&I Network

Customer Battery Energy Sharing (CBES)

Program Description and Service offered

The Customer Battery Energy Sharing (CBES) program leverages distributed batteries as an energy resource during grid emergencies.

The CBES pilot program began in fiscal year 2024. The Energy Bureau's April 3, 2024, Resolution and Order approved CBES as a full program to operate through FY2028. LUMA implements the program in collaboration with aggregators, which serves as the program's key market activation channel. Eligible residential and commercial customers are recruited and enrolled through and approved demand response (DR) aggregator. Aggregators are also responsible for dispatching battery resources of participating customers during CBES program events called by LUMA, and for compensating those customers for the energy provided.

The Energy Bureau's May 20, 2025, Resolution and Order approved an auto-enrollment mechanism for CBES. As a result, there are now more than 80,000 participants enrolled. LUMA expects CBES enrollment and capacity to continue growing in the TYP period.

Estimated Energy Savings and Program Costs

The total program costs include customer incentives plus the program administration costs. The table below shows the peak demand savings, incentive costs, administrative costs and total costs for each year of the TYP.

Table 36: Energy Savings and Program Costs – Customer Battery Energy Sharing

Description	FY27	FY28
Peak Demand Capacity	47 MW	52 MW
Incentive Costs	$24,509,185.80	$23,964,536.90
Administrative Costs	$4,901,837.10	$4,792,907.38
Total Costs	$29,411,022.90	$28,757,444.28

Eligible Customers

The Program targets customers with DBESS batteries that are registered in the LUMA Net Energy Metering (NEM) Program.

Customer Incentive

LUMA compensates aggregators at a standardized rate of $1.25 per kWh dispatched to the grid under the CBES program. Each aggregator, in turn, has the flexibility to establish its own customer-facing incentive structure. As a result, compensation to individual customers varies by aggregator, depending on their respective business model and market strategy.

Market Barrier and Risk Analysis

Table 37: Market Barrier and Risk Analysis – Customer Battery Energy Sharing

Category	Type	Strategies to Overcome Market Barrier and Risk
Data Validation & Settlement	Barrier	Provide training and standardized tools to help collect and report accurate device-level data.
Underutilization of Enrolled Battery Capacity	Risk	Discuss with aggregators the potential reasons for underutilization of enrolled battery capacity. Refine program design to incentivize battery discharge during events; adjust compensation to reflect performance.
Opt-Out Risk	Risk	Require immediate notice of non-compliance and set clear limits on opt-out frequency and timing in participant agreements.

Market Activation

Table 38: Market Activation – Customer Battery Energy Sharing

Program Branding & Communication	Stakeholder Engagement	Strategic Partnerships	Tailored Customer Outreach & Technical Assistance
✓	✓	✓ Aggregators	–

Economic Demand Response

Program Description and Service offered

LUMA will introduce a new economic DR program during this TYP period. The program will initially target Distributed Battery Energy Storage Systems (DBESS), which LUMA believes represent the most promising near-term source of economic DR opportunity.

To inform the program's design, LUMA examined several economic DR models across North America. The proposed program[1] [2] will mirror these models by offering fixed capacity payment in exchange for a firm capacity commitment from participating customers or aggregators, along with a variable energy payment based on the amount of energy delivered during activation events. Firm capacity must be demonstrated through testing and actual response to activation requests, with penalties assessed for failure to meet committed capacity when called upon.

The economic DR program will build on the customer-aggregator approach used in the CBES program. As with CBES, LUMA will work directly with aggregators who will recruit and enroll customers and be responsible for providing customer care and services. Each aggregator will continue to offer its own unique business models and incentive structure. Another important connection with CBES is that the economic DR program will utilize the same administrative infrastructure and DERMS platform, helping to realize economies of scale across the DR portfolio.

Many of the economic DR programs reviewed are consolidating disparate offerings into a single, "all-source" and technology-agnostic program. Consistent with this approach, LUMA aims to expand the economic DR program over time to include other technologies, such as automated demand response (AutoDR) for commercial customers and managed EV charging for electric vehicle owners. LUMA will

[1] In Ontario, Canada, the Independent Electricity System Operator has conducted several annual Capacity Auctions that allow supply-side and demand-side resources to compete on an equal basis for the provision of capacity to the Ontario market. Aggregators have been very successful in these auctions, and "virtual capacity" (DR) has grown over time to represent approximately one-third of the capacity provided (631 MW of 2026 MW for the Summer 2025 Obligation Period as compared to 1395 MW of "physical capacity") See Capacity Auction – Post Auction Report, Independent Electricity System Operator, June 9, 2025. https://reports-public.ieso.ca/public/CA-PostAuction/PUB_CA-PostAuction_2025.xml\

[2] In California, PG&E recently proposed a new program called the Automated Response Technology (ART) program that was launched in May 2025. This is a technology-agnostic, pay-for-performance program offered to all residential customers via third-party aggregators (PG&E can also directly act as a provider for the program). Events can be called throughout the year with limits on maximum number of dispatches and maximum event duration, and either day-ahead or day-of notification. This program is bid as an economic resource in the California ISO (CAISO) market, with PG&E as the market participant. Third-party aggregators are paid based on set capacity prices ($/kW) that vary by month and are required to submit capacity nominations weekly or monthly. There is no payment for energy reduced during an event. AMI data is used for performance measurement and third-party aggregators are subject to penalties if the settled performance is lower than the nominated capacity.

leverage the results of integrated EE/DR load management pilots described in the ELRP section above to support expansion of the economic DR program beyond DBESS for the next TYP.

Estimated energy Capacity and Program Costs

The Regulation for DR requires resource acquisition forecast for economic DR to be aligned with the IRP. A forecast for capacity and costs of the economic DR program will be provided after finalization of the IRP.

Eligible Customers

The Program targets customers with DBESS batteries that are registered in the LUMA Net Energy Metering (NEM) Program.

Customer Incentive

Consistent with the approach used elsewhere, the incentive for the Economic DR program will include a fixed capacity payment ($ / kW-month) and a variable energy payment ($ / kWh). The incentive level will be determined when market conditions for economic DR start to emerge based on system needs, projected capacity costs and market demand.

As with CBES, the incentive will be provided directly to aggregators and incentives to participants will be determined and distributed by aggregators based on each aggregator's unique "business model" and customer value proposition.

Market Barrier and Risk Analysis

Table 39: Market Barrier and Risk Analysis – Economic Demand Response

Category	Type	Strategies to Overcome Market Barrier and Risk
Customer Confusion	Barrier	Work with aggregators to develop unified outreach materials and enrollment portals that clearly differentiate the goals and terms of the various DR programs available to enable customers to make an informed choice as to which DR program would be best for them.
Double Enrollment	Barrier	Program administration processes and DERMS controls will ensure that participants with DBESS will only be able to participate in a single DR program – either CBES or economic DR – at a given time, but not both.
Lower than expected enrollment	Risk	Once the market begins to emerge, aggregators will be key in educating customers on economic DR program benefits and opportunities to increase enrollment.
Non-compliance with Firm Capacity Commitment	Risk	The program will include penalties to aggregators for non-compliance which will serve as a deterrent.

Market Activation

Table 40: Market Activation – Economic Demand Response

Program Branding & Communications	Stakeholder Engagement	Strategic Partnerships	Tailored Customer Outreach & Technical Assistance
✓	✓	✓ Aggregators	–

5.0 Program Administration and Implementation

As LUMA transitions from the TPP to the TYP, its program administration and implementation approach must also evolve to ensure scalability, adaptability, and measurable impact across a broader set of energy efficiency (EE) and demand response (DR) programs.

LUMA's strategy focused on providing administrative oversights to a third-party implementation contractor, who held primary responsibility for portfolio execution. The contractor brought specialized expertise in utility EE and DR program delivery, enabling LUMA to launch TPP programs rapidly by leveraging existing systems, processes, and material resources that would have otherwise required significant time and effort for LUMA to develop internally.

Under the TYP, LUMA will expand number of internal staff to maintain administrative oversight over a growing portfolio of programs while taking on a greater leadership role in guiding strategic direction and implementation activities. LUMA also plans to issue new Request for Proposals (RFPs) to secure essential implementation support from contractors and other service providers needed to deploy and manage programs effectively.

Implementation activities expected to be included in future RFPs will include those in the following categories:

- Customer Call Center Support
- Market Activation – or Marketing - Services
- Customer Energy Engineering Services
- Application and Incentive Processing
- Program Software Solutions
- Evaluation, Measurement & Verification (EM&V)

RFPs for these services are anticipated by the second quarter of FY2027 or sooner depending on the timing of Energy Bureau approval of the TYP and associated budgets. All procured services will be managed directly by LUMA to ensure program success, regulatory compliance, and strong coordination with local stakeholders.

6.0 Performance Incentives

As required by the EE legislation, LUMA has developed a draft performance incentive mechanism to be introduced in the TYP. A well-designed incentive mechanism encourages LUMA to go beyond compliance—driving innovation, efficiency, and customer engagement.

Performance incentives in other jurisdictions were reviewed, and many base some or all the utility performance incentive on net benefits realized.[3] [4] One of the most important objectives of LUMA's EE and DR programs is to provide net benefits to Puerto Ricans over the long term, as determined through the Puerto Rico Cost Test. Given the primacy of net benefits among the many EE and DR program objectives, LUMA proposes that the performance incentive for the TYP should focus on driving net benefits delivered by EE and DR programs, as determined by the Puerto Rico Cost Test.

Compared with the other metrics and mechanisms used among utilities, focusing performance incentive on net benefits realized will, among other things:

- Encourage LUMA to pursue long-lived measures (all other things equal)
- Encourage LUMA to minimize EE and DR spending (which will increase net benefits, all other things equal)

The key features and elements of the performance incentive proposed by LUMA for the TYP are:

- **Target Incentive:** If LUMA achieves the proposed net benefits for the period, it will receive a performance incentive equal to 5% of its budgeted EE and DR spending for the period.
- **Performance and Incentive Threshold:** LUMA must achieve at least 50% of the proposed net benefits for the period to receive an incentive. If LUMA achieves 50% of the proposed net benefits for the period – it will receive a performance incentive equal to 2.5% of its budgeted EE and DR spending for the period.
- **Maximum Incentive:** If LUMA achieves 150% or more of the proposed net benefits for the period – it will receive a performance incentive equal to 7.5% of its budgeted EE and DR spending for the period.

The actual incentive realized by LUMA will be based on linear interpolation between the Incentive Threshold and the Maximum Incentive using the net benefits realized. As noted, If LUMA fails to achieve 50% of the proposed net benefits for the period, no performance incentive will be payable. Conversely, if LUMA achieves more than 150% of the proposed net benefits for the period, the performance incentive will be capped at 7.5% of its budgeted EE and DR spending for the period.

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[3] For example, in Massachusetts, the value component of the utility reward (representing 38.5% of the reward) is based on net benefits realized, with the savings components (representing 61.5% of the reward) is based on benefits realized. MA-EEAC, *Performance Incentive Overview,* (July 17, 2024), https://ma-eeac.org/wp-content/uploads/Peformance-Incentive-Overview_71724.pdf.

[4] Erin Malone & Alice Napoleon, *Earning Adjustment Mechanisms for Energy Efficiency in New York* (Synapse Energy Economics, March 27, 2023), https://www.synapse-energy.com/sites/default/files/EAMs%20White%20Paper_Final%2022-017.pdf

7.0 Long-Term Resource Planning

The EE regulation requires that each TYP includes an EE resource acquisition plan through 2040 based on long-term EE targets assigned to LUMA by the Energy Bureau based on the results of the EE Potential Study.

The Regulation for DR also requires resource acquisition forecast for economic DR aligned with the Integrated Resource Plan.

[This information will be provided after finalization of the Integrated Resource Plan, and after the EE Potential Study has been reviewed by LUMA and new information and insights from the study have been incorporated.]

8.0 Reporting and Planning

The objective of this section is to propose a reporting and planning approach that aligns with important fiscal year deadlines and filings via other dockets related to TYP portfolio funding sources such as the EE Rider.

Reporting

LUMA will submit quarterly and annual reports to the Energy Bureau detailing progress under the TYP. The reports will be prepared in accordance with applicable regulatory requirements and are intended to provide a comprehensive overview of LUMA's performance and progress in implementing EE / DR initiatives. Each report covers activities conducted during the relevant program period, evaluates performance against targets, and presents detailed assessments across financial, operational, and customer engagement dimensions.

- **Quarterly reports** will be submitted within 60 days of each quarter's end and will include updates on implementation, secured EE / DR resources, and other required metrics as outlined in the EE and DR regulations.
- **Year-End Reports** will be submitted within 120 days of each quarter's end and will have the same format and structure as the quarterly report but will highlight results for the entire fiscal year in addition to Q4 results.
- **Annual Program Evaluation Report** will be submitted 120 days after the completion of fiscal year[5] summarize EM&V results and related planned program changes and improvements.

Preliminary filing dates for the reports are shown in Table 9-1. EM&V report timing will require confirmation by EM&V contractor.

[5] Submission timeline will be confirmed upon consultation with the selected EM&V contractor.

Table 41: Schedule for Reports

Report on Period Coverage	Report Type	Report Filing Date
Q1 FY27	Quarterly	November 2026
Q2 FY27	Quarterly	February 2027
Q3 FY27	Quarterly	May 2027
Q4 FY27 & Full Year FY27	Year-End Report	September 2027
FY27	EM&V Report	TBD - EM&V contractor
Q1 FY28	Quarterly	November 2027
Q2 FY28	Quarterly	February 2028
Q3 FY28	Quarterly	May 2028
Q4 FY28 & Full Year FY28	Year-End Report	September 2028
FY28	EM&V Report	TBD - EM&V contractor

Quarterly and Year-End Report Structure

The quarterly and year-end reports are intended to document quarterly and annual performance and provide timely updates on overall portfolio and program performance. The reports will show YTD results along with the specific quarterly results. The details of the contents of these reports are outlined below.

Table 42: Proposed Quarterly Report and Annual Report Contents

Section	Description
1. Portfolio Performance Metrics	Detailed information on LUMA's EE / DR portfolio and program performance during the quarter (quarterly report), YTD and past program year (annual report). • Benefits • Energy Savings • Participants • Cost-Effectiveness (Annual Report)

Section	Description
2. Budget & Expenditures	Budget vs. actual expenditures for the reporting period, broken out by budget category at the program, sector, and portfolio level. Categorized by customer class: • Residential • Low Income • Commercial & Industrial Assessment tables comparing actual vs. planned costs, categorized by: • Customer Incentives • Administration Costs • Market Activation Costs List of Professional and Technical Services Costs Explanations for any variances >15% on any category will be provided
4. Market Activation & Program Updates	Updates on market activation activities to help increase customer adoption of programs.

Planning

The EE Regulation also requires that annual updates to TYP fiscal year plans and budgets be submitted. LUMA is proposing to submit annual plan revisions in March to adequately inform EE Rider reconciliation process filed under NEPR -MI-2020-0001 in April of each year. In addition, LUMA is proposing dates for filing the next TYP. Knowing those dates well in advance will support planning and budgeting efforts.

Table 43: Annual Plan Type and Filing Date

Plan Period	Plan Type	Filing Date
FY28	Annual TYP Plan Revisions	March 2027
FY29 - FY31	TYP Plan Draft	August 1, 2027
FY29 - FY31	TYP Plan Final	December 1, 2027

Appendices

Appendix A: Evaluation, Measurement, and Verification

This appendix sets out the objectives and high-level approach for Evaluation, Measurement and Verification (EM&V) of the TYP portfolio.

Programs that have a least one year of operation, such as rebate programs introduced during the TPP period, will receive an annual evaluation starting in FY2027. For most new programs being introduced in the middle of TYP and thus will less than a year of operation, LUMA does not believe full EM&V would be cost-effective for the program pilot year. Rather, a lower cost pilot evaluation will be completed at the end of each TYP year.

EM&V results will be applied to full program launches, subsequent reporting periods and/or to the next Three-Year Plan (FY2029 – FY2031) as appropriate.

A.1.1 EM&V APPROACH

Existing Program EM&V

EM&V for each existing program (defined as programs that have been operational for at least a full year) will determine the following:

A. Impact Evaluation

- Verified Gross First Year Energy Savings (MWh) to a confidence level of 90% and relative precision of +/-10%
- Verified System Peak Period Capacity Savings (MW)
- Verified Net First Year Energy Savings (MWh) based on the program-specific fixed Net-to-Gross ratio
- Verified Net System Peak Period Capacity Savings (MW) based on the program-specific fixed Net-to-Gross ratio
- Proposed Program-Specific Net-to-Gross ratios, reflecting free-ridership, spillover and other factors, to apply during the next Three-Year Period (FY2029 – FY2031)

B. Process Evaluation

- Participating customer satisfaction and recommendations for future program enhancements
- Non-participant barriers to participation and recommendations to address these barriers and increase participation rates in the future
- Partner and stakeholder satisfaction and recommendations for future program enhancements
- Partner and stakeholder measure-level feedback and recommendations for future program enhancements
- Recommendations to improve and streamline program processes (application, rebate processing, etc.)

C. Market Effects Evaluation

- Market effects such as changes in product availability, pricing, and customer purchase intentions will be assessed for relevant programs to measure broader impacts beyond direct participation.

D. Program-Specific Considerations

- LUMA anticipates that the EM&V objectives set out above will be adequate for most of the programs. There are, however, some program-specific evaluation requirements to support future program planning as set out below:

Table 44: Program-Specific Evaluation Requirements

Program	Program-Specific Evaluation Requirements
Residential Rebates	AC operating hours and system peak period operation (i.e., how participants use their air-conditioning equipment). This information will be used to update residential AC-related energy savings and system peak demand savings estimates for the next Three-Year Period (FY29 – FY31)
Residential Direct Install	Spillover to and change in participation for other LUMA residential programs and energy saving measures in general.
Business Direct Install	Spillover to and change in participation for other LUMA business programs and energy saving measures in general
Residential Behavior	Attribution of savings to other LUMA programs as relevant to minimizing double-counting of savings.
Strategic Energy Management	Attribution of savings to other LUMA programs as relevant to minimizing double-counting of savings.

New Program Pilot EM&V

Each new program pilot would be subject only to the high-level process evaluation described above. LUMA does not believe that full impact evaluation would be a cost-effective investment for only partial year of program pilot operation.

A.1.2 FIXED NET TO GROSS RATIOS

Given the relative immaturity of the EE ecosystem within Puerto Rico and the fact that no EM&V has been undertaken on any of the TPP programs, LUMA proposes to set the Net-to-Gross (NTG) ratio for each program to a constant uniform program-specific value that will be applied to all Verified Gross Savings over the TYP period.

The proposed NTG ratio for each of the TYP programs is provided below based upon LUMA's market insights and input from experience elsewhere.

Table 45: Program Net to Gross Ratios

Program	NTG
In Store Discounts	0.85
Residential Rebates	0.85
Residential Mail Out Kits	0.95
Residential Direct Install	0.95
Residential Behavioral	1.00

Program	NTG
Pay as You Save	0.95
Business Rebates	0.85
Business Direct Install	0.95
Custom Rebates	1.00
Strategic Energy Management	1.00
Streetlighting Conversion	0.85

Initial NTG was derived based on common program design aspect:

- For programs that directly measure energy savings, through a specialized tool or models, a NTG of 1.0 was given. This includes Residential Behavioral, Custom Rebates and Strategic Energy Management.
- For programs that provide measures full measure cost coverage or involve the direct installation of measures through program staff and NTG of 0.95 was given. This includes kits programs, Direct install programs and Pay as You Save.
- All other programs were given a NTG of 0.85.

Once programs are evaluated a NTG can be assessed and provided as an update to these initial values. Mature utility programs such as ComEd[6] often received a NTG of the overall portfolio at 90% or more. Since this is early in the LUMA program we provided conservative NTG estimates but we expect the estimation to improve over time.

As new information becomes available from EM&V, LUMA will update the program-specific NTG ratios which would then be applicable in the next TYP.

A.1.3 EM&V SERVICES PROCUREMENT APPROACH

LUMA will issue an RFP to qualified EM&V providers seeking proposals for EM&V services. LUMA would be pleased to provide a draft of the RFP to the Bureau and revise the RFP based on feedback from the Bureau. The RFP will include:

- Descriptions of each of the programs and participant / savings / spending projections for the TYP.
- Objectives for the evaluation including any program-specific evaluation requirements as set out above
- Proposed schedule for each program evaluation based on sequencing described in the following section

Each proponent will be required to provide the following information in their proposals:

- Detailed EM&V approach by program and pilot to be covered in the scope of work, including research methodologies, sample designs, use of historic consumption data, etc.
- Data requirements, such as participant lists, program data, trade ally names, etc.
- Potential risks and risk mitigation plans

[6] https://www.ilsag.info/wp-content/uploads/ComEd-CY2024-Summary-Impact-Evaluation-Report-2025-04-28-Final.pdf

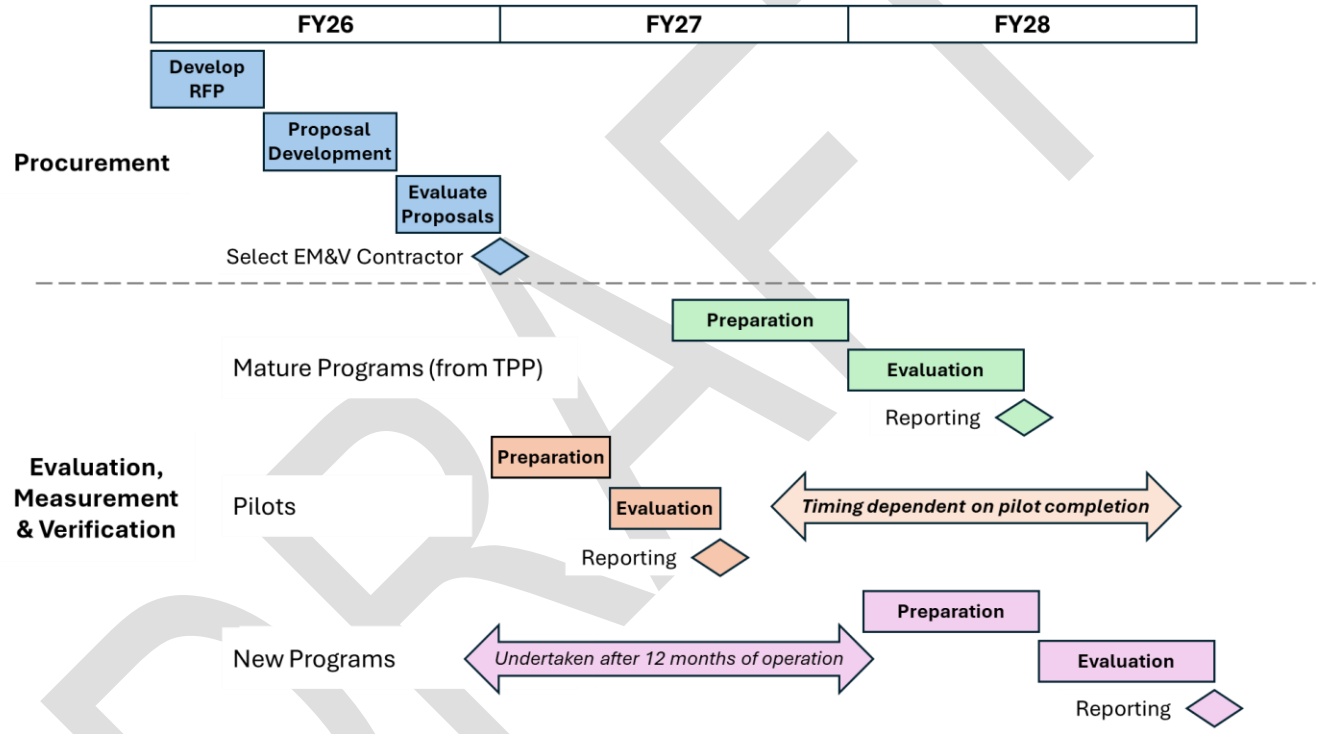
- Overall evaluation schedule
- Project team and qualifications
- Proposed budget by program
- Proposed subcontractors, if any

A.1.4 TYP EM&V SCHEDULE

The proposed EM&V schedule program lays out a schedule for existing programs and new program pilots will be evaluated during this TYP period.

The approximate timing for the key EM&V activities are provided below.

Figure - A 0-1: EM&V Schedule



A.1.5 EM&V BUDGET

For budgeting purposes, LUMA has assumed that EM&V costs will be approximately 5% of the overall portfolio spending for TYP. Actual EM&V costs will vary based on the specifics of the EM&V approach developed with the selected EM&V supplier and the number of programs the Energy Bureau approves for the final TYP.

Appendix B: LUMA Cost Effectiveness Test Tool

To assess the cost-effectiveness of the TYP programs and portfolio as required under the EE Regulation, LUMA developed the Puerto Rico Cost Test Tool (the "tool"). The tool is intended to support LUMA staff, external service providers and delivery agents to develop resource savings, budgets and cost effectiveness projections for EE / DR programs targeting Puerto Rico's electricity market based on the Puerto Rico Benefit-Cost Test (the "PRCT").

The PRCT is an EE / DR cost-effectiveness screening test, reflecting Puerto Rico public policy, used to evaluate whether proposed or actual EE / DR programs provide benefits greater than their costs. The specifics of the PRCT were set out in the August 12, 2022, PREB Resolution and Order under NEPR-MI-2021-0009.

There are three primary use cases for the tool:

A. **Measure Screening** – *evaluating the cost-effectiveness of a single measure*

B. **Evaluating a Program** – *evaluating the cost-effectiveness of a program covering multiple measures, projected participation rates and forecast program costs*

C. **Summarizing a Portfolio** – *providing summary cost, savings and benefit-cost information about a portfolio comprised of multiple programs*

Before using the tool, users are expected to have developed a program concept and preliminary program design. The program design should be focused on a particular target market and should identify applicable measures and measure-specific assumptions for number of participants, incentive costs, net-to-gross ratios and program costs. The tool outputs projections of resource savings and cost effectiveness based on this program's information input (i.e., all key program design elements are inputs to the tool).

B.1.1 COSTS AND BENEFITS CONSIDERED IN THE TOOL

The PRCT is very specific about what costs and benefits are considered and how they are used in determining the overall cost-effectiveness of a measure, program or portfolio. The tool follows the approach as specified in the PRCT.

Broadly speaking, there are two cost categories considered each with additional subcategories:

1) Measure-specific Costs

a) ***Incremental cost*** – is the incremental cost that the customer would pay (before any utility incentives or rebates) for the energy efficiency technology over the cost of the base technology.

Incremental cost = energy efficient technology cost – base technology cost

For example, if the base technology cost is $500 and the energy efficient technology cost is $650, the incremental cost will be $150 ($650 - $500). Some measures, such as behavioral measures, will have a base technology cost of zero because the "default" activity is to do nothing. Incremental cost is independent of incentive costs.

b) **Incentive cost** – is the value of the incentive or payment provided to the customer by the utility to make measures more financially attractive to purchase.

c) **Customer Cost** – the customer cost to purchase any measure is the incremental cost minus the incentive cost or incentive payment

2) Non-Incentive Costs

These costs include all costs the program or portfolio accumulates beyond any measure-specific incentives provided to customers. These costs could include:

a) Administrative costs such as for application and rebate processing, evaluation, measurement and verification (EM&V), regulatory reporting, program planning, and other administrative tasks

b) Marketing and channel activation costs such as general promotion, branding, communications, materials; strategic partnerships; training and technical assistance activities, and other customer support activities

Portfolio-level non-incentive costs are allocated to programs based on energy savings and program non-incentive costs are allocated to measures based on kWh savings

Each EE or DR measure is expected to provide some benefit, comprising one or more of the following:

1) **Avoided Generation Benefit** – reduced annual energy, capacity, gas, water consumption
2) **Utility Grid Benefit** – deferred transmission and distribution investment costs, increased grid reliability, and other benefits
3) **Greenhouse Gases –** Reduced and avoided greenhouse gas (GHG) emissions
4) **Customer Non-Energy Impacts** – such increased thermal comfort, productivity, property value and other non-energy impacts

Each of these benefit streams is multiplied by the benefit-specific avoided cost for the life of the measure and the total benefit is based on the present value of all benefits over the measure life

8.1.1.1 AVOIDED COSTS CONSIDERED IN THE TOOL

The avoided costs used in the tool are primarily based on the Avoided Cost Study provided by Synapse[7] with some of the avoided costs based on estimates developed by LUMA as noted below.

LUMA is currently developing estimates of avoided costs for other fuels, water, transmission capacity, distribution capacity and customer non-energy benefits. We anticipate that these estimates will be incorporated into the cost effectiveness test in the TYP.

[7] Synapse Energy Economics, *Avoided Energy and Capacity Costs in Puerto Rico* (report prepared for the Puerto Rico Energy Bureau, November 2022).

Figure - A 0-2: Avoided Cost Categories (1)

Category	Impact	Include	Monetize	Source
Utility System Impacts				
Generation	Energy Generation	✓	✓	AvCo study*
	Capacity	✓	✓	AvCo study*
	Environmental Compliance	✓	✓	AvCo Phase 2**
	Renewable Portfolio Standard Compliance	✓	✓	AvCo study*
	Ancillary Services	✓	✓	AvCo study*
Transmission	Transmission Capacity	✓	✓	
	Transmission Losses	✓	✓	
Distribution	Distribution Capacity	✓	✓	Phase 2**
	Distribution Losses	✓	✓	
General	Program Incentives	✓	✓	TYP
	Program Administration Costs	✓	✓	
	Program Administration Incentive Costs	✓	✓	
	Credit and Collection Costs	×	✓	TBD
	Utility Rate Riders	×	✓	
	Risk	✓	×	Qualitative
	Reliability	✓	×	
	Resilience	✓	×	

Estimated by LUMA

Estimated by LUMA

Figure - A 0-3: Avoided Cost Categories (2)

Category	Impact	Include	Monetize	Source
Host Customer Impacts				
Host Customer Energy Impacts	Host customer portion of DER costs	✓	✓	TYP
	Interconnection Fees	×	✓	N/A
	Risk	×	×	
	Reliability	×	×	
	Resilience	×	×	
	Tax Incentives	×	×	
Host Customer Non-Energy Impacts (NEIs)	Other Fuels and Water	✓	✓	
	Property Asset Value	✓	×	
	Health & Safety	✓	×	
	Empowerment, Satisfaction & Pride	✓	×	
	Comfort	✓	×	
	Productivity	✓	×	
	Low-Income Host Customer NEIs	✓	×	
Societal Impacts				
Societal Impacts	Greenhouse Gas Emissions	✓	✓	AvCo study*
	Other environmental	✓	×	Qualitative

Estimated by LUMA

Estimated by LUMA

Renewable Portfolio Standard Compliance Avoided Costs

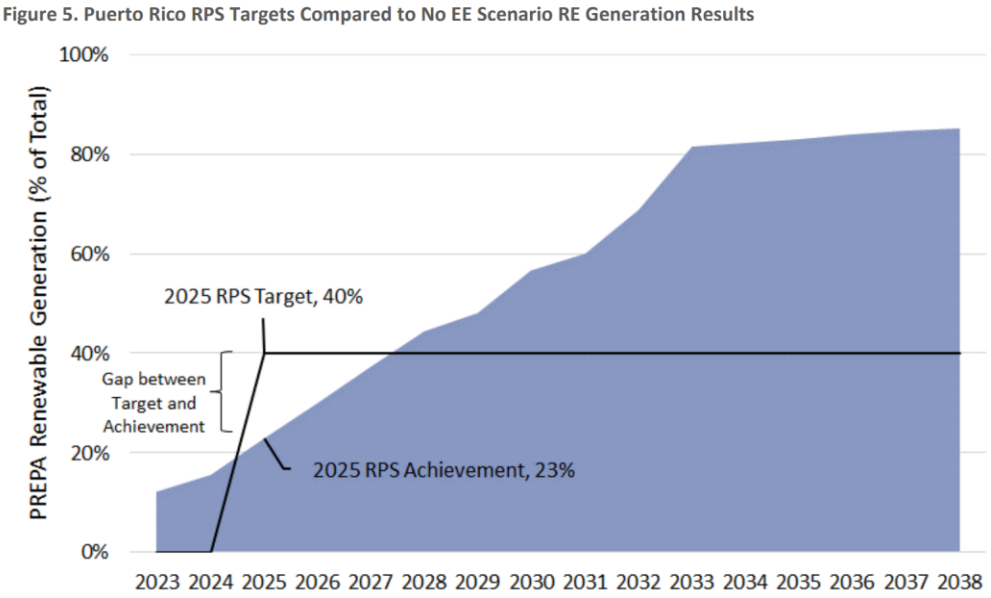
Table 1 in the Synapse Avoided Cost Study[8] ("Avoided Cost Study") indicates that the Renewable Portfolio Standard Compliance Avoided Costs should be developed on a jurisdictional basis (i.e., specifically for Puerto Rico). Further, on page iv, the Avoided Cost Study indicates that the Renewable Portfolio Standard Compliance Avoided Costs would be developed in the next phase of the Avoided Cost Study.

To ensure that the set of avoided costs used in the Puerto Rico Cost Test for the TYP were as comprehensive as possible, LUMA explored whether it would be appropriate to determine the Renewable Portfolio Standard Compliance Avoided Costs in advance of the release of the next phase of the Avoided Cost Study and in advance of the avoided costs that will ultimately be provided through the final Integrated Resource Plan.

Based on its analysis and its understanding of the approach used by Synapse in the Avoided Cost Study, LUMA believes that the Portfolio Standard Compliance Avoided Costs are already largely reflected in the avoided energy generation and capacity costs provided in the Avoided Cost Study. This conclusion is because projected PREPA Renewable Generation (as a % of Total) exceeds the Renewable Portfolio Standard from 2028 onwards.

To illustrate this point, Figure 5 from the Avoided Cost Study is shown below:

Figure - A 0-4: Synapse Puerto Rico RPS Targets Compared to No EE Scenario RE Generation Results



[8] Avoided Costs of Energy Efficiency Resources in Puerto Rico 2023-2045, Synapse Energy Economics, Inc., June 5, 2024, released under NEPR-MI-2021-0009SA

Hence, the supply mix used to determine the avoided energy generation and capacity costs is projected to be compliant with the Renewable Portfolio Standard in all but one of the years in the period (FY2027 – FY2052) used in determining the cost-effectiveness of the TYP. The Renewable Portfolio Standard Compliance Avoided Costs for 2027 would be relatively small in comparison with the costs that are already reflected in the avoided energy generation and capacity costs from 2028 onward given the expected level of EE savings in FY2027.

LUMA will revisit the Renewable Portfolio Standard Compliance Avoided Costs component when updating the avoided costs based on the Final IRP.

System Peak Demand Period Definition

Based on an analysis of hourly system load and weather data from the past five years, LUMA has defined the System Peak Demand Period for the purposes of estimating the peak savings of EE/DR measures, and b) cost-effectiveness testing as follows:

The period between 6 – 12 pm during working weekdays with Cooling Degree Days (CDD) greater than 21 when temperatures are higher than 84 and relative humidity is higher than 80%.

The System Peak Demand Period definition given above is based on the average values for temperature, relative humidity and Cooling Degree Days occurring during the highest 200 demand hours in the past five years.

Avoided Costs Table

The specific avoided costs used in the tool are provided below. For long-lived measures with EULs extending beyond 2045, LUMA simply continued the avoided costs from 2045 forward on a constant basis (e.g., same real costs in all years beyond 2045 as estimated for 2045).

LUMA is currently developing estimates of avoided costs for other fuels, water and customer non-energy benefits. We anticipate that these estimates will be incorporated into the cost effectiveness test in the TYP.

Figure - A 0-5: Avoided Costs

Year	Avoided Energy Generation Costs ($/MWh)			Avoided Capacity Costs ($/kW-year)	Avoided GHG Emissions Costs ($/MWh)		
	Daytime 7am - 4pm	Evening (Peak) 4pm - 11pm	Overnight 11pm - 7am		Daytime 7am - 4pm	Evening (Peak) 4pm - 11pm	Overnight 11pm - 7am
2023	98	141	108	0	0	0	0
2024	79	122	99	0	0	0	0
2025	70	109	94	50	12	41	31
2026	67	100	91	74	6	20	10
2027	72	91	91	91	17	19	21
2028	84	95	96	62	36	8	9
2029	85	95	96	-19	24	10	5
2030	80	89	91	-8	12	7	-2
2031	77	86	86	2	10	13	8
2032	69	77	78	82	12	14	17
2033	47	85	88	116	3	7	2
2034	43	82	86	104	4	9	5
2035	40	78	81	95	4	9	8
2036	40	81	85	88	3	9	10
2037	36	76	80	82	3	9	11
2038	34	76	81	76	3	9	11
2039	34	76	81	76	3	9	11
2040	34	76	81	76	3	9	12
2041	34	76	81	76	3	9	12
2042	34	76	81	76	3	9	13
2043	34	76	81	76	3	10	13
2044	34	76	81	76	3	10	14
2045	34	76	81	76	3	10	14

Net Technical Losses

Based on LUMA metering data, the net technical losses by customer service rating over the period from June 2024 – May 2025 are listed in the table below.

Table 46: Line Losses

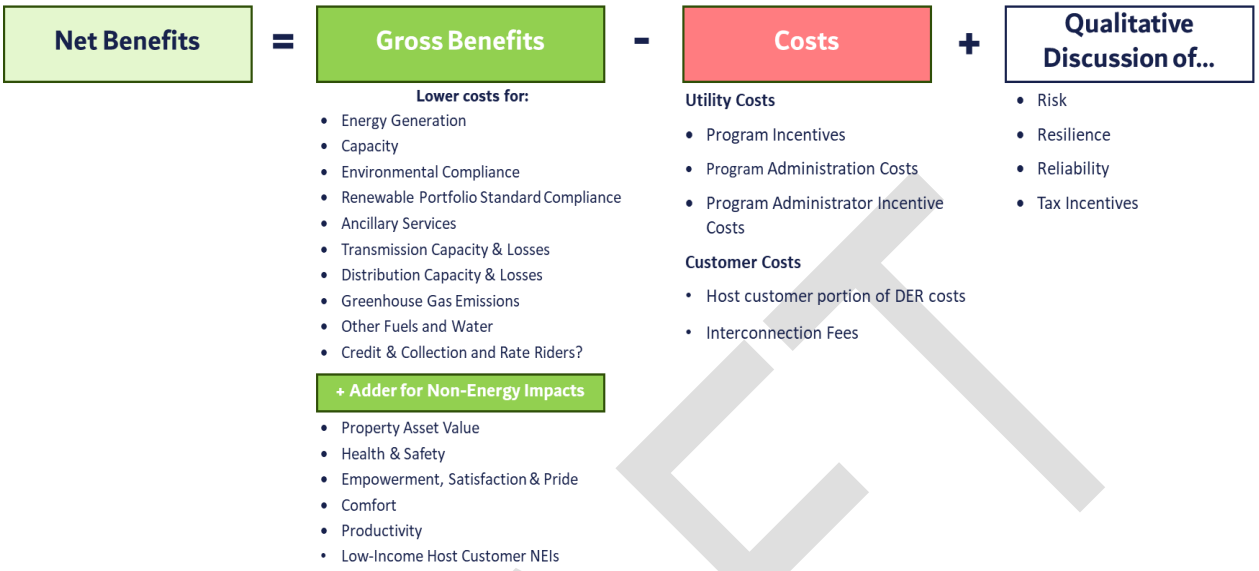
Customer Point of Connection	Net Technical Loss % (Generator Busbar Down)
Transmission	3.00
Primary Distribution	8.32
Secondary Distribution	10.18

The tool adjusts estimated savings at the customer meter by a factor equal to 1/ (1 - losses) to account for the technical losses between the generator busbar and the customer meter.

8.1.1.2 DETERMINATION OF NET BENEFITS

How the various costs and benefits are counted in the tool reflect the approach specified under the PRCT as follows:

Figure - A 0-6: Determination of Net Benefits



B.1.2 TOOL STRUCTURE AND USE

There are four main sections within the tool, each comprising multiple worksheets

1) **Input Worksheets**:
   a) Key cost inputs, for measure program and admin costs
   b) Measure Characterization outlining measure savings
   c) Measure Quantity
2) **Calculation Worksheets**:
   a) The calculation worksheets combine the inputs above with the avoided costs.
3) **Global Worksheets**:
   a) These are assumptions that effect all measures – ex. inflation, base year, line losses.
4) **Output Worksheets**:
   a) Costs and Benefits by the three levels of EE/DR – measure, program and portfolio

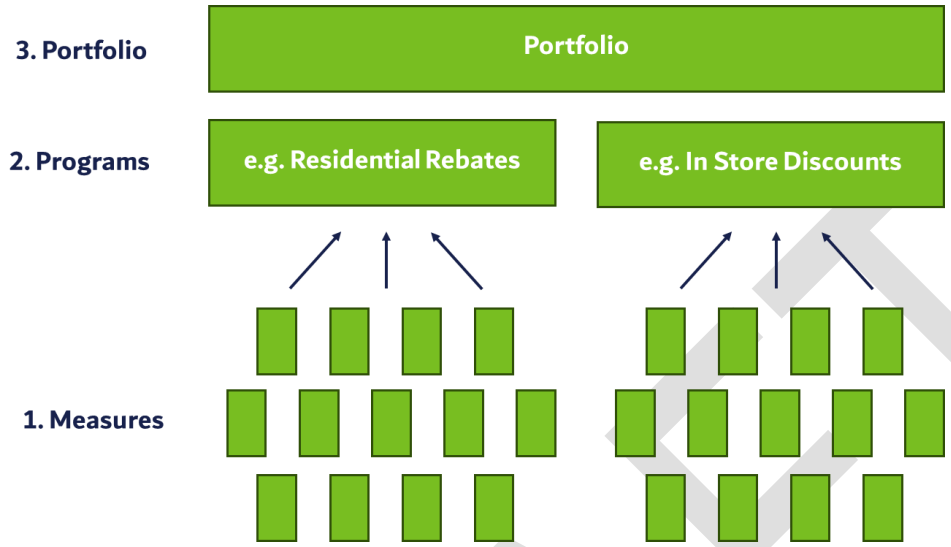
B.1.3 EE / DR HIERARCHY

The hierarchy of EE / DR measures, programs and portfolio is shown schematically below and described in the following sections. As shown, most programs comprise multiple measures[9] and the overall portfolio is comprised of multiple programs. This hierarchy is broadly consistent with the approach LUMA used in

[9] An example of a program with a single measure would be CBES+

developing the overall TYP portfolio to maximize cost-effectiveness in compliance with the objectives and design principles set out in the EE Regulation.

Figure - A 0-7: EE / DR Hierarchy



Measures

Benefits – such as those listed above – are associated with measures. Benefits can only accrue to a program if the relevant measure has benefits associated with it. Benefits accrue over the EUL of the measure. Incentive costs and incentive payments are typically incurred at the measure level.

Measure-specific cost effectiveness can be useful for comparing measures to each other and for prioritizing specific measures within a program. Some measures may have a benefit-cost ratio less than 1 (i.e., not cost-effective) but may still be included in a program if they offer significant savings without overly impacting the cost-effectiveness of the program.

A measure may be included in more than one program, but if the measure characteristics very between the programs, a “duplicate” measure should be created with the appropriate program-specific characteristics.

Program

When assessing cost effectiveness at the program level, the costs and benefits for all measures within the program are aggregated, except for costs incurred at the portfolio level.

Program level cost effectiveness can be useful for comparing program performance year over year and for assessing the performance of different segments.

Portfolio

Cost effectiveness at the portfolio level should account for all costs and benefits associated with the design, delivery, and implementation of all the EE / DR programs within the portfolio.

Portfolio level cost effectiveness can be useful for assessing year over year performance of the EE/DR portfolio, for assessing the overall net benefit of EE / DR by a program administrator and assessing the impacts of change to program mix or emphasis within a portfolio.

Appendix C: TYP Funding Sources and Rider Estimates

8.1.1.3 TYP PROGRAM FUNDING SOURCES

Energy Efficiency Rider

As discussed in the Energy Bureau's 2019 Determination on the Permanent Rates Rider Factors,[10] the Energy Bureau will need to create an Energy Efficiency fund to implement the required EE programs. The Energy Bureau has previously established the EE Rider to recover the cost of energy efficiency programs from all customers on a per kilowatt-hour basis.[11]

Energy Bureau approval of TYP budgets will inform LUMA inputs into the annual EE Rider reconciliation process occurring in April of each year.

Power Purchase Charge Adjustment

On July 31, 2023, the Energy Bureau issued a Resolution and Order in Case No. NEPR-MI-2020-0001, In Re: Permanent Rate of the Puerto Rico Electric Power Authority, in which it determined, among others, that the cost of DR programs will not be part of the EE rider and ordered LUMA to contemplate the DR programs as part of the proposal of factors corresponding to the purchase power charge adjustment ("PPCA") mechanism.

On August 11, 2023, the Energy Bureau issued a Resolution and Order in which in its relevant part, ordered LUMA to file on or before August 23, 2023, for the Energy Bureau's approval, the associated cost related to the compensation to be offered to the DR aggregators and/or ratepayers that participate in the DR program to be recovered through the PPCA thus establishing that the costs associated with DR programs will be recovered through the PPCA.

The event forecasts and resulting budgets provided in the TYP are refined quarterly through the quarterly PPCA reconciliation process. Thus, the PPCA reconciliation process provides the most accurate estimate of DR program budgets.

It is worth noting that through the Resolution and Order issued on March 21, 2024, the Energy Bureau clarified that LUMA should not be constrained by quarterly budgets and may expand participation in the battery emergency DR program. Moreover, LUMA is required to inform the Energy Bureau if it anticipates needing to restrict participation due to budget constraints for their consideration.

[10] https://energia.pr.gov/wp-content/uploads/sites/7/2019/09/Resolution-and-Order-Permanet-Rates-Rider-Factors-CEPR-AP-2015-0001.pdf

[11] Regulation 8720, New Regulation on Rate Filing Requirements for the Puerto Rico Electric Power Authority's First Rate Case, March 28, 2016, Section 2.12(D).

A.3.1 TYP RIDER ESTIMATES

EE Rider Estimation and Monthly Customer Impacts

The EE rider factor is calculated by dividing the total estimated amount to be recovered by the total estimated annual kWh sales.

[EE information will be included after LUMA has reviewed the EE Potential Study and incorporated new data and insights into the TYP.]

PPCA Estimation and Monthly Customer Impacts

The PPCA factor is calculated by dividing the total estimated amount to be recovered ($X) by the total estimated annual kWh sales (X kWh).

PPCA factor estimates for the Economic DR program will be provided when market conditions for economic DR start to emerge based on system needs, projected capacity costs and market demand.

The PPCA factor for FY2027 emergency DR programs is estimated to be $0.002/kWh, as shown in the table below. This figure represents an illustrative estimate of the PPCA factor for CBES, this estimate will be finalized through the quarterly PPCA reconciliation process.

Table 47: FY2027 PPCA Estimation for LUMA Emergency DR Programs

Item	Amount	Reference
Incremental Funds Required from PPCA ($)	$29,411,022.90	LUMA estimate
Estimated Retail Sales for FY27 (kWh)	15,526,244,490	Load Forecast FY27
PPCA Adjustment for FY27 ($/kWh)	$0.002	LUMA estimate / Load Forecast

The PPCA factor for FY2027 emergency DR programs is estimated to be $0.002/kWh, as shown in the table below. This figure represents an illustrative estimate of the PPCA factor for CBES, this estimate will be finalized through the quarterly PPCA reconciliation process.

Table 48: FY2028 PPCA Estimation for LUMA Emergency DR Programs

Item	Amount	Reference
Incremental Funds Required from PPCA ($)	$28,757,444.28	LUMA estimate
Estimated Retail Sales for FY28 (kWh)	15,198,043,750	Load Forecast FY28
PPCA Adjustment for FY28 ($/kWh)	$0.002	LUMA estimate / Load Forecast

Exhibit 2

Exhibit 2: Energy Efficiency Performance Incentive Metrics and Associated Targets

NEPR-MI-2026-0002

April 20, 2026

1.0 Introduction

In compliance with the Energy Bureau's directive for LUMA to submit proposed performance incentive metrics and associated targets for the Three-Year Plan (TYP), LUMA provides the following proposal. LUMA respectfully submits that the Performance Metrics and Targets included in LUMA's October 28, 2022, Revised Annex IX to the Puerto Rico Transmission and Distribution System Operation and Maintenance Agreement ('T&D OMA") filing under docket NEPR-AP-2020-00025, remain an appropriate and consistent basis for evaluating EE/DR performance in the current regulatory context. Accordingly, LUMA proposes to adopt these same metrics and targets for purposes of this TYP submission.

2.0 Proposed Performance Metrics

2.1 Energy Savings as a Percentage of Total Energy Sales

Objective: To incentivize the utility to achieve annual energy reduction targets.

Description: This metric tracks the annual energy savings achieved by LUMA's Demand Side Management Programs, pilots and initiatives. The Final Regulation for Energy Efficiency established planning targets for annual energy savings to be acquired during each year of the Transition Period Plan: 0.1 percent in the first year and 0.25 percent in the second. As per industry convention, these energy savings targets are presented as a percentage of annual energy sales. The annual targets are designed to facilitate a reasonable ramp up of program performance during the early years of program delivery.

Calculation: The metric is calculated as the total gross annual energy savings achieved (MWh) during the year, divided by the total forecasted energy sales (MWh) for the year.

Performance Metric Annual Targets and Minimum Performance Levels

	Minimum Performance Level	25%	50%	100%	125%	150%
Baseline	N/A					
Year 1	N/A	N/A	N/A	N/A	N/A	N/A
Year 2	0.00%	0.06%	0.13%	0.25%	0.31%	0.38%
Year 3	0.25%	0.29%	0.33%	0.40%	0.44%	0.48%

2.2 Peak Demand Savings as a Percentage of Total Peak Demand

Objective: Incentivize the utility to achieve peak demand reduction targets.

Description: This metric tracks the annual peak demand savings achieved by LUMA's Demand Side Management Programs, pilots and initiatives. As per industry convention, these demand savings targets are presented as a age of annual peak demand. The annual targets are designed to facilitate a reasonable ramp up of program performance during the early years of program delivery.

Calculation: The metric is calculated as the total gross annual peak demand savings achieved (MW) during the year, divided by the total forecasted peak demand (MW) for the year.

Performance Metric Annual Targets and Minimum Performance Levels

	Minimum Performance Level	25%	50%	100%	125%	150%
Baseline	N/A					
Year 1	N/A	N/A	N/A	N/A	N/A	N/A
Year 2	0.00%	0.03%	0.05%	0.10%	0.13%	0.15%
Year 3	0.10%	0.13%	0.15%	0.20%	0.23%	0.25%

Exhibit 3

Exhibit 3: Proposed Plan to Achieve 30% Savings Goal by 2040

NEPR-MI-2026-0002

April 20, 2026

Executive Summary

LUMA has developed long-term projections of energy efficiency (EE) savings and associated program costs through 2050, in alignment with the requirements of Section 4.02(B) of the Energy Efficiency Regulation for Three-Year Plan filings. These projections, which support demonstration of progress toward the statutory objective of achieving thirty percent savings by 2040, were developed using the PR100 bottom-up EE forecast and were filed confidentially as part of the Revised IRP 2025 Report. Those estimates inform the basis for LUMA's forward-looking EE resource acquisition plan and the estimated annual funding needs.

Section 1.0 of this document presents the full proposal, including the detailed projected savings and associated costs for 2029–2040. In total, the forecast reflects 1,289 GWh of incremental EE savings and $448.9 million in program costs over this period, with average first-year savings costs estimated at approximately $348 per MWh. Collectively, these estimates provide the 20-year outlook and demonstrate the trajectory toward the objective of meeting long-term EE statutory goals.

1.0 Proposed Plan to Achieve 30% Savings Goal by 2040

LUMA developed an estimate of the projected savings and associated costs for LUMA EE programs through 2050 as part of the Integrated Resource Plan (IRP) development. These estimates were filed confidentially on October 29th as part of the Revised IRP 2025 Report. These projected savings were derived from the PR100 forecast and were used in developing the LUMA load forecast used in the IRP.

The projected annual incremental savings and associated costs for LUMA EE programs for the period 2029 through 2040 are shown in the table below.

Table 1 - Projected Annual Incremental Savings and Costs for LUMA EE Programs

Year	Annual EE Savings Measured at Customer Meter (GWh)	Annual EE Savings Cost (millions $)
2029	137	$47.8
2030	145	$50.5
2031	146	$50.7
2032	150	$52.1
2033	150	$52.3
2034	83	$28.8
2035	81	$28.4
2036	81	$28.1
2037	76	$26.5
2038	75	$26.2
2039	84	$29.0
2040	81	$28.5
Total	**1,289**	**$448.9**

The 30% reduction target by 2040 established by Act 17-2019 is measured relative to FY2019 baseline sales. The September 2025 EE Market Baseline and Potential Study identified as ~16,038 GWh. The cumulative savings of 1,289 GWh, identified in the table above, represents 26.8% of the 30% target reduction to be achieved.