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

IN RE: REGULATION FOR ENERGY EFFICIENCY	**CASE NO.:** NEPR-MI-2021-0005 **SUBJECT:** LUMA's Comments Proposed Regulation for Energy Efficiency

MOTION SUBMITTING COMMENTS TO PROPOSED REGULATION FOR ENERGY EFFICIENCY

TO THE PUERTO RICO ENERGY BUREAU:

COME NOW, LUMA ENERGY, LLC as Management Co., and **LUMA ENERGY SERVCO, LLC** (collectively, LUMA), through the undersigned legal counsel and respectfully state and request the following:

1. On April 21, 2021, this Puerto Rico Energy Bureau ("Energy Bureau") issued a Resolution notifying of a proposed Regulation for Energy Efficiency (the "Proposed Regulation"), its intent to publish a notice of the rulemaking process in a newspaper of general circulation, and that the public would have thirty (30) days from the publication of the latter notice to submit comments regarding the Proposed Regulation. The Energy Bureau included the text of the Proposed Regulation as an attachment to its Resolution of April 21, 2021.
2. On May 6, 2021, this Energy Bureau issued a Resolution notifying that it had published on that same date a public notice in a newspaper related to the Proposed Regulation and that the general public had until June 7, 2021 to submit comments regarding the Proposed Regulation.
3. On June 3, 2021, this Energy Bureau issued a Resolution extending the time for stakeholders and the general public to file comments regarding the Proposed Regulation

until June 28, 2021 and providing until July 5, 2021 to file a reply to comments to the Proposed Regulation.

4. With this Motion, LUMA respectfully submits its comments to the Proposed Regulation. *See* Exhibit 1.

5. LUMA looks forward to engaging with this honorable Energy Bureau and stakeholders in collaborative discussions on the Proposed Regulation.

WHEREFORE, LUMA respectfully requests that the Energy Bureau **accept** and **consider** this filing of LUMA's comments to the Proposed Regulation.

RESPECTFULLY SUBMITTED.

In San Juan, Puerto Rico, this 28th day of June 2021.

We certify that we filed this motion using the electronic filing system of the Puerto Rico Energy Bureau.

DLA Piper (Puerto Rico) LLC
500 Calle de la Tanca, Suite 401
San Juan, PR 00901-1969
Tel. 787-945-9107
Fax 939-697-6147

/s/ Margarita Mercado Echegaray
Margarita Mercado Echegaray
RUA NÚM. 16,266
margarita.mercado@us.dlapiper.com

/s/ Laura T. Rozas
Laura T. Rozas
RUA Núm. 10,398
laura.rozas@us.dlapiper.com

Exhibit 1

LUMA's Comments to Proposed Regulation for Energy Efficiency

Regulation for Energy Efficiency

LUMA's Comments

NEPR-MI-2021-0005

Contents

Introduction

LUMA appreciates the opportunity to participate in the development of the Energy Bureau's proposed Regulation for Energy Efficiency. This Regulation and the ensuing energy efficiency programs will establish a new milestone in Puerto Rico's energy transformation. LUMA looks forward to continuing a constructive collaboration with the Bureau and Stakeholders in the development and delivery of these energy efficiency and demand response programs. LUMA offers the following comments to enhance and customize the proposed regulatory framework, to help ensure the successful planning, design and delivery of energy efficiency programs made for Puerto Rico.

LUMA's comments on the proposed Regulation for Energy Efficiency are provided in sequential order of reference in the Regulation. We first provide some general comments and then go into detail on certain sections.

Funding Source for Energy Efficiency Programs

A reliable and long-term source of incentive funding is essential for successful planning and delivery of energy efficiency (EE) programs to meet IRP and Act 17 objectives. Incentives are the primary tool that EE programs use to influence customers to install efficient equipment (and achieve energy savings). Best-practice programs also include secondary tools such as technical assistance (e.g. energy audits), education campaigns, and financing (e.g. home improvement loans). However, these secondary tools are not nearly as effective as incentives at influencing customer decision-making and achieving energy savings. Best practice programs rely on a combination of incentives, technical assistance, marketing and financing working in combination to overcome customer barriers to adoption of EE technology. However, the magnitude of energy savings reductions contemplated in the IRP require incentive programs.

Energy efficiency programs delivered by utilities rely on a stable annual source of incentive funding determined by the regulator and recovered through utility rates. Annual incentive funding may be supplemented by other sources such as greenhouse gas cap and trade programs, carbon taxes, grant funding, or third-party financing. However, EE targets on the order of 2% per year, as modeled in the IRP, cannot be achieved through these supplemental sources alone**.** In fact, every one of the programs modeled in the IRP (on which these EE targets are based) is an incentive program. The IRP would have shown dramatically less energy savings had financing programs been modeled in place of incentive programs.

Financing programs can be effective at achieving energy savings in certain market segments (at a drastically reduced scale), and many promising new financing models are emerging. However, many of the best-practice programs LUMA would need in its EE portfolio to meet IRP targets rely heavily (if not exclusively) on incentives and would not achieve a meaningful level of participation with financing programs alone, especially among low-income customers.

The quantum, timing, restrictions and special requirements of the funding source has significant implications for program planning. Potential studies and program plans typically assume that only a fraction of the participation (and savings) can be achieved through currently available financing programs compared to incentive programs. The PR Cost Test, on which the potential study is based, also needs to be constructed differently for financing programs. Without stable annual incentive funding, program delivery timelines and Three-Year Plan periods will be defined based on the timelines of when funding is made available by third parties, which may or may not align with the fiscal/program year.

Therefore, to carry out EE planning in an efficient and cost-effective manner, it is important to know upfront the source and duration of the funding of programs. If LUMA develops a Three-Year EE Plan that includes incentives as well as financing-based programs and afterwards it is determined that funding is only available for financing programs, then all the time, effort, dollars and Stakeholder Engagement spent on the incentive-based component will have been wasted.

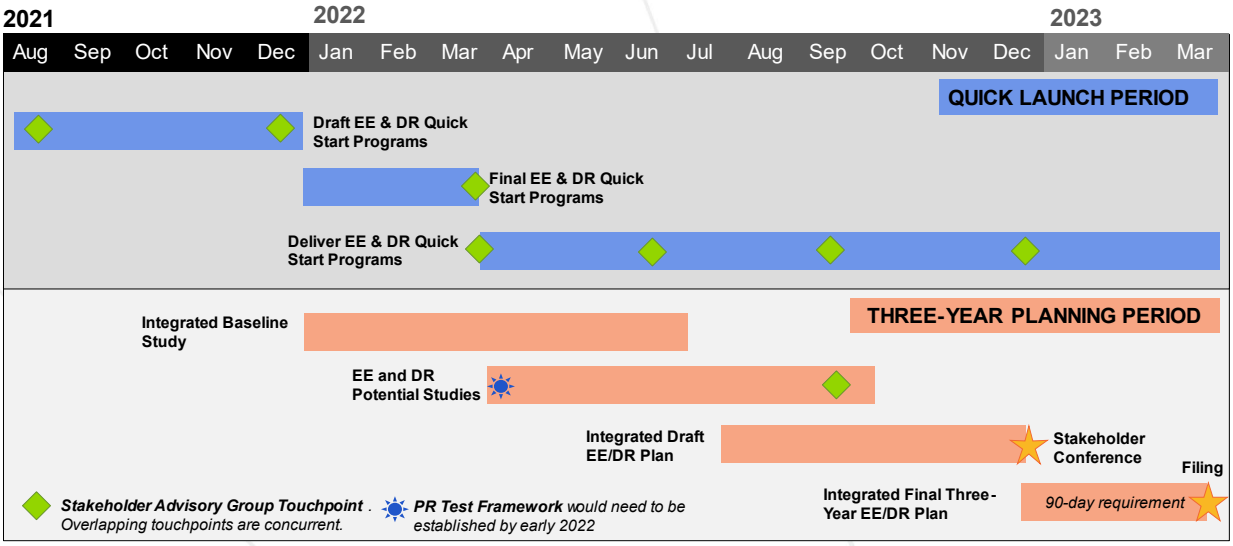
LUMA proposes that it is not prudent to spend time, effort, or rate payer monies in planning and designing EE programs that may not be funded or delivered. With that in mind, LUMA respectfully recommends that the process to provide comments on the proposed EE Regulation will benefit from obtaining clarifications from the Energy Bureau on whether ratepayer funding for EE incentives will be available for the first Three-Year EE Plan through the cost recovery mechanism outlined in the draft EE regulation. Alternatively, LUMA recommends that the Energy Bureau clarify whether LUMA should proceed to develop an EE Plan under the assumption that ratepayer funding for incentives will not be available.

Timing of Energy Efficiency and Demand Response Plans

Section 3.02 of the Demand Response Regulation requires that LUMA file the Three-Year Demand Response Plan (DR Plan) no later than six months after the effective date of the Regulation, resulting in a deadline of the end of June 2021. Section 3.02 Energy Efficiency Plans will require LUMA to file a Three-Year Energy Efficiency Plan (EE Plan) on December 1, 2021. As discussed in the recent Demand Response Technical Conference, cost savings and a more efficient planning and implementation process will result if the two planning processes are coordinated, and the timing of the filings synchronized.

LUMA recommends one coordinated, integrated planning process and filing for both the EE and DR Plans. This will facilitate more effective and efficient development of joint EE and demand response (DR) baseline studies, potential studies, and program offerings. There will also be cost and schedule efficiencies and more effective coordination if there is one integrated Stakeholder consultation process for the development of a single integrated EE/DR plan.

The schedule below provides one example of a potential integrated EE/DR Plan schedule. The key feature of this schedule is a **Quick Launch Period** that lasts until the final Three-Year Plan is approved. During this Quick Launch period, new programs or pilots could be launched individually (or collectively) as funding is secured. During the Quick Launch period, many regulatory requirements such as cost-effectiveness would need to be relaxed to enable quicker market entry, while cost-effectiveness inputs and other requirements (e.g. Technical Reference Manual) are being developed.



This timeline also includes a second phase of activities in the **Three-Year Planning Period** that are conducted in parallel, to support the development of a full Three-Year Portfolio Plan. The Three-Year Plan is dependent upon first completing the Baseline Study, Potential Study, Avoided Cost Study and PR Cost Test. All of these activities provide necessary inputs to the final Three-Year Plan. This suggested timeline is predicated on the timely completion of the initial baseline and potential studies for this Plan and timely approval of this approach.

It should be noted that this schedule only provides indicative estimates of due dates, based on LUMA's experience of the general duration required for completing each activity. Exact dates are difficult to determine this far in advance due to the many uncertainties in the timing and completion of interdependent activities (e.g. studies) and requirements (e.g. funding). This is the first time these studies and activities will be conducted in Puerto Rico, which has the potential to introduce delays as the logistics are worked out for the first time. Any delay in one activity would shift the schedule for remaining activities proportionally.

Treatment of Different Types of Energy Efficiency Programs

The EE Regulation calls for the development of a broad portfolio of standard EE incentive programs, across all customer types and end-uses, along with additional special initiatives such as pilots and education initiatives. Below is the full list of standard incentive programs currently contemplated in the IRP along with additional special programs encouraged or required in the Regulation:

- Standard Incentive Programs (IRP):
  - Residential Air Conditioning
  - Residential Lighting
  - Commercial Air Conditioning
  - Street Lighting
  - Residential Rebuilding Efficiency
  - Residential Demand Response
  - Commercial Demand Response
- Special Programs/Initiatives:

- Low income
- Education/outreach
- Contractor training
- Energy audits
- Pilots
- Financing
- Building code compliance
- Market transformation
- Non-wires alternatives
- Geo-targeted resource acquisition

These special programs and initiatives play a valuable role in encouraging innovation, accelerating entry into new markets, ensuring sector equity, testing new technologies or program delivery strategies, and promoting other goals such as resilience. However, this broad range of programs would be very difficult to plan, develop and launch all at once alongside the standard incentive programs. During the course of the planning process, it will likely be necessary to prioritize this list of programs and initiatives, and to make tradeoffs on which programs are most valuable and feasible to launch first, given operational and financial constraints.

To enable this, the Regulation could set aside a budget "carve-out" (e.g. 5-15%) of its overall EE program budget for these special initiatives, similar to the Regulation's treatment of low-income programs. As with low-income programs, LUMA recommends that any savings from special programs be included in target achievement, but the pilot programs not be required to meet cost-effectiveness tests or be included in the portfolio cost-effectiveness.

Many of these initiatives support and enhance other programs and have associated savings and non-energy benefits that are hard to measure independently of the programs they support. LUMA recommends the common practice of establishing a deemed savings allocation (e.g. 5-15%) for special initiatives that is proportional to the corresponding budget carve out (e.g. 5-15%) for these "hard-to-measure" programs, in order to encourage innovation and equity without penalizing portfolio cost-effectiveness or the ability to achieve savings targets within budget. The size of this carve-out allocation, or the programs included within it, could be revisited annually, and as additional research and development activities enable more accurate measurement and evaluation of energy savings and cost-effectiveness.

Comments on Specific Sections

Section 2.02 Allocation of Targets

- *2.02C: The Energy Bureau shall first determine the contribution of energy savings expected to come from actions identified in (B)(2)-(6) of Section 2.01 and allocate the remainder of the required energy efficiency savings target to PREPA.*

- **LUMA Comment:**
  - Targets should be developed through the Three-Year Portfolio Planning process, on the basis of Achievable Market Potential. Any adjustments to the targets should be made with enough lead time for all parties to sufficiently plan for the required ramp-up or ramp-down of program activities, which typically takes several years. Therefore, targets should

be set to cover the entire Three-Year Plan period and annual adjustments should be avoided.
- Furthermore, the annual targets must be proportional to the funding available for program budgets. In the absence of cost recovery from rates, other funding sources will need to be identified and made available in a timeframe that aligns with target onset. Successful large-scale programs cannot exist, nor targets be achieved, in the absence of commensurate funding.

Section 2.03 Targets for Initial Three-Year Plan

- *2.03A: The Energy Bureau shall establish annual savings targets for PREPA's initial Three-Year Plan. This target shall be based on (1) a reasonable ramp-up in annual energy efficiency savings toward meeting the 2040 energy efficiency savings target, (2) program capacity and available funding and financing, and (3) the estimated energy efficiency savings that can be obtained from actions listed in (B)(2)-(6) of Section 2.01.*

- **LUMA Comment:**
  - LUMA recommends additional discussion and guidance from the Energy Bureau on the determination of a 'reasonable' ramp up. We appreciate this consideration of the realities and challenges of ramping up the development and operation of new programs.
  - As noted in the IRP, the IRP savings targets "…reflect participation rates on par with that of other successful programs implemented in other areas in the U.S." (IRP 2019, Appendix 4, pg 2-11). "Many **mature** [emphasis added] energy efficiency and demand response programs in the continental United States are comparable to those modeled in this section. They have large numbers of participants, an established vendor network supporting the programs, and are part of a larger portfolio of energy efficiency and demand response programs. In ramping up these programs in Puerto Rico, actual savings may lag the two percent of sales target as the associated markets for these technologies adjust to the program opportunities." (IRP 2019, Appendix 4, pg 2-2).
  - Ramping up new programs in a new market is especially difficult because the market infrastructure (e.g. customer awareness, workforce, service providers, etc) are not already in place. Given the nascent level of maturity of the EE market in Puerto Rico, LUMA's ability to ramp up is highly dependent on external factors, such as vendor network, workforce and technology availability. The reasonable ramp up should be appropriate to the Puerto Rico market as it is now, which is unique compared to other markets in the United States. More work and discussion with Stakeholders, service providers and potential participants would be valuable in developing a shared understanding what is reasonable in the Puerto Rico context. Preliminary market research, such as contractor and customer surveys, can also help assess market readiness in Puerto Rico and can inform the establishment of a plan and timeline for ramp-up that is appropriate to the market.
  - LUMA also suggests that any Quick Launch programs should not be subject to hard targets given the high degree of uncertainty about funding availability, realistically achievable potential, and given the very early stage of developing the EE market and program infrastructure in Puerto Rico. These uncertainties introduce exogenous factors that LUMA has little control over and could have significant effects on realized savings.

Section 2.04 Targets for Subsequent Three-Year Plans

- *2.04A) Within four (4) months after the effective date of this Regulation, and triennially as needed, the Energy Bureau shall contract with expert consultants to conduct a Market Baseline Study. The consultant shall gather the necessary data to estimate the contributions from all Contributing Entities toward the types of efficiency resources listed in (B)(1)-(6) of Section 2.01.*
- *2.04B) Within four (4) months of completing the development of the Puerto Rico Test as described in Section 4.02, and triennially as needed, the Energy Bureau shall contract with expert consultants to conduct a Potential Study to quantify the achieved (in the past) and expected (in the future) savings resulting from PREPA and other Contributing Entities listed in (C)(2)-(6) of Section 2.01, as well as the cost-effective potential for energy efficiency in Puerto Rico.*

- **LUMA Comment:**
  - LUMA appreciates the Energy Bureau's commitment to a best-practice, science-based and data-driven approach to program development, as is reflected in the use of a program development lifecycle that begins with Market Baseline and Potential Studies. As noted in the IRP, "reliable native saturation data on existing end-uses is not available and reliance on secondary data from other jurisdictions in many cases will not properly represent Puerto Rico's unique climatological, demographic and firmographic characteristics" (IRP 2019, Appendix 4, pg 2-2). These data must be collected through a Market Baseline study to enable the development of a Potential Study that properly represents Puerto Rico's market characteristics.
  - LUMA recommends adding the following to Section 2.04B: ***"The Energy Bureau can also delegate to PREPA/LUMA the responsibility of contracting with expert consultants for the Market Baseline Study and Potential Study.***" LUMA recommends adding this statement because delegation of this responsibility to LUMA will enable a more efficient and coordinated process, in conjunction with the DR studies. It is common in the United States for the firm which conducts the market baseline and potential study to also be the firm which supports the development of the EE and DR plans. It is also common for these studies to be integrated for both EE and DR. There will be demonstrable efficiencies and higher quality work product if the EE and DR studies can be coordinated and contracted through LUMA for this work.
  - However, regardless of whether LUMA or the Energy Bureau contract the study, it is important that the Market Baseline and Potential Studies be very closely coordinated and conducted by an experienced specialty consulting firm. The backbone of the Potential Study is a highly sophisticated model, or set of models, that rely on numerous data inputs that are gathered through the Market Baseline Study. In other words, the Baseline Study collects the data on which the Potential Study model is based. Without Puerto Rico specific baseline data, the Potential Study would be forced to rely on secondary data sources from other regions, which would ignore Puerto Rico's market conditions, building stock and customer base. The interdependent nature of these studies requires that they be conducted by a single consulting firm whose methods can be very closely integrated. This close integration ensures the Potential Study model is designed to operate using the specific data inputs provided by the Baseline Study; and conversely that the Baseline Study is designed to provide the specific inputs required by the Potential Study.
  - In addition, both of these studies are required inputs for developing a complete Three-Year Plan and therefore must be closely coordinated with the requirements and timelines of the team responsible for developing the Three-Year Plan filing.

- *2.04E) Within the course of each Three-Year EE Plan process, PREPA may propose energy efficiency programs that seek to obtain energy efficiency savings from actions identified in (C)(3)-(4) in this section. PREPA must prove that any projected energy efficiency savings are directly attributable to its actions through an evaluation study. If approved by the Energy Bureau, it shall adjust PREPA's energy efficiency savings targets accordingly to include the anticipated savings.*

- **LUMA Comment:**
  - Energy savings accounting practices generally include a net-to-gross ratio (NTG), which adjusts the gross savings by factors such as free ridership and spillover that account for the portion of savings that can be attributed to program activities. These "directly attributable savings" are generally synonymous with "net savings," as determined from a net-to-gross evaluation. The objective of these studies is to determine what portion of savings would have happened without the program (i.e. net of free ridership) and are therefore directly attributable to program activities. Free ridership and spillover are program specific, difficult and expensive to measure accurately, and require a period of time for the program to be in market before they can be measured and assessed appropriately against a baseline.
  - EE programming is nascent in Puerto Rico and as a result there will not be any local program results on which to estimate free ridership and spillover in the screening to be done for the first Three-Year Plan. In addition, most of the residential customer base in Puerto Rico is low-income and it is typical for jurisdictions to assume a free ridership of zero for low-income programs. Because of the complexities associated with measuring free ridership and spillover, some US jurisdictions have moved to assuming free ridership and spillover net each other out.
  - Conducting rigorous evaluation studies to demonstrate that savings are directly attributable to LUMA may be costly and challenging to execute, especially relative to their value in the first three years. Because LUMA will be establishing a new EE market, it is reasonable to assume that EE savings claimed by the programs will be mostly attributable to program activities.
  - For these reasons, LUMA is recommending the NTG for the cost-effectiveness testing for the development of the first Three-Year Plan be deemed to be one. LUMA recommends that any results of Net-to-Gross evaluation be used to inform program planning, design, and continuous improvement, but this research should not be used to prove attribution nor should the results factor into LUMA's progress towards near-term savings targets.

Section 3.01 Energy Efficiency Programs.

- *3.01D) Regarding the provision of these programs, PREPA shall, among other things:*
  - *Pursue Market Transformation Studies*

    - **LUMA Comment:**
      - LUMA recommends that the Energy Bureau add additional language to clarify expectations for Market Transformation initiatives. LUMA suggests that the Regulation establish a carve-out for Market Transformation, along with education and outreach initiatives, financing, pilot initiatives, where – similar to low-income programs, as discussed in the General Comments above.
      - It should also be noted that market transformation initiatives rely on steady, long-term market interventions such as technical assistance, training, and customer education, built on a foundation of reliable incentives to support the development of a stable new market for EE products and services. The launch of market transformation,

education/outreach and financing initiatives would also be subject to the availability of funding. Education and outreach initiatives may be considered as administrative costs that are not eligible expenses for some grant funding sources.

- *Provide information and education that will empower customers to manage their energy use and energy bills.*

  - **LUMA *Comment:***
    - Education programs will require funds to implement, but these efforts will not directly result in energy savings that can be easily measured. These types of programs could be considered "hard to measure" programs, which can theoretically be estimated but it may be resource-prohibitive to do so. LUMA suggests establishing a budget "carve-out" for these information and education initiatives, as discussed in the General Comments above.

Section 3.02 Energy Efficiency Plans

- *3.02A) PREPA shall develop a Three-Year EE Plan for programs to be implemented over the three (3) year Program Implementation Period. PREPA shall design its plans to identify and implement all cost-effective EE programs, consistent with the most recently approved Integrated Resource Plan ("IRP") to the extent feasible within the approved funding. PREPA may also rely on any subsequent comparable analysis deemed acceptable by the Energy Bureau.*

- **LUMA Comment:**
  - LUMA recommends that the Energy Bureau provide clarification on the definition and the approach or metrics to be used to assess whether EE programs are "consistent" with the IRP. Providing clarity on the intention and objectives of this statement will help ensure, up front, that LUMA can design programs to meet this objective effectively.
  - Further, LUMA recommends that the Energy Bureau clarify the definition of "within the approved funding". LUMA understands that the "approved funding" will be a revenue stream, in addition to current revenues and will not be within the currently approved Base Rates.

- *3.02C) Each Three-Year EE Plan shall include at a minimum the following elements by Program Year: ….1d. Savings. Planned net and gross annual and lifetime energy savings for each Program Year shall be provided at the program, sector, and portfolio levels. Annual capacity savings shall be provided for each plan year at the program, sector, and portfolio levels.*

- **LUMA Comment:**
  - LUMA recommends that Gross savings should be used to determine if program goals/savings targets have been attained. Net Savings are determined by evaluation studies after the program year is complete and are therefore a "lagging indicator." They also may vary widely from year to year based on factors beyond the utility's control or ability to plan for. Furthermore, during the first Three-Year planning cycle, these lagging indicators are not available from which to plan around. LUMA recommends inserting the following, or similar, language to the Regulation, ***"Verified gross savings will be used to set energy savings goals and to determine whether these goals have been attained."*** Net-to-Gross studies should only be conducted for the purposes of acquiring data to improve program effectiveness. This is a common approach in other jurisdictions in the United States, such as Pennsylvania's Act 129 EE programs.

- *3.02C3a. The Three-Year EE Plan must include a strategic plan to conduct EM&V activities through competitively procured independent evaluators under contract to the Energy Bureau, but paid by PREPA, throughout the planning period.*

  - **LUMA Comment**: Evaluation should be conducted by an independent third party. LUMA recommends that contracting with the third-party evaluator be the responsibility of LUMA to ensure an independent assessment. Many jurisdictions in the US (e.g., DTE Energy in Michigan and PECO in Pennsylvania) take this approach, where the utility competitively procures a third-party evaluator (and in some cases with Stakeholder input to evaluator selection and review of draft evaluations), and the regulator approves the savings credited by the evaluator to the utility. This approach has been found to be cost-effective, timely and efficient, and enables the regulator to retain independence over approval of the savings. If PREB were to contract for the independent evaluators, then PREB would need to ensure separation between this function and the decision on the approval of the savings recommended in the evaluation.

- *3.02C6a. Performance Incentives*

- **LUMA Comment:**
  - Performance incentives can serve as an additional mechanism to reward program performance and encourage desired outcomes beyond EE savings. A scorecard could be developed to include metrics that result in customers obtaining most of the benefit of the EE programs. Incentives should be carefully designed to align incentives and promote activities that are within the utility's influence. At this stage, there is uncertainty on what is within that sphere of control considering funding uncertainties. Therefore, LUMA suggests not defining specific performance incentives at this stage but doing so after the Three-Year Planning period when the portfolio and its funding sources have been clearly established.
  - Furthermore, LUMA recommends removing discussion of a performance incentive from the Regulation on Energy Efficiency as it duplicates the Bureau's powers under the Regulation for Performance Incentive Mechanisms (Regulation 9137) and provisions under the OMA. Both Regulation 9137 and the OMA provide the Bureau with the ability to determine the Performance Metrics, including those metrics subject to targets and incentives. They do not preclude establishing metrics related to EE and therefore having provisions in the Regulation on Energy Efficiency are duplicative and could cause conflict in the future.

- *3.02E1. The Three-Year EE Plan procedural schedule shall be as follows.1) PREPA shall file its Three Year-Plan with the Energy Bureau on December 1, 2021, and triennially thereafter on March 1 (beginning March 1, 2024).*

- **LUMA Comment:**
  - As discussed in the general comments above, LUMA recommends it carry out one integrated planning process for the preparation of a DR and EE Plan, with the filing of that plan by the end of June 2022. This suggested timing is predicated on LUMA conducting the baseline and potential studies for both EE and DR, which would also be integrated, and having one combined Stakeholder consultation process for both EE and DR. An integrated planning approach with one EE and DR Plan would provide cost savings, planning efficiencies and enhanced coordination for program development, including programming which contains both EE and DR components.

Section 3.04 Quick Start Programs

- *3.04A. To expedite the use of cost-effective EE to lower electric system costs and maintain safe and reliable service, following the effective date of these regulations, PREPA may propose pilot or quick start EE programs to the Energy Bureau before it files its first three-Year EE Plan, and the Energy Bureau may approve, reject, or modify these proposed pilot or quick start programs.*
- *3.04B. Savings achieved by these pilot or quick-start programs shall be counted toward PREPA's performance metrics for its first Three-Year Program Implementation Period.*

- **LUMA Comment**:
  - LUMA recommends that the Energy Bureau provide clarification in the proposed Regulation for Energy Efficiency on the information needed for the Energy Bureau to review and approve the quick start programs. It would be helpful for the Bureau to provide clarity and guidance on expectations and requirements on the following, among others:
    - General procedures for requesting approval.
    - Minimum required information about each program that the Bureau needs to review to provide approval.
    - General criteria by which the Bureau will evaluate Quick Start Programs for approval, so LUMA may ensure they are designed accordingly from the outset
    - Program changes after initial approval that would require additional Bureau approvals.
    - Requirements around procurement of vendors, consultants, implementation contractors and service providers. Restrictive requirements could delay implementation.
    - Expectations on funding Quick Start Programs.
  - It should be noted that it would not be prudent for LUMA to invest significant time and energy into planning and developing Quick Start Programs prior to securing funding for these programs. Many federal funding opportunities will likely have requirements for certain program types (design, delivery model, target market) or other eligibility restrictions that may or may not align with any Quick Start Programs developed proactively, in absence of knowledge of those funder requirements.
  - Lastly, as discussed above with respect to performance incentives (*3.02C6a)*, savings targets should be determined based on funding available and after the full Three-Year Plan is developed, including Baseline and Potential Study.

Section 3.05 Energy Efficiency Budgets

- *3.05C1. PREPA shall transfer to the Energy Bureau the required funds for Market Baseline Studies, Potential Studies, EM&V activities, and other required studies, reports, or analysis part of the Three-Year EE Plan or required for regulatory oversight and planning of EE programs.*

- **LUMA Comment:**
  - LUMA recommends adding the following statement***, "The Energy Bureau may delegate the*** responsibility ***of being the contracting agent to PREPA/LUMA for these studies"***, for consistency and efficiency with the DR studies.
  - LUMA could transfer the funds required for Market Baseline Studies, Potential Studies, EM&V activities, and other required studies, only if additional funding for such studies is made available from either cost recovery from rates revenue or another to-be determined funding source.

Section 3.06 Energy Efficiency Financing

- *3.05D. PREPA shall offer customers financing to support the installation of EE measures*

- **LUMA Comment:**
  - Financing programs may reduce barriers to EE savings but establishing and running these programs also create administrative costs that negatively impact the cost effectiveness of the overall EE portfolio. There needs to be dedicated funding identified and available to support the establishment and administration of these programs, even if in the long-term they can be designed to be self-sustaining. For example, costs are required for the design and setup of these programs, marketing, application processing, reporting, and evaluation.
  - Financing programs best serve as a complement to other EE programs, not a supplement or as standalone programs. As stated in a review of EE financing program lessons learned, prepared by the American Council for an Energy-Efficient Economy (ACEEE), "financing programs alone are not the "silver bullet" that will solve all EE challenges or meet every individual's needs. Achieving the full potential of efficiency improvements available in the buildings sector will likely require additional complementary services and approaches."[1]
  - Furthermore, market penetration and total EE savings achieved by EE financing programs in the U.S. has been modest to date. According to the ACEEE review study, "Participation rates are generally low across programs. The percentage of total customers in the classes served by programs compared to the total number of program participants reveals that only two of the programs surveyed had rates that exceeded 3% of the customers targeted by the programs and more than half of the programs had participation rates below 0.5%."[2] Therefore, financing programs can be established to complement more traditional EE offerings, but should not be expected to deliver significant energy savings on their own, especially not to the magnitude suggested in the IRP.
  - There are additional barriers, constraints, and needs for low- and moderate-income participants. Financing programs typically serve higher income customers who are able to meet lending/credit requirements to access financing (e.g. minimum credit score, income, etc). Given the higher portion of lower and moderate-income (LMI) customers in Puerto Rico, financing programs will need to be designed to consider and adapt to specific market conditions and customer financing needs and constraints. A report sponsored by the SEE Action Network, focused on Energy Efficiency Financing for Low- and Moderate-Income Households[3] found that:
    - "The LMI context is different than for the market as a whole. Market barriers for LMI households may be exacerbated as compared to the rest of the market, there may be additional barriers and different needs, and financing's impact to LMI households—both beneficial and potentially detrimental—can be significant. For example, consumer protections are crucial for a community that is more vulnerable to abuse and that can be more significantly impacted by the consequences of defaulting on a loan, especially if secured by their property."

[1] American Council for an Energy-Efficient Economy (ACEEE). What Have We Learned from Energy Efficiency Financing Programs? https://www.aceee.org/sites/default/files/publications/researchreports/u115.pdf

[2] Ibid.

[3] State and Local Energy Efficiency Action Network (SEE Action), facilitated by the U.S. Department of Energy/U.S. Environmental Protection Agency. Energy Efficiency Financing for Low- and Moderate-Income Households: Current State of the Market, Issues, and Opportunities. August 2017

- "Financing could potentially facilitate significantly more efficiency in LMI homes, enabling households to realize substantial benefits and program administrators to leverage limited budgets. But there are risks to using financing for LMI households. Those risks, such as fraud, abuse, and the penalties of non-payment, underscore the vital importance of strong consumer protections when using financing for LMI households."
- "Because LMI households have little to no discretionary income, monthly payments to finance an efficiency project may be unaffordable for many. In terms of supporting affordability, program administrators and industry Stakeholders can coordinate the use of available incentives to buy down project costs, provide subsidies to lower monthly payments, require qualifying projects be cash flow-positive, and focus on households with high energy consumption."

  - LUMA does not offer these statements to criticize or dismiss the use of financing programs, only to urge caution in their design and deployment, and to condition expectations about the outcomes they will achieve. Financing has a far narrower range of applications than incentives as a tool to overcome customer barriers to adoption of new technology. The EE market in Puerto Rico is not well-established, and therefore may not be appropriate for financing programs which are typically more suited for established markets with higher incomes.
  - LUMA recommends changing the language in the regulation to state that PREPA "may" offer financing programs, not "shall" offer financing programs. Alternatively, the Regulation could provide flexibility to PREPA to offer these programs only when they are deemed appropriate for the market, similar to the language in section 3.08D.
  - Lastly, LUMA also recommends clarifying 3.05D to indicate that PREPA should offer programs to customers that leverage third-party financing. PREPA cannot be the provider of such financing, given its current financial position, its lack of access to capital markets, and its current capabilities. As described in the Gap Assessment filed within docket NEPR-MI-2020-0019 and NEPR-MI-2021-0004, PREPA lacks the capabilities to administer such financing programs, which require mature risk and credit assessment teams, processes and controls in order to provide financing in a manner consistent with prudent lending practices used in the finance industry.

Section 3.07 Engage with Stakeholders

- *3.07C. PREPA shall work collaboratively with Stakeholders to reflect Stakeholder input in program design and planning. This shall involve at a minimum the facilitation of a Stakeholder working group that meets no less than quarterly each program year.*

- **LUMA Comment:**
  - To enhance coordination and efficiencies in engagement of Stakeholders in EE and DR, LUMA recommends a joint Stakeholder Engagement process for the preparation of the single EE and DR plan, as well as plan implementation. LUMA suggests contracting a dedicated, third-party expert consultant to manage the Stakeholder Engagement process, reporting to either PREB or LUMA.
  - LUMA suggests establishing a Stakeholder Advisory Group that would meet throughout the planning process at each of the key steps to provide advice on portfolio and program design - technologies, markets, trade ally needs, incentive levels, customer support services among other items. LUMA suggests establishing explicit terms of reference for the Stakeholder process in conformity with the DR and EE regulations. Stakeholders collectively would serve as an advisory group in planning and program delivery to enable LUMA to make more informed decisions about markets, technology availability, trade ally

training needs, incentive levels, customer support services, among other matters regarding EE and DR. In addition to the advisory group consultations, LUMA recommends two Stakeholder conferences, the first Stakeholder conference to occur after the completion of the baseline studies, and the second after the preparation of the draft DR and EE Plan.

Section 4.01 Interim Cost Benefit Test

- *4.01E. Each cost and benefits shall be calculated so it reflects the possibility for temporal and locational variation in its cost or value (such as, for example, higher costs when the load is high relative to cheap renewable production or when the transmission or distribution system is congested), and which accounts for the value of marginal changes in load.*

- **LUMA Comment:**
  - Benefit and cost data that reflects temporal and locational variability will be difficult and costly to obtain and/or develop. This difficulty is even greater for the first Three-Year Plan given the current state of system data availability and the ongoing transition to AMI. LUMA recommends adding language to clarify that temporal and locational variation data be considered ***"if and when available".***

- *4.01G. If the initial Baseline Study and Potential Study described in Section 2.04 of this Regulation are completed and the Puerto Rico Test is not yet finalized, PREPA shall begin assessing the cost-effectiveness of EE programs according to the Total Resource Cost Test ("TRC Test").*

- **LUMA Comment:**
  - Section 4.01 Interim Cost Benefit Test B) of the Regulation for Demand Response indicates that "LUMA and the Energy Bureau shall assess the cost-effectiveness of DR Programs according to the Utility Cost Test (UCT). And Section 4.02 G) indicates that "The Puerto Rico Test shall replace the interim Utility Cost Test…". There are similar provisions in the EE Regulation. However, while Section 4.01B of the EE Regulation states that the Total Resource Cost Test will be used once the EE baseline and potential studies are complete, there is no equivalent requirement in the DR Regulation to transition to a Total Resource Cost when the DR baseline and potential studies are complete. This creates a problem for coordination and harmonization of the DR and EE plans as the cost-effectiveness testing does not align. As well, it is not clear when and how it will be determined when these studies are complete, adding additional complexity and potential delay to the completion of the DR and EE plans.
  - LUMA recommends alignment of the use of the cost-effectiveness tests. To change from the UCT to the Total Resource Cost Test during plan preparation for the first Three-Year Plan will create duplication of effort and cost inefficiencies. Therefore, LUMA recommends that the Utility Cost Test be used consistently for the first Three-Year EE and DR Plan for EE and DR until the Puerto Rico Test becomes available.

Section 4.03 Assessment Level

- *4.03A. The Energy Bureau may establish that the primary cost-effectiveness of PREPA's plans be assessed at the portfolio, sector, and/or program level. The primary assessment level for plans shall not be at the measure or project level.*

- **LUMA Comment:**

- LUMA recommends using cost-effectiveness at the portfolio-level as the primary assessment level, with the portfolio having to achieve a benefit cost ratio of at least 1.0. Cost-effective calculations would also be done at the program and measure level for information and program design purposes only. This contributes to creating a climate of innovation for EE and provides new technologies and delivery strategies an opportunity to establish whether they can contribute to EE goals in Puerto Rico's market.

Section 5.02 Evaluation and Verification

- *5.02C. PREPA shall furthermore participate in Market Baseline and Potential Studies, as well as other relevant research or analysis, conducted by the Energy Bureau. PREPA may carry out additional market characterization work as necessary to plan its services and initiatives, and to support its long-range planning responsibilities, as part of its routine course of operations. PREPA and the Energy Bureau shall coordinate studies where appropriate.*

- **LUMA Comment:**
  - LUMA recommends that the proposed Regulation for Energy Efficiency incorporate clarity on what is expected by PREPA/LUMA's "participation" in the Market Baseline and Potential Studies, if these studies are conducted by the Energy Bureau. LUMA recommends that the Energy Bureau delegate the responsibility of contracting for these studies to LUMA. Delegation of this responsibility to LUMA will enable a more efficient and coordinated process, in conjunction with the DR studies.

- *5.02E. Verification.*

- **LUMA Comment**: The Regulation should include a discussion of Net-to-Gross (NTG) research and evaluation, and how that research will be applied to LUMA's program planning and performance. For example, the Regulation does not specify who will conduct NTG studies, the frequency of these studies, and how else the NTG results shall or may be used.
  - LUMA recommends that NTG research be conducted as part of the program evaluation, with limited NTG research requirements for the first three years of the program, as discussed in section 3.02C. For the first three years, and to inform initial program planning, LUMA recommends applying a deemed NTG ratio of 1.0. In future years, the evaluator can conduct NTG research to inform program planning, as appropriate, but NTG should not be used to assess LUMA's performance against savings targets.
  - It would be costly and complicated to evaluate NTG for all programs every year. LUMA suggests that the evaluator conduct NTG studies on a rotational basis – for example, once for each program every three-year cycle. This is a common practice in US jurisdictions.
  - Net savings should not be used to determine if program goals/savings targets have been attained. LUMA recommends inserting the following, or similar, language to the Regulation, "Verified gross savings will be used to set energy savings goals and to determine whether these goals have been attained."
  - NTG studies should be conducted for the purposes of acquiring data to improve program effectiveness. This is a common approach in other jurisdictions in the United States, such as Pennsylvania's Act 129 EE programs.

Section 7.01 Resource and Grid Planning

- *7.01B. To further such planning, PREPA shall: … 3) Undertake or support resource potential studies on an Island-wide basis or in a limited geographic area to estimate the pace and cost to which potential EE resources may be acquired.*

- **LUMA Comment:**
  - There is some ambiguity on the role for PREPA/LUMA's support since the Regulation states that the Energy Bureau is contracting these studies. LUMA recommends that LUMA take responsibility for contracting the baseline and potential studies, to enable a more efficient and coordinated process, in conjunction with the DR studies.

Section 8.01 Identification of Non-Wires Alternatives

- *8.01A) PREPA shall identify opportunities where EE or DR resources may cost-effectively avoid or defer the need to construct transmission or distribution infrastructure.*
  1) *Within six (6) months of the effective date of this Regulation, PREPA shall develop and submit to the Energy Bureau for approval a non-wires alternative (NWA) screening framework for proposed transmission or distribution investments…"*

- **LUMA Comment:**
  - LUMA understands the need to develop a non-wires alternative screening framework, however it will be difficult to develop and integrate such a framework into the initial Three-Year DR and EE Plan during the current timeline. LUMA recommends including any programming targeted to specific infrastructure deferrals in the "regulatory sandbox" for additional research and development during the first Three-Year planning period. Adding NWA's into the Three-Year Plan can be done as part of an annual plan update, after year one of the Three-Year Plan, once the NWA framework is in place.
  - When NWA's are included in the DR and EE plan, they should also be treated separately from the other EE and DR programs. NWA programs will need to be characterized and assessed consistent with the NWA framework, which may not align with requirements, goals and assessment criteria used for traditional, stand-alone EE and DR programs.
  - LUMA recommends that further clarification is needed on how the screening framework should align with similar work conducted by the Energy Bureau's consultant in the Minigrid Optimization Proceeding (NEPR-MI-2020-0016).
  - Furthermore, LUMA would like to urge caution around the breadth of the current scope of planning work within the currently proposed timeline. The Bureau has established an ambitious set of priorities the EE, DR and PR Cost Test proceedings to be achieved within a condensed time frame. Several interdependent and parallel work streams are required to produce the proposed Three-Year EE/DR Plan, which is the basis for program implementation. Adding an NWA workstream to the already significant workload may result in conflicting priorities that could sacrifice work quality and increase costs. LUMA wants to ensure that the work is done thoughtfully and well and proposes a more measured and steady approach, where NWA screening framework development occurs after the Three-Year EE/DR Plan development. This would allow for LUMA's Subject Matter Experts and consultants to shift efforts from the Three-Year EE/DR Plan onto the NWA screening framework, instead of having to increase staffing for near-term overlapping initiatives. Smoothing of regulatory workload provides for a more efficient and cost-effective execution of work and use of personnel and is practiced in most all other jurisdictions.

Section 8.02 Geographically Targeted Resource Acquisition

- *8.02B) PREPA shall design and implement geographically targeted EE and DR programs upon the Energy Bureau's approval and in areas where they would provide the greatest benefit…"*

- **LUMA Comment:**

- LUMA concurs with the value of designing and implementing targeted EE and DR programs, subject to Energy Bureau approval. However, as with NWAs, it will be difficult to integrate these programs into the first Three-Year Plan. The NWA screening framework (or other screening framework) would likely be needed for these programs as well. Including this programming in the first Three-Year Plan will add cost and delay to its preparation. As such LUMA recommends the exclusion of separate geographically targeted resource acquisition programming in the Three-Year Plan for the first plan approval by Energy Bureau. Adding geographically targeted resource acquisition for this purpose into the Three-Year Plan can be done as part of an annual plan update, after year 1 of the Three-Year Plan, once the NWA screening framework is in place. Geographic targeting could be added to program delivery methods (e.g. targeted marketing) later as target geographic regions and program offerings are identified.
- When geographically targeted resource acquisition is included in the DR and EE plan, this should be treated separately from the other EE and DR programs. These programs will need be characterized and assessed consistent with the NWA framework.
- LUMA also submits that guidance from the Energy Bureau is needed on how the screening framework should align with similar work conducted by the Energy Bureau's consultant in the Minigrid Optimization Proceeding (NEPR-MI-2020-0016).