

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

IN RE: PUERTO RICO ELECTRIC
POWER AUTHORITY RATE REVIEW

CASE NO.: NEPR-AP-2023-0003
SUBJECT: Rate Review Petition

MOTION SUBMITTING RATE REVIEW PETITION

TO THE HONORABLE PUERTO RICO ENERGY BUREAU:

COME NOW LUMA Energy, LLC (“ManagementCo”), and LUMA Energy ServCo, LLC (“ServCo”), (jointly referred to as “LUMA”), and respectfully state and request the following:

I. Introduction

1. The current base rates, which this Puerto Rico Energy Bureau (“Energy Bureau”) established for the Puerto Rico Electric Power Authority (“PREPA”) in 2017 and have remained unchanged, do not cover the current costs to operate the Transmission and Distribution System (“T&D System”) and critical investments and high-priority given the fragile state- The T&D Budgets for Fiscal Years 2024 and 2025 were balanced only because of contributions from external sources that are not currently available for Fiscal Year 2026 (“FY2026”). The combination of inflation and stagnating levels of revenues generated from base rates, has resulted in the extended underfunding of the needs of the utility, including the costs of operating and repairing the electrical system by the current operators of the transmission and distribution assets, and the generation assets, including LUMA, Genera PR, LLC (“Genera”), and PREPA.

2. Considering the limitations imposed by an outdated rate structure and the lack of sufficient funding to address these issues and achieve improved performance, LUMA is hereby

proposing, at the request of the Energy Bureau, a historic level of investment options for the Fiscal Years 2026 to 2028 period to address an array of vital customer priorities. Funding is critical to moving Puerto Rico's electrical system toward a better energy future that directly addresses key customer concerns, such as those over reliability and grid resiliency.

3. Over the three-year rate period covering Fiscal Years 2026 to 2028, LUMA is proposing new, necessary investments enabling the LUMA team to take the critical actions necessary to continue building on the progress LUMA has made to date on behalf of its 1.5 million customers to improve reliability and decrease the frequency and duration of outages. The investments proposed support LUMA's key priorities: Improving Reliability, Increasing Hurricane Resiliency and Preparedness, Modernizing Grid Infrastructure, and Supporting Clean Energy.

4. LUMA's Rate Review Petition covers the utility's (PREPA, LUMA, and Genera's) full scope of revenues, other incomes, and costs involved in providing electric service in Puerto Rico (the "total revenue requirement"). However, the key output of the process will be updated base rates (or permanent rates), which are intended to recover the costs to operate and maintain the utility, and to provide electricity service to customers, exclusive of riders or additional sources of funding such as those from the Federal Emergency Management Agency ("FEMA"). At the time of LUMA's Rate Review Petition, the current base rates constitute 26% of the total average customer bill (with the other 74% mainly comprising fuel and purchased power charges whose costs are recovered through riders). *See Annex I.A, Exhibit 1.04.*

5. The Energy Bureau has manifested its intention to review and approve base rates based on forecast information provided herein for Fiscal Years 2026 to 2028, with the expectation that new permanent rates will be in effect for the start of Fiscal Year 2027 ("FY2027"). For that purpose, the Energy Bureau directed LUMA, PREPA, and Genera to file both an "Optimal" and a

“Constrained” budget. The “Optimal Budget” represents system funding needs without constraints, and the “Constrained Budget” is an amount less than the optimal budget requiring unavoidable tradeoffs to provide a “customer-sensitive transition from the *status quo*” to an optimal budget in Fiscal Year 2028. *See* Resolution and Order dated February 12, 2025.

6. In compliance with the Energy Bureau directive, LUMA developed an “Optimal Budget” of \$1.648 billion and a “Constrained Budget” of \$1.231 billion for FY2026. Also, it developed a total system revenue requirement which is the sum of LUMA’s Constrained Budget, PREPA’s Fiscal Year 2025 approved budget adjusted by +1.05% as a placeholder (the “PREPA Proxy,”) with the understanding that PREPA’s revenue requirement will be incorporated as part of the revenue requirement and rate design after this submission), and Genera’s Optimal Budget.

7. LUMA hereby submits **Annex I.A** (LUMA), **Annex I.B** (Genera), **Annex I.C** (PREPA) to this Motion in support of the Rate Review Petition. The above-listed annexes include LUMA’s, Genera’s and PREPA’s witnesses’ pre-filed testimonies; workpapers containing analyses, facts, and calculations; schedules comprising the total utility revenue requirement and other information; and schedules respecting rate design filing requirements (e.g., Cost Of Service Studies (“COSS”) and proposed rate design), in compliance with the orders and directives entered by the Energy Bureau in this instant proceeding.

8. Moreover, LUMA is requesting that the Energy Bureau approve a temporary or provisional rate increase pursuant to Section 6.25(e) of the *Puerto Rico Energy Transformation and RELIEF Act*, Act No. 57-2014, as amended (“Act 57-2014”), to be collected in the interim period (commencing on September 1, 2025) while the Energy Bureau is adjudicating the utility revenue requirement. This temporary or provisional rate increase request is based on LUMA’s incremental costs that are just and reasonable and rooted in high-priority and non-controversial

items, PREPA's Proxy, and Genera's Optimal Budget. LUMA submits herein witnesses' pre-filed testimonies; workpapers containing analyses, facts, and calculations; schedules comprising the total utility revenue requirement and other information; and schedules respecting rate design filing requirements to support the request for a temporary or provisional rate increase in **Annex I.A** to this Motion.

9. Further, in compliance with the Resolution and Order dated February 12, 2025, LUMA hereby submits LUMA's, Genera's lists of witnesses, schedules, and exhibits that the witnesses are supporting, submitted as **Annex II**. In addition, LUMA presents LUMA's list of witnesses, referring to the schedules and exhibits each witness supports, as **Annex III**. Also, LUMA includes a draft public notice in both Spanish and English submitted as **Annex IV (Attachment A)** to this Motion.

10. Finally, LUMA hereby submits its responses to several Requests for Information ("RFI") issued by the Hearing Examiner in an Order dated March 24, 2025, in **Annex V (Attachment B)** to this Motion. **Annex V (Attachment B)** restates each RFI, indicates whether the response is provided within pre-filed testimony or submitted separately, and identifies the LUMA executive responsible for further discussion of the response or for providing any follow-up information that may be required.

II. Procedural Background

11. On June 30, 2024, this Energy Bureau issued a Resolution and Order "to initiate [this] adjudicative process to review PREPA's rates" (the "June 30th Order") and opened this instant proceeding. *See* June 30th Order, p. 2. Through the June 30th Order, the Energy Bureau divided the rate review process into three (3) separate phases and ordered LUMA to file a report

on or before October 4, 2023, containing its understanding of the filing requirements for the rate review process, based on Regulation 8720¹ and prior Energy Bureau orders.² *See id.*, pp. 2-3.

12. On October 4, 2023, LUMA filed a *Motion in Compliance with June 30th Resolution and Order – Submission of Phase I Report* (“Phase I Report”). On October 24, 2023, this Energy Bureau issued a Resolution and Order determining that LUMA’s Phase I Report complied with the June 30th Order (“October 24th Order”). This Energy Bureau also issued the first of various requests for information addressed to LUMA, Genera, and PREPA.³

13. On March 15, 2024, this Energy Bureau issued a Resolution and Order whereby, amongst other things, it assessed LUMA’s Phase I Report and issued several directives (“March 15th Order”). Moreover, in the March 15th Order, this Energy Bureau directed LUMA, Genera, and PREPA to submit responses to additional requests for information on or before April 8, 2024.

14. On April 12, 2024, this Energy Bureau issued a Resolution and Order (“April 12th Order”) whereby it set aside all deadlines and/or milestones established through the March 15th Order until “the Title III Court has rendered its decision on the confirmation of the Amended Plan, so that all matters associated with PREPA’s exit from Title III may be considered simultaneously.” *See* April 12th Order, p. 3.

¹ Known as the *New Regulation on Rate Filing Requirement for the Puerto Rico Electric Power Authority’s First-Rate Case* (“Regulation 8720”).

² Phase I entailed an informal review of previously established filing requirements (including those established through Regulation 8720), that would apply to a rate order modification request filed in the instant proceeding, allocating responsibility for the various requirements across the relevant operating entities. Phase II entailed filing a rate order modification request based on the applicable filing requirements adopted by the Energy Bureau as a result of Phase I. Lastly, Phase III involved the “formal review of a complete rate filing [which] contain[ed] the items addressed in an interim matter in Phase II,” as well as the remaining filing requirements determined during Phase I to be deferred to Phase III. *See* June 30th Order, p. 4.

³ On November 3, 2023, LUMA filed a *Motion Submitting Responses to First Requirement of Information in Compliance with October 24th Resolution and Order*, whereby it submitted its response to this Energy Bureau’s requests for information.

15. On June 5, 2024, this Energy Bureau issued a Resolution and Order whereby it determined that “additional information is required for its review of LUMA’s rate review filing” (“June 5th Order”). Therefore, the Energy Bureau ordered LUMA to respond, within ten (10) days of the notification of the June 5th Order, to several requirements for information regarding trial balances. In compliance with the June 5th Order, on June 17, 2024, LUMA filed its *Motion Submitting Responses to Attachment A to the June 5th, 2024 Resolution and Order*.

16. After nearly six (6) months, on December 10, 2024, this Energy Bureau issued a new Resolution and Order with an update on the expected filing requirements for the rate review petition (“December 10th Order”). The Energy Bureau emphasized that any filing for new rates must comply with its established filing requirements, which were being finalized in collaboration with its consultants, and indicated its expectation to finalize such requirements by early February 2025.

17. On December 16, 2024, this Energy Bureau issued another Resolution and Order (“December 16th Order”), with the aim of providing “preliminary guidance on rate case procedures and scheduling to ensure an orderly and efficient process that advances the public interest while complying with statutory requirements.” *See* December 16th Order, p. 1. Through the December 16th Order, the Energy Bureau scheduled a Technical Conference for December 20, 2024, and listed a series of “substantive issues” that would be addressed at said Technical Conference. *Id.*, p. 3.

18. Following the December 20th Technical Conference, this Energy Bureau issued a Resolution and Order (“December 20th Order”) whereby it set forth additional requests for information for LUMA, Genera, and PREPA (“December 20th ROIs”). Moreover, the Energy Bureau scheduled a Technical Conference for January 10, 2025.

19. On January 3, 2025, the parties were served with a document titled Technical Conference of January 10, 2025: Consultants’ Agenda and Explanation (“January 3rd Agenda”). Said document identified the topics to be discussed during the January 10th Technical Conference, divided into three topics. To wit: i) the procedural and substantive context for the December 20th ROIs; specifically, the relationship between the budget and the revenue requirement; ii) matters relating to the scope of the instant proceeding as it pertains to riders and Renewable Energy Credits; and iii) immediate next steps.

20. After the January 10th Technical Conference was held, the parties were served with a document titled *Consultants’ Request of Parties Arising from Technical Conference of January 10, 2025* (“January 10th Request”). Therein, the Energy Bureau’s consultants requested that, in addition to the December 20th ROIs, the parties address a series of further requests for information, on or before January 17, 2025 and through a “formal filing,” regarding the following: i) advantages and disadvantages of optimal budget and alternative budgets; ii) legacy debt; iii) riders; iv) Renewable Portfolio Standard (RPS) compliance costs; and v) performance level associated with the proposed revenue requirement. Lastly, the Energy Bureau’s consultants provided instructions regarding the responses to the questions posed through the *Appendix on Legal Issues* contained in the January 3rd Agenda.

21. On January 18, 2025, LUMA filed a *Motion Submitting Responses to Requests of Information issued on December 20, 2024 and January 10, 2025*.⁴

⁴ Analogous motions were filed by PREPA, Genera, the Independent Consumer Protection Office, the Institute of Competitiveness and Economic Sustainability, and Bondholders. Available at <https://energia.pr.gov/wp-content/uploads/sites/7/2025/01/20250117-AP20230003-Motion-in-Compl-with-Resol-and-Order-Dated-Dec-20-2024-1.pdf>; <https://energia.pr.gov/wp-content/uploads/sites/7/2025/01/20250117-AP20230003-Motion-to-Subm-Response-to-Resolution-and-Order-Dated-Dec-20-2024.pdf>; <https://energia.pr.gov/wp-content/uploads/sites/7/2025/01/20250117-AP20230003-ICPO-Recomm-About-Optimal-Budget-and-Alternative-Budgets.pdf>;

22. On February 12, 2025, this Energy Bureau issued a Resolution and Order (“February 12th Order”), whereby it established “the filing requirements and procedures for the rate review of the Puerto Rico Electric Power Authority (‘PREPA’).” *See* February 12th Order, p. 1.

23. Through the February 12th Order, this Energy Bureau designated Mr. Scott Hempling as Hearing Examiner for this proceeding (“Hearing Examiner”), with authority over the following matters: i) resolving all discovery disputes between the parties; ii) establishing and modifying procedural schedules; iii) determining witness sequence and logistics for evidentiary hearings; iv) addressing any other procedural or logistical matters that arise during the proceeding; and v) issuing any procedural orders to facilitate the orderly conduct of the proceeding. *Id.*, p. 8. The Energy Bureau ordered participants to direct all procedural motions and requests related to the above-mentioned matters to the Hearing Examiner.

24. Moreover, in its February 12th Order, the Energy Bureau established that “[g]iven the complexity of setting rates for the first time in eight years, it is unrealistic to give full evidentiary attention to the revenue requirement, the billing determinants and the rate design, all in a single 180-day period.” *Id.*, p. 4. Accordingly, the Energy Bureau determined that it would “address rate design in a separate formal proceeding that will have its own 180-day period.” *Id.* The Energy Bureau added the following: “[t]his approach means that in the revenue requirement proceeding [...] the rate application and any responding testimony should assume a continuation of the existing rate design.” *Id.* Lastly, the Energy Bureau stated that it is possible for the two

<https://energia.pr.gov/wp-content/uploads/sites/7/2025/01/20250117-AP20230003-ICSEs-Motion-on-Legal-Issues-Raised-by-Hearing-Examiners.pdf>; and <https://energia.pr.gov/wp-content/uploads/sites/7/2025/01/20250121-AP20230003-Responses-of-PREPA-Bondholders-to-Consultant-Questions.pdf>.

proceedings on revenue requirements and rate design to overlap in time but tasked its consultants with “working with participants to develop procedural schedules for the two proceedings.” *Id.*

25. Following the issuance of the February 12th Order, on February 18, 2025, the Hearing Examiner scheduled a Prehearing Conference for February 21, 2025, to discuss participants’ doubts and concerns about the February 12th Order. Shortly thereafter, the Hearing Examiner issued his *Order Establishing Agenda for Prehearing Conference of February 21, 2025*, together with a draft procedural schedule.

26. Pursuant to the above, the Virtual Prehearing Conference was held on February 21, 2025. Thereafter, the Hearing Examiner entered a bench order whereby he directed LUMA to develop and file a proposal explaining how provisional rates will be trued-up, and how the revenue requirement will be implemented in the interim period until new rates are approved on a prospective basis following the rate design phase.

27. Accordingly, on March 5, 2025, LUMA filed its *Motion in Compliance with Bench Orders issued during Prehearing Conference of February 21, 2025*, which prompted the issuance of the *Hearing Examiner’s Order Scheduling Conference and Offering Observations on LUMA’s Procedural Proposal*, whereby a Prehearing Conference was scheduled for March 7, 2025 (“March 7th Virtual Conference”).

28. During the March 7th Virtual Conference, participants exchanged thoughts regarding alternative procedures for the Energy Bureau to establish a new revenue requirement and a new rate design.

29. On March 10, 2025, the Hearing Examiner issued a new order titled *Hearing Examiner's List of Legal and Practical Questions to Consider* ("March 10th Order"). The March 10th Order sought participants insights as to several matters.⁵

30. Following the submission of participants' responses to the Hearing Examiner's March 10th Order, LUMA was served with an order titled *Hearing Examiner's Two Follow-Up Questions to Participants' Submissions of March 13, 2025*. In compliance therewith, on March 17, 2025, LUMA filed its *Response to Hearing Examiner's Follow-Up Questions*.

31. On March 24, 2025, the Hearing Examiner issued an *Order Requiring Certain Information in the Rate Case Application or Accompanying Prefiled Testimony* ("March 24th Order"). Therein, the Hearing Examiner directed PREPA, LUMA, and Genera to address a set of pre-application questions from the Energy Bureau's consultants in the upcoming rate application. The Hearing Examiner explained that said "questions seek information that the consultants deem essential to any application for rates" and that, therefore, participants should integrate [their] answers into the application or accompanying prefiled testimony". See March 24th Order, p. 1. The Hearing Examiner further explained that:

Responses to these questions are necessary for the Energy Bureau to determine whether the applicants' proposed rates are "just and reasonable"; whether the electric service for which customers must pay those rates is "adequate, safe, reliable, efficient, and nondiscriminatory; whether the costs underlying the rates

⁵ These were: i) the viability and legality, under Act 57-2014, of establishing two provisional rates within a single proceeding, or alternatively the adjustment of the incremental charge rider after the revenue requirement phase, with only one reconciliation upon conclusion of the entire rate case; ii) the legal requirements for issuing the formal determination of completeness that triggers the 180-day period within which the Energy Bureau must issue a final order on rates; iii) the possibility of issuing two separate "Final Orders," at the end of each Phase, without the "Final Order" on revenue requirements triggering appeal rights under Puerto Rico administrative law; iv) the possibility of keeping the provisional rate in effect through the entire time needed to conduct evidentiary procedures on both the revenue requirement and the rate design, pursuant to "just cause" language contained in Act 83-1941; and lastly, v) a practical question pertaining to addressing the possibility of the Energy Bureau setting permanent rates that are lower than the provisional rates.

reflect prudent utility practice; and whether in preparing their application the applicants made these statutory considerations the sole considerations.

Id.

32. In addition, the March 24th Order stated that each response should expressly refer to the corresponding question by its assigned number. *See* March 24 Order, p. 1. The March 24th Order further provides that, in circumstances where an applicant cannot logically incorporate a response within the application or testimony, the applicant may submit the response in a separate document. *Id.* Additionally, the March 24 Order establishes a process for applicants to seek clarification of any question by submitting an inquiry, including the question number, to the designated email address provided in the Order. *Id.*

33. On April 21, 2025, the Energy Bureau issued a Resolution and Order revising aspects of the February 12th Order and establishing other procedures while maintaining in full force and effect the provisions of the February 12th Order that were not modified (“April 21st Order”). The Energy Bureau explained that the rate case will consist of a single proceeding with two phases. Phase I will address revenue requirements and, to the extent possible, revenue allocation. Phase II will address rate design (including any revenue allocation issues not decided in Phase I). Each of the two phases will have its own filing requirements, application, pre-filed testimony, discovery, evidentiary hearing, and briefs. *See* April 21st Order p. 1

34. The April 21st Order instructed LUMA that a pre-petition revenue requirement filing would be filed on April 30, 2025, and supplemented on May 12, 2025, to provide Schedules A-1 and A-2. Those materials would not constitute the formal rate modification petition. *See* April 21st Order, pp. 1-2. Per the April 21st Order, LUMA would file its formal, complete rate review petition on or about July 3, 2025, including both the revenue requirement and rate design components. *Id.*, p. 2.

35. Moreover, the April 21st Order stated that if and until the Energy Bureau authorizes provisional rates, LUMA, Genera, and PREPA shall continue to operate under the most recently approved budget. Also, if and when the Energy Bureau authorizes provisional rates, those rates shall remain in effect, as permitted by Section 6A(e) of Act No. 83-1941, until the final order setting permanent rates is issued and goes into effect. *See* April 21st Order, p. 7. The April 21st Order expressly required that any provisional rate be supported by a proposed amendment to the FY2025 budget, limited to increases for “high-priority” and “noncontroversial” costs only. *See* April 21st Order, at p. 6. The Energy Bureau explained that this approach was intended to minimize the risk of over-collection, and the operational challenges associated with potential refunds if permanent rates were ultimately set below the provisional rates.

36. On April 25, 2025, the Hearing Examiner issued an *Order on Rate Case Procedures* (“April 25th Order”) responding to issues raised during the Technical Conferences held on February 21 and March 7, 2025, and offered guidance in light of the Energy Bureau’s April 21st Order. The Hearing Examiner adopted a combined procedural schedule for both the revenue requirement and rate design phases, allowing for overlapping review and establishing milestones for submissions, discovery, and hearings. The April 25th Order also addressed the form and implementation of provisional rates, the process for submitting supplemental information relating to Schedules A-1 and A-2, and the standards for cost recovery. Additionally, the April 25th Order established procedures for discovery, the use of expert reports, and public notice requirements.

37. On April 26, 2025, LUMA filed an *Urgent Request on Deadline to Submit Revenue-Requirement Application in Light of April 21st Energy Bureau Order* (“April 26th Request”). Therein, because per the April 21st Order the April 30th deadline to submit the revenue requirement application had become moot for purposes of accommodating the Energy Bureau’s evaluation of

provisional rates, LUMA requested the Energy Bureau to establish a single consolidated deadline to submit the revenue-requirement application, including all testimony and workpapers required for the revenue-requirement portion of the rate review petition, for July 3, 2025.

38. In light of the above, on April 28, 2025, the Hearing Examiner issued an *Order Revising Deadline for Rate Case Application*, whereby he granted LUMA’s April 26th Request (“April 28th Order”). Accordingly, the April 28th Order modified the procedural schedule established in the April 21st Order, eliminating the requirement for a “prepetition” filing on April 30, 2025. Instead, LUMA was authorized to submit a single, comprehensive application on July 3, 2025, encompassing all elements required by the Energy Bureau’s prior orders.

39. On May 2, 2025, the Hearing Examiner issued an *Order on Procedure and Rate Design Conference*, establishing the procedural schedule for the rate review proceeding and outlining the process for addressing rate design issues (“May 2nd Order”). The May 2nd Order also scheduled a Technical Conference on rate design for May 7, 2025, and provided instructions for the use of a web-based platform for discovery.

40. On May 9, 2025, the Energy Bureau issued a Resolution and Order in response to a motion filed by the Independent Office of Consumer Protection (“OIPC” for its acronym in Spanish) seeking enhanced language accessibility in the captioned proceeding (“May 9th Order”).⁶

⁶ To wit, the OIPC requested:

- (1) Spanish translations of key documents, including orders, resolutions, and the rate review filing;
- (2) continued implementation of simultaneous translation during public and technical hearings;
- (3) holding hearings for the general public in Spanish; and
- (4) establishment of a formal protocol to ensure Spanish-speaking participants do not face linguistic disadvantages

See Solicitud de Accesibilidad a los Procesos a los Fines de Garantizar la Participación Ciudadana, filed on April 11, 2025. Available at <https://energia.pr.gov/wp-content/uploads/sites/7/2025/04/20250411-AP20230003-SOLICITUD-de-accesibilidad.pdf>.

After detailing existing language accessibility measures observed by the Energy Bureau in all of its proceedings, the Energy Bureau established a new requirement that all parties submitting substantive filings in English must include a concise summary in Spanish within the same filing. Per the May 9th Order, said summary “must clearly present the main points, conclusions, and any specific requests contained in the English-language filing to ensure that Spanish-speaking participants can understand the essential elements”. See May 9th Order, p. 2.

41. Following the Technical Conference held on May 7, 2025 and a series collaborative meetings between LUMA, the Energy Bureau’s consultants, and other participants, where LUMA addressed questions regarding the objectives and limitations for the rate design phase, on May 16, 2025, the Hearing Examiner issued an *Order* circulating the draft filing requirements on rate design, prepared by the Energy Bureau’s consultants, and requesting comments and questions regarding same (“May 16th Order”).⁷

42. On May 21, 2025, LUMA filed a *Request for Partial Reconsideration of the May 9th Order* (“May 21st Request”). Therein, LUMA expressed support for the goal of enhancing public participation but requested that the Energy Bureau amend its order to require full Spanish translations of substantive filings, rather than concise summaries.

43. After receiving comments on the draft filing requirements for rate design⁸, on May 29, 2025, the Energy Bureau issued a Resolution and Order establishing the rate design filing

⁷ The Hearing Examiner later requested comments on the possible addition of four additional rate design filing requirements. See *Order Requesting Comments on Possible Additional Rate Design Filing Requirements*, issued on May 22, 2025.

⁸ See *Motion Submitting LUMA’s Comments on Draft Filing Requirements on Rate Design*, filed by LUMA on May 23, 2025, and *Comments on the Inclusion of a “Net-Metering Customer Class” Filing Requirement*, filed by the Solar and Energy Storage Associate of Puerto Rico (“SESA”) on May 23, 2025. Available at <https://energia.pr.gov/wp-content/uploads/sites/7/2025/05/20250523-AP20230003-Motion-Subm-Lumas->

requirements applicable to the forthcoming rate application (“May 29th Order”). The May 29th Order adopted, with minor modifications, the draft requirements circulated by way of the May 16th Order, re-lettering the schedules for clarity and incorporating certain suggestions from LUMA to improve the structure and content of the filing package. The May 29th Order detailed the specific schedules and supporting materials that LUMA must include in its rate design submission, encompassing cost allocation, revenue allocation, rate and bill effects, billing determinants, proposed tariffs, and responses to policy questions.⁹

44. On June 4, 2025, the Energy Bureau issued a Resolution and Order addressing LUMA’s May 21st Request (“June 4th Order”). Through its June 4th Order, the Energy Bureau denied LUMA’s request to replace the requirement for concise Spanish summaries with mandatory full translations of substantive English filings. The Energy Bureau clarified that while full translations may be submitted voluntarily within five business days of the original filing, concise Spanish summaries remain mandatory and must be filed concurrently with the English document. The Energy Bureau confirmed that each party is solely responsible for preparing summaries or translations of documents it authors.

45. By way of an *Order* issued on June 6, 2025, the Hearing Examiner took notice of LUMA’s unfruitful requests to PREPA to provide its revenue requirement for FY2026 to 2028 and all accompanying workpapers, so that these may be incorporated into the upcoming rate review

[Comments-on-Draft.pdf](#), and <https://energia.pr.gov/wp-content/uploads/sites/7/2025/05/20250523-AP20230003-Comments-on-the-Inclusion.pdf>, respectively.

⁹ On June 11, 2025, the Hearing Examiner issued an *Order Adjusting Rate Design Filing Requirements*, where he conceded that certain topics – specifically, Schedules P-1 through P-4 – are more appropriately discussed through pre-filed testimony rather than as discrete data submissions (“June 11th Order”). Accordingly, the Hearing Examiner directed LUMA to address these four items through pre-filed testimony.

petition to be filed with the Energy Bureau by the July 3rd deadline. In light thereof, and following a Virtual Conference held on June 9, 2025, with the purpose of addressing intercompany cooperation in preparing the upcoming rate review application, LUMA and PREPA met through their respective counsels and agreed upon a work plan pursuant to the directives issued by the Hearing Examiner during the June 9th Virtual Conference.¹⁰

46. In sum, PREPA committed to providing its proposed revenue requirement to LUMA by June 25, 2025. Moreover, LUMA would submit a rate application on or before July 3, 2025, in compliance with the Energy Bureau's April 21st Order, using a consolidated revenue requirement for LUMA, PREPA, and Genera. If PREPA did not provide its revenue requirement information by June 25, LUMA would use an inflation-adjusted proxy based on PREPA's Fiscal Year 2025 figures. Due to time constraints, LUMA's revenue allocation and rate design would be based on this proxy, with any necessary adjustments to reflect PREPA's actual data to be made at a later date.¹¹

47. On June 13, 2025, the Hearing Examiner issued an *Order Requiring PREPA Filing on Managing Federal Funds* in response to PREPA Governing Board Resolution 5183, which repealed the prior delegation of authority to LUMA for managing federal grant applications related to Transmission and Distribution (T&D) Reconstruction Projects and designated PREPA's Executive Director as the sole authority for such matters. Recognizing the potential impact of this governance change on PREPA's rates, particularly in the event of any shortfall in federal funding,

¹⁰ Said convened upon workplan was outlined through a *Joint Motion in Compliance with Directive Issued During June 9th Virtual Conference*, filed on June 17, 2025. Available at <https://energia.pr.gov/wp-content/uploads/sites/7/2025/06/20250617-AP20230003-Joint-Motion-in-Compl-with-Directive-Issued.pdf>.

¹¹ See *Hearing Examiner's Revised Order Summarizing Conference of June 18, 2025 on Compliance with the Energy Bureau's Order of April 21, 2025* ("June 20th Order"), at p. 1; see also June 18th Virtual Conference, available at https://www.youtube.com/watch?v=_OsaSQpq-Ok.

the Hearing Examiner directed PREPA to address a series of detailed questions and subjects in its revenue requirement filing and accompanying testimony due July 3, 2025.

48. On June 25, 2025, the Hearing Examiner issued an *Order* clarifying the obligations of PREPA and LUMA in connection with the July 3rd consolidated rate application filing. The Hearing Examiner stated that PREPA's responses to the corresponding requests for information issued with the March 24th Order must be integrated into its portion of the application or accompanying pre-filed testimony, with each response clearly citing the relevant question number. The March 24th Order expressly rejected the notion that PREPA should submit these responses as standalone documents.

49. A day later, on June 26, 2025, the Hearing Examiner issued an *Order* adjusting the deadline for PREPA to submit its proposed revenue requirement and supporting testimony to LUMA ("June 26th Order"). This, in response to the *Urgent Motion for Extension of Time to Notify Revenue Requirement Data and File Rate Case Application*, filed by PREPA on June 25, 2025. Specifically, the June 26th Order granted PREPA's request to extend its submission deadline from June 25 to June 30, 2025, while maintaining LUMA's deadline to file the consolidated rate application on July 3, 2025. The June 26th Order, however, underscored the expectation that PREPA would fulfil its statutory responsibilities without additional delay and confirmed that any necessary adjustments to the consolidated revenue requirement, revenue allocation, and rate design, would be addressed in subsequent phases of the proceeding.

III. Legal Framework of Rate Proceeding

A. Applicable Statutory Framework

50. As the main entity in charge of ensuring compliance with energy public policy and carrying out energy policy mandates, the Energy Bureau has the authority to review this

submission pursuant to Act 57-2014, PR Laws Ann. Tit. 22 §§ 1051-1056 (2025), 22 LPRA §§ 1051-1056 (2025), and the *Puerto Rico Energy Public Policy Act*, Act No. 17-2019, as amended (“Act 17-2019”), PR Laws Ann. Tit. 22 §§ 1141a-1141r (2025), 22 LPRA §§ 1141a-1141r (2025). Specifically, Act 57-2014 gives the Energy Bureau authority and regulatory oversight over electric services and companies such as PREPA and LUMA. *See* Sections 6.3 and 6.4 of Act 57-2014, PR Laws Ann. Tit. 22 §§ 1054b and 1054c (2025), 22 LPRA §§ 1054b and 1054c (2025). Among other powers, the Energy Bureau oversee and ensure the execution and implementation of the public policy concerning electric service companies, establish by regulations the public policy rules regarding electric power service companies, and adopt the rules, orders, and regulations needed to carry out its duties, issue orders, as well as for the implementation of Act 57-2014. *See* Section 6.3 of Act 57-2014, PR Laws Ann. Tit. 22 § 1054b (2025), 22 LPRA § 1054b (2025).

51. Act 57-2014 was enacted with the aim of, amongst other things, enforcing “a thorough reform of the energy sector that promotes the operation and administration of an efficient system at just and reasonable costs, considering that we are an isolated jurisdiction that needs to have a safe and stable electric power grid.” *See Statement of Motives*, Act 57-2014. In furtherance thereof, Article 6.21 of Act 57-2014 establishes obligations applicable to electric power service companies. To wit:

- (a) Every certified electric power company shall provide customers or consumers with an adequate, safe, reliable, efficient, and nondiscriminatory electric power service;
- (b) Every rate or charge required or collected for any service provided or to be provided, and the rules adopted by every electric power service company regarding the provision of such services shall be just, reasonable, and nondiscriminatory; and
- (c) No certified electric power company shall give unjust or unreasonable preference or advantage to any person; neither shall such company subject any person to unjust or unreasonable prejudice or disadvantage in any aspect.

PR Laws Ann. Tit. 22 § 1054t (2025), 22 LPRA § 1054t (2025).

52. In what is pertinent to the captioned proceeding, Article 6.25 of Act 57-2014 regulates the procedures for review of Puerto Rico's electricity rates by this Energy Bureau. PR Laws Ann. Tit. 22 § 1054x (2025), 22 LPRA § 1054x (2025). Subsection (a) of the referenced provision states that the Energy Bureau:

shall be in charge of following the process established herein to review and approve the electric power service companies' proposed rate reviews. The Energy Bureau shall ensure that all rates are just and reasonable and consistent with sound fiscal and operational practices that provide for a reliable and adequate service at the lowest reasonable cost. [...]

Id.

53. Moreover, during any rate review process, the burden of proof shall lie on the requesting electric power service company to show that the proposed rate is just and reasonable, consistent with sound fiscal and operational practices that provide a safe and adequate service at the lowest reasonable cost. *See* Article 6.25(b) of Act 57-2014.

54. "The request shall state the grounds for the modification, the effect of such modification on the revenues and expenditures of the requestor, and any other information requested by the Energy Bureau through regulations or resolution." *See* Article 6.25(c) of Act 57-2014. Further, any rate modification proposal "shall undergo a discovery and a public hearing process to be held by the Energy Bureau to determine whether the proposed change is just and reasonable and consistent with sound fiscal and operational practices that provide for a reliable and adequate service, at the lowest reasonable cost." *Id.* In furtherance of transparency, the Energy Bureau shall provide an opportunity to allow the participation of interested parties in the process.
Id.

55. Specifically, to the petition at issue, Act 57-2014 provides that within thirty (30) days after the filing of the rate modification request, the Energy Bureau may make, *motu proprio*,

or at the request of a requesting certified company, a preliminary evaluation to determine whether a temporary or provisional rate should be established. *See* Article 6.25(e) of Act 57-2014, PR Laws Ann. Tit. 22 § 1054x(e), 22 LPRA § 1054x(e) (2025). The Energy Bureau shall exercise its discretion in establishing the temporary rate, unless the requestor contests the establishment of the temporary rate or the amount thereof, in which case the Energy Bureau shall decide whether it shall revise the amount of the temporary rate or desist from establishing the same. *Id.*¹²

56. If the Energy Bureau establishes a temporary rate, such a rate shall take effect sixty (60) days after the date of approval of the temporary rate, unless the Energy Bureau determines, at the request of the requestor, that the temporary rate should take effect earlier, but never within less than thirty (30) days after the approval of the temporary rate. *See* Article 6.25(e) of Act 57-2014, PR Laws Ann. Tit. 22 § 1054x(e), 22 LPRA § 1054x(e) (2025). Said temporary rate shall remain in effect during the period of time needed by the Energy Bureau to evaluate the rate modification request proposed by the requestor and up to the date on which the new bill is implemented, which shall not exceed sixty (60) days after the approval thereof. *Id.*

57. Upon the conclusion of the public hearing process, “the Energy Bureau shall issue its final determination with regards to the rate review request and establish the electricity rate it deems just and reasonable”, with such determination being "duly grounded and in compliance with

¹² Similarly, Act 83 provides that at PREPA’s request, the Energy Bureau may approve a provisional rate modification. *See* Article 6A(e) of Act 83, PR Laws Ann. Tit. 22 § 196a(d), 22 LPRA § 196a(e) (2025). Within thirty (30) days after the filing of the rate modification request, the Energy Bureau may make, *motu proprio*, or at the request of PREPA, a preliminary evaluation to determine whether a temporary rate should be established. *Id.* The temporary rate shall be established at the discretion of the Energy Bureau. *Id.* If the Energy Bureau establishes a temporary rate, such rate shall take effect sixty (60) days after the date of approval of the temporary rate, unless the Energy Bureau determines, at the request of PREPA, that it should take effect earlier, but never within less than thirty (30) days after the approval of the temporary rate. *Id.* Said temporary rate shall remain in effect during the period of time needed by PREPA to evaluate the rate modification request proposed by PREPA and issue a final order thereon, and up to the date on which the new bill is implemented, which shall not exceed sixty (60) days after the approval of the rate, unless PREPA extends such term for just cause. *Id.*

“all the safeguards of the due process of law applicable to the final determinations of administrative agencies.” *See* Article 6.25(f) of Act 57-2014. The Energy Bureau’s review processes shall not exceed one hundred eighty (180) days from the Energy Bureau’s determination of completeness; provided, however, that the Energy Bureau may extend the review process for an additional term that shall not exceed sixty (60) days. *See* Article 6.25(c) of Act 57-2014. Once approved, the newly approved rate shall take effect sixty (60) days after the effective date of the Bureau’s order. *See* Article 6.25(f) of Act 57-2014.

58. Upon the issuance of a final order after completion of the rate review process, the Energy Bureau shall direct the requesting company to adjust customers’ bills so as to credit or charge any discrepancy between the temporary rate established by the Energy Bureau and the permanent rate approved by the Energy Bureau. *Id.*, Article 6.25(f).

B. Relevant T&D OMA Background

59. LUMA entered into the *Puerto Rico Transmission and Distribution System Operation and Maintenance Agreement* dated June 22, 2020 (“T&D OMA”) with PREPA and the Puerto Rico Public-Private Partnerships Authority (“P3A”) to (i) provide management, operation, maintenance, repair, restoration and replacement, and other related services for the T&D System, in each case that are customary and appropriate for a utility transmission and distribution system service provider; and (ii) establish policies, programs, and procedures with respect thereto ((i) and (ii), collectively, the “O&M Services”).¹³ *See* T&D OMA, Section 5.1, p. 62.

¹³ The O&M Services are to be provided in accordance with the “Contract Standards,” requiring compliance with Applicable Law, Prudent Utility Practice, and other standards, terms, conditions, and requirements specified in the T&D OMA (for purposes of this submission, “Contract and Policy Standards”). Contract and Policy Standards necessarily require acting consistently with policy mandates and directives in Act 57-2014, Act 120-2018, as amended, known as the *Electric Power System Transformation Act* (“Act 120-2018”) and Act 17-2019, among others. The term “Applicable Law” includes “any foreign, national, federal, state, Commonwealth, municipal or local law, constitution, treaty, convention, statute, ordinance,

60. LUMA is tasked with (i) representing PREPA before the Energy Bureau with respect to any matter related to the performance of any of the O&M Services provided by LUMA under the T&D OMA; (ii) preparing all related filings and other submissions before the Energy Bureau; and (iii) represent PREPA before any Governmental Body and any other similar industry or regulatory institutions or organizations having regulatory jurisdiction. *See* T&D OMA, Section 5.6(a), p. 66.

61. Additionally, LUMA may apply to the Energy Bureau “to request that a change in customer rates or charges be made.” *See* T&D OMA, Section 5.6(g), p. 67. “Any such application shall be prepared and undertaken in accordance with the relevant requirements set forth under the Applicable Law.” *Id.*, p. 68. PREPA and P3A “shall support [LUMA’s] proposed rate changes to ensure that adequate amounts are available for inclusion in any budget, provided that the rates are reasonable and customary.” *Id.*

62. LUMA, PREPA, and the P3A “shall abide by any rate order reflecting determinations and directives of, and requirements established by, [the Energy Bureau] through its review of such application and the rate review proceeding.” *Id.*

IV. The Energy Bureau’s Revenue Requirement and Rate Design Filing Requirements

63. In the February 12th Order, the Energy Bureau established that this rate case will cover the full scope of revenues, other income, and costs involved in providing electric service in

code, rule, regulation, common law, case law or other similar requirement enacted, adopted, promulgated or applied by any Governmental Body [...]” in each case applicable to the parties to the T&D OMA. *See* T&D OMA, Section 1.1, p. 3. “Prudent Utility Practice” is defined, in pertinent part, as “...at any particular time, the practices, methods, techniques, conduct and acts that, at the time they are employed, are generally recognized and accepted by companies operating in the United States electric transmission and distribution business as such practices, methods, techniques, conduct and acts appropriate to the operation, maintenance, repair and replacement of assets, facilities and properties of the type covered by the [T&D OMA][. . .].” *Id.*, at 26.

Puerto Rico, signifying a comprehensive approach necessary to determine the true cost of electric service. Moreover, the rate case is aimed at setting permanent rates for FY2026 and projected rates for FY2027 and Fiscal Year (“FY2028”) while functioning simultaneously as a budget proceeding and a rate proceeding. *See* February 12th Order, pp. 2-3.

64. This combination of budget approval and rate approval is reflected in the Filing Requirements accompanying the February 12th Order, which mandate the submittal of Schedules A-1 and A-2 containing, respectively, an Optimal Budget and a Constrained Budget, each organized according to the outline in the Appendix to the February 12th Order. *See* February 12th Order, Appendix. Pursuant to the Energy Bureau’s directives, Schedules B through H address financial, operational, and other matters and will contain the information necessary to calculate new rates based on the new budget. *Id.*

65. Furthermore, per the Energy Bureau’s directives, the rate application will be supported by pre-filed testimony and accompanying workpapers containing all analyses, facts, and calculations necessary for the Energy Bureau and intervenors to perform comprehensive analyses. *See* February 12th Order, p. 9. Witnesses who support costs must explain why each cost is necessary and reasonable; and whether the cost is (a) an already incurred cost and thus unavoidable, or (b) a to-be-incurred cost, and therefore avoidable. *Id.*, p. 10. A list of all witnesses, referencing the schedules and exhibits that the witness is supporting, must be filed together with the petition for rate review. *Id.*, p. 9. Moreover, the February 12th Order directs the inclusion of an Executive Summary of the rate application explaining the key elements of the rate request, its potential impact on customers, and the major components driving the proposed changes. *Id.*, p. 10.

66. Lastly, the February 12th Order states that LUMA shall include in its formal application a draft public notice. All public notices must be in both Spanish and English. The

purpose of this public notice is to (i) inform the public: that LUMA has filed a formal application proposing new rates, and (ii) describe how the public may participate in the rate review proceedings, among other specific requirements set forth in detail by the Energy Bureau. *See* February 12th Order, p. 10.

67. Subsequent determinations issued by the Energy Bureau and the Hearing Examiner in the March 24th and April 21st Orders amended or supplemented the February 12th Order filing requirements.

68. In the March 24th Order, the Hearing Examiner directed PREPA, LUMA, and Genera to address a set of pre-application questions from the Energy Bureau’s consultants in the upcoming rate application. The Hearing Examiner explained that “participants should integrate [their] answers into the application or accompanying prefiled testimony”. *See* March 24th Order, p. 1.

69. Moreover, through its April 21st Order, the Energy Bureau clarified that the revenue requirement underlying LUMA’s proposed provisional rate “shall exceed the current revenue requirement only by an amount supported by a proposed budget amendment that includes high-priority and noncontroversial spending increases.” *See* April 21st Order, at p. 7.

70. As for rate design, per the filing requirements issued on May 29, 2025, as revised by way of the June 11th Order, LUMA’s rate review filing also must provide detailed explanations and supporting data for cost allocation, revenue allocation, rate design, and the resulting effects on customer bills. Specifically, the requirements are organized into Schedules K through P of the May 29th Order.

71. Schedules K-1 and K-2 require a fully allocated embedded cost-of-service study and detailed derivation of allocation factors; Schedules L-1 and L-2 address revenue allocation at

present and proposed rates, with explanations for any differences in cost allocation; Schedules M-1 through M-9 require presentation and comparison of proposed rates, sample bills, bill impact analyses, and bill frequency analyses, as well as an assessment of how the proposed rates ensure fair cost contribution from all customer types, including self-suppliers; Schedules N-1 through N-3 require granular billing determinants, advanced metering infrastructure implementation plans, and projections for net energy metering customers; Schedules O-1 through O-4 summarize proposed tariffs, redline changes to current tariffs, describe riders and surcharges, and support any proposed modifications; and Schedules P-1 through P-4 address policy questions regarding customer class definitions, potential class consolidations, treatment of net-metering customers, and the recovery of subsidy costs.¹⁴

V. Submission in Compliance with the Filing Requirements

A. System-Wide Revenue Requirement Filing

72. In compliance with the directives set forth by this Energy Bureau and its Hearing Examiner, LUMA hereby submits the System's revenue requirement. Pursuant to the expectations outlined in the Hearing Examiner's June 20th Order, LUMA's submittal incorporates the relevant information on Genera's individual revenue requirements, as timely received, together with Genera's pre-filed testimonies and supporting workpapers. *See Annex I.B* to this Motion, Genera's filing materials, and index.

73. LUMA received PREPA's revenue requirement information on June 30, 2025. As advanced in *LUMA's Response to PREPA's June 25th Motion*, LUMA was unable to integrate said information into the consolidated rate review application, due to PREPA's delay and the manual

¹⁴ Regarding Schedules P-1 through P-4, these are to be discussed through pre-filed testimony rather than as separate data submissions. *See* June 11th Order.

nature of the work required to update the revenue allocation and rate design, as previously explained to the Hearing Examiner.

74. PREPA granted the undersigned counsels access to their materials on June 30th but removed access to said materials on July 2nd. In correspondence of July 2, 2025 and during the morning on July 3, 2025, PREPA's counsels informed that they did not have authorization to allow LUMA to submit PREPA's materials with the Rate Case Petition.

75. LUMA respectfully informs that although it informed PREPA that it was ready to file the Rate Review Petition by July 2nd and then, by 10:00 am today, LUMA could not complete the filing on July 2nd or prior to noon today, because it did not have authorization to file PREPA's materials. LUMA received PREPA's authorization to file PREPA's material today, July 3, 2025 at 12:30 p.m.

76. In compliance with the June 20th and June 26th Orders, LUMA is submitting PREPA's information as received, but the consolidated revenue requirement and associated rate design in the application are based on a proxy for PREPA's revenue requirement, adjusted for inflation from Fiscal Year 2025 figures. Any necessary adjustments to fully reflect PREPA's actual data will be made at a later stage, as permitted by the adopted procedural schedule. *See Annex I.C* to this Motion, PREPA's filing materials, and index.¹⁵

B. LUMA's Compliance with the Energy Bureau's filing requirements.

77. In compliance with the February 12th Order, LUMA hereby submits the pre-filed testimonies and accompanying workpapers containing all analyses, facts, and calculations

¹⁵ LUMA did not prepare and does not endorse PREPA's cover letter. The letter was submitted strictly in compliance with the Orders issued by the Energy Bureau and the Hearing Examiner in this proceeding. LUMA herein makes a reservation of rights in relation to the aforementioned PREPA's cover letter.

necessary for the Energy Bureau and intervenors to perform comprehensive analyses. *See Annex I.A* to this Motion (LUMA's filing materials).

78. In further compliance with the February 12th Order, LUMA also submits a list of all the witnesses supporting its rate review application, referencing the schedules and exhibits that the witnesses support, as **Annex III** to this Motion. Therein, LUMA includes a table with a reference to each LUMA witness **supporting its revenue requirement**, the exhibits and schedule they support, and a summary of their direct testimony. Furthermore, LUMA is submitting the completed Schedules A through J in Excel format with formulas intact and PDF versions.

79. With regards to Schedules B through J, LUMA is submitting comprehensive financial, operational, and regulatory data, including detailed revenue requirement calculations, financial statements, capital expenditure plans, proposed rates and bill impacts, tariff and rider details, affiliate information, estimates of renewable portfolio standard compliance costs, proposed revenue decoupling mechanism, and a rider allowing for recovery of storm-related costs exceeding budgeted amounts.

80. Pertaining to Schedules A-1 and A-2, in the April 25th Order, the Hearing Examiner noted that LUMA does not currently maintain its cost records in a manner that allows for a straightforward mapping to the more than 100 specific cost items listed in said Schedules. Accordingly, the Hearing Examiner acknowledged that achieving full compliance with these schedules, in the format and detail prescribed, would require a multi-month effort and a significant financial investment, which is not feasible within the timeline needed to implement new rates. To address these constraints, the April 25th Order allowed LUMA to use a format and organization that aligns with its present recordkeeping practices. In addition, the April 25th Order also acknowledged, "[i]t is possible that for some of numbered or letter items in Schedules A-1 or A-

2, LUMA will have no credible basis on which to make any estimate.” In those instances, the April 25th Order directed LUMA to request a waiver and provide a full explanation of the reasons for the unavailability of the information.

81. Accordingly, LUMA’s submittal of Schedules A-1 and A-2 included herein is structured to best comply with the detailed directives set forth in the February 12th Order, as modified through the April 25th Order, ensuring that the Energy Bureau receives the necessary information to conduct a thorough and transparent review of the revenue requirements and associated costs.

82. Schedule A-1 presents LUMA’s Optimal Budget, which reflects the costs necessary to provide electric service at the quality required by Puerto Rico statutes and the contractual obligations of LUMA. This budget is based on a bottoms-up analysis mandated by the Energy Bureau. Schedule A-2, on the other hand, presents LUMA’s proposed Constrained Budget, a reduced-cost scenario designed to provide a customer-sensitive transition from the status quo to the optimal level of service by FY2028. LUMA’s submittal is in direct alignment with the requirements contained in the February 12th Order, as well as the flexibilities articulated in the April 25th Order, ensuring both substantive compliance and procedural efficiency. Below is a table of the items listed in Schedules A-1 and A-2 for which LUMA requests a waiver.

Table 1: Requests for Waiver to Provide Cost Information in Schedules A-1 and A-2

<i>Cost Item</i>	<i>Cost Name</i>	<i>Explanation for Unavailability of Information in Support of Waiver Request</i>
II.B.c	Vendor work oversight, Problem management	LUMA does not have any credible basis or available information on which to make any estimate for “Vendor work oversight, Problem management” costs. The utility does not maintain a separate, consolidated budget specifically for Vendor work oversight and Problem management activities. These functions are integral to utility operations and are embedded within the daily responsibilities and

<i>Cost Item</i>	<i>Cost Name</i>	<i>Explanation for Unavailability of Information in Support of Waiver Request</i>
		approved budgets of each department across the utility. This integrated approach is necessary to ensure that all departments remain accountable for maintaining high standards of vendor performance and identifying opportunities for improvement and efficiencies. Isolating and quantifying vendor oversight costs within individual departmental budgets is not feasible with LUMA's current structure.
II.B.d	Quality assurance	LUMA does not have any credible basis or available information on which to make any estimate for "Quality assurance" costs. The utility does not maintain a separate, consolidated budget specifically for "Quality assurance" activities. These functions are integral to our operations and are embedded within the daily responsibilities and approved budgets of each LUMA department. This integrated approach ensures that all departments remain accountable for upholding high standards of quality and identifying opportunities for improvement and efficiencies. Isolating and quantifying quality assurance costs within individual departmental budgets is not feasible under LUMA's current structure.
II.B.c	Process Improvement	LUMA does not have any credible basis or available information on which to make any estimate for "Process Improvement" costs. The utility does not maintain a separate, consolidated budget specifically for Process Improvement activities. These functions are integral to utility operations and are embedded within the daily responsibilities and approved budgets of each LUMA department. This integrated approach is necessary to ensure that all departments remain accountable for identifying, implementing, and sustaining improvements that enhance efficiency and effectiveness. Isolating and quantifying process improvement costs within individual departmental budgets is not feasible under LUMA's current structure.
IV.E	(LUMA) New debt	PREPA is unable to issue new debt while in bankruptcy. Therefore, LUMA does not have any credible basis or

<i>Cost Item</i>	<i>Cost Name</i>	<i>Explanation for Unavailability of Information in Support of Waiver Request</i>
		available information on which to make any estimate for “new debt.”
IV.P	Working Capital	PREPA does not have working capital due to its Title III bankruptcy. Therefore, LUMA does not have any credible basis or available information on which to make any estimate for “Working Capital.”
V.C.3	Strategic Affairs	LUMA does not have any credible basis or available information on which to make any estimate for “Strategic Affairs” costs. The utility does not maintain a separate, consolidated budget for Strategic activities, strategic functions are fundamental to our operations and are embedded within the routine responsibilities of senior leaders all the way to supervisors across the utility. Isolating and quantifying process improvement costs within individual departmental budgets is not feasible under LUMA’s current structure.
VII.C	Improved efficiencies and resulting savings (including, but not limited to, contract efficiencies, revenue collections, reduction in system technical and non-technical losses, unbilled customers, and other efficiencies)	There is no credible basis for LUMA to provide the requested estimate. As Mr. Eduardo Balbis, former Commissioner to the Florida Public Service Commission, states in his testimony, it would be premature for LUMA to calculate direct reductions to customer rates generated by any efficiencies LUMA has made to furnish electric service in a more cost-effective manner. <i>See</i> LUMA Ex. 3.00. Mr. Eduardo Balbis details the progress LUMA has made in the efficiencies previously identified by the Energy Bureau, including efficient contracting of services, revenue collection from past due bills, transmission line losses, mitigating energy theft, addressing missing or malfunctioning meters, and collecting revenue from third-party attachments. Mr. Balbis recommends that the Energy Bureau accept the positive impacts listed in LUMA’s petition and LUMA’s quarterly reports on more than 594 performance metrics as satisfying this requirement.

83. In compliance with the February 12th Order, in **Annex IV (Attachment A)** to this Motion, LUMA is submitting a draft public notice in both Spanish and English. The draft public

notice complies with the specific requirements set forth in detail by the Energy Bureau therewith. LUMA also submits in **Annex I.A** its *Exhibit 1.04*, which includes LUMA's Executive Summary, both in English and Spanish, in compliance with the February 12th Order.

84. In addition, in compliance with the March 24th Order, LUMA hereby submits its responses to RFIs, in **Annex V (Attachment B)** to this Motion. Therein, LUMA restates each RFI, indicates whether the response is provided within pre-filed testimony or submitted separately, and identifies the LUMA executive responsible for further discussion of the response or for providing any follow-up information that may be required. Where feasible, LUMA has ensured that responses included in testimony, specify the precise question or exhibit in which the response may be found, thereby facilitating the Energy Bureau's review and ensuring full compliance with the directives set forth in the March 24th Order.

1. Rate Design

85. In further compliance with the February 12th Order and for the benefit of the Energy Bureau and the Hearing Examiner, LUMA hereby includes the following table identifying the materials **supporting LUMA's rate design proposal**, with identification of the rate design exhibits and schedules that LUMA's witness, Mr. Sam Shannon, supports, together with a summary of his direct testimony:

Table 2: Rate Design Materials

<i>Witness - Testimony</i>	<i>Exhibit(s)</i>	<i>Schedule(s)</i>
LUMA Ex. 20.0	<ul style="list-style-type: none"> LUMA Ex. 20.01 – Resume/CV of Sam Shannon 	Revenue Requirement <ul style="list-style-type: none"> Schedules C-8 and C-10

<p>Expert Witness, Sam Shannon, Associate Director, Guidehouse on behalf of LUMA Energy ServCo LLC</p>	<ul style="list-style-type: none"> • LUMA Ex. 20.02 - Draft Tariff Sheets and Redlines • LUMA Ex. 20.03 - Rate Design for Provisional Rates 	<ul style="list-style-type: none"> • Schedules E-1 through E-4 • Schedules F-1 through F-5; F-7 • Schedule I-1 <p>Rate Design</p> <ul style="list-style-type: none"> • Schedules K-1 through K-2 • Schedules L-1 through L-2 • Schedules M-1 through M-9 • Schedule N-1 • Schedules O-1 through O-4 • Schedules P-1 through P-4.
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86. LUMA is submitting information in full compliance with the requirements set forth in the May 29th Order, as supplemented by the June 11th Order, including all requirements of Schedules K through P, explanations, and supporting data, covering cost allocation, revenue allocation, rate and bill effects, billing determinants, proposed tariffs, and responses to additional policy questions (Schedule P).

87. Schedules K-1 and K-2 provide a fully allocated embedded cost-of-service study and detailed derivation of allocation factors; Schedules L-1 and L-2 address revenue allocation at present and proposed rates; Schedules M-1 through M-9 present proposed rates, sample bills, bill impact analyses, and bill frequency analyses, as well as an assessment of how the proposed rates ensure fair cost contribution from all customer types, including self-suppliers; Schedules N-1 through N-3 provide billing determinants, advanced metering infrastructure implementation plans, and projections for net energy metering customers; Schedules O-1 through O-4 summarize proposed tariffs, redline changes to current tariffs and describe riders and surcharges. The

testimony of Sam Shannon, **Annex I.A**, *Exhibit 20.00*, addresses the requirements of Schedules P-1 through P-4, regarding customer class definitions, potential class consolidations, treatment of net-metering customers, and the recovery of subsidy costs.¹⁶

VI. Request for a Provisional Rate Adjustment

88. Section 6.25(e) of Act 57-2014 provides that at the request of a certified company, the Energy Bureau may make a preliminary evaluation to determine whether a temporary rate should be established, within thirty (30) days after filing the rate modification request. *See* Article 6.25(e) of Act 57-2014, PR Laws Ann. Tit. 22 § 1054x(e), 22 LPRA § 1054x(e) (2025). As with any other rate increase petition, the proposed temporary rate should be just and reasonable, consistent with sound fiscal and operational practices that provide a safe and adequate service at the lowest reasonable cost. *See* Article 6.25(b) of Act 57-2014, PR Laws Ann. Tit. 22 § 1054x(b), 22 LPRA § 1054x(b) (2025).

89. Courts have long articulated that the “just and reasonable” standard demands a balancing of interests to ensure that utility may cover operating expenses (and earn a reasonable return for investor-owned utilities, unlike PREPA) while guarding consumers against excessive charges. *Farmers Union Cent. Exch., Inc. v. FERC*, 734 F.2d 1486, 1502 (D.C. Cir. 1984); *see also* S. Hempling, *Regulating Public Utility Performance: the Law of Market Structure, Pricing and Jurisdiction*, Ch. 6, 257 (2nd ed. 2021).

90. The United States Supreme Court has opined that “[t]he return should be reasonably sufficient to assure confidence in the financial soundness of the utility and should be adequate, under efficient and economical management, to maintain and support its credit and enable it to raise the money necessary for the proper discharge of its public duties.” *Bluefield Water Works &*

¹⁶ Regarding Schedules P-1 through P-4, these are to be discussed through pre-filed testimony rather than as separate data submissions. *See* June 11th Order.

Improvement Co. v. Public Serv. Comm'n, 262 U.S. 679, 693 (1923). It has also been held that “[e]very utility shall be entitled to such just and reasonable rates as will enable it at all times to fully perform its duties to the public and will, under honest, efficient and economical management, earn a fair net return on the reasonable value of its property devoted to the public service.” *Ala. Pub. Serv. Comm'n v. S. Bell Tel. & Tel. Co.*, 106 So. 2d 163, 165 (1958) (emphasis added) (internal citations omitted).

91. The Supreme Court of Colorado has held that rates “must also consider the reasonableness and fairness of rates so far as the public utility is concerned. It must have adequate revenues for operating expenses and to cover the capital costs of doing business. The revenues must be sufficient to assure confidence in the financial integrity of the enterprise, so as to maintain its credit and to attract capital.” *Pub. Serv. Co. v. Pub. Utils. Com.*, 644 P.2d 933, 939 (Colo. 1982) (internal citations omitted). Therefore, to comply with its legal obligations, the Energy Bureau must authorize rates that fully recover the System’s prudent costs, thereby aligning Puerto Rico’s regulatory framework with well-settled statutory standards for “just and reasonable” rates.

92. In the April 21st Order, the Energy Bureau ruled that the provisional rates should only propose investment increases that LUMA views as high priority and non-controversial. *See* April 21st Order, Section II. C, pp. 5-6. Thus, under the standard set forth by Act 57-2014 and re-interpreted by the Energy Bureau in this instant proceeding, it is required that any provisional rate must be just and reasonable, as well as high priority and non-controversial.

93. The request for a provisional rate adjustment is submitted at the System-wide, utility level. Thus, the request includes adjustments attributable to LUMA’s provisional rate proposal, Genera’s proposed Optimal Budget, and PREPA’s placeholder amount, plus other expenses and net income. Herewith, LUMA is hereby supporting the portion of the provisional

rate request attributable to LUMA's own provisional rate proposal that includes LUMA's high-priority and non-controversial costs attributable to T&D costs incremental to the FY2026 Temporary Default Budget for GridCo, as well as storm expenses, as explained in the testimony of Mr. Figueroa, **Annex I.A**, *Exhibit 1.0*.

94. The records of this Energy Bureau in the proceeding *In Re: LUMA Initial Budgets and Related Terms of Service*, Case No. NEPR-MI-2021-0004, show that current rates are insufficient to cover the costs of Puerto Rico's electric system operations. The Fiscal Year 2024 and Fiscal Year 2025 Budgets approved by the Energy Bureau and Certified by the Financial Oversight and Management Board for Puerto Rico, included additional monies allocated by the P3A to compensate for the insufficiency of revenues generated by energy sales at current rates. *See* Resolution and Order of June 25, 2023, and Resolution and Order of June 26, 2024, in Case No. NEPR-MI-2021-0004. As more fully explained in the testimonies of Mr. Andrew Smith, LUMA's Chief Financial Officer, **Annex I.A.**, *Exhibit 2.0*, and of Mr. Alejandro Figueroa, LUMA's Chief Regulatory Officer, **Annex I.A**, *Exhibit 1.0*, the base rates that were established eight years ago have not been adjusted to account for the effects of inflation, the population outflow from Puerto Rico, and the increases in combined heat and power systems by industrial customers and participation in the Net Energy Metering program by residential customers. *See Annex I.A*, *Exhibit 1.0*. There has been, and continues to be, a mismatch between current rates and actual costs. *Id.*

95. Also, because the utility's revenue requirement was set in 2017, with financial data from 2014, before PREPA entered bankruptcy under the Puerto Rico Oversight, Management, and Economic Stability Act, prior to hurricanes María and Irma, and the 2019 and 2020 earthquakes,

and before the T&D OMA and the Generation OMA¹⁷ were executed, current rates are insufficient to cover the energy system’s current operation, maintenance, and investment needs. They are also insufficient to cover the costs that PREPA should bear under the T&D OMA but have not been funded, including the outage event reserve account.

96. These circumstances establish a present and clearly imminent threat that LUMA, as Operator of the T&D System, will be unable to continue meeting its public service obligations to customers. LUMA estimates an urgent need for \$398.6 million in incremental funding to cover operational expenditures beyond the Fiscal Year 2026 Temporary Default Budget. *See Annex I.A, Exhibit 1.0.* These projections are grounded in the financial requirements necessary to continue investing in the T&D System, as outlined in the approved Annual Budget for Fiscal Year 2025, and the changing needs of the T&D System that demand critical investments that cannot be delayed.

97. As explained in the supporting testimonies submitted in **Annex I.A, Exhibits 1.0-2.0, 5.0-7.0, 11.0, and 17.0-18.0**, LUMA has identified several operational areas that will suffer immediate harm due to the underfunding and are evidence of the need for a provisional rate adjustment. The table below, also found in the pre-filed testimony of Mr. Figueroa, **Annex I.A, Exhibit 1.0**, identifies the specific sections of the testimonies on permanent rates that address the provisional rates.

Table 3: LUMA’s Witnesses in Support of Provisional Rates Request

<i>Exhibit</i>	<i>Witness</i>	<i>Section</i>
LUMA Exhibit 7.00	Jessica Laird	Section V

¹⁷ Puerto Rico Thermal Generation Facilities Operation and Maintenance Agreement executed by the PREPA, P3A and Genera PR LLC (Jan. 24, 2023).

<i>Exhibit</i>	<i>Witness</i>	<i>Section</i>
LUMA Exhibit 6.00	Kevin Burgemeister	Section V
LUMA Exhibit 5.00	Pedro Meléndez	Section V
LUMA Exhibit. 11.00	Crystal Allen	Section V
LUMA Exhibit 18.00	Kevin Burgemeister	Section VII
LUMA Exhibit 17.00	José Latorre González	Section V
LUMA Exhibit 2.0	Andrew Smith	Section VI.D
LUMA Exhibit 1.0	Alejandro Figueroa	Section XI

98. Given the critical condition of the T&D System and the well-documented funding limitations arising from outdated energy rates, the T&D System’s investment needs far exceed available funding. The examples of high-priority activities that are at risk, described and explained in the accompanying pre-filed testimonies and workpapers, reflect those crucial for storm preparedness, wildfire mitigation, minimizing outages, safeguarding customer’s private information, and expediting restoration times.

A. Costs Basis for a Provisional Rate Adjustment

99. In alignment with the April 21st Order whereby the Energy Bureau indicated that LUMA could propose spending increases via a budget amendment, provided that the increases involve high-priority and non-controversial costs, LUMA identified high-priority costs that are either unavoidable costs or costs that support critical and necessary investments into the grid that must be undertaken in FY2026 and thus, must be funded at the start of FY2026 through an amendment to the FY2026 Temporary Default Budget. Through this Motion, LUMA respectfully requests that the Energy Bureau approve a temporary rate increase that includes an amendment to

the FY2026 T&D Temporary Default Budget, as described in Table 12 of Mr. Figueroa's testimony, **Annex I.A, Exhibit 1.0**.

100. Given that LUMA is submitting this Rate Review Petition on July 3, 2025, and considering that the high-priority activities that conform LUMA's provisional rate request are urgent in nature, LUMA requests that the provisional rate go into effect no later than September 1, 2025.

1. High Priority and Non-Controversial Funding Needs That Are Just and Reasonable

101. In the forthcoming sections, LUMA describes the urgent funding needs as included in LUMA's Petition, for the different operational components for FY2026, along with a detailed overview of the activities and/or projects impacted and the risks associated with the need for provisional rate adjustment and the correlative budget amendment.

102. In the accompanying pre-filed testimonies and workpapers, *see Annex I.A, Exhibits 1.0-2.0, 5.0-7.0, 11.0, 17.0-18.0, and 20.3*, LUMA describes the funding needs of the different operational components of the FY2026 Budget, along with a description of the activities and/or projects impacted and the risks associated with the current underfunding in providing the O&M Services and establishes that this scenario constitutes justification for a provisional rate adjustment under Act 57-2014. As explained in detail in the supporting pre-filed testimonies, the specific LUMA departments that have high-priority expenses to be funded through provisional rates are: Customer Experience, T&D Operations, Capital Programs & Grid Transformation, Information Technology and Operational Technology, Fleet, Real Estate, Property and Facilities Management Services and Development, and Finance. The FY2026 incremental funding needs encompass Operations and Maintenance ("O&M") and Non-Federal Capital ("NFC") costs that

are fundamental to addressing the reliability and safety of the T&D System and ensuring maximum collection of electricity fees from consumers.

103. Current rates do not fund the costs included in the provisional rate petition. Given the reality of outdated base rates, the utility faces a financial emergency that places it at risk of not meeting its obligation to provide safe and reliable services. There is an imminent need to adjust rates to ensure that the rates raise sufficient revenue to fund costs that are critical for LUMA to meet its obligations to operate a dilapidated and fragile T&D System and to invest in transforming the grid and to remediate critical gaps and deficiencies that predate LUMA's tenure as Operator of the T&D System. The costs are just, reasonable, and necessary to allow LUMA to meet sound fiscal, operational, and prudent utility practices. Moreover, as LUMA's witnesses explain in their pre-filed testimonies, the proposed costs are high priority and non-controversial.

104. It should be noted that the costs included in the provisional rates request are not incremental to LUMA's proposed optimal or constrained budgets. These costs are already part of LUMA's overall revenue requirement. The provisional rates reflect the timing of cost recovery, with a portion of these costs allocated to FY2026 while the Permanent Rate request is under adjudication. This approach ensures continuity of operations and funding during the regulatory review period, without increasing the total budget request.

a. Capital Programs Costs

105. The Capital Programs Department requests \$138.6 million of NFC funding to support system stabilization, wildfire mitigation and hardening, and Grid Modernization initiatives. See **Annex I.A, Exhibit 5.0**, p. 67, lines 1309-1311. The amount is divided into \$122.9 million for system stabilization, \$11.7 million for wildfire mitigation and hardening, and \$4.0 million for Grid Modernization initiatives. *Id.*, pp. 67-70.

106. For system stabilization, LUMA proposes \$44.2 million to complete immediate and critical pole replacements and non-structural repairs, restore out of service distribution lines (currently numbering 114, a net increase of 16 since the start of FY2025), remediate overloads, thermal and voltage issues, and address situations where overhead primary wire is on unsound and non-standard structures in violation of the National Electric Safety Code (“NESC”). *See Annex I.A, Exhibit 5.0*, p. 67, lines 1316-1322. Moreover, LUMA proposes \$44.4 million to continue the completion of critical out-of-service substation installation and stabilization activities, including (1) replacement of transformers, load tap changers, breakers, protection and control, and batteries, (2) addressing overloads, and (3) making critical repairs to our worst performing substations. *Id.*, pp. 67-68, lines 1323-1328.

107. In addition, for system stabilization as well, LUMA proposes \$30.8 million to address the fifty (50) out-of-service transmission line segments that are core to system stabilization, as they represent essential facilities to reduce the risk of larger transmission-caused outages. *See Annex I.A, Exhibit 5.0*, p. 68, lines 1332-1335. Also, LUMA proposes \$3.5 million to address critical fiber and core microwave repairs and complete the IP network stabilization (Megaplex) and transport network MPLS at the most critical sites. *Id.*, lines 1342-1345.

108. As to wildfire mitigation and hardening projects, LUMA requests \$11.7 million to support the furtherance of wildfire mitigation activities, as required by the Energy Bureau in the proceeding *In Re: LUMA Initial Budgets and Related Terms of Service*, Case No. NEPR-MI-2021-0004. *See Annex I.A, Exhibit 5.0*, p. 69, lines 1352-1354. Finally, LUMA proposes \$4.0 million in urgent funding to purchase land in Barceloneta, Manatí, Aguadilla and San Juan to install battery energy storage systems during the first quarter of FY2026 and comply with the tasks instructed by

the Energy Bureau in the proceeding *In Re: Plan Prioritario para la Estabilización de la Red Eléctrica*, Case No. NEPR-MI-2024-0005. *Id.*, lines 1366-1368.

109. These above-outlined costs are just and reasonable because: (1) LUMA prioritized the costs considering immediate or urgent needs, and seeks to recover or fund the actual costs of operating the system to the benefit of its customers, (2) LUMA seeks to recover or fund the actual costs of operating the system to benefit customers, and (3) the costs were calculated using historical costs data, as well as LUMA's expertise and experience. *See Annex I.A, Exhibit 5.0*, p. 70, lines 1383-1387. Each area described above presents its own impact should these costs not be funded through a provisional rate. These impacts highlight why the costs are a high priority for the T&D System to meet customer needs and should be considered noncontroversial. *Id.*, lines 1389-1392. Those impacts are fully described in the Direct Testimony of Mr. Pedro Meléndez, Chief Capital Programs & Grid Transformation Officer. *Id.*, pp. 70-72.

b. Operations Costs

110. The Operations Department requests \$16.4 million of NFC funding to support transmission priority pole replacements, substation reliability, and the aviation portion of Fleet (the balance of the Fleet-related requests is addressed in **Annex I.A, Exhibit 18.0**, as outlined in an upcoming section); and \$47.0 million of O&M funding to address the areas of vegetation management, substation maintenance, and system operations. *See Annex I.A, Exhibit 6.0*, p. 60-61, lines 1178-1183. The NFC funding request is divided into \$5.7 million for priority pole replacements, \$7.7 million for substation reliability, and \$3.0 million for the aviation portion of the Fleet. *Id.*, pp. 61-63.

111. As to the request for funds for priority pole replacements, the basis for this funding is the fact that 28 overhead transmission line segments are out-of-service (noting that in FY2025

LUMA restored six, but six transmission overhead line segments failed during that same period – i.e., barely keeping pace with the these failures), and the current backlog of critical deficiencies/anomalies and forecasted failures and find rates (i.e., the anticipated number of deficiencies/anomalies expected to be found as the scope and number of inspections and tests increases) from proactive inspection and maintenance activities. *See Annex I.A, Exhibit 6.0*, p. 60, lines 1187- 1194.

112. In terms of substation reliability, LUMA needs to address known issues across substations (i.e., backlog heretofore not addressed in previous years, including issues with transformers, breakers, and protection equipment), as well as remediate critical deficiencies identified during the necessary substation preventive maintenance activities. *See Annex I.A, Exhibit 6.0*, p. 61-62, lines 1202-1206. A subset of these items will pose a high risk of future events that could impact large groups of customers and divert LUMA’s resources from performing more proactive/planned maintenance. *Id.*, p. 62, lines 1217-1224. This will cause the T&D System to fall further out of its designed configuration and limit any contingencies to absorb system disturbances without incurring unplanned outages. *Id.*, lines 1224-1226.

113. In regard to the support of the aviation portion of Fleet, the requested funding will help address helicopter equipment leases and purchases aimed at accelerating the helicopter 12-year overhaul. *See Annex I.A, Exhibit 6.0*, p. 63, lines 1232-1234. The Super Puma heavy lift helicopter, currently out of service pending a required 12-year inspection and overhaul, is scheduled to be returned to service in April 2026. *Id.*, lines 1234-1236. However, LUMA has been able to source engines that could be purchased rather than wait for the existing engines to be rebuilt, thus allowing the availability of this helicopter prior to the peak of the upcoming storm season during the first quarter of FY2026. *Id.*, lines 1236-1239.

114. Further, the O&M funding portion is divided into \$24.0 million to establish a cyclic trimming program reminiscent of a typical North American utility, \$21.0 million to add the minimum activities necessary to stabilize and continue the transition towards the future state for substations, and \$2.0 million to provide work planning and scheduling, outage planning, and control center support related to the requested increase in substation maintenance and vegetation management activities described above. *See Annex I.A, Exhibit 6.0*, pp. 63-66.

115. To establish a cyclic trimming program, LUMA seeks to be able to immediately start a 3-4 year cyclic trimming program (industry norm for environments similar to Puerto Rico), apply herbicide treatment to the rights of-way addressed by the federally funded work (assuring LUMA maintains the benefits of this clearance effort), and perform vegetation management on those transmission facilities specified in Department of Energy (“DOE”) Order No. 202-25-213 that do not qualify for federal funding (which is approximately 25 percent of the requirement). *See Annex I.A, Exhibit 6.0*, pp. 64, lines 1252-1258. The effects of any delay in starting a cyclic trimming process system-wide only compound over time, resulting in higher costs than will be experienced should LUMA start the process sooner, rendering this request both high priority (i.e., linked to previously cited DOE order), and non-controversial (i.e., customers will receive immediate benefit in the form of fewer unplanned tree-caused outages). *Id.*, p. 64, lines 1258-1263.

116. Moreover, LUMA requests funding to add the minimum activities necessary to stabilize and continue the transition towards the future state, as this involves high-priority activities because they impact system stabilization and near-term reliability improvements (i.e., substation-caused outages typically affect larger numbers of customers). *See Annex I.A, Exhibit 6.0*, p. 64-65, lines 1269-1273. Also, an effective substation maintenance regimen is a key cornerstone to the system stabilization initiative to reduce the risk of catastrophic, regional- or island-wide outages.

Id., lines 1273-1275. All major outages experienced over the past four years of operation have had significant contributing factors from failed or mis-operating substation components. *Id.*, lines 1275-1277. This funding is viewed as high priority, given its role in LUMA achieving system stabilization while simultaneously improving near-term reliability, and non-controversial given the material benefits to be provided to our customers. *Id.*, p. 65, lines 1290-1293.

117. Finally, LUMA requests funding to provide work planning and scheduling, outage planning, and control center support related to the requested increase in substation maintenance and vegetation management activities described above. *See Annex I.A, Exhibit 6.0*, p. 66, lines 1297-1299. As the scope of these activities increases, additional resources will be needed to plan the work, ensure proper staging of materials and staff, schedule the work, develop integrated activity and resource-based schedules, monitor progress, develop workarounds when obstacles occur, and ensure integration with other activities either in close proximity to the work or that require system-oriented coordination. *Id.*, lines 1299-1304. These costs are therefore tied directly to the two operation and maintenance programs presented above (i.e., substation maintenance and vegetation management), along with any related interfaces with other NFC-funded transmission and substation work. Further, these functions are thinly staffed, thus requiring excessive levels of overtime, which is already viewed as unsustainable; thus, the urgency for this funding is unquestioned. *Id.*, pp. 66, lines 1309-1314.

118. These costs are just and reasonable because: (1) LUMA prioritized the costs considering immediate or urgent needs, and seeks to recover or fund actual costs of operating the T&D System to the benefit of its customers, (2) LUMA seeks to recover or fund actual costs of operating the system to benefit customers, and (3) the costs were calculated using historical costs data, as well as LUMA's expertise and experience. *See Annex I.A, Exhibit 6.0*, p. 67, lines 1334-

1338. Each area described above presents its own impact should these costs not be funded through a provisional rate. *Id.*, lines 1340-1341. Those impacts are fully described in the Direct Testimony of Mr. Kevin Burgemeister, Senior Vice President of Operations (Acting). *Id.*, pp. 68-71.

c. Customer Experience Costs

119. The Customer Experience Department requests \$4.5 million to be collected through the provisional rate due to increased payment processing costs, considering pricing in existing contracts. *See Annex I.A, Exhibit 7.0*, p.39, lines 798-799. These costs cannot be accommodated within the FY2025 Default Budget due to a number of factors, primarily due to absorption of other unavoidable and incremental cost increases, such as the full year labor costs of employees whose positions were budgeted for only a partial year in FY2025, and an increased level of system enhancements needed in FY2026 to support the development of new rates and riders for the rate case. *Id.*, lines 809-815.

120. Collecting revenue is a fundamental function, and payment processing fees are unavoidable and cannot be paused or deferred. These costs are ongoing, and if funding is unavailable through the provisional rate, this could impact LUMA's cash flow or result in delayed payments to vendors. Late payments would result in additional costs that could otherwise be avoided, including financial penalties, damage to LUMA's relationship with this group of vendors, and, in extreme cases, could result in interruptions to the services that these vendors provide (which would impact collections from the affected payment processing channel). *Id.*, p.40, lines 828-835.

121. Therefore, payment processing fees are a high priority and non-controversial, as they are critical to collecting revenues necessary for the System. Collecting electronic payments from customers requires the assistance of a bank or financial institution, which charges a fee for its service. *Id.*, p.40, lines 818-821.

d. IT/OT Costs

122. The IT/OT Department is requesting an additional \$4.2 million in funding to cover the fixed cost absorption from the termination of Genera's shared services. *See Annex I.A, Exhibit 11.0*, p. 52, lines 1123-1124. The cost absorption from the termination of Genera's shared services is a high priority and non-controversial. From Genera's commencement until the termination of the Shared Services agreement on February 28, 2025, the IT/OT Department provided shared services to Genera, which included the joint use of these applications and many others. Terminating the Shared Services agreement with Genera eliminated cost-sharing for essential IT infrastructure originally designed to support an integrated utility. Fixed costs such as server maintenance, security, and core application support now fall solely on LUMA, as these used to be invoiced to Genera. The costs associated with shared services are unavoidable and no longer offset by a cost-sharing agreement that previously existed with Genera, making them a high priority. These services are critical to ongoing operations and now fall solely under LUMA's responsibility, so they should be viewed as non-controversial. *Id.* pp. 52-53, lines 1128-1140.

123. The Department is also requesting \$7.2 million in NFC funds to support critical initiatives. *See Annex I.A, Exhibit 11.0*, p. 52, lines 1124-1125. Other LUMA departments are requesting funding to begin or continue activities within their programs. Those activities require IT/OT Department support, which in turn requires additional IT/OT Department funding. This additional cost is a high priority and non-controversial since these costs will be unavoidable. Without this funding, the execution of prioritized program briefs and emergency IT/OT projects will be delayed. *Id.*, p. 53, lines 1151-1157.

124. Specifically, the IT/OT Department is requesting \$0.8 million for the IT OT Cybersecurity Program, \$3.3 million for the IT/OT Enablement Program, \$2.08 million for the

IT/OT Asset Management Program, and \$1.1 million for the IT/OT Collaboration and Analytics Program. *Id.*, p. 54, lines 1160-1162. These are critical initiatives for which the Provisional Rate funding is necessary.

125. For example, funding for the IT/OT Cybersecurity Program is a high priority and non-controversial because cybersecurity initiatives have become even more imperative to protect our critical infrastructure. Current threats include a rise in phishing and credential theft attempts targeting OT environments, vulnerabilities in remote access security stemming from outdated firewall configurations, and heightened activity from nation-state actors and ransomware groups targeting energy infrastructure. This funding will enhance defense capabilities, protect infrastructure from disruptions, safeguard customer data, and ensure compliance with industry standards. *See Annex I.A, Exhibit 11.0*, p. 54, lines 1165-1173.

126. Similarly, incremental funding is required for the IT/OT Enablement Program through the Provisional Rate to ensure the reliability of essential tools for outage response, customer service, grid monitoring, and daily operations. The funding will replace equipment beyond end-of-life, including laptops, field tablets, and devices for front-line teams; update communication equipment like radios and hotspots; and enhance device management and cybersecurity. *See Annex I.A, Exhibit 11.0*, p. 55, lines 1185-1193.

127. Further, IT/OT Asset Management Program funding will support replacing end-of-life IT/OT infrastructure, including hardware, software, and systems that underpin grid control, enterprise applications, and secure communication. This is a high priority as these assets pose significant risks. LUMA plans to replace end-of-life servers, switches, and backup systems. *See Annex I.A, Exhibit 11.0*, p.56, lines 1206-1211. Without replacement, LUMA anticipates increased service interruptions, worsened mean time to recovery due to lack of vendor support,

and an inability to scale recovery systems during hurricane season making this non-controversial. *Id.*, lines 1213-1215.

128. Finally, funding the IT/OT Collaboration and Analytics Program is a high priority because delaying these investments would reduce visibility into program performance, hinder compliance efforts, and force continued reliance on manual, error-prone processes that increase operating costs and slow value delivery. *See Annex I.A, Exhibit 11.0.*, p. 56, lines 1224-1227. As LUMA scales federal programs and regulatory commitments, modern collaboration and analytics tools are no longer optional—they are essential and high priority. *Id.*, pp. 56-57, lines 1227-1229.

e. Facilities Costs

129. The Facilities Department requests \$20.9 million to be collected through the provisional rate. The amount is divided into \$0.6 million for existing rent and lease renewals (O&M costs) and \$20.3 million for critical facilities initiatives (NFC costs). *See Annex I.A, Exhibit 17.00*, pp. 37-38, lines 725-727. On the O&M side, LUMA identified thirteen (13) leases that either include year-over-year rent increases that are contractually obligated or leases that have been extended with upward rent adjustments. *Id.*, p. 38, lines 737-739. As these costs are contractually obligated by LUMA and unavoidable, an incremental \$0.6 million is included in the provisional rate request to be funded beginning as soon as possible. *Id.*, lines 739-741.

130. On the NFC side, Facilities developed a prioritized list of necessary capital repairs, replacements, and additions for FY2026. *See Annex I.A, Exhibit 17.00*, p. 38, lines 741-743. A host of capital repairs were ranked using a ranking methodology that factors in risk, facility focus, procurement viability, and strategic alignment. *Id.*, lines 743-744. Each factor or evaluation criterion is assigned a weight, allowing for total weighted scores (meaning that the higher the total score, the higher the priority). *Id.*, lines 744-746. Based on this exercise and the criteria, Facilities

identified several capital projects to be undertaken in FY2026. *Id.*, pp. 38-39, lines 746-747. These supporting facilities include, but are not limited to, customer service centers, operational centers, maintenance depots, and logistical hubs, all of which are indispensable for coordinating, deploying, and managing resources required for T&D projects. *Id.*, p. 40, lines 758-761. The proper functioning of these facilities ensures that field operations can be executed efficiently and safely, thereby facilitating the timely completion of critical infrastructure projects. *Id.*, lines 761-763. The table in page 39 of *Exhibit 17.00* provides a detailed description of the works that have to be performed in the different initiatives.

131. The costs are just and reasonable because LUMA has identified and requested approval of high-priority and non-controversial costs. *See Annex I.A, Exhibit 17.00*, p. 40, lines 773-774. The O&M costs are not contemplated in the FY2025 budget nor the FY2026 Temporary Budget, and approval of these costs cannot and should not wait until the third quarter of FY2026, at the earliest, when the permanent rates are expected to be approved. *Id.*, pp. 40-41, lines 774-777. Similarly, as mentioned above, the NFC projects have been identified through LUMA's ranking criteria as high-priority and require immediate funding to avoid further degradation and risks to employee and public safety. *Id.*, p. 41, lines 777-780. These costs cannot be deferred until the approval of permanent rates. *Id.*, line 780. Based on this, automatic increases in existing rent agreements, lease renewals, and capital projects identified herein are high-priority and non-controversial. *Id.*, lines 780-782. They should be approved as part of the provisional rate request. *Id.*, lines 782-783.

f. Fleet Costs

132. The Fleet Department requests \$3.8 million of NFC funding and \$2.6 million of O&M funding to ensure that LUMA can maintain a serviceable Fleet that can be operated reliably,

safely, and cost-effectively. *See Annex I.A, Exhibit 18.00*, p. 35, lines 677-679. The \$3.8 million of NFC funding will support 17 RPO – buyouts as well as 30 direct purchases – NFC (distinction between the two is addressed in *Exhibit 18.0*), whereas the requested \$2.6 million in O&M funding supports the Rental Purchase Option (“RPO,” also defined in *Exhibit 18.0*) of an additional 30 vehicles. *Id.*, p. 36, lines 683-686. All these purchases and rentals are tied directly to supporting the immediate needs of the Operations and Capital Programs departments, with due consideration to the age and condition of specific fleet assets. *Id.*, lines 686-689.

133. Considering the level of investment in fleet assets since commencement (approximately \$50 million, which is less than 25% what was planned in the original System Remediation Plan submission), there is no questioning about the urgency of addressing this gap, especially on those vehicles tied directly to the work, be it planned or reactive. *See Annex I.A, Exhibit 18.00*, p. 36, lines 695-699. Further, LUMA considers this request non-controversial as it is confined to those vehicles necessary to maintain the T&D System while supporting the drive to improve service restoration times to benefit LUMA’s customers. *Id.*, lines 699-701.

134. These costs are just and reasonable because: (1) LUMA prioritized the costs considering immediate and/or urgent needs, and seeks to recover or fund actual costs of operating the system to the benefit of its customers, (2) LUMA seeks to recover or fund actual costs of operating the fleet assets to benefit both the field and customers, and (3) the costs were calculated using historical acquisition prices arrived at through a competitive bidding process. *See Annex I.A, Exhibit 18.00*, pp. 37-38, lines 722-727.

g. Finance Costs

135. The Finance Department requests \$0.5 million in funding to support LUMA’s efforts to budget costs (or groups of costs) in a format similar to the A-Schedules in the February

12th Order for FY2027. *See Annex I.A, Exhibit 2.0*, p. 83, lines 1717-1719. The funding is intended to support limited tracking and reporting of financial information in a format that is different from the format in which LUMA currently racks and reports financial information. In other words, it will allow LUMA to provide an A-Schedule again next period. The additional funding to be provided to the Finance Department through the provisional rate will allow LUMA to budget FY2027 costs by categories closer to those in the A-Schedules. *Id.*, lines 1730-1733. If the A-Schedules serve as a bridge to help the Energy Bureau and its consultants classify costs that are ultimately passed on to customers through rates, until FERC accounting can be implemented across the utility, then the requested costs to assist with those efforts should be viewed as non-controversial. *Id.*, lines 1738-1741.

2. *Replenishing and Collecting the Accumulated Balance of the Outage Event Reserve Account is a High Priority and Non-Controversial Funding Need*

136. As Mr. Figueroa explains in his testimony, the Outage Event Account is contractually established under the T&D OMA¹⁸ with a minimum balance set at \$30 million. *See Annex I.A, Exhibit 1.0*, p.78, lines 1409-1411. This account is intended to ensure that funds are available to address costs incurred in response to outage events, which can be caused by smaller events, such as periods of heavy rain, wind, and/or lightning, or extreme events such as hurricanes.¹⁹

¹⁸ *See* T&D OMA, Section 7.5(d), p. 94.

¹⁹ What constitutes an Outage Event is defined by specific criteria in the T&D OMA.

137. Per Section 7.5(d) of the T&D OMA, LUMA shall “draw funds from time to time to pay for costs in connection with an Outage Event (“Outage Event Costs”) incurred by [LUMA].” *See* T&D OMA, Section 7.5(d)(i), p. 94. Thus, “[n]o later than ten (10) Business Days prior to the Service Commencement Date, [PREPA] [was required] to fund the Outage Event Reserve Account with an amount equal to US\$30,000,000.” *See* T&D OMA, Section 7.5(d)(ii), p. 94. More importantly, the T&D OMA established PREPA’s obligation to replenish the account by stating that “[p]romptly following a withdrawal, [PREPA] shall replenish the Outage Event Reserve Account so as to maintain an amount equal to US\$30,000,000.” *Id.*

138. The Outage Event Reserve Account is meant to provide the money necessary to fund outage response initiatives without compromising the funding that would otherwise be available for normal operations. Although PREPA is solely responsible for funding the Account, it has not replenished it since November of calendar year 2023. *See Annex I.A, Exhibit 1.0*, p.79, lines 1430-1433. The present request is based on actual costs that LUMA was forced to cover due to PREPA’s failure to meet its funding obligations. Because the necessary funds were not available in the Outage Event Reserve Account when needed, LUMA had to redirect funds from its Operating Account to respond to outage events. *Id.*, lines 1549-1551. For example, in the fall of 2024, the Outage Event Reserve Account held just over \$1.5 million. In response to Tropical Storm Ernesto, LUMA redirected \$33 million from its Operating Account to fund recovery efforts. These funds were originally designated for planned and approved operational and capital activities. *Id.*, lines 1552-1555.

139. Collecting the accumulated balance to replenish the Outage Event Reserve Account is a high priority and non-controversial matter because its absence has directly impaired LUMA’s liquidity. Liquidity is critical for executing the approved budget and maintaining reliable

operations. *See Annex I.A, Exhibit 1.0.*, p.84, lines 1545-1547. As shown in *Exhibit 1.05*, LUMA has incurred an accumulated underfunding of \$209 million. Combined with the \$30 million required to restore the Outage Event Reserve Account to its contractual balance, the total amount requested as part of the revenue requirement is \$239 million, to be collected over two years (FY2026 and FY2027). *Id.*, lines 1354-1362.

140. In addition, collecting the accumulated balance will help stabilize the financial condition of the system. *See Annex I.A, Exhibit 1.0*, p.85, lines 1569-1570. It will restore liquidity, protect the execution of critical projects, and ensure that LUMA can continue to meet its obligations to the people of Puerto Rico. *Id.*, lines 1570-1571. For these reasons, the payment of the accumulated balance is not only a matter of contractual compliance. *Id.*, lines 1572-1573. It is a financial necessity and should be considered both high priority and non-controversial. *Id.*, lines 1573-1574.

141. Due to the urgent need for proper funding in the Outage Event Reserve Account, LUMA is requesting a provisional rate adjustment to collect \$120 million in funding for the replenishment and balance the underfunding of the outage reserve account, commencing September 1, 2025. This item consists of two outstanding obligations that PREPA is contractually required to fund through the Service Accounts: (1) approximately \$30 million to replenish the Outage Reserve Account to its required funding level, and (2) approximately \$209 million to reimburse Outage Event Costs that LUMA has had to cover from the Operating Account, rather than from the Outage Reserve Account, due to the lack of available funds. *See Annex I.A. Exhibit. 2.0.*, p.75, lines 1354-1362. The funding will ensure that LUMA can maximize the deployment of resources to restore operations and service, and protect lives, public health, safety, and property in an emergency.

142. In conclusion, LUMA requests that the Energy Bureau approve the provisional rate outlined above and supported in **Annex I.A**, *Exhibits 1.0 (Testimony of A. Figueroa); 1.05 (workpapers); 20.0 (Testimony of S. Shannon); and LUMA Exhibit 20.03 (Rate Design for Provisional rate)*, and supported by the testimony of the LUMA witnesses, as explained above, to be implemented on September 1, 2025. This will provide the T&D System with sufficient funding to carry out urgent and critical investments that cannot wait and that, if delayed, carry a risk of service degradation or future cost increases.

WHEREFORE, LUMA respectfully requests the Energy Bureau to **take notice** of the foregoing, and **accept** LUMA's pre-filed testimonies and accompanying work papers and schedules submitted as **Annex I.A**, Genera's materials and schedules submitted as **Annex I.B**, PREPA's materials and schedules submitted as **Annex I.C**; and LUMA's, Genera's, and PREPA's indexes of the filing materials, referencing the list of witnesses, schedules and exhibits that the witnesses are supporting submitted as **Annex II**; LUMA's list of witnesses referring the schedules and exhibits that each witness is supporting, as **Annex III**; the draft public notice in both Spanish and English submitted as **Annex IV (Attachment A)**; and LUMA's responses to the Energy Bureau's requests for information issued in the March 24th Order as **Annex V (Attachment B)**.

RESPECTFULLY SUBMITTED.

In San Juan, Puerto Rico, this 3rd day of July of 2025.

WE HEREBY CERTIFY that this Motion was filed using the electronic filing system of this Energy Bureau and that electronic copies of this Motion will be notified to Hearing Examiner, Scott Hempling, shempling@scotthemplinglaw.com; and to the attorneys of the parties of record. To wit, to the **Puerto Rico Electric Power Authority**, through: Mirelis Valle-Cancel, mvalle@gmlex.net; Juan González, jgonzalez@gmlex.net; Alexis G. Rivera Medina, arivera@gmlex.net; and Juan Martínez, jmartinez@gmlex.net; and to **Genera PR, LLC**, through: Jorge Fernández-Reboredo, jfr@sbgbllaw.com; Gabriela Castrodad, gcastrodad@sbgbllaw.com; Jennise Alvarez, jennalvarez@sbgbllaw.com; regulatory@genera-pr.com; and legal@genera-pr.com; **Co-counsel for Oficina Independiente de Protección al Consumidor**, hrivera@jrsp.pr.gov; contratistas@jrsp.pr.gov; pvazquez.oipc@avlawpr.com; **Co-counsel for Instituto de Competitividad y Sustentabilidad Económica**, victorluisgonzalez@yahoo.com; agraitfe@agraitlawpr.com; **Co-counsel for National Public Finance**

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Annexes I.A (LUMA), I.B (Genera), I.C (PREPA)
(to be submitted via email)

Annex II
(indexes, LUMA, Genera, and PREPA)

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

IN RE: PUERTO RICO ELECTRIC
POWER AUTHORITY RATE REVIEW

CASE NO.: NEPR-AP-2023-0003

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GENERA PR LLC
NEPR-AP-2023-0003 RATE CASE
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**GOVERNMENT OF PUERTO RICO
PUERTO RICO PUBLIC SERVICE REGULATORY BOARD
ENERGY BUREAU**

**IN RE: PUERTO RICO ELECTRIC POWER
AUTHORITY RATE REVIEW**

CASE NO.: NEPR-AP-2023-0003

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PREPA Ex. 41	PREPA Exhibit 7	Schedule C-9 - Various Operating Statistics	PREPA Ex. 41 6.30.25 - PREPA Exhibit 7-Schedule C-9 - Various Operating Statistics
PREPA Ex. 42 6.30.25	PREPA Exhibit 8	Schedule G-Desc of Affiliates & Listing of Officers	PREPA Ex. 42 6.30.25 - PREPA Exhibit 8-Schedule G-Desc of Affiliates & Listing of Officers
PREPA Ex. 43 6.30.25	PREPA Exhibit 9	Schedules C-1 _ C-3 _ C-4 _ C-5 - PREPA_s FY22 Audited FS	PREPA Ex. 43 6.30.25 - PREPA Exhibit 9-Schedules C-1 _ C-3 _ C-4 _ C-5 - PREPA_s FY22 Audited FS
PREPA Ex. 44 6.30.25		FOMB - Letter - PREPA - FY26 Budget Certification - June 30, 2025	PREPA Ex. 44 6.30.25 - PREPA Exhibit 10-FOMB - Letter - PREPA - FY26 Budget Certification
PREPA Ex. 45 6.30.25		PREPA Responses to First RFI and Exhibits	PREPA Ex 45 6.30.25 PREPA Responses to First RFI
PREPA Ex. 46 6.30.25		PREPA Responses to Second RFI	PREPA Ex 46 6.30.25 PREPA

			Responses to Second RFI
PREPA Ex. 47 6.30.25		PREPA Responses to Hearing Examiner's Order requiring PREPA filing on Managing Federal Funds	PREPA Ex 47 6.30.25 PREPA Responses to RFI Federal funds

Annex III

(LUMA's witness list)

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

IN RE: PUERTO RICO ELECTRIC
POWER AUTHORITY RATE REVIEW

CASE NO.: NEPR-AP-2023-0003

a list of all witnesses, referencing the schedules and exhibits that the witness is supporting

<i>Witness - Testimony</i>	<i>Exhibit(s)</i>	<i>Schedule(s)</i>	<i>Summary</i>
LUMA Ex. 1.0 Alejandro Figueroa, Chief Regulatory Officer, LUMA Energy ServCo LLC Regulatory	<ul style="list-style-type: none">• LUMA Ex. 1.01 - Schedule C-6 – FOMB Certified PREPA Fiscal Plan• LUMA Ex. 1.02 - Schedule H-1 – Renewable Portfolio Standard Compliance Costs• LUMA Ex. 1.03 - Schedule J-1 – Major Storm Costs Rider• LUMA Ex. 1.04 – Executive Summary• LUMA Exhibit 1.05 Cumulative Underfunding of the Outage Event Reserve Account• LUMA Ex. 1.06 - Provisional Rate Workpapers• LUMA Ex. 1.07 - Schedules N-2 and N-3	<ul style="list-style-type: none">• Schedule C-6• Schedule H-1• Schedule J-1• Schedules N-2 and N-3	<p>Mr. Alejandro Figueroa Ramírez (“Mr. Figueroa”) is Chief Regulatory Officer at LUMA Energy ServCo, LLC. The purpose of Mr. Figueroa’s prepared direct testimony in this proceeding is to sponsor the Rate Review Petition.</p> <p>Mr. Figueroa also provides a background on the System Revenue Requirement and explains that LUMA is only sponsoring the revenue requirement for the Operation and Maintenance Services (“O&M Services”) that LUMA is responsible for as the Operator of Puerto Rico’s Transmission and Distribution System (“T&D System”).</p> <p>Mr. Figueroa outlines LUMA’s structure, mission, and vision as Operator of the T&D System, and discusses LUMA’s accomplishments, including the implementation of the System Remediation Plan. Mr. Figueroa describes the state of the T&D System when LUMA took over as Operator on June 1, 2021, states how LUMA has been able to operate the T&D System under</p>

			<p>2017 Base Rates and explains that current rates are insufficient.</p> <p>Mr. Figueroa describes LUMA's Optimal Budget versus Constrained Budget and identifies witnesses and whether they testify to any filing schedules.</p> <p>Mr. Figueroa's testimony also provides the operations and maintenance ("O&M") costs for the Regulatory Department ("Regulatory Department" or "Department") in the Optimal and Constrained Budgets.</p> <p>Mr. Figueroa recommends an Optimal Budget for the Regulatory Department of \$28.23 million for Fiscal Year ("FY") 2026, \$29.92 million for FY2027, and \$31.72 million for FY2028. Mr. Figueroa's testimony also includes a Constrained Budget, as ordered by the Energy Bureau</p> <p>Furthermore, Mr. Figueroa sponsors LUMA's Request for Provisional Rates.</p> <p>Finally, Mr. Figueroa's testimony addresses the Energy Bureau's current requirements to amend approved budgets and suggests that the Energy Bureau eliminate this requirement going forward; provides an estimate of RPS compliance costs; submits the Fiscal Plan certified by the Financial Oversight and Management Board for Puerto Rico ("FOMB") for the Puerto Rico Electric Power Authority ("PREPA"); and proposes a major-storm costs rider.</p>
<p>LUMA Ex. 2.0</p> <p>Andrew Smith, Chief Financial</p>	<ul style="list-style-type: none"> LUMA Ex. 2.01 - Critical Financial Controls Program Brief (PBFM2) (FY2026) 	<ul style="list-style-type: none"> Schedules A-1, A-2 Schedules B-1 through B-7 	<p>Mr. Andrew Smith is Chief Financial Officer at LUMA Energy ServCo, LLC. His prepared direct testimony serves</p>

<p>Officer, LUMA Energy ServCo, LLC</p> <p>Finance</p>	<ul style="list-style-type: none"> • LUMA Ex. 2.02 - Critical Financial Systems Program Brief (PBFM4) (FY2026) • LUMA Ex. 2.03 - Optimal Budget Workpapers • LUMA Ex. 2.04 - Constrained Budget Workpapers 	<ul style="list-style-type: none"> • Schedules C-1 through C-5; C-7, C-9 & C-11 • Schedules D-1, D-3, D-4 (Optimal & Constrained) 	<p>several purposes, including providing a broad overview of the economic challenges that LUMA Energy LLC and LUMA Energy ServCo, LLC (together, “LUMA”) face that result in the need for this filing.</p> <p>Mr. Smith’s testimony also provides an overview of the schedules he is sponsoring, including the schedules for</p> <p>Mr. Smith explains the bottom-up budgeting exercise that LUMA conducted and the assumptions underpinning the preparation of the Optimal Budget. He also describes the process for preparing the Constrained Budget, as ordered by the Energy Bureau, explaining that each LUMA department identified which departmental activities planned under the Optimal Budget could be deferred or delayed to meet the definition of the Constrained Budget.</p> <p>In addition, Mr. Smith explains that due to the state of PREPA’s historical financial records and lack of a reconciled and current balance sheet, LUMA is not able to present its revenue information using the Federal Energy Regulatory Commission’s Uniform System of Accounts and has limited ability to confirm the accuracy of the balance sheet and plant-in service and accumulated depreciation values. Mr. Smith testifies that such challenges do not negatively impact this rate case and the setting of new Base Rates because the current regime is a cash financing model that does not depend on that information.</p>
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			<p>Mr. Smith also presents LUMA's revenue requirement and the overall increase in total T&D System investment that is being proposed.</p> <p>Mr. Smith then testifies as to the operations and maintenance ("O&M") and non-federal capital ("NFC") costs for the Finance Department ("Department") in the Optimal and Constrained Budgets.</p> <p>Based on existing and projected company needs, Mr. Smith recommends an Optimal Budget for Finance of \$63.1 million for Fiscal Year ("FY") 2026, \$62.6 million for FY2027, and \$94.4 million for FY2028. Mr. Smith's testimony for the Department also includes a Constrained Budget, as ordered by the Energy Bureau.</p> <p>Mr. Smith's testimony also presents LUMA's requests for the Energy Bureau to modify certain reporting requirements.</p> <p>Finally, Mr. Smith's testimony supports the costs of the Finance Department that are included in LUMA's provisional rate application.</p>
<p>LUMA Ex. 3.0</p> <p>Expert Witness, Ed Balbis, Partner, Guidehouse on behalf of LUMA Energy ServCo LLC</p>	<ul style="list-style-type: none"> • LUMA Ex. 3.01 - Resume/CV of Ed Balbis • LUMA Ex. 3.02 - Electric Utilities - Annual Budgeting Requirements by State • LUMA Ex. 3.03 - Electric Utilities - Annual Reporting Requirements by State 	N/A	<p>Mr. Eduardo Balbis, who is a Partner in the Energy, Sustainability, and Infrastructure practice at Guidehouse, Inc., an international consulting firm, and a former Commissioner of the Florida Public Service Commission, presents Prepared Direct Testimony on behalf of LUMA Energy LLC and LUMA Energy ServCo, LLC (collectively, "LUMA").</p>

			<p>The purpose of Mr. Balbis' testimony is to provide insights based on his experience as a former regulator and make policy recommendations to enhance cost savings and efficiencies.</p> <p>First, Mr. Balbis recommends that the Puerto Rico Energy Bureau amend the annual budgeting process to replace the current full adjudication of budgetary limits of LUMA, Genera, and Puerto Rico Electric Power Authority ("PREPA") (collectively, "the Parties") with the requirement that LUMA submits to the Energy Bureau, for informational and review purposes only, the consolidated fiscal year budget of the Parties as determined by the Puerto Rico Public-Private Partnerships Authority ("P3A"), as established in the Puerto Rico Transmission and Distribution System Operation Maintenance Agreement ("T&D OMA"), executed by PREPA, P3A, and LUMA dated June 22, 2020, and the Puerto Rico PREPA - GenCo - HydroCo Operating Agreement ("PGHOA"), dated September 15, 2022.</p> <p>Second, Mr. Balbis recommends that the Energy Bureau no longer adjudicate budget amendment deviations to align with generally accepted best practices of utility regulation in the United States. Third, Mr. Balbis recommends that the Energy Bureau remove the current requirement of a fourth quarterly report and instead continue requiring three quarterly reports and an annual report only (four total reports) to eliminate additional administrative burden and remove redundancy while maintaining oversight.</p>
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			<p>Fourth, Mr. Balbis recommends that the Energy Bureau accept LUMA’s quarterly reporting on more than 584 performance metrics, as well as ongoing annual reporting on stated efficiencies and cost savings, as sufficient to satisfy the Energy Bureau’s Efficiencies and Cost Savings reporting requirement. This recommendation eliminates the need for additional burdensome tracking and data analyses, requiring additional resources and technology upgrades to reduce the efficiencies and cost savings LUMA is trying to achieve.</p> <p>Fifth, Mr. Balbis provides some general observations regarding how net metering can impact utilities and non-participating customers based on his experience as a regulator in the state of Florida.</p>
<p>LUMA Ex. 4.0</p> <p>Joseline N. Estrada Rivera, Manager of Tariffs & Budgets, LUMA Energy ServCo LLC</p> <p>Load Forecasting</p>	<ul style="list-style-type: none"> • LUMA Ex. 4.01 – Load Forecasting Models • LUMA Ex. 4.02 - Load Forecast 2025 Update (Excel) • LUMA Ex. 4.03 - Load Forecast Modifiers FY 2025 (Excel) • LUMA Ex. 4.04 – Customers Forecast 2025 Update (Excel) 	<ul style="list-style-type: none"> • Schedule F-6 	<p>Ms. Joseline N. Estrada-Rivera (“Ms. Estrada”) is Director of Tariff & Budgets, Load Forecasting and Research at LUMA Energy ServCo, LLC. In her prepared Direct Testimony, Ms. Estrada supports the load forecast used by LUMA to establish its rates and revenue requirement for Fiscal Year (“FY”) 2026, FY2027, and FY2028.</p> <p>Ms. Estrada explains that the load forecast for FY2026 is 7.2% below levels forecasted in 2017, when the current rates were established, and 5% below the forecast developed for FY2025. She testifies that projected load is expected to further decline in FY2027 by 7.9% and FY2028 by 9.9%.</p>

			<p>Ms. Estrada identifies the exogenous factors affecting load, including the installation of distributed photovoltaic (“PV”) systems and participation in the Net Metering (“NM”) Program by residential and commercial customers in response to outage events, installation of combined heat and power systems (“CHP”) by industrial customers, and energy efficiency programs, which all decrease load, and increase of electric vehicles and Cooling Degree Days, which increase load.</p> <p>Ms. Estrada identifies potential revenue impacts caused by installation of PV systems and participation in the NM Program, and installation of CHP systems.</p>
<p>LUMA Ex. 5.0</p> <p>Pedro A. Meléndez Meléndez, Chief Capital Programs & Grid Transformation Officer, LUMA Energy ServCo LLC</p> <p>Capital Programs & Grid Transformation</p>	<ul style="list-style-type: none"> • LUMA Ex. 5.01 - Range of Reliability Improvements (Powerpoint) • LUMA Ex. 5.02 - Compliance & Studies Program Brief (PBUT1) (FY2026) • LUMA Ex. 5.03 - CONFIDENTIAL AND PRIVILEGED OT Telecom Systems and Networks Program Brief (PBUT1) (FY2026) • LUMA Ex. 5.04 - Transmission Priority Pole Replacements Program Brief (PBUT13) (FY2026) • LUMA Ex. 5.05 - Transmission Line Rebuild Program Brief (PBUT33) (FY2026) • LUMA Ex. 5.06 - Substation Reliability 	N/A	<p>Mr. Pedro A. Meléndez-Meléndez (“Mr. Meléndez”) is Chief Capital Programs & Grid Transformation Officer at LUMA Energy ServCo, LLC. The purpose of Mr. Meléndez’s prepared direct testimony in this proceeding is to provide the operations and maintenance (“O&M”) costs and Non-Federal Capital (“NFC”) costs for the Capital Programs Department (“Capital Programs” or “Department”) in the Optimal and Constrained Budgets on behalf of LUMA Energy LLC and LUMA Energy ServCo, LLC (collectively, “LUMA”).</p> <p>Mr. Meléndez’s testimony describes the fragile state of the grid and the need for significant investment to reverse the effects of the deteriorating system. His testimony discusses the sources of funding available to LUMA and the risks of underinvestment.</p>

	<p>Program Brief (PBUT7) (FY2026)</p> <ul style="list-style-type: none"> • LUMA Ex. 5.07 - Substation Rebuilds Program Brief (PBUT8) (FY2026) • LUMA Ex. 5.08 - Distribution Pole and Conductor Repair Program Brief (PBUT30) (FY2026) • LUMA Ex. 5.09 - Grid Automation Program Brief (PBUT4) (FY2026) • LUMA Ex. 5.10 - Distribution Line Rebuild Program Brief (PBUT6) (FY2026) • LUMA Ex. 5.11 - New Business Connections Program Brief (PBUT38) (FY2026) • LUMA Ex. 5.12 - Distribution Streetlighting Program Brief (PBUT5) (FY2026) • LUMA Ex. 5.13 - Distribution Grid Reliability Program Brief (PBUT39) (FY2026) • LUMA Ex. 5.14 - Asset Data Integrity Program Brief (PBUT27) (FY2026) 		<p>Mr. Meléndez presents the O&M and NFC costs needed to implement capital projects that are part of LUMA's Long-Term Investment Plan and the System Stabilization Plan to stabilize the grid and improve system reliability, service, and affordability.</p> <p>Based on the need to stabilize the T&D System and reverse its deteriorated fragile state, Mr. Meléndez recommends for Capital Programs an Optimal Budget of \$401.3 million for FY2026, \$646.3 million for FY2027, and \$790.7 million for FY2028. Mr. Meléndez's testimony for Capital Programs also includes a Constrained Budget, as ordered by the Energy Bureau.</p> <p>Finally, Mr. Meléndez's testimony supports the costs of Capital Programs that are included in LUMA's provisional rate application.</p>
<p>LUMA Ex. 6.0</p> <p>Kevin Burgemeister, Senior Vice President Operations (Acting), LUMA Energy ServCo, LLC</p> <p>Operations</p>	<ul style="list-style-type: none"> • LUMA Ex. 6.01 – Tools Repair & Management Program Brief (PBOP5) (FY2026) • LUMA Ex. 6.02 – Meter Replacement and Maintenance Program Brief (PBUT17) (FY2026) • LUMA Ex. 6.03 – Standardized Metering & Meter Shop Setup 	N/A	<p>Mr. Kevin Burgemeister (“Mr. Burgemeister”) is the Senior Vice President of Operations (Acting), at LUMA Energy ServCo, LLC. The purpose of Mr. Burgemeister's prepared direct testimony is to provide the proposed Optimal Budget for FY2026, FY2027, and FY2028, attributable to the Operations Department (“Operations” and/or “Department”), requesting Operations and Maintenance</p>

	<p>Program Brief (PBUT29) (FY2026)</p> <ul style="list-style-type: none"> • LUMA Ex. 6.04 – Retail Wheeling Program Brief (PBCS4) (FY2026) • LUMA Ex. 6.05 – Critical Energy Management System Program Brief (PBUT22) (FY2026) • LUMA Ex. 6.06 – New Business Connections Program Brief (PBUT38) (FY2026) • LUMA Ex. 6.07 – Distribution Line Rebuild Program Brief (PBUT33) (FY2026) • LUMA Ex. 6.08 – Grid Automation Program Brief (PBUT4) (FY2026) • LUMA Ex. 6.09 – Distribution Pole & Conductor Repair Program Brief (PBUT30) (FY2026) • LUMA Ex. 6.10 – Transmission Priority Pole Replacements Program Brief (PBUT13) (FY2026) • LUMA Ex. 6.11 – Substation Rebuilds Program Brief (PBUT8) (FY2026) • LUMA Ex. 6.12 – Substation Reliability Program Brief (PBUT7) (FY2026) • LUMA Ex. 6.13 – Aviation (Contained within T&D Fleet Program Brief (PBOP1) (FY2026)) • LUMA Ex. 6.14 – Vegetation Management and Capital Clearing 		<p>(“O&M”) and Non-Federal Capital (“NFC”) on behalf of LUMA Energy LLC and LUMA Energy ServCo, LLC (collectively, “LUMA”).</p> <p>Mr. Burgemeister recommends an Optimal Budget of \$548.7 million for Fiscal Year (“FY”) 2026, \$582.1 million for FY2027, and \$621.3 million for FY2028. Mr. Burgemeister’s testimony for Operations also includes Constrained Budgets, as ordered by the Energy Bureau.</p> <p>Finally, Mr. Burgemeister’s testimony supports the costs of the Operations Department that are included in LUMA’s provisional rate application.</p>
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	Implementation Program Brief (PBOP7) (FY2026)		
<p>LUMA Ex. 7.0</p> <p>Jessica Laird, Vice President Customer Experience (Acting), LUMA Energy ServCo LLC</p> <p>Customer Experience</p>	<ul style="list-style-type: none"> • LUMA Ex. 7.01 - Loss Recovery Program Brief (PBUT31) (FY2026) • LUMA Ex. 7.02 - Billing Accuracy & Back Office Program Brief (PBCS3) (FY2026) • LUMA Ex. 7.03 - Modernize Customer Service Technology Program Brief (PBCS1) (FY2026) • LUMA Ex. 7.04 - Voice of the Customer Program Brief (PBCS2) (FY2026) • LUMA Ex. 7.05 - Electric Vehicle Implementation Support Program Brief (PBRE7) (FY2026) 	<ul style="list-style-type: none"> • Schedule E-5 	<p>Ms. Jessica Laird (“Ms. Laird”) is the Senior Vice President of Customer Experience at LUMA Energy ServCo, LLC. The purpose of Ms. Laird’s prepared direct testimony in this proceeding is to provide the proposed Optimal and Constrained Budgets for FY2026, FY2027, and FY2028, attributable to the Customer Experience Department (“Customer Experience” and/or “Department”), requesting Operations and Maintenance (“O&M”) and Non-Federal Capital (“NFC”) on behalf of LUMA Energy LLC and LUMA Energy ServCo, LLC (collectively, “LUMA”).</p> <p>Based on the projected workload, Ms. Laird recommends an Optimal Budget of \$191.3 million for Fiscal Year (“FY”) 2026, \$226.5 million for FY2027, and \$248.2 million for FY2028. Ms. Laird’s testimony for the Customer Experience Department also includes a Constrained Budget, as ordered by the Energy Bureau.</p> <p>Finally, Ms. Laird’s testimony supports the costs of the Customer Experience Department that are included in LUMA’s provisional rate application.</p>
<p>LUMA Ex. 8.0</p> <p>Michael Granata, Senior Vice President, Safety, Security and Emergency Response (Acting) LUMA</p>	<ul style="list-style-type: none"> • LUMA Ex. 8.01 - Excerpts from the T&D OMA that are applicable to HSE • LUMA Ex. 8.02 - HSE & Technical Training Program Brief (PBHE1) (FY2026) 	N/A	<p>Mr. Michael Granata is Acting Senior Vice President of Safety, Security and Emergency Response at LUMA Energy ServCo, LLC. The purpose of Mr. Granata’s prepared direct testimony in this proceeding is to provide the operations and maintenance (“O&M”) costs for</p>

<p>Energy ServCo, LLC</p> <p>Health, Safety and Environment</p>	<ul style="list-style-type: none"> • LUMA Ex. 8.03 - Public Safety Program Brief (PBHE3) (FY2026) • LUMA Ex. 8.04 - Waste Management Program Brief (PBHE4) (FY2026) 		<p>the Health, Safety, and Environmental Department (“HSE”) in the Optimal and Constrained Budget on behalf of LUMA Energy LLC and LUMA Energy ServCo, LLC (collectively, “LUMA”).</p> <p>Based on existing and projected company needs, Mr. Granata recommends an Optimal Budget for HSE of \$11.42 million for Fiscal Year (“FY”) 2026, \$11.49 million for FY2027, and \$11.68 million for FY2028. Mr. Granata’s testimony for HSE also includes a Constrained Budget, as ordered by the Energy Bureau.</p>
<p>LUMA Ex. 9.0</p> <p>Ivonne Gómez Méndez, Chief People Officer, LUMA Energy ServCo, LLC</p> <p>Human Resources</p>	<ul style="list-style-type: none"> • N/A 	N/A	<p>Ms. Ivonne Gómez- Méndez is the Chief People Office at LUMA Energy ServCo, LLC. The purpose of Ms. Gómez- Méndez’s prepared direct testimony in this proceeding is to provide the operations and maintenance (“O&M”) costs for the Human Resources Department (“HR Department”) in the Optimal and Constrained Budget on behalf of LUMA Energy LLC and LUMA Energy ServCo, LLC (collectively, “LUMA”).</p> <p>Ms. Gómez-Méndez’s testimony recommends an Optimal Budget of \$8.87 million for Fiscal Year (“FY”) 2026, \$8.66 million for FY2027, and \$9.15 million for FY2028. Ms. Gómez-Méndez’s testimony for the HR Department also includes a Constrained Budget, as ordered by the Energy Bureau.</p>
<p>LUMA Ex. 10.0</p> <p>Ángel E. Rotger Sabat, Esq., Chief Legal Officer, LUMA</p>	<ul style="list-style-type: none"> • LUMA Ex. 10.01 - Number of Cases for FY2025 • LUMA Ex. 10.02 - Excerpts from the T&D OMA applicable to the 	N/A	<p>Mr. Ángel E. Rotger-Sabat (“Mr. Rotger-Sabat”) is the Chief Legal Officer at LUMA Energy ServCo, LLC. The purpose of Mr. Rotger-Sabat’s prepared direct testimony in this proceeding is to provide the operations and maintenance</p>

<p>Energy ServCo, LLC</p> <p>Legal</p>	<p>Land & Permits Division</p> <ul style="list-style-type: none"> • LUMA Ex. 10.03 - Land & Permits Processes and Management Program Brief (PBRE1) (FY2026) • LUMA Ex. 10.04 - Land Record Management Program Brief (PBRE5) (FY2026) 		<p>(“O&M”) costs for the Legal Department (“Legal Department”) and for the Land and Permits (“L&P” and/or “Division”) Division in the Optimal and Constrained Budget on behalf of LUMA Energy LLC and LUMA Energy ServCo, LLC (collectively, “LUMA”).</p> <p>Based on the projected workload of the Legal Department, Mr. Rotger-Sabat’s testimony recommends an Optimal Budget of \$9.81 million for Fiscal Year (“FY”) 2026, \$10.30 million for FY2027, and \$10.82 million for FY2028. Mr. Rotger-Sabat’s testimony for the Legal Department also includes a Constrained Budget, as ordered by the Puerto Rico Energy Bureau.</p> <p>Based on the projected workload of the L&P Division, Mr. Rotger-Sabat’s testimony recommends an Optimal Budget of \$5.25 million for FY2026, \$6.03 million for FY2027, and \$6.94 million for FY2028. Mr. Rotger-Sabat’s testimony for the L&P Division also includes a Constrained Budget, as ordered by the Puerto Rico Energy Bureau.</p>
<p>LUMA Ex. 11.0</p> <p>Crystal Allen, Chief Information Officer, LUMA Energy ServCo, LLC</p> <p>IT-OT</p>	<ul style="list-style-type: none"> • LUMA Ex. 11.01 - Excerpts from the T&D OMA, applicable to the IT/OT Department • LUMA Ex. 11.02 - CONFIDENTIAL AND PRIVILEGED IT OT Cybersecurity Program Brief (PBIT2) (FY2026) • LUMA Ex. 11.03 - IT OT Enablement Program Brief (PBIT3) (FY2026) 	N/A	<p>Ms. Crystal Allen is Chief Information Officer at LUMA Energy ServCo, LLC. The purpose of Ms. Allen’s prepared direct testimony in this proceeding is to provide the operations and maintenance (“O&M”) costs and Non-Federal Capital (“NFC”) costs for the IT OT and Cybersecurity Department (“IT/OT Department”) in the Optimal and Constrained Budgets on behalf of LUMA Energy LLC and LUMA</p>

	<ul style="list-style-type: none"> • LUMA Ex. 11.04 - IT OT Asset Management Program Brief (PBIT4) (FY2026) • LUMA Ex. 11.05 - IT OT Collaboration and Analytics Program Brief (PBIT5) (FY2026) 		<p>Energy ServCo, LLC (collectively, “LUMA”).</p> <p>Based on existing and projected company needs, Ms. Allen recommends for the IT/OT Department an Optimal Budget of \$105.03 million for Fiscal Year (“FY”) 2026, \$132.90 million for FY2027, and \$145.67 million for FY2028. Ms. Allen’s testimony for the IT/OT Department also includes a Constrained Budget, as ordered by the Energy Bureau.</p> <p>Finally, Ms. Allen’s testimony supports the costs of the IT/OT Department that are included in LUMA’s provisional rate application.</p>
<p>LUMA Ex. 12.0 and LUMA Ex. 13.0</p> <p>Michelle M. Fraley, Vice President, Corporate Security and Emergency Management, LUMA Energy ServCo, LLC</p> <p>Emergency Preparedness and Corporate Security</p>	<ul style="list-style-type: none"> • LUMA Ex. 12.01 - Emergency Response Preparedness Program Brief (PBHE8) (FY2026) • LUMA Ex. 13.01 - Total Corporate Security Employee Compensation Costs for FY2025 and FY2026 • LUMA Ex. 13.02 - CONFIDENTIAL AND PRIVILEGED Substation Physical Security Program Brief (PBUT18) (FY2026) • LUMA Ex. 13.03 - CONFIDENTIAL AND PRIVILEGED Regional Operations Facilities Physical Security Program Brief (PBUT19) (FY2026) • LUMA Ex. 13.04 - CONFIDENTIAL AND PRIVILEGED, Response to November 8, 2024 	N/A	<p>Ms. Michelle M. Fraley (“Ms. Fraley”) is Vice President of Corporate Security and Emergency Management at LUMA Energy ServCo, LLC. The purpose of Ms. Fraley’s prepared direct testimony in Exhibit 12.0 in this proceeding is to provide the operations and maintenance (“O&M”) and Non-Federal Capital (“NFC”) costs for the Emergency Preparedness Department (“Emergency Preparedness Department” and/or “Department”) in the Optimal and Constrained Budget on behalf of LUMA Energy LLC and LUMA Energy ServCo, LLC (collectively, “LUMA”).</p> <p>Based on the Emergency Preparedness Department’s existing costs, the need to replace equipment at the primary Emergency Operation Center (“LEOC”), and the need to install IT equipment at the alternate LEOC, which is currently being staged, Ms. Fraley’s testimony recommends an Optimal Budget</p>

	Requests, Exhibit 1, ROI-LUMA-MI-2020-0018-20241108-PREB-005_Attachment20, and ROI-LUMA-MI-2020-0018-20241108-PREB-005_Attachment21 (Dec. 16, 2024)		<p>of \$2.40 million for Fiscal Year (“FY”) 2026, \$1.19 million for FY2027, and \$1.24 million for FY2028. Ms. Fraley’s testimony for the Emergency Preparedness Department also includes a Constrained Budget, as ordered by the Puerto Rico Energy Bureau</p> <p>The purpose of Ms. Fraley’s prepared direct testimony in Exhibit 13.0 is to provide the O&M and NFC costs for the Corporate Security Department (“Corporate Security” or “Department”) in the Optimal and Constrained Budget on behalf of LUMA.</p> <p>Based on LUMA’s existing security needs and the need to replace security equipment that has exceeded its recommended useful life, Ms. Fraley’s testimony recommends an Optimal Budget of \$12.78 million for Fiscal Year (“FY”) 2026, \$13.18 million FY2027, and \$13.61 million for FY2028 for the Corporate Security Department. Ms. Fraley’s testimony for the Corporate Security Department also includes a Constrained Budget, as ordered by the Puerto Rico Energy Bureau.</p>
<p>LUMA Ex. 14.0</p> <p>Lorenzo López, Chief of Communications and Stakeholder Engagement, LUMA Energy ServCo, LLC</p> <p>Corporate Communications</p>	<ul style="list-style-type: none"> N/A 	N/A	<p>Mr. Lorenzo López is Chief of Communications and Stakeholder Engagement at LUMA Energy ServCo, LLC. The purpose of Mr. López’s prepared direct testimony in this proceeding is to provide the operations and maintenance (“O&M”) costs for the Corporate Communications Department (“Corporate Communications”) in the Optimal and Constrained Budget on behalf of LUMA Energy LLC and LUMA Energy</p>

			<p>ServCo, LLC (collectively, “LUMA”).</p> <p>Based on existing and projected company needs, Mr. López recommends an Optimal Budget for Corporate Communications of \$13.50 million for Fiscal Year (“FY”) 2026, \$14.15 million for FY2027, and \$14.83 million for FY2028. Mr. López’s testimony for Corporate Communications also includes a Constrained Budget, as ordered by the Energy Bureau.</p>
<p>LUMA Ex. 15.0</p> <p>Juan Rogers, Chief Procurement and Supply Chain Officer LUMA Energy ServCo, LLC</p> <p>Procurement and Supply Chain</p>	<ul style="list-style-type: none"> • LUMA Ex. 15.01 - Procurement Department Organizational Chart • LUMA Ex. 15.02 - LUMA’s Procurement Manual, Version 2, as published on July 31, 2023 • LUMA Ex. 15.03 - Materials Management Program Brief (PBOP6) (FY2026) 	N/A	<p>Mr. Juan Rogers is the Chief Procurement Officer at LUMA Energy ServCo, LLC. The purpose of Mr. Rogers’ prepared direct testimony in this proceeding is to provide the operations and maintenance (“O&M”) costs and Non-Federal Capital (“NFC”) costs for the Procurement and Supply Chain Department (“Department”) in the Optimal and Constrained Budgets on behalf of LUMA Energy LLC and LUMA Energy ServCo, LLC (collectively, “LUMA”).</p> <p>Based on existing and projected company needs, Mr. Rogers puts forth an Optimal Budget for the Procurement Department of \$16.87 million for Fiscal Year (“FY”) 2026, \$16.19 million for FY2027, and \$16.70 million for FY2028. Mr. Roger’s testimony for the Procurement Department also includes a Constrained Budget, as ordered by the Energy Bureau.</p>
LUMA Ex. 16.0	<ul style="list-style-type: none"> • N/A 	N/A	<p>Mr. Ángel E. Rotger-Sabat (“Mr. Rotger-Sabat”) is the Chief Legal</p>

<p>Mr. Angel Rotger-Sabat Chief Legal Officer at LUMA Energy ServCo, LLC</p> <p>Compliance</p>			<p>Officer at LUMA Energy ServCo, LLC. The purpose of Mr. Rotger-Sabat's prepared direct testimony in this proceeding is to provide the operations and maintenance ("O&M") costs for the operations and maintenance ("O&M") costs for the Compliance and Ethics Department ("Compliance Department" or "Department") in the Optimal and Constrained Budgets on behalf of LUMA Energy LLC and LUMA Energy ServCo, LLC (collectively, "LUMA").</p> <p>Based on existing and projected company needs, Mr. Rotger-Sabat recommends an Optimal Budget for the Compliance Department of \$2.80 million for Fiscal Year ("FY") 2026, \$2.94 million for FY2027, and \$3.49 million for FY2028. Mr. Rotger-Sabat's testimony for the Compliance Department also includes a Constrained Budget, as ordered by the Energy Bureau.</p>
<p>LUMA Ex. 17.0</p> <p>José C. Latorre González, Manager of Design and Space Planning, LUMA Energy ServCo, LLC</p> <p>Facilities</p>	<ul style="list-style-type: none"> LUMA Ex. 17.01 - Facilities Development & Implementation Program Brief (PBFM1) (FY2026) 	N/A	<p>Mr. José Carlos Latorre González ("Mr. Latorre") is the Manager of Design and Space Planning and Real Estate at LUMA Energy ServCo, LLC. The purpose of Mr. Latorre's prepared direct testimony in this proceeding is to present the proposed Optimal Budget for FY2026, FY2027, and FY2028, attributable to Real Estate, Property and Facilities Management Services and Redevelopment Department, ("Facilities" and/or "Department"), and to request Operations and Maintenance ("O&M") and Non-Federal Capital ("NFC") funding on behalf of LUMA Energy LLC and LUMA Energy ServCo, LLC (collectively, "LUMA").</p>

			<p>Based on the projected workload, Mr. Latorre recommends an Optimal Budget of \$102.81 million for Fiscal Year (“FY”) 2026, \$48.76 million for FY2027, and \$50.07 million for FY2028. Mr. Latorre’s testimony for the Department also includes a Constrained Budget, as ordered by the Energy Bureau.</p> <p>Finally, Mr. Latorre’s testimony supports the costs of the Facilities Department that are included in LUMA’s provisional rate application.</p>
<p>LUMA Ex. 18.0</p> <p>Kevin Burgemeister, Senior Vice President Operations (Acting), LUMA Energy ServCo, LLC</p> <p>Fleet</p>	<ul style="list-style-type: none"> • LUMA Ex. 18.01 - Fleet Specific Applicable Laws, Regulations, and Industry Standards • LUMA Ex. 18.02 - T&D Fleet Program Brief (PBOP1) (FY2026) 	N/A	<p>Mr. Kevin Burgemeister (“Mr. Burgemeister”) is the Senior Vice President of Operations (Acting), at LUMA Energy ServCo, LLC. The purpose of Mr. Burgemeister’s prepared direct testimony is to provide the proposed Optimal and Constrained Budgets for FY2026, FY2027, and FY2028, attributable to the Fleet Department (“Fleet” and/or “Department”), requesting Operations and Maintenance (“O&M”) and Non-Federal Capital (“NFC”) on behalf of LUMA Energy LLC and LUMA Energy ServCo, LLC (collectively, “LUMA”).</p> <p>Mr. Burgemeister recommends an Optimal Budget of \$88.8 million for Fiscal Year (“FY”) 2026, \$93.5 million for FY2027, and \$97.3 million for FY2028. Mr. Burgemeister’s testimony for Fleet also includes Constrained Budgets, as ordered by the Energy Bureau.</p> <p>Finally, Mr. Burgemeister’s testimony supports the costs of the Fleet Department that are</p>

			included in LUMA's provisional rate application.
LUMA Ex. 19.0 Expert Witness – Branko Terzic	<ul style="list-style-type: none"> • LUMA Ex. 19.01 - Resume/CV of Branko Terzic • LUMA Ex. 19.02 - Authority of State Commissions to Regulate Rates of Public Power Utilities from the American Public Power Association 	N/A	Mr. Branko Terzic, who is an internationally recognized consultant in regulation and a former Commissioner of the Federal Energy Regulatory Commission and Wisconsin Public Service Commission, presents Prepared Direct Testimony on behalf of LUMA Energy LLC and LUMA Energy ServCo, LLC (collectively, "LUMA"). The purpose of Mr. Terzic's testimony is to address the differences between publicly owned electric utilities, such as the Puerto Rico Electric Power Authority ("PREPA"), and investor-owned utilities ("IOU"), and the issues raised by the requirement that LUMA as operator of PREPA's assets file both an Optimal Budget and Constrained Budget. Mr. Terzic explains that the regulation of PREPA in Puerto Rico is not intended to restrain the unjust profits by a private monopoly such as an IOU but to determine the lowest reasonable cost that provides reliable and adequate service. Mr. Terzic recommends that the Puerto Rico Energy Bureau focus its review on the Optimal Budget, which should be LUMA's best estimate of the necessary costs to operate at a just and reasonable performance, as it would be in the public interest to allow a regulated utility to operate at a just and reasonable performance level.
LUMA Ex. 20.0 Expert Witness, Sam Shannon, Associate Director, Guidehouse	<ul style="list-style-type: none"> • LUMA Ex. 20.01 – Resume/CV of Sam Shannon • LUMA Ex. 20.02 - Draft Tariff Sheets and Redlines 	Revenue Requirement <ul style="list-style-type: none"> • Schedules C-8 and C-10 • Schedules E-1 through E-4 	Mr. Sam Shannon is an Associate Director at Guidehouse. He provides this Prepared Direct Testimony on behalf of LUMA Energy LLC and LUMA Energy ServCo, LLC (collectively, "LUMA") to present the Utility's

<p>on behalf of LUMA Energy ServCo LLC</p>	<ul style="list-style-type: none"> • LUMA Ex. 20.03 - Rate Design for Provisional Rates 	<ul style="list-style-type: none"> • Schedules F-1 through F-5; and F-7 • Schedule I <p>Rate Design</p> <ul style="list-style-type: none"> • Schedules K-1 through K-2 • Schedules L-1 through L-2 • Schedules M-1 through M-9 • Schedule N-1 • Schedules O-1 through O-4 • Schedules P-1 through P-4. 	<p>preferred cost of service study, revenue allocation, and rate design.</p> <p>Mr. Shannon discusses the cost allocation process; first, functionalizing costs by purpose (i.e., generation, transmission, distribution, customer service, and administrative and general), second, classifying costs by unit (i.e., energy, demand, and customer), and lastly, allocating costs to each customer class. He then discusses the results of the cost of service study.</p> <p>Mr. Shannon then discusses the revenue allocation, that is the assignment of portions of the total revenue requirement to each customer class. He explains that he chose to allocate the revenue requirement over three years to spread the rate increase over that period and avoid a single large jump in rates.</p> <p>Next, Mr. Shannon provides an overview of the Utility's rate design generally for each test year, the rate design for each of the Utility's rate schedules, the bill impact analysis, and customer classifications.</p> <p>Mr. Shannon also presents a proposed decoupling mechanism to begin in fiscal year ("FY") 2028.</p> <p>Mr. Shannon then discusses additional tariff changes. He explains the Utility is proposing a redesign of the tariff book to use an amended structure to track changes that will improve transparency and provide customers with better clarity on</p>
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			<p>how they are charged for electric service.</p> <p>He discusses the proposal to change the Contributions In Lieu of Taxes-Municipalities (“CILT”) and Subsidies HH related to Help to Humans and NHH related to Non- Help to Humans Subsidy (“SUBA”) riders to recover to the total amount for each tariff rate via a fixed monthly charge.</p> <p>Mr. Shannon also provides a general overview of the proposed changes to the Net Metering Rider to make its operation clearer to customers.</p> <p>Mr. Shannon then presents the tariff sheets for the two new riders - the Outage Recovery Rider and the Legacy Debt Rider – that are proposed to go into effect in FY2027.</p> <p>Lastly, Mr. Shannon presents the rate design for the provisional rates, explaining how the rate design is consistent with the provisional rates for PREPA during the 2017 Rate Review and improves transparency for customers.</p>
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Annex IV (Attachment A)
(draft public notice)
(to be submitted via email)

Annex V (Attachment B)
(LUMA's Responses to RFIs)
(attachments to be submitted via email)

Pre-Application Questions from PREB Consultants

NEPR-AP-2023-0003

July 3, 2025



Rate Review

List of Responses and Attachments

Response ID	Location of Response ¹	Response Subject	Testimony Witness
ROI-LUMA-AP-2023-0003-20250324-PREB-001	Response in PDF	Transmission, Distribution, and Storage	Pedro A. Meléndez Meléndez
ROI-LUMA-AP-2023-0003-20250324-PREB-002	Response in Testimony	Transmission, Distribution, and Storage	Pedro A. Meléndez Meléndez
ROI-LUMA-AP-2023-0003-20250324-PREB-003	Response in PDF	Transmission, Distribution, and Storage	Pedro A. Meléndez Meléndez
ROI-LUMA-AP-2023-0003-20250324-PREB-004	Response in PDF	Transmission, Distribution, and Storage	Andrew Smith Pedro A. Meléndez Meléndez
	Attachment		
ROI-LUMA-AP-2023-0003-20250324-PREB-005	Response in Testimony	Transmission, Distribution, and Storage	Pedro A. Meléndez Meléndez
ROI-LUMA-AP-2023-0003-20250324-PREB-006	Response in Testimony	Transmission, Distribution, and Storage	Pedro A. Meléndez Meléndez
ROI-LUMA-AP-2023-0003-20250324-PREB-007	Response in PDF	Transmission, Distribution, and Storage	Andrew Smith Pedro A. Meléndez Meléndez
ROI-LUMA-AP-2023-0003-20250324-PREB-008	Response in PDF	Transmission, Distribution, and Storage	Pedro A. Meléndez Meléndez Kevin Burgemeister
ROI-LUMA-AP-2023-0003-20250324-PREB-009	Response in PDF	Purchased Power Charge Adjustment	Andrew Smith Alejandro Figueroa
ROI-LUMA-AP-2023-0003-20250324-PREB-010	Response in PDF	Reliability Improvements	Pedro A. Meléndez Meléndez Alejandro Figueroa
ROI-LUMA-AP-2023-0003-20250324-PREB-011	Response in PDF	Reliability Improvements	Pedro A. Meléndez Meléndez Alejandro Figueroa
	Testimony		
	Attachment		
ROI-LUMA-AP-2023-0003-20250324-PREB-012	Response in Testimony	Reliability Improvements	Pedro A. Meléndez Meléndez
ROI-LUMA-AP-2023-0003-20250324-PREB-013	Response in PDF	Reliability Improvements	Pedro A. Meléndez Meléndez
ROI-LUMA-AP-2023-0003-20250324-PREB-014	Response in Testimony	Reliability Improvements	Pedro A. Meléndez Meléndez Kevin Burgemeister
			Kevin Burgemeister
ROI-LUMA-AP-2023-0003-20250324-PREB-015	Response in Testimony	Vegetation Management	Kevin Burgemeister
ROI-LUMA-AP-2023-0003-20250324-PREB-016	Response in PDF	Fuel Costs	Kevin Burgemeister

¹ **Note:** This column includes three response types:

- **Response in PDF** – Indicates that the response is provided within this document, following the restated RFI.
- **Response in Testimony** – Indicates that the response refers to prefiled testimony, where the relevant information can be found.
- **Attachment** – Indicates that the response includes an attachment submitted along with this document.

RESPONSES TO MARCH 24, 2025 REQUEST

Rate Review

Response ID	Location of Response ¹	Response Subject	Testimony Witness
ROI-LUMA-AP-2023-0003-20250324-PREB-017	Response in PDF	LUMA Priority Stabilization Plan – System Improvements Preliminary Plan as submitted in NEPR-MI-2024-0005	Pedro A. Meléndez Meléndez Kevin Burgemeister
ROI-LUMA-AP-2023-0003-20250324-PREB-018	Response in PDF	LUMA Priority Stabilization Plan – System Improvements Preliminary Plan as submitted in NEPR-MI-2024-0005	Pedro A. Meléndez Meléndez
ROI-LUMA-AP-2023-0003-20250324-PREB-019	Response in PDF	LUMA Priority Stabilization Plan – System Improvements Preliminary Plan as submitted in NEPR-MI-2024-0005	Kevin Burgemeister Pedro A. Meléndez Meléndez
ROI-LUMA-AP-2023-0003-20250324-PREB-020	Response in Testimony	LUMA Priority Stabilization Plan – System Improvements Preliminary Plan as submitted in NEPR-MI-2024-0005	Kevin Burgemeister Pedro A. Meléndez Meléndez
ROI-LUMA-AP-2023-0003-20250324-PREB-021	Response in PDF	LUMA Priority Stabilization Plan – System Improvements Preliminary Plan as submitted in NEPR-MI-2024-0005	Kevin Burgemeister
ROI-LUMA-AP-2023-0003-20250324-PREB-022	Response in PDF	LUMA Priority Stabilization Plan – Accelerated Storage Addition Program (ASAP) as submitted in NEPR-MI-2024-0005	Kevin Burgemeister
ROI-LUMA-AP-2023-0003-20250324-PREB-023	Response in PDF	LUMA Priority Stabilization Plan – Accelerated Storage Addition Program (ASAP) as submitted in NEPR-MI-2024-0005	Kevin Burgemeister
ROI-LUMA-AP-2023-0003-20250324-PREB-024	Response in PDF	LUMA Priority Stabilization Plan – Accelerated Storage Addition Program (ASAP) as submitted in	Kevin Burgemeister

RESPONSES TO MARCH 24, 2025 REQUEST

Rate Review

Response ID	Location of Response ¹	Response Subject	Testimony Witness
		NEPR-MI-2024-0005	
ROI-LUMA-AP-2023-0003-20250324-PREB-025	Response in PDF	LUMA Priority Stabilization Plan – Accelerated Storage Addition Program (ASAP) as submitted in NEPR-MI-2024-0005	Kevin Burgemeister
ROI-LUMA-AP-2023-0003-20250324-PREB-026	Response in PDF	LUMA Priority Stabilization Plan – Accelerated Storage Addition Program (ASAP) as submitted in NEPR-MI-2024-0005	Kevin Burgemeister
ROI-LUMA-AP-2023-0003-20250324-PREB-027	Response in PDF	LUMA Priority Stabilization Plan – Accelerated Storage Addition Program (ASAP) as submitted in NEPR-MI-2024-0005	Kevin Burgemeister
ROI-LUMA-AP-2023-0003-20250324-PREB-028	Response in Testimony	Cybersecurity Investment and Budgeting	Crystal Allen
ROI-LUMA-AP-2023-0003-20250324-PREB-029	Response in Testimony	Cybersecurity Investment and Budgeting	Crystal Allen
ROI-LUMA-AP-2023-0003-20250324-PREB-030	Response in PDF	RPS Strategy and Compliance Roadmap	Kevin Burgemeister
ROI-LUMA-AP-2023-0003-20250324-PREB-031	Response in PDF	RPS Strategy and Compliance Roadmap	Kevin Burgemeister
ROI-LUMA-AP-2023-0003-20250324-PREB-032	Response in PDF	RPS Compliance Costs	Kevin Burgemeister
ROI-LUMA-AP-2023-0003-20250324-PREB-033	Response in PDF	RPS Compliance Costs	Kevin Burgemeister
ROI-LUMA-AP-2023-0003-20250324-PREB-034	Response in PDF	Renewable Resource Integration	Kevin Burgemeister
ROI-LUMA-AP-2023-0003-20250324-PREB-035	Response in PDF	Renewable Resource Integration	Kevin Burgemeister
ROI-LUMA-AP-2023-0003-20250324-PREB-036	Response in PDF	Virtual Power Plant and Distributed Energy Resources	Kevin Burgemeister
ROI-LUMA-AP-2023-0003-20250324-PREB-037	Response in PDF	Compliance Monitoring and Reporting	Kevin Burgemeister
ROI-LUMA-AP-2023-0003-20250324-PREB-038	Response in PDF	Management Audit Expense	

RESPONSES TO MARCH 24, 2025 REQUEST

Rate Review

Response ID	Location of Response¹	Response Subject	Testimony Witness
ROI-LUMA-AP-2023-0003-20250324-PREB-039	Response in Testimony	Customer Service and Information	Jessica Laird
ROI-LUMA-AP-2023-0003-20250324-PREB-040	Response in Testimony	Customer Service and Information	Jessica Laird
ROI-LUMA-AP-2023-0003-20250324-PREB-041	Response in PDF	Customer Service and Information	Jessica Laird
ROI-LUMA-AP-2023-0003-20250324-PREB-042	Response in Testimony	Billed Revenue Collection, Customer Payment Processing	Jessica Laird
ROI-LUMA-AP-2023-0003-20250324-PREB-043	Response in Testimony	Billed Revenue Collection, Customer Payment Processing	Jessica Laird
ROI-LUMA-AP-2023-0003-20250324-PREB-044	Response in Testimony	Billed Revenue Collection, Customer Payment Processing	Jessica Laird
ROI-LUMA-AP-2023-0003-20250324-PREB-045	Response in PDF	Call Center Operations and Staffing	Jessica Laird
ROI-LUMA-AP-2023-0003-20250324-PREB-046	Response in PDF	Bill Inserts, Education, Advertising, Web Content	Lorenzo Lopez
ROI-LUMA-AP-2023-0003-20250324-PREB-047	Response in PDF	Bill Inserts, Education, Advertising, Web Content	Lorenzo Lopez
ROI-LUMA-AP-2023-0003-20250324-PREB-048	Response in PDF	Bill Inserts, Education, Advertising, Web Content	Lorenzo Lopez
ROI-LUMA-AP-2023-0003-20250324-PREB-049	Response in Testimony	Revenue Management and Protection	Jessica Laird
ROI-LUMA-AP-2023-0003-20250324-PREB-050	Response in Testimony	Revenue Management and Protection	Jessica Laird
ROI-LUMA-AP-2023-0003-20250324-PREB-051	Response in Testimony	Net Metering	Jessica Laird
ROI-LUMA-AP-2023-0003-20250324-PREB-052	Response in PDF	Workflow Process and Tracking (GM,ME)	Kevin Burgemeister
ROI-LUMA-AP-2023-0003-20250324-PREB-053	Response in Testimony	Workforce Management Systems	Crystal Allen
ROI-LUMA-AP-2023-0003-20250324-PREB-054	Response in PDF	Irrigation Costs	PREPA
ROI-LUMA-AP-2023-0003-20250324-PREB-055	Response in PDF	Irrigation Costs	PREPA
ROI-LUMA-AP-2023-0003-20250324-PREB-056	Response in PDF	Irrigation Costs	PREPA

RESPONSES TO MARCH 24, 2025 REQUEST

Rate Review

Response ID	Location of Response¹	Response Subject	Testimony Witness
ROI-LUMA-AP-2023-0003-20250324-PREB-057	Response in PDF	Irrigation Costs	PREPA
ROI-LUMA-AP-2023-0003-20250324-PREB-058	Response in PDF	Irrigation Costs	PREPA
ROI-LUMA-AP-2023-0003-20250324-PREB-059	Response in PDF	Irrigation Costs	PREPA
ROI-LUMA-AP-2023-0003-20250324-PREB-060	Response in PDF	Irrigation Costs	PREPA
ROI-LUMA-AP-2023-0003-20250324-PREB-061	Response in PDF	Irrigation Costs	PREPA
ROI-LUMA-AP-2023-0003-20250324-PREB-062	Response in PDF	Emergency Response Plan	Michelle M. Fraley Kevin Burgemeister
ROI-LUMA-AP-2023-0003-20250324-PREB-063	Response in Testimony	Cost of aligning cost accounts to track Schedules A-1 and A-2	Andrew Smith
ROI-LUMA-AP-2023-0003-20250324-PREB-064	Response in PDF	Efficiencies	Kevin Burgemeister
ROI-LUMA-AP-2023-0003-20250324-PREB-065	Response in PDF	Efficiencies	Lorenzo Lopez
ROI-LUMA-AP-2023-0003-20250324-PREB-066	Response in PDF	Contracted Labor	Andrew Smith
ROI-LUMA-AP-2023-0003-20250324-PREB-067	Response in PDF Attachment	Contracted Labor	Andrew Smith
ROI-LUMA-AP-2023-0003-20250324-PREB-068	Response in Testimony	Title III Debt	Andrew Smith
ROI-LUMA-AP-2023-0003-20250324-PREB-069	Response in PDF Attachment *	Miscellaneous	Andrew Smith Ivonne Gomez-Mendez Each Departments Witness
ROI-LUMA-AP-2023-0003-20250324-PREB-070	Response in PDF Attachment *	Miscellaneous	Each Departments Witness
ROI-LUMA-AP-2023-0003-20250324-PREB-071		Miscellaneous	Andrew Smith
ROI-LUMA-AP-2023-0003-20250324-PREB-072	Response in PDF Attachment *	Miscellaneous	Andrew Smith Jessica Laird
ROI-LUMA-AP-2023-0003-20250324-PREB-073	Response in PDF Attachment *	Miscellaneous	Andrew Smith
ROI-LUMA-AP-2023-0003-20250324-PREB-074	Response in PDF Attachment *	Miscellaneous	Andrew Smith
ROI-LUMA-AP-2023-0003-20250324-PREB-075	Response in PDF Attachment *	Miscellaneous	Andrew Smith
ROI-LUMA-AP-2023-0003-20250324-PREB-076	Response in PDF Attachment *	Miscellaneous	Andrew Smith
ROI-LUMA-AP-2023-0003-20250324-PREB-077	Response in Testimony	Cost of Service Study	Sam Shannon

RESPONSES TO MARCH 24, 2025 REQUEST

Rate Review

Response ID	Location of Response ¹	Response Subject	Testimony Witness
ROI-LUMA-AP-2023-0003-20250324-PREB-078	Response in Schedule K	Cost of Service Study	Sam Shannon
ROI-LUMA-AP-2023-0003-20250324-PREB-079	Response in Testimony	Cost of Service Study	Sam Shannon
ROI-LUMA-AP-2023-0003-20250324-PREB-080	Response in Testimony	Cost of Service Study	Sam Shannon
ROI-LUMA-AP-2023-0003-20250324-PREB-081	Response in PDF	Cost of Service Study	Sam Shannon
ROI-LUMA-AP-2023-0003-20250324-PREB-082	Response in PDF	Cost of Service Study	Sam Shannon

Note: ¹Denotes attachments that have been provided in Microsoft Excel format.

Rate Review

Pre-Application Questions from PREB Consultants

NEPR-AP-2023-0003

Response: ROI-LUMA-AP-2023-0003-20250324-PREB-001

SUBJECT

Transmission, Distribution, and Storage

REQUEST

Provide any and all studies from January 1, 2020, to present, conducted by or on behalf of PREPA or LUMA, to assess the transmission and distribution systems.

RESPONSE

On April 16, 2021, LUMA provided the Energy Bureau with a comprehensive gap assessment of the Transmission & Distribution System. That filing is available in the System Remediation Plan Docket NEPR-MI-2019-0019.² Additionally, LUMA provides annual updates on the gaps that were identified in front-end transition through the Improvement Programs (see ROI-LUMA-AP-2023-0003-20250324-PREB-001_Attachment 1) that are submitted annually to the Energy Bureau in the System Remediation Plan as well as the Initial Budgets, Docket NEPR-MI-2021-0004.³

² Page 1 to 677 (RFI-LUMA-MI-20-0019-210406-PREB-001 Attachment 1) of Exhibit 1 of LUMA's Responses to April 6th Resolution and Order and to Requests for Information on System Remediation Plan, Docket No. NEPR-MI-2019-0019, available at <https://energia.pr.gov/wp-content/uploads/sites/7/2021/04/Motion-in-Compliance-with-Resolution-and-Order-os-April-6-2021-and-Submitting-Responses-to-Request-for-Information-NEPR-MI-2020-0019-1.pdf>

³ In Re: LUMA Initial Budgets and Related Terms of Service, Docket No. NEPR-MI-2021-0004, available at <https://energia.pr.gov/expedientes/?docket=nepr-mi-2021-0004>.

Rate Review

Pre-Application Questions from PREB Consultants

NEPR-AP-2023-0003

Response: ROI-LUMA-AP-2023-0003-20250324-PREB-002

SUBJECT

Transmission, Distribution, and Storage

REQUEST

What activities and associated costs does LUMA plan to make in FY 26, FY 27, and FY 28 related to improvement, restoration, and modernization of the transmission and distribution systems? Provide any supporting planning documents including but not limited to, Capital Investment Plans, Long-Term Investment Plans, LUMA's System Remediation Plan, the Department of Energy's 2018 Energy Resilience Solutions for the Puerto Rico Grid, and any other planning documents intended to outline the roadmap for T&D system upgrades.

RESPONSE

The items requested above are generally available in the testimony of Pedro Melendez respecting the departmental budget for Capital Programs and Grid Transformation, *Exhibit 5.00*. The testimony provides an overall supporting narrative. Specific information can be found in *LUMA Ex. 5.01: NFC Long Term Investment Plan ("LTIP") FY2026-FY2035 Unconstrained (Breakout of NFC funding and Consolidated Units by Program)*, and *LUMA Ex. 5.02: NFC LTIP FY2026-FY2035 Constrained (Breakout of NFC funding and Consolidated Units by Program)*.

Rate Review

Pre-Application Questions from PREB Consultants

NEPR-AP-2023-0003

Response: ROI-LUMA-AP-2023-0003-20250324-PREB-003

SUBJECT

Transmission, Distribution, and Storage

REQUEST

Identify capital expenditures made since LUMA took over operations. Include the amount, project description, date of completion, reason for project, categorized by transmission, distribution, or generation, and identify any subsequent improvements in reliability.

RESPONSE

LUMA reports on the information being requested in two main dockets with the Energy Bureau: 1) PREB Approved Investments, Docket NEPR-MI-2024-0001⁴, and 2) 10-Year Infrastructure Plan, Docket NEPR-MI-2021-0002⁵. Please refer to the documents linked below.

1) PREB Approved Investments, Q2 FY2025 report:

- <https://energia.pr.gov/wp-content/uploads/sites/7/2025/02/20250214-MI20240001-LUMA-Status-Rept-2Q-FY2025.pdf>
- https://energia.pr.gov/wp-content/uploads/sites/7/2025/02/20250214-MI20240001-LUMA-Exhibit1_Annex-A-Q2-FY2025-PREB-Approved-Investments.xlsx

2) PREPA's 10 Year Infrastructure Plan, Federally Funded Activities for Q2 FY2025:

- <https://energia.pr.gov/wp-content/uploads/sites/7/2025/02/20250214-MI20210002-Motion-Submitting-Q2FY25-Report-on-Federal-Fund-Activities-1.pdf>

⁴ *In Re: Registro actualizado del Proyectos aprobados por el Negociado de Energía de la Junta Reglamentadora de Servicio Público de Puerto Rico*, Docket No. NEPR-MI-2024-0001.

⁵ *In Re: Review of the Puerto Rico Electric Power Authority's 10 Year Infrastructure Plan- December 2020*, Docket No. NEPR-MI-2021-0002.

Rate Review

Pre-Application Questions from PREB Consultants

NEPR-AP-2023-0003

Response: ROI-LUMA-AP-2023-0003-20250324-PREB-004

SUBJECT

Transmission, Distribution, and Storage

REQUEST

Describe all efforts made to obtain federal funding for improvement, restoration, and modernization of the T&D systems. Identify federal funding received, project description, categorized by transmission or distribution, date of completion, and status of on-going projects.

RESPONSE

LUMA has been working tirelessly to obtain federal funding for the improvement, restoration, and modernization of the Transmission and Distribution (T&D) system:

- Specifically, regarding repairs to damage caused by Hurricane Maria, LUMA has submitted to the Federal Emergency Management Agency (FEMA) and the Central Office for Recovery, Reconstruction and Resiliency (COR3) 529 initial scopes of work (ISOW), 437 detailed scopes of work (DSOW), of which 191 projects have been obligated, representing more than \$5B of federal funds focused on the T&D system. To support this work, LUMA has also submitted projects to the Puerto Rico Department of Housing to access funds from the U.S. Department of Housing and Urban Development (HUD) as part of the Community Development Block Grant (CDBG) program.
- Similarly, LUMA has formulated more than \$190M of projects to support the completion of emergency repairs following Hurricane Fiona, of which more than \$10M has been obligated and continues to work with COR3 and FEMA on formulation of new projects – both for additional emergency work as well as permanent work – while FEMA processes the projects submitted to date.
- We are also working with COR3 and FEMA to maximize cost recovery for Tropical Storm Ernesto and have submitted emergency work for the Mudslide event.
- Our FEMA projects consider both restoration to codes and standards and the potential for application of hazard mitigation measures, which opens additional funding for system hardening.
- In addition, LUMA has pursued other funding from FEMA, such as the Building Resilient Infrastructure and Communities (BRIC) program, as well as funding from other Federal agencies. For example, LUMA has submitted multiple projects to the U.S. Department of Energy and

Rate Review

received approvals for projects including the deployment of advanced sensors in Culebra. LUMA is currently discussing with the U.S. Department of Energy, the Energy Czar's office, and others, the potential to access funds associated with the Energy Resilience Fund to execute projects that would support the T&D system, including projects from the System Stabilization Program.

Further adding to our response, please refer to the response provided in *ROI-LUMA-AP-2023-0003-20250324-PREB-003*, as well as in *ROI-LUMA-AP-2023-0003-20250324-PREB-004 Attachment 1*, which provides details around federal funding of T&D projects.

Rate Review

Pre-Application Questions from PREB Consultants

NEPR-AP-2023-0003

Response: ROI-LUMA-AP-2023-0003-20250324-PREB-005

SUBJECT

Transmission, Distribution, and Storage

REQUEST

Identify the NERC transmission planning standards TPL-001 through TPL-006 with which the transmission system does not comply and the corrective actions taken or planned to ensure compliance with those standards.

RESPONSE

Puerto Rico is not subject to the NERC reliability standards as they only apply to the continental United States. However, it is LUMA's best interest to adopt the best industry practices that will enhance Puerto Rico's grid resiliency and reliability. The current active and most comprehensive standard in effect as of 2024 is the TPL-001-5.1. It outlines the requirements for system performance assessment over the planning horizon, typically 1–10 years, and sets the performance requirements for planning the reliable operation of the system. While TPL standards cover long-term system planning, there are other standards to be considered to ensure: accurate models (MOD), safe operation and control (TOP, IRO, VAR), proper facility design and ratings (FAC), protection system reliability (PRC), emergency readiness (EOP), and cybersecurity compliance (CIP).

LUMA performs an annual transmission assessment and report identifying system reliability violations (thermal or voltage) in accordance with the TPL standard. The system reliability performance is evaluated under normal conditions, single element contingency, and multiple element contingency to identify the required mitigations. The 2023-2024 Annual Transmission Planning Report developed by LUMA assessed the near-term Year 1 (Y1) 2024 and long-term Year 5 (Y5) 2028 power system reliability. For Y1 2024 reliability assessment, 66 total projects were identified. Of these projects, 42 were projects to resolve thermal violations, and 24 were projects identified to resolve voltage violations. For Y5 2028, 41 total projects were identified; 25 were projects to resolve thermal violations, and 17 were projects identified to resolve voltage violations.

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Table 1. Y1 2024 N-1 Thermal Overloads and Projects

N-1 Contingency (If this element trips...)	Contingency Type	Monitored Element	N-1 Contingency (If this element trips...)	Contingency Type
N2 - 37200 AÑASCO TC - VICTORIA TC AND 50500 MAYAGUEZ TC - MORA TC - CAMBALACHE GP	COMMON STRUCTURE	SAN SEBASTIAN TC 115/38 KV TRANSFORMER	79.6	199.05
N2 - 37200 AÑASCO TC - VICTORIA TC AND 50500 MAYAGUEZ TC - MORA TC - CAMBALACHE GP	COMMON STRUCTURE	AÑASCO TC 115/38 KV TRANSFORMER	46.8	117.1
SB: 50500 MAYAGUEZ TC - MORA TC - CAMBALACHE GP AND GENERATOR UNIT 2	FAULT PLUS STUCK BREAKER	37200 MAYAGUEZ TC - AÑASCO TC	130.8	100.05
N2 - 41200 SABANA LLANA TC - CANOVANAS TC AND 36800 SABANA LLANA TC - CANOVANAS TC	COMMON STRUCTURE	SABANA LLANA TC 115/38 KV TRANSFORMER	102.4	127.94
BF: SABANA LLANA TC BUS 1 115 KV	BUS SECTION FAULT	41200 SABANA LLANA TC - CANOVANAS TC	158.1	108.72
BF: CAYEY TC BUS 115 KV	BUS SECTION FAULT	COMERIO TC 115/38 KV TRANSFORMER	76.8	192.01
SBT: PONCE TC BUSES 115 KV	FAULT PLUS STUCK BREAKER (LOSS OF MULTIPLE ELEMENTS)	CANAS TC 115/38 KV TRANSFORMER 1	113.4	141.7
SBT: JOBOS TC BUSES 38 KV	FAULT PLUS STUCK BREAKER (LOSS OF MULTIPLE ELEMENTS)	SANTA ISABEL TC 115/38 KV TRANSFORMER	65.8	131.69
BF: HUMACAO TC BUS 1 115 KV	BUS SECTION FAULT	RIO BLANCO HP 115/38 KV TRANSFORMER	41.6	104.03
SBT: SABANA LLANA TC BUSES 115 KV	FAULT PLUS STUCK BREAKER (LOSS OF	3600-MONACILLOS TC-		159.54

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N-1 Contingency (If this element trips...)	Contingency Type	Monitored Element	N-1 Contingency (If this element trips...)	Contingency Type
	MULTIPLE ELEMENTS)	SABANA LLANA TC-		
P1-2_38: 17100 MARTIN PEÑA TC - COLISEO SECT	LOSS TRANSMISSION CIRCUIT	3300-MARTIN PEÑA TC- POPULAR SECT-	40	135.47
N2 - 41200 SABANA LLANA TC - CANOVANAS TC AND 36800 SABANA LLANA TC - CANOVANAS TC	COMMON STRUCTURE	18800-SABANA LLANA TC- CAROLINA-	76	125.2
SBT: PONCE TC BUSES 115 KV	FAULT PLUS STUCK BREAKER (LOSS OF MULTIPLE ELEMENTS)	500-PONCE TC- COSTA SUR SP- CANAS TC	40	128.98
N2 - 37200 AÑASCO TC - VICTORIA TC AND 50500 MAYAGUEZ TC - MORA TC - CAMBALACHE GP	COMMON STRUCTURE	2100-HATILLO TC- QUEBRADILLAS SECT-	48	108.8
N2 - 37200 AÑASCO TC - VICTORIA TC AND 50500 MAYAGUEZ TC - MORA TC - CAMBALACHE GP	COMMON STRUCTURE	5600-VICTORIA TC-AÑASCO TC-	38.6	192.95

Table 2. Projects for Y1 2024 N-1 Voltage Violations

Monitored Bus Name	N-1 Contingency (If this element trips...)	Contingency Type	Worst Low kV
ACACIAS TC BUS 115 KV	N2- 39800 MAYAGUEZ GP - ACACIAS TC AND 37100 ACACIAS TC - SAN GERMAN TC	COMMON STRUCTURE	0.743
HUMACAO TC 115 KV	YABUCOA TC 115 KV TIE BREAKER 0050	FAULT PLUS STUCH BREAKER	0.8879
VICTORIA TC 115 KV	N2 - 37200 AÑASCO TC - VICTORIA TC AND 50500 MAYAGUEZ TC - MORA TC - CAMBALACHE GP	COMMON STRUCTURE	0.6519

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Monitored Bus Name	N-1 Contingency (If this element trips...)	Contingency Type	Worst Low kV
VEGA BAJA TC 115 KV	37400 VEGA BAJA TC - MANATI TC AND 37400 DORADO TC - VEGA BAJA TC	FAULT PLUS STUCK BREAKER	0.8106

Table 3. Y5 2028 N-1 Thermal Overloads and Projects

N-1 Contingency (If this line trips...)	Contingency Type	Monitored Element	N-1 Contingency (If this line trips...)	Contingency Type
P1-2: 50700 AES TP - YABUCOA TC	SINGLE CONTINGENCY	36300 SHELL - JUAN MARTIN SECT	SINGLE CONTINGENCY	124.25
BF: MAYAGUEZ GP BUS 115 KV	BUS SECTION FAULT	37100 SAN GERMAN TC - GUANICA TC	BUS SECTION FAULT	102.88
SB: 51000 AGUAS BUENAS TC - SABANA LLANA TC AND SABANA LLANA TC 230/115 KV TRANSFORMER 1	FAULT PLUS STUCK BREAKER (LOSS OF MULTIPLE ELEMENTS)	41400 JUNCOS TC - HUMACAO TC	FAULT PLUS STUCK BREAKER (LOSS OF MULTIPLE ELEMENTS)	101.93
BF: CAYEY TC BUS 115 KV	BUS SECTION FAULT	3800 COMERIO TC - CIDRA SECT	BUS SECTION FAULT	203.9

Table 4. Y5 2028 Voltage Violations and Solutions

Monitored Bus Name (... then this voltage goes low...)	N-1 Contingency (If this element trips...)	Contingency Type	Worst Low kV
VEGA BAJA TC 115	SB: 37400 VEGA BAJA TC - MANATI TC AND 37400 DORADO TC - VEGA BAJA TC	FAULT PLUS STUCK BREAKER (TRANSMISSION CIRCUIT)	0.7957
ACACIAS TC 115	N2- 39800 MAYAGUEZ GP - ACACIAS TC AND 37100 ACACIAS TC - SAN GERMAN TC	COMMON STRUCTURE	0.7534
ISLA GRANDE TC 115	SBT: VIADUCTO TC 115 KV	FAULT PLUS STUCK BREAKER (LOSS OF MULTIPLE ELEMENTS)	0.8967

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Monitored Bus Name (... then this voltage goes low...)	N-1 Contingency (If this element trips...)	Contingency Type	Worst Low kV
CAMBALACHE TC 115	SB: CAMBALACHE TC 115/38 KV TRANSFORMER AND 37400 BARCELONETA TC - CAMBALACHE TC	FAULT PLUS STUCK BREAKER (TRANSMISSION CIRCUIT, TRANSFORMER)	0.8935

To better assess critical areas and components, LUMA performs sensitivity cases where specific areas of the system are put in stress to identify critical contingencies, critical elements, and maximum overload (%) experienced. The latest LUMA transmission planning studies have identified several critical transmission contingencies where loss of a single element (i.e. N-1) causes critical elements to experience overloads. In other words, the Puerto Rico transmission system is far from being N-1 secure and does not adhere to basic planning criteria given the number of out-of-service facilities at both the transmission and distribution levels. Below is the summary for each region.

Modeled Load and Generation Values: Arecibo Region

System load and generation assumptions, and the resulting equipment over capacity for N-0 and N-1 conditions (line and transformer trips only).

Table 5. PSSE Base Case Load & Generation

Regions	Load (MW)	Generation (MW)
San Juan	940	715
Bayamón	420	224
Caguas	453	24
Ponce	424	1698
Mayagüez	251	203
Arecibo	321	136
Total	2811	2959

Table 6. Contingencies and Overloads: Arecibo

Region

N-1 Contingency (If this line trips...)	Monitored Element (... then this line overloads...)	Line (#)	Rating (MVA)	Base Case Loading (%)	High Load Case(%)
L-0700 COSTA SUR TO YAUCO HP	1600 SAN GERMAN TC - YAUCO 1 HP	1600	20	217.32	222.27

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N-1 Contingency (If this line trips...)	Monitored Element (... then this line overloads...)	Line (#)	Rating (MVA)	Base Case Loading (%)	High Load Case(%)
700 COSTA SUR SP - YAUCO 2 HP	1200 SAN GERMAN TC – YAUCO HP 2	1200	20	178.46	183.05
MANATI TC 230/115 KV TRANSFORMER	CAMBALACHE GP 230/115 KV TRANSFORMER	TRANSFORMER	210	120.79	139.56
50500 MAYAGUEZ TC - MORA TC - CAMBALACHE GP	37200 MAYAGUEZ GP - AÑASCO TC	37200	116.2	112.31	125.13
	37200 AÑASCO TC - VICTORIA TC	37200	137.4	85.32	96.65
51200 COSTA SUR SP - CAMBALACHE GP	CAMBALACHE GP 230/13.8KV	TRANSFORMER	60	119.18	123.89
AES 21/230 KV U-1 TRANSFORMER	AGUIRRE SP 230/13.2KV	TRANSFORMER	37.5	118.19	120.84
HATILLO TC 115/38 KV TRANSFORMER	CAMBALACHE TC 115/38KV	TRANSFORMER	80	88.1	111.98
CAMBALACHE TC 115/38 KV TRANSFORMER	18300 MIRADOR AZUL - HATILLO TC	18300	48	84.79	107.78
	HATILLO TC 115/38KV	TRANSFORMER	80	74.69	95.83
37200 MAYAGUEZ TC - AÑASCO TC	SAN SEBASTIAN TC 115/38KV	TRANSFORMER	40	86.78	91.3

Modeled Load and Generation Values: Bayamon Region

System load and generation assumptions, and the resulting equipment over capacity for N-0 and N-1 conditions (line and transformer trips only).

Table 7. PSSE Base Case Load & Generation

Regions	Load (MW)	Regions (MW)
San Juan	940	715
Bayamón	525	227
Caguas	453	24.2

Rate Review

Regions	Load (MW)	Regions (MW)
Ponce	424	1698
Mayagüez	251	203
Arecibo	256	138
Total	2849	3005

Table 8. Contingencies and Overloads: Bayamon Region

Contingency (If this line trips...)	Monitored Element (then this line overloads)	Overloaded Element	Rate (MVA)	Base Case Loading (%)	High Load Case(%)
HATO TEJAS 115/38 KV TRANSFORMER	DORADO TC 115/38 KV TRANSFORMER	TRANSFORMER	80	86.19	120.44
L-9300 GAUTIER BENITEZ SECT – SAN LORENZO TO	L-9300 SAN LORENZO TO – JUNCOS TC	9300	19.7	79.9	108.68
L-3600 LLORENS TORRES SECT - MARTIN PEÑA GIS	L-6700 SEBORUCO TO – MARTIN PEÑA GIS	6700	76	78.85	102.49
SAN JUAN SP 115/38 KV TRANSFORMER	L-3900 SAN JUAN SP – CAPARRA SECT	3900	40.1	79.65	100.55
	L-40000 MARTIN PEÑA GIS – VIADUCTO TC	400000	191	77.2	100.33
	L-4400 CAPARRA SECT – SAN JUAN SP	XMER	40	89.63	112.66

Modeled Load and Generation Values: Caguas Region

System load and generation assumptions and resulting equipment over capacity for N-0 and N-1 conditions (line and transformer trips only).

Rate Review

Table 9. PSSE Base Case Load & Generation

Regions	Load (MW)	Generation (MW)
San Juan	1438	903
Bayamón		
Caguas	492	16
Ponce	515	1900
Mayagüez	356	190
Arecibo	371	164
Total	3172	3173

Table 10. Contingencies and Overload: Caguas Region

Contingency (If this line trips...)	Monitored Element (...then this line overloads)	Rating (MVA)	Base Case Loading %	High Load Case(%)
L-3700 JOBOS TC – MAUNABO TC	L-3700 HUMACAO TC – YABUCOA TO	20	223.56	238.12
CAGUAS TC 115/38/13.2 KV TRANSFORMER	L-9300 GAUTIER BENITEZ SECT – JUNCOS TC	19.7	163.67	203
L-3700 HUMACAO TC – YABUCOA TO	L-3700 JOBOS TC – MAUNABO TC	20	146.56	163.85
L-9300 SAN LORENZO TO – JUNCOS TC	L-9300 GAUTIER BENITEZ SECT – SAN LORENZO TO	19.7	93.35	120.69
BARRANQUITAS TC 115/38 KV TRANSFORMER	COMERIO TC 115/38 KV TRANSFORMER	50	87.37	109.22
L-9300 GAUTIER BENITEZ SECT – SAN LORENZO TO	L-9300 SAN LORENZO TO – JUNCOS TC	19.7	79.84	101.96
L-39000 BARRANQUITAS TC – TORO NEGRO H.P.	L-6500 TORO NEGRO HP 1 – BARRANQUITAS TC	145.4	90.9	100.72

Modeled Load and Generation Values: Mayaguez Region

System load and generation assumptions and resulting equipment over capacity for N-0 and N-1 conditions (line and transformer trips only).

Rate Review

Table 11. Base Case Load & Generation

Regions	Load (MW)	Generation (MW)
San Juan	959	704
Bayamon	430	223
Caguas	452	24
Ponce	494	1670
Mayagüez	313	200
Arecibo	252	136
Total	2900	2957

Table 12. Contingencies and Overload: Mayaguez Region

Contingency (If this line trips...)	Monitored Element (...then this line overloads)	Rating (MVA)	Base Case Loading %	High Load Case(%)
SAN GERMÁN TC 115/38 KV TRANSFORMER	TL 13400 LAJAS T.O. – BOQUERÓN T.O.	19.7	143.87	200.78
50500 MAYAGUEZ TC - MORA TC - CAMBALACHE GP	TL 700 COSTA SUR – YAUCO TO	40.8	128.24	167.43
	TL 37200 MORA TC – AÑASCO TC	116.2	111.94	135.39
TL 39800 MAYAGUEZ GP – ACACIAS	ACACIAS TC 115/13.2 KV TRANSFORMER	18	119.69	155.95
TL 700 COSTA SUR – YAUCO TO	TL 1200 YAUCO HP 2 – SAN GERMAN TC	20	178.52	205.26

Modeled Load and Generation Values: Ponce Region

System load and generation assumptions, and resulting equipment over capacity for N-0 and N-1 conditions (line and transformer trips only).

Table 13. PSSE Base Case Load & Generation

Regions	Load (MW)	Generation (MW)
San Juan	1438	903
Bayamón		
Caguas	492	16
Ponce	515	1900
Mayagüez	356	190

Rate Review

Regions	Load (MW)	Generation (MW)
Arecibo	371	164
Total	3172	3173

Table 14. Contingencies and Overload: Ponce Region

Contingency (If this line trips...)	Monitored Element (...then this line overloads)	Rating (MVA)	Base Case Loading %	High Load Case(%)
PONCE TC 115 KV BUS	PONCE TC 115/38 KV TRANSFORMER #2	120	87.42	107.94
L-3700 HUMACAO TC - MAUNABO TC	L-3700 JOBOS TC - MAUNABO TC 38KV	21	146.56	183.75
L-3700 JOBOS TC - MAUNABO TC	L-3700 HUMACAO TC - MAUNABO TC 38KV	20	226.56	239.34
L-39000 TORO NEGRO 1 HP - JUANA DÍAZ TC	L-300 JUANA DÍAZ TC - TORO NEGRO 1 HP 38KV	20	86.55	95.1
L-700 COSTA SUR SP - YAUCO 2 HP	L-1200 YAUCO 2HP - SAN GERMAN TC	20	192.21	278.46

Note: transformer overloads above 95% are shown.

Rate Review

Pre-Application Questions from PREB Consultants NEPR-AP-2023-0003

Response: ROI-LUMA-AP-2023-0003-20250324-PREB-006

SUBJECT

Transmission, Distribution, and Storage

REQUEST

Specify expected improvements in the reported reliability metrics for FY 26, FY 27, and FY 28, and LUMA's plans to produce those improvements, including expected capital and operating expenditures.

RESPONSE

Please refer to the Testimony of Pedro Melendez regarding the funding of the Capital Programs and Grid Transformation Department, *Exhibit 5.0*. Specifically, see *Question 71* and *Table 8. SAIFI and SAIDI projections* of the Testimony, which includes System Average Interruption Frequency Index (SAIFI) and System Average Interruption Duration Index (SAIDI) projections. Additionally, refer to *LUMA Exhibit 5.03: Range of Reliability Improvements*, filed as an attachment to the testimony.

Rate Review

Pre-Application Questions from PREB Consultants

NEPR-AP-2023-0003

Response: ROI-LUMA-AP-2023-0003-20250324-PREB-007

SUBJECT

Transmission, Distribution, and Storage

REQUEST

Explain the processes that LUMA uses to ensure that transmission and distribution capital projects are completed on time and within budget.

RESPONSE

LUMA has implemented and continues to improve its processes and controls to ensure that projects are completed on time and within budget. The Delivery Lifecycle Framework (DLF) provides both the broad guidance and the details necessary to successfully plan and complete a project, including appropriate reporting tools and processes necessary to develop, implement, track, and close out a project. The DLF references other key manuals and controls that LUMA has also implemented, such as LUMA's Procurement Manual.

For federally funded projects, LUMA created the LUMA Grants Management Manual (Grants Management Manual) and the LUMA Federal Emergency Management Agency (FEMA) Funding Manual (FEMA Funding Manual), both of which are currently under the review of the Central Office for Recovery, Reconstruction, and Resiliency (COR3). These manuals address LUMA's Capital Programs' Project Controls administration by offering guidance to ensure LUMA is in compliance with Federal Emergency Management Agency Public Assistance Program and Policy Guidelines as well as other requirements of Title 2, part 200 of the Code of Federal Regulations⁶.

⁶ Part 200 Uniform Administrative Requirements, Cost Principles, and Audit Requirements for Federal Awards of Title 2 Federal Financial Assistance of the Code of Federal Regulations, [2 CFR Part 200](#).

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Pre-Application Questions from PREB Consultants

NEPR-AP-2023-0003

Response: ROI-LUMA-AP-2023-0003-20250324-PREB-008

SUBJECT

Transmission, Distribution, and Storage

REQUEST

Explain LUMA's use and integration of energy storage into the transmission network, the distribution network, or as support for generation. Identify each utility scale storage installation or planned installation for FY 26, FY 27, and FY 28, since LUMA began operations. Specify the intended purpose, the size, the operational date, the associated capital and operating expenditures, or annual payment to third-party providers.

RESPONSE

Currently, there are no utility-scale energy storage facilities installed on the Puerto Rico electricity grid. However, between now and the end of FY2028, LUMA expects to integrate several battery energy storage systems (BESS). These utility-scale BESS projects stem from four separate initiatives:

1. Procurement tranches ordered and managed by the PREB.⁷
2. The Accelerated Storage Addition Program (ASAP), initiated by LUMA, may add up to 360 MW of BESS.⁸
3. LUMA's 4 x 25 initiative to acquire and install 4 sets of 25 MW of energy storage at 4 transmission substations.⁹
4. Genera's proposal to install 430 MW of BESS at existing generation facilities.¹⁰

Table 1 below lists each utility-scale storage installation that LUMA currently anticipates being installed in FY2026, FY2027, and FY2028.

⁷ Resolution and Order on Determinations for Subset of Tranche 1 Solar PV and Battery Energy Storage Projects dated June 30, 2023; and Resolution and Order on Renewable Energy Generation and Energy Storage Resource Procurement Plan – Second Tranche Projects Approval dated August 26, 2024, Docket No. NEPR-MI-2020-0012.

⁸ *Exhibit 1 of LUMA's Motion to Submit ASAP Structure and Concept in Compliance with Resolution and Order issued on April 19, 2024, and Request for Determination of Consistency with Energy Public Policy and IRP of April 26, 2024, Docket No. NEPR-MI-2024-0002.*

⁹ Resolution and Order on Determination on LUMA's August 25, 2023, of August 30, 2023, Docket No. NEPR-MI-2021-0002.

¹⁰ Resolution and Order on Genera Motion Requesting Acceptance of Amended Scope of Work for Battery Energy Storage System Project of July 17, 2024, Docket No. NEPR-MI-2021-0002.

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Table 1. Anticipated Utility-Scale Energy Storage Installations Through FY2028

Developer	Project	Location	Point of Interconnection	Commercial Operation Date (FY)	Capacity (MW)
Convergent	Peñuelas Storage	Peñuelas	Costa Sur	2026	100
Convergent	Ponce Storage	Ponce	Juana Diaz TC	2026	25
Convergent	Caguas Storage	Caguas	Bairoa TC	2026	25
AES	Salinas BESS	Salinas	Sectionalizer	2026	175
AES	Jobos BESS	Guayama	Jobos TC	2026	110
Infinigen	Oriana	Isabela	Oriana	2026	50
Infinigen	Horizon	Salinas	Horizon	2026	20
Stonepeak	San Fermin	Loiza	San Fermin	2026	20
EcoEléctrica	EcoEléctrica	Peñuelas	EcoEléctrica	2026	20
Genera PR	Cambalache	Arecibo	Cambalache	2026	80
Genera PR	Costa Sur	Peñuelas	Costa Sur	2026	40
Genera PR	Yabucoa	Yabucoa	Yabucoa	2026	40
Genera PR	Vega Baja	Vega Baja	Vega Baja TC	2026	52
Genera PR	Aguirre	Guayama	Aguirre	2026	71
CS-UR	Canadian Vega Baja	Vega Baja	Vega Baja TC	2027	60
Infinigen	Santa Isabel BESS	Isabela	Mora TC	2027	50
Genera PR	Palo Seco	Toa Baja	Palo Seco	2027	26
Genera PR	Aguirre	Guayama	Aguirre	2027	71
LUMA 4X25	Vega Baja TC	Vega Baja	Vega Baja TC	2028	25
LUMA 4X25	Monacillos TC	Monacillos	Monacillos TC	2028	25
LUMA 4X25	Barceloneta TC	Barceloneta	Barceloneta TC	2028	25
LUMA 4X25	Aguadilla TC	Aguadilla	Aguadilla TC	2028	25

Table 1 represents what LUMA believes to be a comprehensive list of the utility-scale energy storage projects that are reasonably likely to be operational by the end of FY2028.

LUMA notes that the commercial operation date presented in Table 1 above for each energy storage project represents LUMA's best current assessment of project completion and commissioning, but the assessment is subject to considerable uncertainty. If all projects in Table 1 are completed according to the dates presented above, it implies the addition of 828 MW of utility-scale energy storage in FY2026, another 207 MW in FY2027, and another 100 MW in FY2028, for a total of 1,135 MW of new utility-scale energy storage (from a current base of zero) over the next three years.

For each of the projects listed in Table 1, Table 2 below specifies the initiative from which the project was originated and – for the projects that will not be acquired via Federal funding – the capacity payment (in \$/MW-month) specified for the first month of the contract and the annual capacity payment escalator.

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Table 2. Details for Anticipated Utility-Scale Energy Storage Additions

Project	Origination	Capacity Payment in First Contract Month (\$/MW-month)	Annual Capacity Payment Escalator
Peñuelas Storage	Tranche 1	\$28,669.75	2%
Ponce Storage	Tranche 1	\$27,236.95	2%
Caguas Storage	Tranche 1	\$28,524.36	2%
Salinas BESS	Tranche 1	\$25,096	2%
Jobos BESS	Tranche 1	\$25,117	2%
Santa Isabel BESS	Tranche 1	\$26,000	2%
<i>Tranche 2 Proponent</i>	Tranche 2	N/A*	N/A*
Oriana	ASAP	\$16,000	0%
Horizon	ASAP	\$16,000	0%
San Fermin	ASAP	\$16,000	0%
EcoEléctrica	ASAP	\$16,000	0%
Palo Seco	Genera PR	Federally Funded	NA
Cambalache	Genera PR	Federally Funded	NA
Costa Sur	Genera PR	Federally Funded	NA
Yabucoa	Genera PR	Federally Funded	NA
Aguirre	Genera PR	Federally Funded	NA
Vega Baja TC	LUMA 4 x 25	Federally Funded	NA
Monacillos TC	LUMA 4 x 25	Federally Funded	NA
Barceloneta TC	LUMA 4 x 25	Federally Funded	NA
Aguadilla TC	LUMA 4 x 25	Federally Funded	NA

*Tranche 2 is subject to confidential designation and treatment

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Pre-Application Questions from PREB Consultants

NEPR-AP-2023-0003

Response: ROI-LUMA-AP-2023-0003-20250324-PREB-009

SUBJECT

Purchased Power Charge Adjustment

REQUEST

Identify, quantify, and summarize each cost and/or adjustment factor included in the power purchase cost adjustment (PPCA). Indicate the Energy Bureau Report and Order authorizing each. Separately identify any additional adjustment factors expected to be included in the future, such as LUMA Works for Interconnection of Tranche 2 renewable generation projects.

RESPONSE

The Purchase Power Charge Adjustment (PPCA) Rider¹¹ is a recovery mechanism for all purchased power-related costs and amounts are recovered from all tariff classes except the Fixed Block RFR. The Puerto Rico Energy Bureau (Energy Bureau or the PREB) approves all costs that are included in the PPCA through a quarterly factors application. That process ensures transparency and accountability regarding each and every cost adjustment. Below is a breakdown of the current and future expected adjustment factors.

Current Adjustment Factors

Demand Response Programs / Customer Battery Energy Sharing

On July 31, 2023, the Energy Bureau distinguished the costs associated with Demand Response (DR) programs from the Energy Efficiency (EE) Rider and directed LUMA to incorporate the cost of DR Programs into the PPCA because DR represents an energy purchase.¹² On August 11, 2023, the Energy Bureau confirmed DR program costs would be recovered through the PPCA.¹³

The Customer Battery Energy Sharing (CBES) program is a DR program that LUMA is implementing. CBES is a pilot program designed to leverage customer battery energy storage systems to increase the supply of energy available to LUMA, as the system operator, if needed, during peak periods of demand to minimize the potential impact of load shedding.

¹¹ PREPA Tariff Book, available at [Tariff-Book-Electric-Service-Rates-and-Riders-Revised-by-Order-05172019-Approved-by-Order-05282019.pdf](#)

¹² Pages 6 – 8 of Resolution and Order of July 31, 2023, Docket No. NEPR-MI-2020-0001.

¹³ Page 2 of Resolution and Order of August 11, 2023, Docket No. NEPR-MI-2020-0001.

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On August 29, 2023, the Energy Bureau issued a Resolution and Order directing LUMA to recover the administrative costs of DR programs through the PPCA, provided the Energy Bureau reviews the expenditures to ensure that they are limited, reasonable, and strictly related to DR.¹⁴ Table 1 below provides a breakdown of CBES costs recovered through the PPCA through March 2025.

Table 1. Approved CBES Costs in PPCA

Resolution and Order Date	Amount
September 29, 2023	\$1,839,375.00
December 21, 2023	\$878,607.07
March 27, 2024	\$3,261,734.52
June 30, 2024	\$369,619.07
December 20, 2024	\$896,754.00
March 28, 2025	\$6,557,032.00
Total	\$13,803,121.66

LUMA proposed a budget of \$5,285,375.00 for FY2026 in its Transition Period Plan (TPP) filing,¹⁵ but final approval from the Energy Bureau on this amount is still pending.

Tranche 1 Interconnections Costs

On February 5, 2024, the Energy Bureau issued a Resolution and Order approving the recovery of interconnection costs discrepancies through the PPCA and ordered LUMA to prepare an estimate of the portion of expenditures to be recovered through the PPCA for the Q2 of 2024 based on existing construction schedules for the development of all Tranche 1 interconnection projects and submit in the Permanent Rate docket.¹⁶ On February 15, 2024, LUMA submitted the projected interconnection costs of approximately \$100.8 million. LUMA proposed the total sum be recovered over a period of fifteen months, starting April 2024 through June 2024, and then from January 2025 through December 2025.¹⁷

Table 2 below provides a breakdown of Tranche 1 Interconnection costs recovered through the PPCA through March of 2025.

Table 2. Approved Tranche 1 Interconnection Costs in PPCA

Resolution and Order Date	Amount
March 27, 2024	\$1,900,000.00
December 20, 2024	\$24,716,398.00

¹⁴ Page 3 of LUMA's Motion on Submit Costs Associated with Emergency DR Program in Compliance with Resolution and Order of August 11, 2023, and Request for Confidential Treatment, Docket No. NEPR-MI-2022-0001.

¹⁵ LUMA's TPP Filing of January 31, 2025, Docket No. NEPR-MI-2022-0001.

¹⁶ Page 4 of Resolution and Order on Tranche 1 Interconnection Costs, Docket No. NEPR-MI-2020-0012.

¹⁷ Exhibit 1 of LUMA's Motion of February 15, 2024, Docket No. NEPR-MI-2020-0001.

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Resolution and Order Date	Amount
March 28, 2025	\$24,716,398.00
Total	\$51,332,796.00

Table 3 below provides a breakdown of forecast Tranche 1 Interconnection costs to be recovered through the PPCA in FY2026.

Table 3. Projected Tranche 1 Interconnection Costs through PPCA for FY2026

Date	Amount
July 2025	\$8,238,799.33
August 2025	\$8,238,799.33
September 2025	\$8,238,799.33
October 2025	\$8,238,799.33
November 2025	\$8,238,799.33
December 2025	\$8,238,799.33
Total	\$49,432,795.98

Tranche 2 Interconnections Costs

On March 10, 2025, LUMA filed an informative motion with the Energy Bureau to request clarification on the funding of cost discrepancies that may arise in the execution of the Tranche 2 Points of Interconnection and the Network Upgrades necessary to integrate the three new resource providers that were approved by the Energy Bureau on August 26, 2024.¹⁸ The three Tranche 2 contracts are awaiting approval from the FOMB for execution.

Upon receipt of clarification from the Energy Bureau and confirmation of the final number of approved and effective Tranche 2 contracts, LUMA will be better able to estimate the amounts required to be recovered through the PPCA to fund Interconnection and Network Upgrade cost discrepancies.

Emergency Generation Interconnection Studies

On March 28, 2025, the Energy Bureau approved an additional \$400,000 to be recovered through the PPCA for interconnection studies for the Emergency Generation being procured by the Independent Third-Party Purchasing Office (3PPO). LUMA has yet to receive Interconnection Applications from 3PPO, thus, at this time, LUMA is unable to accurately forecast emergency generation interconnection costs to be recovered through the PPCA.

Table 4 below provides a breakdown of Emergency Generation Interconnection Studies costs recovered through the PPCA through March of 2025.

¹⁸ LUMA's Informative Motion and Request for Determination Regarding Tranche 2 Interconnection Works and Associated Costs and Request for Confidential Treatment of March 10, 2025, Docket No. NEPR-MI-2020-0012.

Rate Review

Table 4. Emergency Generation Interconnection Studies in PPCA

Resolution and Order Date	Amount
March 28, 2025	\$400,000
Total	\$400,000

Accelerated Storage Addition Program

The Accelerated Storage Addition Program (ASAP) aims to enhance Puerto Rico's electric system by rapidly integrating Battery Energy Storage Systems (BESS) at eligible generation facilities. This initiative involves offering a standardized proposal to generators for the installation of BESS capacity, which will be managed by LUMA to deliver services such as time-shifting, voltage and frequency stabilization, and other ancillary functions. The program is expected to bolster system reliability, minimize load shedding, and reduce costs for consumers.

ASAP will be rolled out in two distinct phases. In Phase 1, a Standard Offer Agreement (SO1 Agreement) will be offered to current Independent Power Producers (IPPs) that are already operational and supplying power to the grid, provided their projects do not need any changes to their existing interconnection points. In Phase 2, a Standard Offer Agreement (SO2 Agreement) will be extended to existing IPPs that may need modifications to their interconnection points to facilitate the connection of proposed BESS and other IPPs with Power Purchase and Operating Agreements (PPOAs) that are still in development and not yet operational. Projects in Phase 2 will require interconnection studies and may require upgrades to ensure the safe and reliable integration of their BESS into the grid.

On March 5, 2025, the Energy Bureau approved the ASAP Implementation Plan and the ASAP Expenditure Collection, Reporting & Recovery Procedure.¹⁹ The Energy Bureau stated that given current cash constraints, LUMA is authorized to use the PPCA as a cost recovery mechanism for ASAP implementation costs through December 2025.²⁰

Table 5 below provides a breakdown of ASAP costs recovered through the PPCA through March 2025.

Table 5. Approved ASAP Costs Through PPCA

Resolution and Order Date	Amount
March 28, 2025	\$ 3,449,361.25
Total	\$ 3,449,361.25

Table 6 below provides a breakdown of forecast ASAP costs to be recovered through the PPCA in FY2026.

¹⁹ Page 2 – 3 of Resolution and Order of March 5, 2025, Docket No. NEPR-MI-2024-0002.

²⁰ *Id.*, page 3.

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Table 6. Projected ASAP Costs through PPCA for FY2026

Month	Forecast Costs
July 2025	\$600,000.00
August 2025	\$600,000.00
September 2025	\$600,000.00
October 2025	\$600,000.00
November 2025	\$550,000.00
December 2025	\$550,000.00
Total	\$3,500,000.00

Future Adjustment Factors

Permanent CBES Program

On October 23, 2024, the PREB issued a Resolution & Order, modified by Resolution and Order issued on December 5, 2024, in which it directed LUMA to propose a form of permanent CBES program to further grow and scale this resource before summer 2025.²¹ LUMA presented a proposed “permanent” CBES on April 3, 2025. The Energy Bureau approved the program design aspects that are not changed from the pilot program but has not yet approved aspects of the permanent CBES program that reflect changes and investments in back-end systems.²²

In a Technical Conference on April 24, 2025, LUMA presented the CBES program along with an expanded CBES+ proposal to the Energy Bureau.²³ The expanded program, which is designed to address immediate resource adequacy concerns for the summer of 2025, included key enhancements such as auto-enrollment and increased participation capacity. It also included requirements for more detailed reporting, such as monthly status updates on program metrics.²⁴ In a resolution and Order dated May 20, 2025, the Energy Bureau conditionally approved CBES+. Then, on May 29, 2025, the Energy Bureau fully approved the CBES+ program and the permanent CBES program.²⁵

Pilot Backup Generators Emergency Demand Response Program

LUMA has developed emergency demand response programs to tackle the expected increase in grid constraints for the upcoming summer. To support this initiative, the Energy Bureau instructed LUMA to

²¹ Page 3 of Resolution and Order on Administrative Costs, Three-year Plan Schedule, and FY24 Budget Rollover; and page 2 of Resolution and Order on Request for Extension of Deadlines and Modification of a Reporting Requirement in Resolution and Order of October 23, 2024, Docket No. NEPR-MI-2022-0001.

²² Page 3 of Resolution and Order on Technical Conferences Regarding Customer Batter Sharing, Revised Transition Period Plan, and Generator Emergency Demand Response Program Revised Schedule for Three-Year EE and DR Plan, Docket No. NEPR-MI-2022-0001.

²³ Technical Conference on CBES Program and Emergency Demand Response Program of April 24, 2025, available at https://www.youtube.com/watch?v=ZO1KS_j2Jq4.

²⁴ Page 2 of Resolution and Order Approving CBES+ Proposal and Conditional Approval of Permanent CBES Program of May 20, 2025, Docket No. NEPR-MI-2022-0001.

²⁵ Page 2 – 3 of Resolution and Order Fully Approving CBES+ and Remaining Unapproved Aspects of Permanent CBES Program of May 29, 2025, Docket No. NEPR-MI-2022-0001.

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create and implement a pilot program that utilizes customers' large backup generators (the "BUGS program").²⁶ The initial Emergency Load Reduction Pilot Program, established in FY2023, aimed to encourage industrial customers to shift their load to their backup generators during times of generation shortfalls or grid emergencies. Participants in the BUGS program will benefit from Emergency Generation Stabilization Incentives:

- \$5,000 per MW monthly capacity reserve payment, even if no events are called.
- Additional \$0.38 per kWh during emergency events.

Participants will receive prior notifications from LUMA about possible emergency events. During these events, they will utilize their backup generators, and once the situation is resolved, standard energy usage settings will be reinstated. LUMA proposed a budget of \$6,304,560.00 for the BUGS program in FY2026 in the TPP filing,²⁷ but final approval from the Energy Bureau on this amount is still pending.

Tranche 4 Interconnections Costs

Requests for Proposal (RFP) respecting Tranche 4 were released by the Energy Bureau and the Independent Coordinator ACCION on October 24, 2024. In a resolution and order dated December 30, 2024 (the "December 30th order"), the Energy Bureau ordered PREPA to seek approval from the FOMB prior to execution of the Tranche 4 contract. The December 30th order further clarified that the maximum cost for interconnection shall be \$20 million, and additional costs (if any) shall not be borne by ratepayers.²⁸ The December 30th order does not specify the funding source for Network Upgrades beyond the \$5,000,000.00 (if any) that the proponent shall contribute once the system impact studies are completed by LUMA. LUMA will work with the Energy Bureau to address any cost discrepancies and their funding source.

²⁶ Resolution and Order of October 23, 2024, Docket No. NEPR-MI-2022-0001.

²⁷ LUMA's TPP Filing of January 31, 2025, Docket No. NEPR-MI-2022-0001.

²⁸ Page 4 of Resolution and Order on Renewable Energy Generation and Energy Storage Resource Procurement Plan – fourth Tranche Project Approval, Docket No. NEPR-MI-2020-0012.

Rate Review

Pre-Application Questions from PREB Consultants

NEPR-AP-2023-0003

Response: ROI-LUMA-AP-2023-0003-20250324-PREB-010

SUBJECT

Reliability Improvements

REQUEST

Explain LUMA's reaction to this proposition: Puerto Rico's transmission system, when rebuilt, should have the flexibility that allows for interconnecting of varying types of variable generation, even though we do not currently know that generation's characteristics. That is, the transmission system will need advanced transmission technologies that accommodate diverse types of generation. Moreover, the cost associated with this flexibility belongs not in PPOAs but in base rates, because these enhancements benefit the entire system, just as do network upgrades.

RESPONSE

From a technical perspective, LUMA agrees that when Puerto Rico's transmission system is rebuilt, it should indeed have the "flexibility to allow" for interconnecting of varying types of variable generation, and it will feature advanced transmission technologies that accommodate diverse types of generation. However, the statement "even though we do not currently know that generation's characteristics" suggests some undefined hypothetical that requires more information before providing a complete response. The characteristics of any new generation source would, of course, have to be known and understood before being added to the system.

For example, if a developer proposes a 1,000 MW plant in the location of their choosing that might not have a transmission interconnection, the transmission system will have the technical "flexibility" to allow for the new plant (meaning it could technically communicate, dispatch, and control that facility), but the size and location will evidently change the system flow paths and associated risks entirely. Therefore, even though the system would have the "flexibility", there could be significant system upgrade modifications that would have to be made to accommodate this new plant. From a commercial perspective, LUMA interprets the "belonging" of costs to mean "who should pay for the system upgrade costs."

Consistent with the best utility practices throughout the rest of North America, all the incremental costs imposed on the system to safely accommodate a new developer's project should be incurred by the developer. It would be contrary to industry practices to have those costs included in "base rates." Doing so would be imposing the existing ratepayers to subsidize developers' costs and, thus, unfairly and inappropriately increasing developers' profit levels.

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Pre-Application Questions from PREB Consultants NEPR-AP-2023-0003

Response: ROI-LUMA-AP-2023-0003-20250324-PREB-011

SUBJECT

Reliability Improvements

REQUEST

Describe the elements of planned AMI deployment, for each of FY25, FY26, FY27, and FY28. Explain what effects this deployment will have on electric system reliability.

RESPONSE

Please refer to the AMI Implementation Improvement Program previously submitted as part of the FY2025 Annual Budgets and System Remediation Plan in dockets NEPR-MI-2021-0004 and NEPR-MI-2020-0019, respectively (*ROI-LUMA-AP-2023-0003-20250324-PREB-011_Attachment1*). Additionally, please refer to the testimony of Pedro Melendez regarding the Capital Programs and Grid Modernization department that discusses the impact of AMI on reliability, specifically questions 50 and 53.²⁹

²⁹ Exhibit 5.0.

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Pre-Application Questions from PREB Consultants NEPR-AP-2023-0003

Response: ROI-LUMA-AP-2023-0003-20250324-PREB-012

SUBJECT

Reliability Improvements

REQUEST

Describe which distribution network support facilities LUMA intends to phase out by FY28 and explain the associated cost savings. Consider the fact that, since January 1, 2025, all interconnecting inverter-based resources (IBR) must provide grid support services as required by IEEE STD 1547 and UL 1741 SB.

RESPONSE

There are no specific identified distribution facilities that are projected to be “phased out” during the three-year test period. There is, however, an inventory of projects totaling more than \$12 million to perform upgrades to the distribution system, focused on mitigating voltage and thermal issues at a system level in support of interconnections with distributed energy resources. Please also refer to the testimony of Andrew Smith respecting LUMA’s revenue requirement and funding for the finance department, specifically, questions 16-18.³⁰

³⁰ LUMA Ex. 2.00.

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Pre-Application Questions from PREB Consultants

NEPR-AP-2023-0003

Response: ROI-LUMA-AP-2023-0003-20250324-PREB-013

SUBJECT

Reliability Improvements

REQUEST

Describe the status of the GIS incorporation to the EMS and OMS; and also to the transmission and distribution systems simulation models.

RESPONSE

The integration between LUMA's geographic information system (GIS) and outage management system (OMS) is currently operational and stable. To maintain synchronization, the map migration process is run on a bi-weekly basis. The migrated data includes electrical network components (feeders, transformers, switches, etc.), attribute changes and newly added or retired assets and customers. A selection of database tables from GIS are transferred into OMS, helping to ensure as much congruence between LUMA's connectivity model and that installed in the field as possible, thus enabling better outage predictions.

Regarding the energy management system (EMS), parameters and values from the modeling tools are manually entered into the legacy Siemens Supervisory Control and Data Acquisition (SCADA) system (i.e., no GIS integration). The new Monarch EMS system will provide advanced applications and engineering tool kits that can provide real-time integration with external modeling tools. As EMS operates at the transmission level, LUMA will import transmission GIS information, but only as tiles (i.e., static input). The timeline for the Monarch EMS is as follows:

- Internal testing in progress (already completed a couple of iterations of database and display conversions)
- Factory acceptance testing is scheduled for completion in July 2025
- The new system will arrive in September 2025
- Commissioning of the new system will be completed by December 2025
- The legacy Siemens system will be shut down by February 2026

For Distribution, Synergi models are manually extracted from the GIS database through the Forge function in Synergi. Once created (extracted), the models undergo a cleanup process to fix any potential issues that may arise during the export process (i.e., addressing missing / incorrect device ratings, topology issues, etc.). The models are then stored in a SharePoint location for use by various groups across LUMA (e.g., planning and reliability departments). LUMA continues to work on improvements to

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the process, including making these models available via a single “Distribution Feeder Page” (as opposed to navigating through the SharePoint which can lead to the selection of outdated models if the user is not familiar with the appropriate SharePoint location) and transitioning to an automatic model building script process.

And, with respect to transmission power system modeling, LUMA applies a multifaceted and iterative process necessitating meticulous gathering of information on transmission lines, transformers, generators, load forecast data, renewable energy resources, and energy storage systems. GIS information is used to manage and visualize spatial data, which is considered in developing and updating the power flow models. Changes can include network topology, equipment electrical parameters, and operational date, all used to inform the power flow models maintained on LUMA's SharePoint.

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Pre-Application Questions from PREB Consultants

NEPR-AP-2023-0003

Response: ROI-LUMA-AP-2023-0003-20250324-PREB-014

SUBJECT

Reliability Improvements

REQUEST

Which specific initiatives does LUMA plan to implement through FY28 to improve SAIDI and SAIFI? Describe the costs associated with these initiatives and the projected annual reliability index improvement.

RESPONSE

Initiatives that LUMA plans to implement to improve System Average Interruption Duration Index (SAIDI) and System Average Interruption Frequency Index (SAIFI) are addressed throughout the testimony of Pedro Melendez (Capital Programs and Grid Transformation), *Exhibit 5.0*, supplemented by *LUMA Ex. 5.03: Range of Reliability Improvements*. They are also addressed in the testimony of Kevin Burgemeister (Operations-LUMA), *Exhibit 6.00*, specifically in discussing the shift to a more proactive maintenance (refer to questions and responses 40, 69, and 70), and increased focus on capital replacements (questions and responses 53, 54, 55, 56, and 60), and vegetation management (questions and responses 41 and 72).

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Pre-Application Questions from PREB Consultants

NEPR-AP-2023-0003

Response: ROI-LUMA-AP-2023-0003-20250324-PREB-015

SUBJECT

Vegetation Management

REQUEST

Because the purported \$1.2 billion federally funded Vegetation Management Reset effort faces delays, describe how LUMA will secure sufficient non-federal funds to maintain an aggressive vegetation management program, which remains largely reactive.

RESPONSE

LUMA remains confident that the federally funded Vegetation Management Reset effort will be completed and deliver material reliability improvements to the LUMA transmission and distribution systems. Additional funding to maintain and perform preventative maintenance is requested in this rate case. Please refer to the testimony of Kevin Burgemeister for the Operations department, *Exhibit 6.00*.

That said, delays do not translate to discontinuance as there is no viable option to the current approach in clearing the right of way (ROWs) in parallel with an approximate four-year trimming cycle to maintain the benefits of said clearance. The Operations Department is currently requesting a ramp up of an additional \$75 million to properly maintain the benefits of capital clearing (based on the realization that current state puts LUMA on a de facto 15 – 20-year cycle, and thus predominantly reactive in responding to vegetation-caused outages). This \$75 million increase is not just to maintain the benefits of the capital reclamation, but will also be used to: continue maintenance on the 230 kV system (which has been reclaimed), trim vegetation and remove bamboo (not reclaim) that are imminent threats to circuits while waiting for obligations and execution of the Federally Funded program, and to start reclamation of the 115 kV system which has become a Puerto Rico Energy Bureau (PREB) order. Lacking the \$1.2 billion of federal funds to reset the Vegetation Management Program, any proactive vegetation maintenance would be applied to transmission system clearing, and LUMA would be resigned to the realities of extended cycles (in other words, more outages) on the distribution system, as LUMA also needs to adopt a more proactive posture towards maintenance of the transmission and distribution (T&D) System (requiring additional operational and maintenance (O&M) spending). Please also refer to question and response 52 in the Operations Testimony.

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Pre-Application Questions from PREB Consultants

NEPR-AP-2023-0003

Response: ROI-LUMA-AP-2023-0003-20250324-PREB-016

SUBJECT

Fuel Costs

REQUEST

Because Genera anticipates shutting down the Aguirre Thermoelectric Plant (900 MW) this summer and expects to rely on generation that consumes more expensive fuels (such as peaker units), describe the cost impact of this operational limitation.

RESPONSE

Pursuant to the Puerto Rico Transmission and Distribution System Operation and Maintenance Agreement (T&D OMA)³¹, LUMA operates and maintains the Transmission and Distribution (T&D) System on behalf of the Puerto Rico Electric Power Authority (PREPA). As such, LUMA's responsibilities are strictly confined to the management and operation of the transmission and distribution (T&D) System and do not extend to the operation and management of PREPA's Legacy Generation Assets, which consist of base-load generation plants and combustion turbine peaking units. While LUMA oversees system dispatch and coordinates with generation producers for planned outages, it does not hold ultimate responsibility for the shutdown of these units; the owner of any generation facility connected to the T&D System retains the authority to decide on unit shutdowns independently of LUMA.

Assuming that the Aguirre Thermoelectric Plant is shut down during the summer, the output of energy would need to be substituted by another generation system.

Following the premise of the question, Genera plans to shut down the Aguirre Thermoelectric Plant (900 MW) this summer, which will necessitate a shift to more costly fuel sources, such as peaker units, for electricity generation. To assess the financial implications of this operational change, LUMA conducted two (2) forecast simulations: one incorporating the Aguirre plant and the other excluding it. As seen in figures 1 and 2 below, the findings indicate that the decision to close Aguirre could lead to an incremental cost of approximately \$217 million for fiscal year 2026, primarily due to the increased reliance on these higher-priced generation units to satisfy demand.

³¹ The Puerto Rico Transmission and Distribution System Operation and Maintenance Agreement executed on June 22, 2020, by and amongst the Puerto Rico Electric Power Authority ("PREPA"), the Puerto Rico Public-Private Partnerships Authority ("P3A") and LUMA Energy, LLC and LUMA Energy ServCo, LLC (collectively, "LUMA").

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Figure 1. Monthly Total Generation Cost Comparison

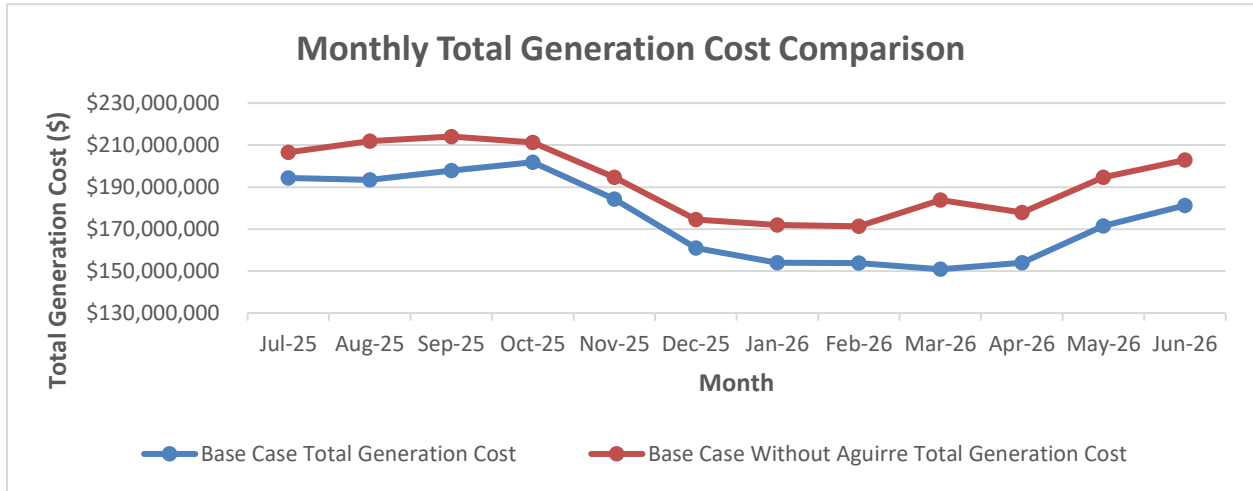
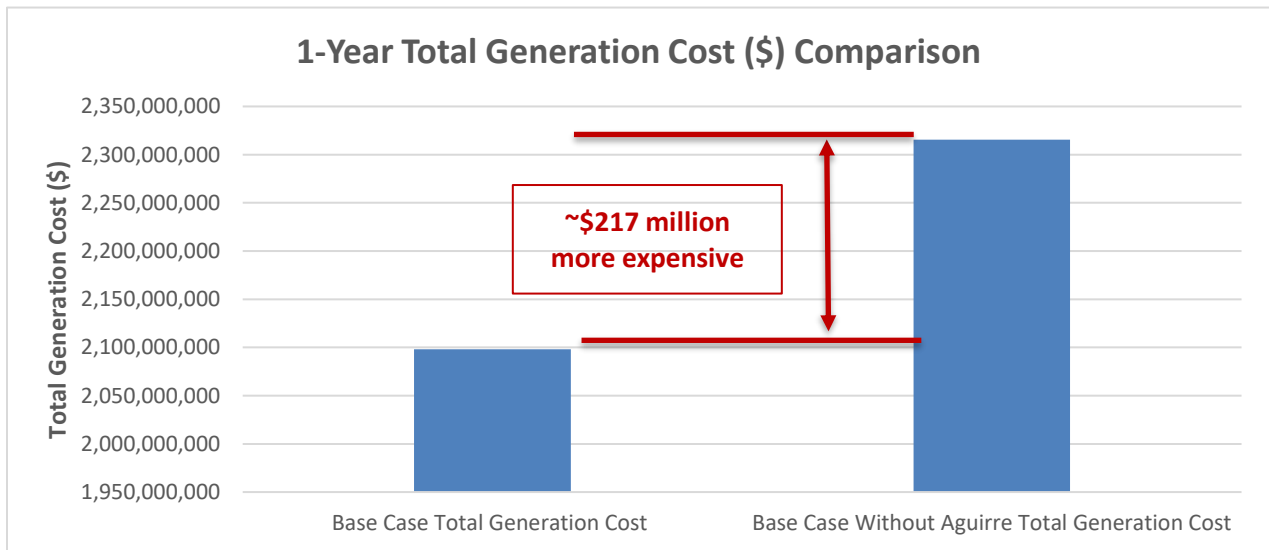


Figure 2. 1-Year Total Generation Cost (\$) Comparison



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Pre-Application Questions from PREB Consultants

NEPR-AP-2023-0003

Response: ROI-LUMA-AP-2023-0003-20250324-PREB-017

SUBJECT

LUMA Priority Stabilization Plan – System Improvements Preliminary Plan as submitted in NEPR-MI-2024-0005

REQUEST

LUMA's transmission reliability improvement plan lists 51 line segments on the 38 kV and 115 kV system that caused ~75% of all transmission-related customer minute interruptions. LUMA plans to inspect all 51 line segments in FY 2025. (a) When does LUMA plan to perform the necessary repairs—in FY 2025 or beyond? (b) What is the estimated cost and source of funding? (c) How does LUMA plan to acquire needed material and other resources for repair work?

RESPONSE

- (a) LUMA will inspect a total of 67 line segments, which includes the identified 51 worst performing segments. The planned repairs for these lines will commence in FY 2025 and are expected to be completed by FY 2035.
- (b) The transmission reliability improvement plan will be funded by Federal Emergency Management Agency (FEMA) with a 10% non-federal capital cost share, to be provided by LUMA. LUMA forecasts minimal immediate repairs funded with non-federal capital. Refer to Figure 1 below for projected costs.

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Figure 1. Transmission Reliability Improvement Plan

Stabilization Plan Updates – Transmission

Project Name	Total Cost Estimate	Equip & Material Cost	Labor Cost	Eng Cost	Funding Source	NFC FY25	NFC FY26
2100 – Line Repairs	\$2M	\$0.5	\$1.3	\$0.2M	NFC	\$2M	
16800 – UG Line Repair	\$4M	\$2M	\$1.6M	\$0.4M	NFC		\$4M
2200 – UG Line Repair	\$2M	\$1M	\$0.8M	\$0.2M	NFC		\$2M
8700 – Repairs	\$10m	\$5M	\$4.5M	\$0.5M	NFC	\$10M	
9100 - Repairs	\$1.5m	\$0.5	\$1m	\$0.0	NFC	\$5M	
TL100/200 - Ponce to Salinas Urbano	\$97.8M	\$46M	\$46.9M	\$4.9M	FEMA		
TL3600 – Monacillos to Martin Pena	\$114M	\$53.5M	\$54.8M	\$5.7M	FEMA		
TL2800 – Aguadilla Hospital Distrito Sect to T-Bone TO	\$45M	\$30.6M	\$12.1M	\$2.3M	FEMA		

- (c) LUMA will acquire the material and resources for the repairs in accordance with LUMA's procurement manual, which facilitates fair and competitive procurement practices. All federally funded projects will adhere to FEMA purchasing requirements as required by law and LUMA's procurement manual.

Rate Review

Pre-Application Questions from PREB Consultants

NEPR-AP-2023-0003

Response: ROI-LUMA-AP-2023-0003-20250324-PREB-018

SUBJECT

LUMA Priority Stabilization Plan – System Improvements Preliminary Plan as submitted in NEPR-MI-2024-0005

REQUEST

Substation rebuild: FEMA determined that 87 substations lie within flood-prone areas and may require rebuilding. How many substations must LUMA rebuild due to poor physical condition or a history of operational deficiencies?

RESPONSE

In addition to the 87 substation sites that require flood mitigation according to Federal Emergency Management Agency (FEMA) maps, LUMA is planning to complete critical repairs on large numbers of substations across Puerto Rico. LUMA developed these plans on the basis of assessments of substations across Puerto Rico, including grounding studies and component testing, in alignment with current forecasts of potential available funds, including from FEMA and nonfederal capital (NFC).

LUMA divides its projects into multiple program briefs, including substation rebuild³² and substation reliability projects³³. LUMA is right now expecting to complete more than 40 projects within the substation rebuild program brief and more than two dozen projects within the substation reliability program brief.

³² LUMA Exhibit 6.11: Substation Rebuilds Program Brief (PBUT8) (FY2026).

³³ LUMA Exhibit 6.12: Substation Reliability Program Brief (PBUT7) (FY2026).

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Pre-Application Questions from PREB Consultants NEPR-AP-2023-0003

Response: ROI-LUMA-AP-2023-0003-20250324-PREB-019

SUBJECT

LUMA Priority Stabilization Plan – System Improvements Preliminary Plan as submitted in NEPR-MI-2024-0005

REQUEST

Substation rebuild: LUMA, COR3, and FEMA have reached an agreement to rebuild 21 substations, some with an estimated completion date extending to FY 2027. Explain how LUMA is identifying those projects offering the largest improvement on system reliability and having a maximum implementation period of two years, as directed by the Energy Bureau.

RESPONSE

LUMA requests that the Energy Bureau provide further clarification on the “agreement [reached] to rebuild 21 substations.” LUMA has been unable to determine where this request originated from.

Rate Review

Pre-Application Questions from PREB Consultants

NEPR-AP-2023-0003

Response: ROI-LUMA-AP-2023-0003-20250324-PREB-020

SUBJECT

LUMA Priority Stabilization Plan – System Improvements Preliminary Plan as submitted in NEPR-MI-2024-0005

REQUEST

Substation Reliability Overview: By when will LUMA finish the substations' preventive and corrective maintenance? Provide the estimated cost.

RESPONSE

The preventive maintenance program for substations will be fully implemented in FY2026 whereas corrective maintenance will transition from current “recovery” state to “stable” state (the point at which the deficiencies of transmission and distribution (T&D) equipment have been remediated, repaired, or replaced, allowing LUMA to perform the operational and maintenance (O&M) Services in compliance with the Contract Standards as set forth in the *Puerto Rico Transmission and Distribution System Operation and Maintenance Agreement* (T&D OMA) over a six-year period (i.e., 50% complete by the end of FY2028). Estimated costs (preventative maintenance (PM), corrective maintenance (CM), out of service (OOS) restoration, and Emergent) over the three-year period total 196 million in O&M and \$47 million in non-federally funded capital (NFC). Refer to the response to question 40 in the Kevin Burgemeister Operations Testimony, including Table 3 and accompanying notes, *Exhibit 6.0*.

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Pre-Application Questions from PREB Consultants

NEPR-AP-2023-0003

Response: ROI-LUMA-AP-2023-0003-20250324-PREB-021

SUBJECT

LUMA Priority Stabilization Plan – System Improvements Preliminary Plan as submitted in NEPR-MI-2024-0005

REQUEST

Distribution automation overview (federally funded, \$233 M): LUMA plans to deploy 11,000 automation devices by the end of FY 2026.

- A) Clarify whether the \$233 million covers the cost of installing these devices and whether it forms part of the \$700 million project to deploy grid automation across Puerto Rico.
- B) What grid automation does LUMA plan to implement using the remaining funds from the \$700 million budget?
- C) Have any federal entities approved this funding? If so, which ones?
- D) Has LUMA quantified the reliability benefits of installing automation devices on the distribution system (e.g., expected SAIDI/SAIFI reductions)?

RESPONSE

- A) The \$233 million covers the cost of installing distributed automation (DA) devices and is part of the \$700 million project to deploy grid automation across Puerto Rico. The first iteration of the island-wide DA initial scope of work (ISOW) only included mid-feeder and tie reclosers, which amounted to \$233 million. The ISOW was later increased to \$700 million and added additional DA to optimize the reliability and resilience of the program.
- B) The revision to the island-wide DA ISOW added 4,000 three-phase reclosers; 15,000 single-phase reclosers; 11,000 communicating fault current indicators (CFCI); 100 three-phase, 38-kilovolt (kV) class reclosers; and the associated labor to engineer, install, and integrate the three-phase reclosers to LUMA's supervisory control and data acquisition (SCADA) system.
- C) Federal Emergency Management Agency (FEMA) has allocated funding for the deployment of reclosers, CFCIs, and communication devices. This funding covers the labor required for engineering and grid integration, which includes the integration of DA into LUMA's central control to enhance control and visualization of the grid.
- D) LUMA has conducted a cost-benefit analysis to quantify the advantages of installing these automation devices. The analysis shows a reduction of 218 minutes in System Average Interruption Duration Index (SAIDI) and 1.05 interruptions in System Average Interruption Frequency Index (SAIFI) since the program's commencement.

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These benefits stem from the synergies produced by the components included in the program:

- Automatic reclosers are crucial to enhancing system stability as they reduce both the duration and frequency of outages by automatically identifying and isolating faults while at the same time automatically restoring power by reclosing after temporary fault events.
- CFCIs contribute to these benefits by facilitating faster service restoration as they provide precise fault location data to crews responding to outages.
- Communication components contribute by enabling remote operation and visualization of the reclosers and fault sensors from a central control room, further increasing response times and facilitating the isolation of faults.
- The labor and services for comprehensive reliability analysis, load flow analysis, protection coordination studies, engineering design packages, testing, installation, commissioning, enterprise integration of operational and non-operational data, training, and maintenance ensure that DA components are installed, operated, and maintained in a manner that maximizes system benefits.
- As the analysis shows, DA reduces the frequency and duration of outages, which has other beneficial impacts for the system and LUMA's customers. Labor costs should fall due to the elimination of the need for crews to respond to temporary fault events resolved by DA as well as help crews quickly identify the locations of faults. Customer satisfaction should increase as well as the performance of LUMA's Customer Care Department as a result of the expected reduced calls.

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Pre-Application Questions from PREB Consultants

NEPR-AP-2023-0003

Response: ROI-LUMA-AP-2023-0003-20250324-PREB-022

SUBJECT

LUMA Priority Stabilization Plan – Accelerated Storage Addition Program (ASAP) as submitted in NEPR-MI-2024-0005

REQUEST

Genera proposes to add 430 MW of battery energy storage system (BESS) by the end of 2026. LUMA proposes to integrate 360 MW of BESS through the ASAP program. Have LUMA and Genera jointly studied the need of total BESS capacity needed on the island? What has been the outcome of their joint study?

RESPONSE

No joint study has been performed. However, internal analysis performed by LUMA suggests 800-1200 Megawatt (MW) of battery energy storage system (BESS) can be utilized and can be charged with the current grid capability. This is a significant decision variable that affects the relative priority of which contracts should be signed and pursued at this point. LUMA has consistently stated that it will require all of the standard offer agreement one (SO1) projects, but might not require all of the SO2 candidate projects. In addition, LUMA has stated that the incremental new Tranche projects that are still being reviewed and approved are not in rate payers' interest since they cost more than twice as much as Accelerated Storage Addition Program (ASAP) projects.

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Pre-Application Questions from PREB Consultants NEPR-AP-2023-0003

Response: ROI-LUMA-AP-2023-0003-20250324-PREB-023

SUBJECT

LUMA Priority Stabilization Plan – Accelerated Storage Addition Program (ASAP) as submitted in NEPR-MI-2024-0005

REQUEST

What is LUMA's timeline for developing the detailed SO (Standard Offer)? When does LUMA expect to have signed SOs in place?

RESPONSE

The first four standard offer Agreements (SO) 1 are in the process of being executed as the proponents are completing the Signing Conditions of their Agreements and will return the signed documents to PREPA in the upcoming days.

The remaining SO 1s should be completed and submitted to the Puerto Rico Energy Bureau (PREB) in the upcoming months.

The SO2 template has been completed. The detailed SO 2s will be developed once LUMA determines how many megawatts (MW) can be contracted, prioritizes the candidates and collects preliminary project information.

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Pre-Application Questions from PREB Consultants NEPR-AP-2023-0003

Response: ROI-LUMA-AP-2023-0003-20250324-PREB-024

SUBJECT

LUMA Priority Stabilization Plan – Accelerated Storage Addition Program (ASAP) as submitted in NEPR-MI-2024-0005

REQUEST

How extensive is the interconnection work that LUMA must undertake to implement phase 2 of the ASAP? Has LUMA determined the cost and timeline for this interconnection work?

RESPONSE

The studies required are the same as for all other battery energy storage system (BESS) projects. If the standard offer agreement (SO) 2 project is only solar, and plans to install BESS capacity within their points of interconnection (POI) limit, there should be only minor physical interconnection work required. If the project is an existing BESS project or they plan to expand their POI, it could require more significant work. The cost and timeline have not been determined yet, and it will vary depending on the megawatt (MW) to be contracted.

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Pre-Application Questions from PREB Consultants NEPR-AP-2023-0003

Response: ROI-LUMA-AP-2023-0003-20250324-PREB-025

SUBJECT

LUMA Priority Stabilization Plan – Accelerated Storage Addition Program (ASAP) as submitted in NEPR-MI-2024-0005

REQUEST

Some IPPs have indicated that once SO is signed, BESS could be online as soon as 12 months. Has LUMA independently determined the time needed to engineer, procure, and construct BESS? On that subject, what information does LUMA have?

RESPONSE

LUMA has stated that it agrees with developers that their schedule estimate of 12-18 months after Regulatory approval should be feasible. But LUMA has not made any assessment of the schedule-related risks or probabilities expected.

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Pre-Application Questions from PREB Consultants NEPR-AP-2023-0003

Response: ROI-LUMA-AP-2023-0003-20250324-PREB-026

SUBJECT

LUMA Priority Stabilization Plan – Accelerated Storage Addition Program (ASAP) as submitted in NEPR-MI-2024-0005

REQUEST

Relating to BESS, what considerations has LUMA given to the following: useful life, maintenance costs, and effect on Loss of Load Expectation (LOLE) and Loss of Load Hours (LOLH)?

RESPONSE

Accelerated Storage Addition Program (ASAP) contracts are for terms of 20 years each. It includes a discretionary augmentation adjustment variable which would allow for augmentation when mutually agreed upon when degradation occurs. Maintenance cost should be minimal.

LUMA has quantified and discussed the impact to the loss of load expectation (LOLE) of different amounts of battery energy storage system (BESS) capacity and these results are described in detail in the annual Resource Adequacy report³⁴.

³⁴ LUMA Resource Adequacy Study, Docket No. NEPR-MI-2022-0002.

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Pre-Application Questions from PREB Consultants NEPR-AP-2023-0003

Response: ROI-LUMA-AP-2023-0003-20250324-PREB-027

SUBJECT

LUMA Priority Stabilization Plan – Accelerated Storage Addition Program (ASAP) as submitted in NEPR-MI-2024-0005

REQUEST

LUMA proposes to charge BESS from the existing electric system. What studies has LUMA conducted to ensure availability of energy charge BESS.

RESPONSE

An internal analysis suggests 800-1200 megawatts (MW) of battery energy storage system (BESS) are needed and can be charged with the current grid capability. LUMA has expressed its concern that potentially too much BESS capacity is being pursued, and a structured prioritization process needs to be followed.

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Pre-Application Questions from PREB Consultants

NEPR-AP-2023-0003

Response: ROI-LUMA-AP-2023-0003-20250324-PREB-028

SUBJECT

Cybersecurity Investment and Budgeting

REQUEST

Provide a detailed breakdown of proposed cybersecurity expenditures by category (capital investments vs. operational expenses), accompanied by your risk assessment methodology that justifies these investments and demonstrates their alignment with identified threat vectors specific to Puerto Rico's electric system.

RESPONSE

For information on cybersecurity expenditures please refer to Table 6 of Crystal Allen's testimony respecting funding for LUMA's Information Technology/ Operations Technology (IT/OT) department, *Exhibit 11.00*. Specifically, the PBIT2 line item lists the proposed non-federally funded capital (NFC) expenditures for the IT Cybersecurity during the test period, and the accompanying program brief. For risk assessment methodology and alignment with threat vectors specific to Puerto Rico's electric system please refer to the questions and responses that are identified in that testimony for *ROI-LUMA-AP-2023-0003-20250324-PREB-028*, *ROI-LUMA-AP-2023-0003-20250324-PREB-029*, and *ROI-LUMA-AP-2023-0003-20250324-PREB-053*.

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Pre-Application Questions from PREB Consultants NEPR-AP-2023-0003

Response: ROI-LUMA-AP-2023-0003-20250324-PREB-029

SUBJECT

Cybersecurity Investment and Budgeting

REQUEST

Describe LUMA's multi-year cybersecurity investment strategy, including how it is balancing immediate security needs with longer-term resilience objectives, and how these investments compare to industry benchmarks for utilities of similar size and risk profile.

RESPONSE

For information on cybersecurity investment strategy, please refer to Crystal Allen's testimony, *Exhibit 11.00*.

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Pre-Application Questions from PREB Consultants

NEPR-AP-2023-0003

Response: ROI-LUMA-AP-2023-0003-20250324-PREB-030

SUBJECT

RPS Strategy and Compliance Roadmap

REQUEST

Provide a comprehensive discussion of LUMA's strategic plan to achieve Puerto Rico's Renewable Portfolio Standard (RPS) milestones and Energy Bureau's established yearly targets.

RESPONSE

LUMA is committed to playing a leading role in developing an electricity system for Puerto Rico that achieves environmental requirements set by law and regulation while also minimizing the costs of electricity service and increasing the quality of electricity service.

Although LUMA does play a leading role in advancing the recovery and transformation of Puerto Rico's electricity system, matters involving power generation are largely outside of LUMA's responsibility and control. Under the *Puerto Rico Transmission and Distribution System Operation and Maintenance Agreement* (T&D OMA), LUMA serves as the operator of the electricity transmission and distribution system, and LUMA does not own or operate power generation facilities on the island.

Consequently, LUMA does not make decisions respecting the addition of new renewable energy generation facilities whose renewable energy credits (RECs) count towards compliance with the Puerto Rico Renewable Portfolio Standard (RPS). Instead, LUMA buys all the electricity produced by all renewable energy generation facilities operating in Puerto Rico, as well as the RECs originating from these facilities as measured by their electricity output (generation).

To the extent that RPS compliance reports previously submitted by LUMA have indicated shortfalls in REC procurement, it is not because LUMA did not fulfill its obligations but rather because the decisions of other parties have resulted in the insufficient deployment of renewable electricity generation assets in Puerto Rico, resulting in a deficit in the supply of RECs for LUMA to obtain.

Looking forward, the two primary ways in which LUMA can facilitate future growth in the supply of RECs – and thereby help enable the attainment of Puerto Rico's RPS requirements – are by (1) producing high-quality publicly-available information about the electricity system that leads the Energy Bureau and companies involved in the development, financing, construction and operation of power generation facilities to make decisions that result in the deployment of additional renewable energy projects capable of producing RECs, and (2) working expeditiously during the implementation of new REC-producing

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renewable energy projects to enable their prompt, safe and reliable interconnection to the Puerto Rico electricity system.

In closing, it must also be noted that Act 1-2025³⁵ (enacted on March 18, 2025) restructured the Puerto Rico RPS by eliminating all pre-2050 compliance requirements, leaving only the final milestone requirement wherein 100% of Puerto Rico's electricity supply must come from renewable sources by 2050.

³⁵ Act No. 1 of March 18, 2025, to amend Section 1.6 of Act No. 17-2019, known as the “*Puerto Rico Energy Public Policy Act*” and Sections 2.3 and 2.13 of Act No. 82-2010, as amended, known as the “*Public Policy on Energy Diversification by Means of Sustainable and Alternative Renewable Energy in Puerto Rico Act*,” to conform the energy public policy objectives to the urgent and precarious reality of Puerto Rico's energy emergency; ensure the attainment of the goals established for the year 2050, particularly, the urgent need to address the reliability and resilience of the electric power service; provide for compliance with this Act; and for other related purposes.

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Pre-Application Questions from PREB Consultants

NEPR-AP-2023-0003

Response: ROI-LUMA-AP-2023-0003-20250324-PREB-031

SUBJECT

RPS Strategy and Compliance Roadmap

REQUEST

Detail the methodology that LUMA applies to forecast RPS compliance percentages over the next five years, including assumptions about renewable project development timelines, anticipated interconnection rates, and how these projections account for potential delays or implementation challenges.

RESPONSE

With the passage of Act 1-2025³⁶, the concept of the Puerto Rico Renewable Portfolio Standard (RPS) compliance in any given year before 2050 has become legally ambiguous. Nevertheless, LUMA plans to continue publishing updated information on a regular basis about the extent of renewable energy deployment in Puerto Rico. LUMA recognizes that Act 1-2025 has not altered LUMA's responsibility to file an annual report by March 31st of each calendar year to provide an update on renewable energy progress in Puerto Rico.³⁷ Consistent with LUMA's role in facilitating the advancement of cost-effective renewable energy in Puerto Rico, LUMA's ongoing reporting of data will help all parties by providing accurate representations about the pace of renewable energy supply growth towards the eventual requirement of 100% renewable energy supply by 2050.

In its previously filed RPS compliance reports, LUMA has only made forecasts of future renewable energy supplies for the calendar year currently in progress, so that the report can focus more prominently on recent (prior year) actual results and imminent expected results. Should LUMA be asked to forecast renewable energy supplies and corresponding RPS compliance (however that is to be defined) for a longer future horizon, the following methodology – based on how LUMA has historically forecasted the remainder of the current year – will be applied.

³⁶ Act No. 1 of March 18, 2025, to amend Section 1.6 of Act No. 17-2019, known as the “*Puerto Rico Energy Public Policy Act*” and Sections 2.3 and 2.13 of Act No. 82-2010, as amended, known as the “*Public Policy on Energy Diversification by Means of Sustainable and Alternative Renewable Energy in Puerto Rico Act*,” to conform the energy public policy objectives to the urgent and precarious reality of Puerto Rico's energy emergency; ensure the attainment of the goals established for the year 2050, particularly, the urgent need to address the reliability and resilience of the electric power service; provide for compliance with this Act; and for other related purposes.

³⁷ *In Re: Informe Anual de Cumplimiento de Proveedor de Energía al Detal*, Docket No. NEPR-MI-2020-0015.

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Broadly speaking, future renewable energy supplies for the Puerto Rico electricity grid are sourced from one of three categories: (1) existing utility-scale facilities that are already operational and delivering electricity to LUMA, (2) planned utility-scale facilities that have not yet become operational, or (3) distributed energy resource (DER) facilities located on a customer's premises that "sell" electricity back to LUMA some of the time under net energy metering (NEM) arrangements. Total future renewable energy supply to the Puerto Rico electricity system is the sum of electricity output from all facilities in each of these three categories, which are discussed sequentially below.

For existing utility-scale renewable energy facilities, the operating capacity and site location (which dictates expected weather conditions that determine output from solar and wind energy projects) are known and fixed; therefore, an expectation of annual output from each existing facility can be derived in a straightforward manner by averaging annual output from prior years. Since renewable energy facilities will deliver to LUMA as much electricity as can be produced based on prevailing weather conditions, averaging data on actual annual output over multiple prior years for each facility is a reasonable approach for developing an estimate of average annual future output from that facility – provided that there were no reductions in facility availability of unusually long duration or extent during any of the prior years included in the average (e.g., due to hurricane damage). As additional "normal" years of actual data are accumulated with the passage of time, a methodology of this kind should produce an estimate of average output that converges on the true average output that can be expected to result from each existing facility.

For planned utility-scale renewable energy facilities (all of which are solar photovoltaic (PV)), each proposed project must be assessed separately. The most important factor affecting forecast volumes of electricity deliveries from any proposed project is a judgment of the likely date of its initial commercial operation. In LUMA's general experience, project completion is achieved approximately 18-months after finalization of the construction contract, thus providing a tangible (i.e., objectively identifiable) basis for developing a projection on the forecasted date of commercial operation. After judging the likely date of commercial operation for a proposed project in this manner, the remaining step is to estimate annual electricity output once the project becomes operational. Lacking actual data on the amount of solar energy that will be available annually at the site of a planned project before it has become operational, LUMA can estimate annual expected output of each planned utility-scale project, irrespective of location in Puerto Rico, by applying an average annual capacity factor (i.e., actual electricity output divided by theoretical output assuming operation at full capacity for all 8,760 hours in a year) derived from all existing utility-scale solar PV projects across the entire island.

For distributed energy resources (DER) facilities (rooftop solar PV systems, with very few exceptions), the methodology for estimating contributions to the Puerto Rico electricity system requires a substantially greater number of inferences. Note that DER facilities first are called upon to supply the electricity demand of the host customer, and only if there are surpluses of DER-produced electricity beyond on-site demands do these facilities "export" renewable energy to the Puerto Rico electricity system (i.e., to LUMA, under NEM arrangements). In turn, this implies that the method required to estimate "net" DER output sold back to LUMA under NEM involves four steps: (1) estimating the amount of installed DER capacity across Puerto Rico, (2) estimating annual energy production by installed DER capacity (using assumptions about average annual capacity factors for PV-based DER systems in Puerto Rico), (3) estimating how much of annual DER energy production is consumed by host customers before selling back to the grid, and then finally (4) calculating how much of annual DER energy production is sold back to LUMA for distribution on the Puerto Rico electricity system. This set of estimates about DER electricity production (both gross and net) is performed by LUMA's load forecasting department when developing

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projections of aggregate future electricity demands that LUMA must serve via electricity supply from all utility-scale generators.

As described immediately above, the forecast of electricity demands that LUMA must serve from all utility-scale generators – gross aggregate electricity demands of customers, less customer demands supplied by DER – represents the denominator when calculating the fraction of Puerto Rico electricity supply estimated to be supplied from renewable energy sources. The numerator for calculating this fraction is represented by the sum of renewable energy supply estimated in future years over each of the three categories of renewable energy assets contributing electricity supply to the Puerto Rico electricity grid: existing utility-scale renewable projects, planned utility-scale renewable projects, and DER facilities.

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Pre-Application Questions from PREB Consultants

NEPR-AP-2023-0003

Response: ROI-LUMA-AP-2023-0003-20250324-PREB-032

SUBJECT

RPS Compliance Costs

REQUEST

Describe the projected RPS compliance costs, including a breakdown of expenditures by resource type, program category, and timeline, with particular attention to how LUMA will recover these costs through rates.

RESPONSE

LUMA assumes the phrase “RPS compliance costs” posed in the question refers to the costs specifically associated with acquiring renewable energy credits (RECs) for the purpose of demonstrating the extent of compliance with Puerto Rico Renewable Portfolio Standard (RPS) requirements.

As noted in *ROI-LUMA-AP-2023-0003-20250324-PREB-030*, the enactment of Act 1-2025³⁸ has eliminated the need to achieve any degree of compliance with RPS provisions before the year 2050. Thus, the answer presented herein discusses the estimated costs directly attributable to the purchase of RECs in each future year between now and 2050 – irrespective of whether these REC purchases are helpful in assessing the ambiguous concept of “RPS compliance costs” in any year before 2050.

As noted in *ROI-LUMA-AP-2023-0003-20250324-PREB-031* on “RPS compliance percentages,” LUMA only purchases RECs from six existing utility-scale renewable energy projects for which the terms of the Power Purchasing and Operating Agreements (PPOA) contract specifically state that RECs must be paid for separately from energy purchases. As noted in the previous answer, the estimated volumes of REC purchases from these six projects equal the estimated volumes of actual electricity deliveries to LUMA from these projects.

For the remaining existing utility-scale renewable energy projects, and for all future proposed renewable energy facilities in Puerto Rico, the terms of the PPOA contract stipulate that LUMA will obtain RECs alongside electricity deliveries for one bundled price so that there is no separately-denominated REC

³⁸ Act No. 1 of March 18, 2025, to amend Section 1.6 of Act No. 17-2019, known as the “*Puerto Rico Energy Public Policy Act*” and Sections 2.3 and 2.13 of Act No. 82-2010, as amended, known as the “*Public Policy on Energy Diversification by Means of Sustainable and Alternative Renewable Energy in Puerto Rico Act*,” to conform the energy public policy objectives to the urgent and precarious reality of Puerto Rico’s energy emergency; ensure the attainment of the goals established for the year 2050, particularly, the urgent need to address the reliability and resilience of the electric power service; provide for compliance with this Act; and for other related purposes.

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price for transactions with these facilities, and, hence, no payments from LUMA allocable only to RECs for any proposed project. For distributed energy resource (DER) facilities, since virtually all of them lack meters quantifying how much renewable energy was produced, it is not possible for DER owners to “originate” RECs for subsequent purchase by LUMA; therefore, LUMA anticipates no REC acquisition costs from this category of renewable energy generation assets.

In general, RPS compliance costs paid by LUMA to the six existing renewable energy projects with separable REC payments are constituted of both (1) the payments to acquire the RECs from the renewable energy producer, and (2) the payment of fees to register the RECs with the North American Registry as stipulated by law. Both cost components are and will be recovered from customers through LUMA's Purchased Power Cost Adjustment (PPCA) rider and are discussed separately below.

For the six projects with separable REC payments for the remaining duration of their operational term, the average purchase price of RECs is (and will remain) roughly \$29.7/MWh for the duration of the term of the projects, and ranges from \$27.1/MWh to \$35.0/MWh across the six relevant projects, totaling to approximately \$5.3 million on an annual aggregate basis for the foreseeable future. Excluding inter-annual variances due to weather solar variability, this magnitude of expenditures by LUMA for REC acquisition will not increase appreciably, and in fact will tend to decrease slightly over time as the performance of the solar panels at these existing facilities degrades (at approximately 0.5% per year). The costs associated with REC procurement will be recovered from customers through the PPCA.

On a per-MWh basis, the second component of REC payments (registration fees) is small (<10%) relative to the first component, historically representing approximately \$0.029/MWh. However, this fee will apply to all RECs: not just the ones purchased separately by LUMA from the six above-noted projects, but also those acquired by LUMA from all other metered utility-scale renewable energy projects as part of the bundled price to effectuate electricity purchases. As a result, total outlays on REC registration fees are likely to increase considerably from recent levels of approximately \$12,000 per year, although these expenditures will remain small relative to LUMA's REC purchase expenditures of over \$5 million annually (as discussed above). As with the costs of REC procurement, the costs associated with REC registration fees will be recovered from customers through the PPCA.

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Pre-Application Questions from PREB Consultants

NEPR-AP-2023-0003

Response: ROI-LUMA-AP-2023-0003-20250324-PREB-033

SUBJECT

RPS Compliance Costs

REQUEST

Explain the cost-containment strategies that LUMA is carrying out to minimize the cost of achieving RPS goals, including any optimization analyses conducted to determine the most cost-effective compliance pathways.

RESPONSE

As described in *ROI-LUMA-AP-2023-0003-20250324-PREB-030*, there are two primary ways by which LUMA can minimize the cost of achieving the ultimate Puerto Rico Renewable Portfolio Standard (RPS) goal of 100% renewable energy supply by 2050: (1) producing high-quality publicly-available information about the electricity system that leads the Energy Bureau and companies involved in the development, financing, construction and operation of power generation facilities to make decisions that result in the deployment of additional renewable energy projects capable of producing renewable energy credits (RECs), and (2) working expeditiously during the implementation of new REC-producing renewable energy projects to enable their prompt, safe and reliable interconnection to the Puerto Rico electricity system.

It must be reiterated that LUMA is operator of the electricity transmission and distribution system in Puerto Rico, and thus LUMA has no direct responsibility for decisions that will increase the supply of renewable electricity generation in Puerto Rico. LUMA is, at most, a facilitator of actions by others that will increase renewable energy penetration on the Puerto Rico electricity grid.

One of the most important ways in which LUMA has acted as a facilitator of responsible future capacity addition decisions in Puerto Rico is the Integrated Resource Plan (IRP) that LUMA is currently completing.³⁹ The main output of the IRP will be a set of analyses indicating various low-cost pathways to supply the electricity needs of Puerto Rico under different sets of assumptions, and these analyses are intended to be used by third-parties to evaluate the economic and environmental desirability of alternative configurations of proposed generation capacity additions. Because the IRP is being developed with extensive engagement from a wide spectrum of stakeholders, the resulting capacity additions proposed by the community of power generation developers and endorsed by the Energy Bureau are most likely to

³⁹ *In Re: Review of the Puerto Rico Electric Power Authority Integrated Resource Plan*, Docket No. NEPR-AP-2023-0004.

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be grounded in realistic and widely accepted assumptions and projections of future costs, environmental benefits, and system reliability enhancements.

Beyond the IRP, LUMA's primary initiative to minimize the cost of compliance with future RPS requirements is reducing the time – and improving the efficiency – of interconnection of new renewable energy facilities, both utility-scale and distributed energy resources (DER). For DER, LUMA has reduced interconnection approval times by almost 40% since 2021 from an average of 39 days under the Puerto Rico Electric Power Authority (PREPA) to an average of 24 days currently. This streamlining of interconnection approvals has been a significant contributor to a major surge in DER adoption among Puerto Rico electricity customers, which in turn reduces the amount of new proposed utility-scale renewable energy projects that will enable Puerto Rico to meet the 100% requirement by 2050.

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Pre-Application Questions from PREB Consultants

NEPR-AP-2023-0003

Response: ROI-LUMA-AP-2023-0003-20250324-PREB-034

SUBJECT

Renewable Resource Integration

REQUEST

Describe the technical plans and grid enhancements that LUMA must undertake to integrate the planned renewable resources for RPS compliance, including specific investments in transmission, distribution, and control systems to accommodate increasing penetration levels.

RESPONSE

Independent of the increasing deployment of renewable energy projects to make progress towards Puerto Rico's Renewable Portfolio Standard (RPS) requirement of 100% by 2050, LUMA is undertaking numerous initiatives to modernize and upgrade both network infrastructure and associated control systems for the transmission and distribution of electricity in Puerto Rico.

Many of these initiatives are encompassed under LUMA's System Remediation Plan (SRP), a multi-year program with the aim of bringing operational practices embedded throughout the Puerto Rico electricity system from the 20th Century into the 21st Century. The SRP would be important to implement even if transitioning the island's electricity supply fully to renewable energy was not a priority, because the antiquated systems inherited by LUMA on commencement in June 2021 were – and are – rapidly reaching (or have reached) the end of their useful lives. Since it would be extremely challenging to reliably operate a grid supplied 100% by renewable energy sources using the aged equipment and systems that LUMA inherited – which were developed (and installed) before wind and solar energy emerged as major generation supply sources to be accommodated – the SRP becomes even more important.

Even so, it would be inaccurate to attribute most aspects of the SRP mainly or even largely to the enablement of greater penetration of renewable energy. For instance, while LUMA has developed plans for improving the island's transmission system as discussed in LUMA's First Interim 2025 IRP Filing,⁴⁰ these plans are more for updating the system to current standards and to better cope with the legacy "North-South" imbalance between electricity demand (mostly on the North side of the island) and supply (mostly on the south side of the island) than they are for supporting future renewable energy

⁴⁰ Exhibit 1 of [LUMA's Motion Submitting First Interim Filing of the IRP in Compliance with the Resolution and Order of October 29, 2024, Request for Confidential Treatment, and Memorandum in Support of Confidentiality](#) of November 22, 2024, Docket No. NEPR-AP-2023-0004.

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development. Similarly, the need for updated systems at LUMA's main control center is at least as much motivated by the importance of better managing the current fleet of thermal powerplant units during their remaining lifetimes – especially given their fragile state and the consequent need to make real-time adjustments for outages – as it is for optimally managing the future fleet of renewable energy generation sources (as well as energy storage assets, discussed further in *ROI-LUMA-AP-2023-0003-20250324-PREB-035*).

Of the initiatives to modernize and improve the Puerto Rico electricity system, only a few are primarily focused on helping enable greater penetration of renewable energy. From a system operations standpoint, LUMA will need to strengthen its near-term (i.e., day-ahead and hour-ahead) weather forecasts of solar and wind conditions, to improve the accuracy of output forecasts from wind and solar facilities and thereby better manage the dispatch of fossil generation and energy storage assets in anticipation of major increases in renewable energy supply volumes.

More broadly, several aspects of the distribution system must be updated to anticipate widespread deployment of distributed energy resource (DER). Note that the transmission system is generally well-positioned to cope with the addition of new utility-scale renewable energy facilities, because each such addition is not much different than the addition of utility-scale thermal generating facilities for which the transmission system was designed and constructed. In contrast, the addition of DER is a dramatic conceptual departure for the distribution network, which was never conceived to accommodate numerous small-scale points of electricity injection from customer premises downstream of the substation where the feeder originates and sources its supply of electricity from the transmission system.

In its current configuration based on 20th Century technologies, each distribution “feeder” (i.e., circuit) can handle DER systems being deployed by a modest proportion of customers served by the feeder. However, as the number of DER systems on a feeder increases to higher levels over time with accumulating DER adoption, it will eventually become the case that aggregate output from DER systems located on the feeder will at times exceed aggregate electricity demands from all customers served by the feeder. When this occurs, electricity will flow “backwards” to the substation – something that 20th Century substations cannot tolerate without major safety concerns or likelihood of severe damage.

Accordingly, before this occurs, a distribution feeder with DER system penetration levels approaching critical limits will need to be retrofitted – both re-engineered and re-equipped – to be able to handle backwards electricity flows. To monitor the degree to which each distribution feeder in Puerto Rico can accept a new DER installation, LUMA has developed a web-based hosting capacity map – updated frequently to reflect recent additions of DER – indicating the amount of incremental DER that can be installed on each feeder before re-engineering is required. Since retrofitting the entire Puerto Rico distribution network for high DER penetration would be very expensive, retrofits are being deferred for each feeder until hosting capacity map trends suggest that additional prospective DER installations will soon become technically infeasible. In other words, retrofits of distribution feeders to enable high penetration of DER will be prioritized between feeders based on customer demands for additional DER installations relative to the ability of feeders to accept new DER additions.

More imminently, LUMA will be adopting new software systems – including an Advanced Distribution Management System (ADMS) and a Distributed Energy Resource Management System (DERMS) – that will respectively be able to manage distribution feeders with bi-directional electricity flows and interface directly with installed DER systems. Although the Puerto Rico electricity distribution system can continue to operate effectively with its current software systems even with moderate amounts of DER, high

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penetration of DER would require the adoption of ADMS and DERMS, and the adoption of these systems is part of the overall SRP grid modernization program currently being undertaken by LUMA in anticipation of the future need for 100% renewable electricity supply – a significant portion of which is likely to come from DER on a large fraction of electricity customers.

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Pre-Application Questions from PREB Consultants

NEPR-AP-2023-0003

Response: ROI-LUMA-AP-2023-0003-20250324-PREB-035

SUBJECT

Renewable Resource Integration

REQUEST

Describe the energy storage strategy supporting renewable integration, including technologies being considered, deployment timelines, and how storage resources will be optimized to support both RPS compliance and overall system reliability.

RESPONSE

The addition of energy storage will only indirectly affect Puerto Rico's ability to comply with Renewable Portfolio Standard (RPS) requirements. Because energy storage systems do not generate electricity, they are unable to produce renewable energy credits (RECs) that contribute towards RPS compliance.

However, LUMA recognizes that attaining the requirements of the Puerto Rico RPS program – mandating 100% of Puerto Rico electricity supply from renewable energy sources by 2050 – will require substantial deployment of new energy storage systems on the island. This is because the existence of ample quantities of energy storage on the Puerto Rico electricity grid will facilitate the addition of more new renewable energy supply sources.

Note that the most cost-effective forms of renewable electricity generation – wind energy and solar photovoltaic (PV) energy – are unable to supply their full capacity ratings all the time. Absent energy storage, an electricity system based primarily on solar PV and wind energy will be unable to reliably provide electricity service on a 24/7/365 basis to customers. Therefore, a 100% renewable electricity system in Puerto Rico will require ample quantities of energy storage to supply electricity when wind and solar energy inputs are otherwise insufficient.

Until recently, the only energy storage technology widely applied to electricity systems across the world has been pumped storage hydro. At a pumped storage facility, energy can be stored by pumping water from a low-elevation reservoir uphill to a higher-elevation reservoir, allowing energy to later be supplied by releasing the water to flow from the upper reservoir into the lower reservoir, generating electricity from the downhill water flow in a manner exactly like conventional hydro. Although in use worldwide for several decades, pumped storage facilities are generally limited in applicability to wherever large-scale conventional hydro projects can be implemented. Alas, because Puerto Rico's hydroelectricity resource is modest, and with limited ability to develop sizable upper and lower reservoirs to hold large volumes of water, pumped storage has never been considered a viable energy storage alternative for Puerto Rico.

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Over the last 50 years, dozens of alternative energy storage technologies have been investigated. Although research continues on most of them, battery energy storage systems (BESS) based on lithium-ion batteries have arisen in the past decade to become the dominant technology now being employed for energy storage project development on electricity grids around the world. This is because the costs and performance of lithium-ion batteries have improved dramatically since their initial application in small portable electronics in the early 1990s, especially as production volumes have been scaled up by orders of magnitude in the past decade to supply the rapidly-growing electric vehicle industry.

With BESS having become the industry-standard for energy storage, the largest power generation companies active in Puerto Rico (e.g., Genera, AES, EcoElectrica) and several other project developers are actively pursuing opportunities to deploy utility-scale BESS projects on the Puerto Rico electricity grid, with over 1,500 MW of projects in various stages of development. Meanwhile, vendors such as Sunnova and Windmar are deploying a growing number of small-scale BESS systems at the premises of electricity customers, allowing customers with distributed BESS installations to both (1) capture more economic benefit from installed distributed energy resource (DER) systems by reducing NEM exports to the grid and (2) enable self-supply of electricity when electricity service from the grid is interrupted.

It is currently unclear how much energy storage will be necessary to support the Puerto Rico electricity grid in 2050 with 100% of electricity generation from renewable energy sources. However, it is clear that the amount of energy storage deployed in Puerto Rico must expand significantly from current levels for Puerto Rico to attain 100% of electricity supply from renewables.

As of now, LUMA estimates that about 123,000 distributed BESS systems have been installed by residential customers around Puerto Rico. Since the estimated average size of these systems is on the order of 17 kWh, and since most BESS systems are designed to have four hours of run-time, the current aggregate capacity of distributed BESS installed in Puerto Rico is believed to be about 575 MW.

In the future, distributed BESS penetration in Puerto Rico should continue to grow in parallel with the growth in the number of DER installations. As noted in the 2025 Renewable Energy Compliance Report, customer demand for new DER installations remains near record-high levels, and this should cause continued growth in distributed BESS deployments, since most customers now installing DER are also installing BESS as well.

However, the actual amount of distributed BESS capacity that supplies the electricity system – in other words, electricity supplies from distributed BESS assets that could support additional renewable energy deployment in Puerto Rico – is likely to always remain considerably less than the aggregate installed capacity of distributed BESS systems. This is because distributed BESS systems are designed to be dispatched (i.e., directed to charge and to discharge) to best serve the needs of host customers, and generally are not accessible by the system operator to compensate for intermittent renewable electricity supplies elsewhere on the grid.

Only if owners of distributed BESS assets elect to participate in virtual power plant (VPP) programs (discussed further in *ROI-LUMA-AP-2023-0003-20250324-PREB-036*) can distributed BESS can provide demand response to support the electricity grid as requested by the system operator. Moreover, even for distributed BESS systems that are enrolled in VPP programs, host customers have the right to retain some fraction of energy storage capacity for their own use.

Between VPP participation rates below 100% of customers with distributed BESS assets and less than 100% availability to access full capacity of distributed BESS assets of VPP participants, the aggregate

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amount of capacity that distributed BESS systems can supply to an electricity system under the direction of the system operator will always be less than the total rated capacity of all installed BESS systems. To illustrate, LUMA administers the Customer Battery Energy Sharing (CBES) program in which distributed BESS systems are aggregated into VPPs by five DER vendors active in Puerto Rico, and based on the successful launch of this program in late 2023, LUMA aims to grow CBES to achieve 40 MW of dispatchable capacity by 2028 – noteworthy, but less than 10% of the estimated 575 MW of distributed BESS capacity currently installed on the island.

Meanwhile, there are presently no utility-scale BESS systems that are operational in Puerto Rico. This is changing: as described in greater detail in LUMA's recently-released *2025 Renewable Energy Portfolio Compliance Report* (submitted to the Energy Bureau on March 31, 2025), LUMA is undertaking several initiatives to expedite deployment of utility-scale BESS assets across Puerto Rico. Between the Accelerated Storage Addition Program (ASAP) launched by LUMA and the installation of BESS at several Tranche 1 and Tranche 2 projects currently under development, several hundred MW of utility-scale BESS assets are anticipated to be commissioned during the next three years – although experience has shown that the exact timing of these additions is uncertain and subject to delays.

As installed BESS capacity in Puerto Rico grows and becomes a significant fraction of total electricity supply (unlike today), the reliability of the island's electricity system will improve considerably. Among other reasons, this is because – unlike any generating unit in the current Puerto Rico thermal powerplant fleet – already-charged BESS assets controllable by the system operator can instantaneously be called upon to discharge their full capacity.

In essence, BESS assets act as large “surge protectors” on the electricity system, ensuring uninterrupted constancy of supply to meet aggregate demands on the electricity system even in the event of a sudden disruption to the grid, such as an unexpected “forced” outage at a powerplant. Given the age and degraded condition of Puerto Rico's thermal powerplant fleet, forced outages are relatively common, as described at length in LUMA's recently-released *Puerto Rico System Resource Adequacy: Interim Update for Summer 2025*⁴¹ (submitted to the Energy Bureau on March 24, 2025). Forced outages can often cause load shed events – or worse, blackouts – in Puerto Rico because other supply resources connected to the grid cannot respond rapidly enough to compensate for the sudden loss of hundreds of MW of generation when a powerplant unit experiences a forced outage.

On the other hand, if sizable quantities of energy storage controllable by the system operator are in place to serve as a backup resource, major transient swings in frequency and voltage in the wake of a sudden disruption – which often cause manual load shedding to avoid cascading damage on the electricity system – will be prevented.

In addition to such reliability benefits, large quantities of utility-controlled energy storage will also prevent the “wastage” of renewable energy generated at times when the Puerto Rico electricity system cannot currently accept it. Already, there are instances when the amount of PV generation received by LUMA during sunny but mild mid-day hours is more than the electricity grid can handle, and experience in other parts of the world with high PV penetration (e.g., California, Australia, Germany) shows that this phenomenon will only become more common and larger in magnitude as more PV capacity is installed on

⁴¹ Exhibit 1 of LUMA's Motion on System Resource Adequacy: Interim Update for Summer 2025 of March 24, 2025 Docket No. NEPR-MI-2022-0002.

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the island. Without access to energy storage assets, when PV generation surpluses become too large, the system operator is driven to “curtail” deliveries of electricity from PV facilities but remains obligated to continue paying owners of these facilities as if they had continued to deliver electricity without curtailment. In other words, under these conditions, some opportunity for renewable electricity production to contribute to Puerto Rico electricity supply is wasted.

This outcome can be avoided if there is sufficient energy storage capability under the control of the system operator to accept the surplus mid-day PV electricity generation and return the stored electricity back to the grid during peak demand hours in the evening when the Puerto Rico electricity grid sometimes faces shortages of supply. In so doing, energy storage will allow solar energy to meaningfully supply the electricity grid even after the sun has gone down, thereby bringing Puerto Rico closer to an electricity system supplied 100% by renewable energy around-the-clock.

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Pre-Application Questions from PREB Consultants

NEPR-AP-2023-0003

Response: ROI-LUMA-AP-2023-0003-20250324-PREB-036

SUBJECT

Virtual Power Plant and Distributed Energy Resources

REQUEST

Describe plans to incorporate virtual power plants, demand response programs, and other distributed energy resources into the RPS compliance strategy, including program designs, implementation timelines, and projected contributions toward compliance targets.

RESPONSE

In addition to distributed energy resource (DER) systems and distributed battery energy storage system (BESS) systems, programs that affect customer demands also affect the electricity system. These predominantly include (1) energy efficiency (EE) programs designed to reduce overall electricity consumption by encouraging the adoption of new appliances that consume less energy, and (2) demand response (DR) programs designed to change behaviors about when and how much to utilize electricity-consuming appliances. EE programs are typically structured to provide economic incentives (e.g., rebates) that increase the likelihood that customers will invest in new appliances that are more energy efficient, whereas DR programs typically involve innovative pricing structures that cause customers to shift the timing of electricity consumption away from peak demand hours to off-peak hours.

In other words, EE programs tend to reduce overall electricity consumption, whereas DR programs tend to shift the timing of electricity consumption. By reducing electricity consumption, EE programs can reduce the amount of renewable energy additions that a 100% renewable energy Puerto Rico will require in 2050. By shifting electricity consumption out of peak hours, DR programs can reduce the need for peaking powerplants (typically diesel) whose continued operation may impede the achievement of 100% the Puerto Rico Renewable Portfolio Standard (RPS).

Generally speaking, any single DER-related resource (whether it be DER, distributed BESS, EE or DR) is of sufficiently small-scale that it is – on an isolated basis – invisible to the system operator managing the bulk power system comprised of utility-scale generation and transmission assets. In contrast, virtual power plants (VPPs) represent aggregations of DERs across many customers, so that the cumulative amount of capacity is sufficient to be of interest to the bulk power system operator.

The value proposition of VPPs is that the aggregator can firmly control a collection of DERs and make available the collective capacity of those DERs to the system operator as if it were a powerplant. As noted in *ROI-LUMA-AP-2023-0003-20250324-PREB-035*, LUMA manages the Customer Battery Energy

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Sharing (CBES) VPP program, wherein LUMA asks aggregators during peak demand periods to deliver energy from the collection of distributed BESS assets over which they have control, and aggregators compensate participating customers for discharging the customer's BESS asset. Based on the early successes of CBES during its pilot phase, LUMA has recently proposed expanding CBES to achieve a 40 MW target of dispatchable capacity from aggregations of distributed BESS assets by 2028.

On an ongoing basis, LUMA continues to evaluate potential new programs to take advantage of individual DERs, distributed BESS, EE and DR, as well as VPPs that represent aggregation of DERs. Typically, before rolling out a new DER-based program to Puerto Rico electricity customers, LUMA proposes to the Energy Bureau a pilot demonstration of the project to a limited number of customers over a limited duration of time – as was the case with CBES. Pilot demonstrations of proposed new DER-based programs are undertaken to test market acceptance of the program and ensure that any adverse side-effects of the program (e.g., cross-subsidies that create inequities) can be contained to acceptably low levels, before making any program permanently available to all qualifying customers in Puerto Rico.

To date, LUMA has not estimated the relative contributions of DER-based programs and utility-scale renewable energy additions that combine to produce a 100% renewable electricity supply for Puerto Rico in 2050.

In its PR100 study released in early 2024, the U.S. Department of Energy developed multiple scenarios involving 100% renewable electricity supply for Puerto Rico in 2050, and the PR100 modeling results generally indicated comparably large contributions from DER-based photovoltaic (PV) systems and utility-scale renewable energy projects, backstopped by large quantities of energy storage. Clearly, sizable volumes of DER – especially distributed PV and distributed BESS – will be needed in addition to significant expansion of utility-scale renewables in order to achieve the 2050 100% renewables mandate of the Puerto Rico RPS.

Based on LUMA's experience in analyzing the economics and environmental implications of various supply-side and demand-side resources in Puerto Rico, LUMA believes it is likely that the aggregate impact of EE and DR in reducing new renewable energy additions will be small relative to the amount of new renewable energy additions (and BESS additions) necessary to achieve the 100% renewable mandate in 2050.

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Pre-Application Questions from PREB Consultants

NEPR-AP-2023-0003

Response: ROI-LUMA-AP-2023-0003-20250324-PREB-037

SUBJECT

Compliance Monitoring and Reporting

REQUEST

Explain the systems and processes that LUMA is implementing to track, verify, and report RPS compliance, including the methodology for calculating compliance percentages, auditing procedures, and how LUMA will share this information with regulators and the public.

RESPONSE

By March 31 of each calendar year, LUMA is obligated to submit to the Energy Bureau a report on progress towards Puerto Rico Renewable Portfolio Standard (RPS) compliance. The report includes (1) descriptions of LUMA's active initiatives to promote the expansion of renewable energy installations in Puerto Rico, and (2) data on renewable energy supplies to the Puerto Rico electricity system in the just-completed calendar year.

Included in the reported data are (1) tabulations of electricity (and renewable energy credits (RECs)) purchased by LUMA from utility-scale renewable energy projects and (2) estimates of electricity produced by distributed energy resource (DER) systems located at customer premises that are delivered to LUMA under net energy metering (NEM) arrangements. The first data item is assured to be accurate because these electricity purchase volumes reflect metered data on actual electricity deliveries received by LUMA from utility-scale renewable energy facilities, as corroborated during monthly invoice reconciliation between LUMA and the owner of each renewable energy facility. The second data item is estimated based on the number of DER installations among the LUMA customer base, using an average DER installation size and average hourly output per day of a rooftop photovoltaic (PV) system, with the aggregate estimate of DER production across the island compared to the average daily load profile of the residential customer class to arrive at an estimate of NEM exports from the base of DER systems.

When utility-scale renewable electricity purchases and NEM exports from DER systems are added together, the sum can be compared to the total amount of electricity delivered by LUMA to all Puerto Rico customers to calculate the fraction of aggregate electricity supplies that are provided by renewable energy sources, and this fraction is an accurate measure of progress towards compliance with the Puerto Rico RPS.

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To illustrate, Table 2 of LUMA's most recent RPS Compliance Report⁴² presents data on renewable energy supplies obtained in calendar year 2024 relative to actual data from calendar year 2023 and forecasts for calendar year 2025. For 2024, Table 2 shows that 397,396 MWh of energy was purchased by LUMA from utility-scale renewable energy projects under Power Purchasing and Operating Agreements (PPOA) contracts, and another 693,617 MWh was estimated to have been delivered to LUMA from DER systems under NEM arrangements. Together, this implies that LUMA obtained 1,091,013 MWh from renewable electricity generation sources in Puerto Rico during 2024. Meanwhile, Table 2 also shows that LUMA delivered 17,181,857 MWh of electricity to all customers in 2024, which means that 6.35% ($1,091,013/17,181,857$) of volumes on the Puerto Rico electricity system originated from renewable energy sources in 2024. This value of 6.35% for 2024 should be compared to the 100% RPS mandate for 2050 to gauge progress towards RPS compliance.

Clearly, progress to date towards 100% renewable energy supply (as mandated for Puerto Rico by 2050) has been modest. In recent years, growth in renewable energy sources in Puerto Rico is solely attributable to the increasing addition of DER systems at customer premises under the NEM program, as the last new utility-scale renewable energy project completed in Puerto Rico was commissioned in 2016. Looking forward, progress in growing the share of renewable energy supply is expected to accelerate considerably, with approximately 1,000 MW of new utility-scale solar PV projects anticipated by LUMA to be commissioned between now and the end of 2027, along with continued growth in DER adoption by electricity customers.

⁴² Page 15 of Exhibit 1 of LUMA's Submittal of 2025 Annual Compliance Report under Section 2.9(c) of Act 82-2010, Exhibit 1, 2025 Annual Compliance Report dated March 31, 2025, Docket No. NEPR-MI-2020-0015, available at [20250331-MI20200015-Motion-to-Submit-2025-Annual-Compliance-Report-final-w-Exh.pdf](#).

Rate Review

Pre-Application Questions from PREB Consultants

NEPR-AP-2023-0003

Response: ROI-LUMA-AP-2023-0003-20250324-PREB-038

SUBJECT

Management Audit Expense

REQUEST

Identify the potential cost of the Comprehensive Management and Operations Audit that the Energy Bureau or an Independent Auditor will conduct on its behalf. Provide examples to support your estimate. Use the latest New York State Department of Public Service Comprehensive and Regular Management and Operations Audit of Long Island Power Authority and PSEG Long Island LLC as a model.

RESPONSE

Pursuant to the information disclosed in the website of the New York Department of Public Service Commission (NY Commission) (for matter number 21-00618 with the Title of Matter/Case *In the Matter of a Comprehensive and Regular Management and Operations Audit of Long Island Power Authority and PSEG Long Island LLC*,⁴³ the New York State Department of Public Service conducted an independent, third-party comprehensive management and operations audit of the Long Island Power Authority (LIPA) and its service provider PSEG Long Island (PSEG LI). However, on November 21, 2024, PSEG LI requested the NY Commission to maintain the report confidential. Thus, LUMA does not have access to the report and, in turn, cannot evaluate potential costs.

It is important to note that the referenced LIPA and PSEG LI audit was conducted by the NY Commission, rather than the regulated entity. Consequently, it can be reasonably inferred that the audit would be carried out by the Energy Bureau or an Independent Auditor, rather than LUMA. Therefore, the associated costs would be borne by the Energy Bureau, not LUMA.

⁴³ In the Matter of a Comprehensive and Regular Management and Operations Audit of Long Island Power Authority and PSEG Long Island LLC. , Matter Number: 21-00618, available at <https://documents.dps.ny.gov/public/MatterManagement/CaseMaster.aspx?MatterCaseNo=21-00618> . (Last visited on May 5, 2025)

Rate Review

Pre-Application Questions from PREB Consultants NEPR-AP-2023-0003

Response: ROI-LUMA-AP-2023-0003-20250324-PREB-039

SUBJECT

Customer Service and Information

REQUEST

Explain LUMA's criteria for customer service and information goals, and how LUMA assesses its progress in achieving those goals.

RESPONSE

For information on LUMA's customer service and information goals please refer to Jessica Laird's testimony, *Exhibit 7.00 questions 34, 35, 36, and 37*.

Rate Review

Pre-Application Questions from PREB Consultants NEPR-AP-2023-0003

Response: ROI-LUMA-AP-2023-0003-20250324-PREB-040

SUBJECT

Customer Service and Information

REQUEST

How does LUMA determine the priority for its customer service and information goals, compared to its other activities aimed at ensuring safe and reliable electric service.

RESPONSE

For information on LUMA's customer service and information goals please refer to Jessica Laird's testimony, *Exhibit 7.0 questions 34, 35, 36, and 37*.

Rate Review

Pre-Application Questions from PREB Consultants

NEPR-AP-2023-0003

Response: ROI-LUMA-AP-2023-0003-20250324-PREB-041

SUBJECT

Customer Service and Information

REQUEST

Describe how LUMA plans to reduce costs in the Customer Experience department and quantify these reductions.

RESPONSE

LUMA plans to reduce costs in the Customer Experience department by focusing on increasing customer self-service options and facilitating adoption thereof. Aside from necessary and essential operational expenses such as bill rendering, printing and payment processing, the majority of the department's budget is staffing or labor costs.

Long-term cost reductions are reasonably expected from greater customer utilization of self-service tools and channels. However, continued investment will be required over the next several years to further automate certain functions within the Customer Care & Billing (CC&B) system, which will support enhanced self-service options via the web and Interactive Voice Response (IVR). Customer education and adoption of these tools and channels will determine the actual savings.

The full implementation of Advanced Metering Infrastructure (AMI) will also help with cost reduction efforts because customers will have access to detailed usage data, which will allow them to better understand and manage their energy consumption (as opposed to dialing the call center or visiting a customer service center). Again, customer education and adoption will determine the actual savings.

Assuming an initial self-service adoption rate of 2.5% of all customers, LUMA estimates potential savings of \$0.963 million per fiscal year, with \$0.557 million attributable to savings in call center expenditures and the balance attributable to fewer customer visits to LUMA's regional offices. LUMA plans to benchmark cost savings with other utilities in FY2026 to determine cost savings targets over time.

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Pre-Application Questions from PREB Consultants NEPR-AP-2023-0003

Response: ROI-LUMA-AP-2023-0003-20250324-PREB-042

SUBJECT

Billed Revenue Collection, Customer Payment Processing

REQUEST

Describe the current status of past-due revenue collection, and plans for improvement.

RESPONSE

For the current status of past due revenue, please refer to *ROI-LUMA-AP-2023-0003-20250324-PREB-072*. For plans to improve the collection of past-due revenue, please refer to questions and responses 26, 27 and 28 of Jessica Laird's testimony respecting the customer experience department, *Exhibit 7.00*.

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Pre-Application Questions from PREB Consultants

NEPR-AP-2023-0003

Response: ROI-LUMA-AP-2023-0003-20250324-PREB-043

SUBJECT

Billed Revenue Collection, Customer Payment Processing

REQUEST

Quantify the estimated financial benefit from the planned improvements.

RESPONSE

Please refer to Jessica Laird's testimony, *Exhibit 7.00 question 27*.

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Pre-Application Questions from PREB Consultants NEPR-AP-2023-0003

Response: ROI-LUMA-AP-2023-0003-20250324-PREB-044

SUBJECT

Billed Revenue Collection, Customer Payment Processing

REQUEST

Identify anticipated improved customer payment processing methods and quantify expected financial benefits.

RESPONSE

For information on LUMA's customer payment processing please refer to Jessica Laird's testimony, *Exhibit 7.00 question 27*.

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Pre-Application Questions from PREB Consultants NEPR-AP-2023-0003

Response: ROI-LUMA-AP-2023-0003-20250324-PREB-045

SUBJECT

Call Center Operations and Staffing

REQUEST

Identify expected improvements and quantify expected financial benefits.

RESPONSE

Please refer to the response provided in *ROI-LUMA-AP-2023-0003-20250324-PREB-041*.

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Pre-Application Questions from PREB Consultants

NEPR-AP-2023-0003

Response: ROI-LUMA-AP-2023-0003-20250324-PREB-046

SUBJECT

Bill Inserts, Education, Advertising, Web Content

REQUEST

What are LUMA's goals with these four efforts?

RESPONSE

Effective communication and customer education are essential for LUMA to foster trust and transparency, ensure compliance, and promote understanding of the electric service in Puerto Rico. By using communication tools like bill inserts, educational campaigns, and web content, LUMA can provide customers with timely, relevant, educational, and actionable information.

Since customers review LUMA bills, it is considered an ideal way to deliver important messages directly to customers on a monthly basis. Bill inserts serve as a direct communication method, allowing us to provide personalized information, new updates, and tips on energy efficiency alongside monthly bills—ensuring visibility and relevance. These inserts are especially valuable for delivering seasonal safety messages, outage protocols, and billing changes. Also, we communicate our progress in regard to making upgrades to the electrical system.

Educational campaigns or paid efforts, both traditional and digital, play a crucial role in broadening awareness of our progress. Examples include safety campaigns and hurricane preparedness.

Our web content is vital for offering in-depth resources. It allows customers to explore FAQs, access educational materials 24/7, check service status, and plan outages. A well-designed website supports transparency. Also, we promote the web page as one of our communication tools with our customers. These communication tools are highly effective in keeping our customers informed. They are also an excellent opportunity to increase the visibility and impact of LUMA's initiatives in the communities.

All these communication channels help utilities build stronger relationships with their customers, encourage responsible resource use, and improve overall customer satisfaction.

LUMA's goals with these efforts are:

1. Increase transparency and customer awareness
2. Enhance customer engagement
3. Improve transparency and trust

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4. Communicate our progress and digital transformation
5. Increase safety and hurricane preparedness awareness

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Pre-Application Questions from PREB Consultants NEPR-AP-2023-0003

Response: ROI-LUMA-AP-2023-0003-20250324-PREB-047

SUBJECT

Bill Inserts, Education, Advertising, Web Content

REQUEST

How is LUMA pursuing those goals?

RESPONSE

At LUMA, we aim to achieve our objectives through targeted campaigns across various communication channels, fulfilling our responsibilities to our customers and the government. Our primary role is to create educational campaigns that raise awareness for safety and hurricane preparedness, as well as sharing information with customers about upgrades to the electric system. These communication tools are highly effective in keeping our clients informed. This is a valuable opportunity to increase the visibility and impact of LUMA's initiatives within the communities we serve. We approach these efforts with a comprehensive plan that includes a budget and addresses both internal and external audiences.

We review the plans to align all communication channels monthly.

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Pre-Application Questions from PREB Consultants NEPR-AP-2023-0003

Response: ROI-LUMA-AP-2023-0003-20250324-PREB-048

SUBJECT

Bill Inserts, Education, Advertising, Web Content

REQUEST

What are financial and non-financial benefits that LUMA expects?

RESPONSE

LUMA anticipates both financial and non-financial benefits from its customer engagement and communication initiatives. Although the direct financial impact of these efforts has not been formally quantified, due to the complexity and uncertainty involved in isolating such variables, it is reasonable to expect that improved customer satisfaction and trust in the electric system may contribute to increased customer retention. By enhancing the perceived reliability and responsiveness of the utility, LUMA may help reduce customer attrition over time.

From a non-financial standpoint, the benefits are more immediate and observable. Through targeted communication campaigns and proactive outreach, LUMA seeks to foster transparency, build public trust, and strengthen its relationship with customers. These efforts are intended to ensure that customers feel informed, supported, and engaged, especially during service interruptions or periods of operational stress. Effective communication enhances the overall customer experience and contributes to broader public confidence in the ongoing transformation of Puerto Rico's energy system.

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Pre-Application Questions from PREB Consultants NEPR-AP-2023-0003

Response: ROI-LUMA-AP-2023-0003-20250324-PREB-049

SUBJECT

Revenue Management and Protection

REQUEST

What potential supplemental revenue streams is LUMA envisioning?

RESPONSE

For information on LUMA's activities for Revenue Protection please refer to Jessica Laird's testimony, *Exhibit 7.00*. Please also refer to *Schedule B-7*⁴⁴, which identifies all revenues and income other than revenues from the sale of electricity, including, without limitation, revenue from pole attachments, interest income, and miscellaneous charges and fees.

⁴⁴ Schedule B-7, All Revenues and Income (excluding revenues from sale of electricity).

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Pre-Application Questions from PREB Consultants NEPR-AP-2023-0003

Response: ROI-LUMA-AP-2023-0003-20250324-PREB-050

SUBJECT

Revenue Management and Protection

REQUEST

What are the specific activities LUMA is undertaking for revenue protection? What is LUMA's estimate of the financial benefits arising from those activities?

RESPONSE

For information on LUMA's activities for Revenue Protection please refer to Jessica Laird's testimony, *Exhibit 7.00 questions 26 and 27*.

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Pre-Application Questions from PREB Consultants

NEPR-AP-2023-0003

Response: ROI-LUMA-AP-2023-0003-20250324-PREB-051

SUBJECT

Net Metering

REQUEST

Provide projected revenue reductions attributable to NEM, relative to the most recent years for which LUMA has ready attributed to NEM, for each of FY26, FY27, and FY28.

RESPONSE

For information on Net Metering please refer to Jessica Laird's testimony, *Exhibit 7.00 question 72*.

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Pre-Application Questions from PREB Consultants NEPR-AP-2023-0003

Response: ROI-LUMA-AP-2023-0003-20250324-PREB-052

SUBJECT

Workflow Process and Tracking (GM,ME)

REQUEST

Describe the elements of this program. What is LUMA's expected timeline for completion? What are the quantitative and qualitative benefits?

RESPONSE

Please refer to the Workflow Processes & Tracking Improvement Program filed annually in LUMA's Initial Budgets docket NEPR-MI-2021-0004⁴⁵, and System Remediation Plan docket NEPR-MI-2020-0019⁴⁶.

⁴⁵ In Re: LUMA Initial Budgets and Related Terms of Service, Docket No. NEPR-MI-2021-0004.

⁴⁶ In Re: Review of the Puerto Rico Electric Power Authority's System Remediation Plan, Docket No. NEPR-MI-2020-0019.

Rate Review

Pre-Application Questions from PREB Consultants

NEPR-AP-2023-0003

Response: ROI-LUMA-AP-2023-0003-20250324-PREB-053

SUBJECT

Workforce Management Systems

REQUEST

Describe this program. Provide the status of its development and monitoring.

RESPONSE

This improvement program was previously part of the Workflow Processes and Tracking Program referred to in *ROI-LUMA-AP-2023-0003-20250324-PREB-052*. However, for FY2026, the activities associated with Workforce Management Systems were transferred to the budget of the Asset Management Program. For more details, please refer to the testimony of LUMA witness Crystal Allen respecting LUMA's IT/OT department, *Exhibit 11.00*. Specifically, the Asset Management Program (PBIT4) budget for FY2026, FY2027 and FY2028 is identified in Table 5 and the improvement program is filed as part of Ms. Allen's working papers.

The work order management system (WMS) program is designed to improve customer response times and enable real-time visibility into field service execution by enabling and supporting key operational functions within LUMA such as work planning, mobile dispatch, crew scheduling, and work order management. WMS will also integrate with other critical systems such as the Emergency Response Tool (WebEOC), Outage Management System (OMS), Geographic Information System (GIS), and Customer Information System (CC&B), Asset Management System (Asset Suite), Damage Tracking System (Crisis Track). Currently, LUMA relies on fragmented manual processes and legacy tools, which limit the utility's ability to effectively plan, dispatch and monitor field workforce activities at a scale.

The implementation of WMS began in November 2024, and a structured multi-phase rollout is planned. The WMS is currently being designed and configured through collaboration between LUMA's IT and Operations departments. Once completed, a limited pilot is scheduled for May 2025 targeting selected regions and field crews. Full deployment for Phase 1 is targeted for August 2025. Thereafter, staged onboarding of additional operational areas in Phases 2 and 3 will occur no later than December 2025. The WMS is being supported by LUMA's IT Project Management Office (PMO) to help mitigate risk, support change management purposes and to aid in the adoption.

Rate Review

Pre-Application Questions from PREB Consultants

NEPR-AP-2023-0003

Response: ROI-LUMA-AP-2023-0003-20250324-PREB-054

SUBJECT

Irrigation Costs

REQUEST

Provide full details of how PREPA is complying with this Energy Bureau directive, from the June 26, 2024 Resolution and Order in Case No. NEPR-MI-2021-0004: "The costs associated with these [irrigation] services should be fully recovered through the rates charged for irrigation water and from the Commonwealth, not through electricity rates."

RESPONSE

Irrigation Costs are managed by the Puerto Rico Electric Power Authority (PREPA). On multiple occasions, LUMA has formally requested that PREPA provide the necessary information to respond to this request, with the intention of submitting PREPA's response as part of this filing. Despite repeated follow-ups, PREPA has not provided the requested information to date. LUMA has evidence of these repeated requests and can submit them to the Energy Bureau if ordered.

Given that the requested data falls squarely within PREPA's area of responsibility and control, LUMA respectfully recommends that the Energy Bureau's consultants direct this request to PREPA for a response. LUMA remains available to facilitate coordination, should the Bureau find it appropriate.

Rate Review

Pre-Application Questions from PREB Consultants NEPR-AP-2023-0003

Response: ROI-LUMA-AP-2023-0003-20250324-PREB-055

SUBJECT

Irrigation Costs

REQUEST

Provide details on how electric ratepayers currently subsidize irrigation costs and explain the government's payment of these costs.

RESPONSE

Irrigation Costs are managed by the Puerto Rico Electric Power Authority (PREPA). On multiple occasions, LUMA has formally requested that PREPA provide the necessary information to respond to this request, with the intention of submitting PREPA's response as part of this filing. Despite repeated follow-ups, PREPA has not provided the requested information to date. LUMA has evidence of these repeated requests and can submit them to the Energy Bureau if ordered.

Given that the requested data falls squarely within PREPA's area of responsibility and control, LUMA respectfully recommends that the Energy Bureau's consultants direct this request to PREPA for a response. LUMA remains available to facilitate coordination, should the Bureau find it appropriate.

Rate Review

Pre-Application Questions from PREB Consultants NEPR-AP-2023-0003

Response: ROI-LUMA-AP-2023-0003-20250324-PREB-056

SUBJECT

Irrigation Costs

REQUEST

If electric ratepayers continue to subsidize irrigation services, provide the date by which irrigation customers will pay fully for that service and the subsidy will end.

RESPONSE

Irrigation Costs are managed by the Puerto Rico Electric Power Authority (PREPA). On multiple occasions, LUMA has formally requested that PREPA provide the necessary information to respond to this request, with the intention of submitting PREPA's response as part of this filing. Despite repeated follow-ups, PREPA has not provided the requested information to date. LUMA has evidence of these repeated requests and can submit them to the Energy Bureau if ordered.

Given that the requested data falls squarely within PREPA's area of responsibility and control, LUMA respectfully recommends that the Energy Bureau's consultants direct this request to PREPA for a response. LUMA remains available to facilitate coordination, should the Bureau find it appropriate.

Rate Review

Pre-Application Questions from PREB Consultants NEPR-AP-2023-0003

Response: ROI-LUMA-AP-2023-0003-20250324-PREB-057

SUBJECT

Irrigation Costs

REQUEST

Provide the status of PREPA's commitment as PREPA set forth in the October 14, 2024 Motion in Case No. NEPR-MI-2021-0004 that it "will request the mandated reimbursement from the Puerto Rico department of Treasury (Hacienda) pursuant to Act 83 and Act 58 as a proposed measure to unwind the current SUB-NHH subsidy."

RESPONSE

Irrigation Costs are managed by the Puerto Rico Electric Power Authority (PREPA). On multiple occasions, LUMA has formally requested that PREPA provide the necessary information to respond to this request, with the intention of submitting PREPA's response as part of this filing. Despite repeated follow-ups, PREPA has not provided the requested information to date. LUMA has evidence of these repeated requests and can submit them to the Energy Bureau if ordered.

Given that the requested data falls squarely within PREPA's area of responsibility and control, LUMA respectfully recommends that the Energy Bureau's consultants direct this request to PREPA for a response. LUMA remains available to facilitate coordination, should the Bureau find it appropriate.

Rate Review

Pre-Application Questions from PREB Consultants NEPR-AP-2023-0003

Response: ROI-LUMA-AP-2023-0003-20250324-PREB-058

SUBJECT

Irrigation Costs

REQUEST

Explain PREPA's plan for cost recovery for irrigation services through appropriate rate structures for irrigation customers as PREPA set forth in the October 14, 2024 Motion in Case No. NEPR-MI-2021-0004. What is the status of that plan?

RESPONSE

Irrigation Costs are managed by the Puerto Rico Electric Power Authority (PREPA). On multiple occasions, LUMA has formally requested that PREPA provide the necessary information to respond to this request, with the intention of submitting PREPA's response as part of this filing. Despite repeated follow-ups, PREPA has not provided the requested information to date. LUMA has evidence of these repeated requests and can submit them to the Energy Bureau if ordered.

Given that the requested data falls squarely within PREPA's area of responsibility and control, LUMA respectfully recommends that the Energy Bureau's consultants direct this request to PREPA for a response. LUMA remains available to facilitate coordination, should the Bureau find it appropriate.

Rate Review

Pre-Application Questions from PREB Consultants NEPR-AP-2023-0003

Response: ROI-LUMA-AP-2023-0003-20250324-PREB-059

SUBJECT

Irrigation Costs

REQUEST

Provide the status of negotiations with irrigation customers to achieve full recovery for irrigation services.

RESPONSE

Irrigation Costs are managed by the Puerto Rico Electric Power Authority (PREPA). On multiple occasions, LUMA has formally requested that PREPA provide the necessary information to respond to this request, with the intention of submitting PREPA's response as part of this filing. Despite repeated follow-ups, PREPA has not provided the requested information to date. LUMA has evidence of these repeated requests and can submit them to the Energy Bureau if ordered.

Given that the requested data falls squarely within PREPA's area of responsibility and control, LUMA respectfully recommends that the Energy Bureau's consultants direct this request to PREPA for a response. LUMA remains available to facilitate coordination, should the Bureau find it appropriate.

Rate Review

Pre-Application Questions from PREB Consultants NEPR-AP-2023-0003

Response: ROI-LUMA-AP-2023-0003-20250324-PREB-060

SUBJECT

Irrigation Costs

REQUEST

To what extent has OIPC been involved in such negotiations? If it has not been involved, explain why not and the extent of communications between PREPA and OIPC in this matter?

RESPONSE

Irrigation Costs are managed by the Puerto Rico Power Electric Power Authority (PREPA). On multiple occasions, LUMA has formally requested that PREPA provide the necessary information to respond to this request, with the intention of submitting PREPA's response as part of this filing. Despite repeated follow-ups, PREPA has not provided the requested information to date. LUMA has evidence of these repeated requests and can submit them to the Energy Bureau if ordered.

Given that the requested data falls squarely within PREPA's area of responsibility and control, LUMA respectfully recommends that the Energy Bureau's consultants direct this request to PREPA for a response. LUMA remains available to facilitate coordination, should the Bureau find it appropriate.

Rate Review

Pre-Application Questions from PREB Consultants NEPR-AP-2023-0003

Response: ROI-LUMA-AP-2023-0003-20250324-PREB-061

SUBJECT

Irrigation Costs

REQUEST

Explain and quantify areas in which irrigation costs are interrelated with costs of electric service.

RESPONSE

Irrigation Costs are managed by the Puerto Rico Electric Power Authority (PREPA). On multiple occasions, LUMA has formally requested that PREPA provide the necessary information to respond to this request, with the intention of submitting PREPA's response as part of this filing. Despite repeated follow-ups, PREPA has not provided the requested information to date. LUMA has evidence of these repeated requests and can submit them to the Energy Bureau if ordered.

Given that the requested data falls squarely within PREPA's area of responsibility and control, LUMA respectfully recommends that the Energy Bureau's consultants direct this request to PREPA for a response. LUMA remains available to facilitate coordination, should the Bureau find it appropriate.

Rate Review

Pre-Application Questions from PREB Consultants

NEPR-AP-2023-0003

Response: ROI-LUMA-AP-2023-0003-20250324-PREB-062

SUBJECT

Emergency Response Plan

REQUEST

LUMA must separately identify and quantify all costs associated with preparation of the Emergency Response Plan, as well as the costs to be incurred for emergency preparedness and emergency response. Include, without limitation, costs associated with: procurement of restoration materials, training emergency personnel, preparing and running mock drills, meetings with stakeholders, buying poles and conductors, performing preemptive vegetation management, and buying augers and bucket trucks in preparation of hurricane season.

RESPONSE

The Emergency Preparedness Department budget of \$1,091 million⁴⁷ is solely dedicated to emergency preparedness, which includes training emergency personnel, preparing and running mock drills, and meetings with stakeholders (Puerto Rico Emergency Management Bureau (PREMB), ESF-12 partners, Interagency Coordinators, Federal Emergency Management Agency (FEMA), Department of Energy (DoE), among others). Other tasks are updating documents such as the Emergency Response Plan (ERP), the LUMA Emergency Operation Center (LEOC) Roster, Monthly Recall Roster, Standard Operating Guides, Alternate and Contingency communications testing (specifically mini-CRDs and satellite), developing and conducting functional training, developing LUMA-specific course material such as Emergency Response Tool (WebEOC), and, in the future, Crisis Track.

In addition to the Emergency Preparedness Department, various departments also include costs that may be used for emergency preparedness purposes including, but not limited to:

- **Procurement & Supply Chain:** specialists in this department procure restoration materials, poles, conductors, augers and bucket trucks for other departments (in preparation of hurricane season). Please see Direct Testimony of Juan Rogers, *Exhibit 15.00*; and,
- **Operations:** vegetation management is a dedicated function within Operations. Please see Direct Testimony of Kevin Burgermeister, *Exhibit 6.00*.

⁴⁷ Broken out, this includes labor costs of \$0.818 million and non-labor costs of \$0.272 million.

Rate Review

Pre-Application Questions from PREB Consultants NEPR-AP-2023-0003

Response: ROI-LUMA-AP-2023-0003-20250324-PREB-063

SUBJECT

Cost of aligning cost accounts to track Schedules A-1 and A-2

REQUEST

Explain which modifications to existing financial recordkeeping LUMA must make to track costs consistently with Schedules A-1 and A-2 from the February 12 Order. How can LUMA minimize the cost of these modifications?

RESPONSE

For information on LUMA's approach to the *Schedules A* please refer to Andrew Smith's testimony, *Exhibit 2.00*.

Rate Review

Pre-Application Questions from PREB Consultants

NEPR-AP-2023-0003

Response: ROI-LUMA-AP-2023-0003-20250324-PREB-064

SUBJECT

Efficiencies

REQUEST

PREPA, LUMA, and Genera seem to be monitoring and publishing the same power supply information. <https://aeepr.com/#/operacion>; <https://lumapr.com/resumen-del-sistema/>; <https://genera-pr.com/data-generacion>. Explain why this is necessary, how it contributes to the safe and reliable delivery of electricity, and what can be done to consolidate efforts and reduce expenses.

RESPONSE

As System Operator under the *Puerto Rico Transmission and Distribution System Operation and Maintenance Agreement* (T&D OMA), LUMA is responsible for the dispatch of the generation fleet. LUMA publishes power supply information for transparency and for the benefit of interested customers and stakeholders. To the extent that the Puerto Rico Electric Power Authority (PREPA) and Genera find cost savings from linking to LUMA's website, instead of publishing the same power supply information, they may choose to do so. LUMA's website is the only source of accurate real-time system status data, including outages.

Rate Review

Pre-Application Questions from PREB Consultants NEPR-AP-2023-0003

Response: ROI-LUMA-AP-2023-0003-20250324-PREB-065

SUBJECT

Efficiencies

REQUEST

During FY25 LUMA has incurred media expenses that has included full-page printed material in local newspapers (e.g., El Nuevo Día, El Vocero) and radio informercial time in NotiUno (WUNO, 1/23/25) and SALSOU (WPRM, 1/30/25). Describe all media expenses incurred and to be incurred in FY25 and identify the source of funds in the FY25 approved budgets used to cover these costs. The advertisement of 12/17/24 in El Nuevo Día appeared to be a LUMA progress report intended to enhance LUMA's image. Describe how these media efforts contribute to the safe and reliable delivery of electricity.

RESPONSE

The media expenses mentioned, along with similar expenditures, are managed by ManagementCo, not ServCo. Consequently, they are not recovered as transmission and distribution (T&D) Pass-Through Expenditures and are not included in the FY2025 or any proposed fiscal year's budget.

Rate Review

Pre-Application Questions from PREB Consultants

NEPR-AP-2023-0003

Response: ROI-LUMA-AP-2023-0003-20250324-PREB-066

SUBJECT

Contracted Labor

REQUEST

Describe how eliminating mandatory Project Labor Agreements (PLAs) for contractors and subcontractors on government construction projects (as per Executive Order No. OE-2025-015) impacts costs.

RESPONSE

As of the time of this filing, LUMA is not eliminating the Project Labor Agreement (PLA) on construction projects. The LUMA/IBEW PLA predates EO-2025-015⁴⁸, and EO-2022-014⁴⁹ which it amends. Thus, EO2025-015 did not and does not affect the validity of the LUMA PLA. More information is provided below.

On March 18, 2021, LUMA entered into the aforementioned PLA with the Union, which applies to several ongoing construction contracts held by LUMA. A total of twelve (12) active contractors are subject to the terms of the PLA, who administer projects with a total value of \$676,244,700. Each of these contracts is in excess of \$5,000,000 and represent a mix of both federally- and locally-funded projects. Of the total amount contracted, \$610,244,700 is assigned to contracts with nine local Puerto Rico contractors and \$66,000,000 is assigned to three off-island Contractors. Hence, the share held by Puerto Rican contractors represents 90% of the total funds currently assigned to the construction projects which are subject to the LUMA PLA. Therefore, the existence of the LUMA PLA has neither hindered nor excluded the participation of, nor the awarding to, local contractors.

On February 20, 2022, almost a year after the LUMA PLA came into effect, the then Governor of Puerto Rico, Hon. Pedro R. Pierluisi, issued Executive Order 2022-014. It introduced a Pilot Program for the Incorporation of Project Labor Agreements in construction projects exceeding \$5 million that are funded wholly or partially with federal funds designated for reconstruction and recovery. Specifically, from the Federal Emergency Management Agency (FEMA) Public Assistance program under Section 406 of the Robert T. Stafford Disaster Relief and Emergency Assistance Act of 1988.

⁴⁸ Executive Order of the Government of Puerto Rico of March 19, 2025, No. EO-2025-015.

⁴⁹ Executive Order of the Government of Puerto Rico of February 20, 2022, No. EO-2022-014.

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Governor Hon. Jenniffer González Colón's EO2025-015 repealed the last paragraph of section 2 and sections 4 to 8 of the EO2022-014, thereby prospectively revoking the requirement for contractors and subcontractors to adopt the Model PLA for government construction projects established in EO2022-014. However, EO2025-015 had no effect on the LUMA PLA as it does not follow the Model PLA created under EO2022-014 nor the projects covered under said Order. The LUMA PLA is a contract between LUMA and the Union that was not impaired or affected in any way through EO2025-15.

For absolute clarity, the LUMA PLA predates EO2022-014, thus its validity and effect are not contingent on the validity of said EO2022-014. The procurement processes followed for LUMA contracts and the resulting participation by local contractors do not conform to the assumptions contained in EO2025-015. Therefore, the LUMA PLA remains valid for all construction projects under its defined scope, regardless of changes in government policy.

Rate Review

Pre-Application Questions from PREB Consultants NEPR-AP-2023-0003

Response: ROI-LUMA-AP-2023-0003-20250324-PREB-067

SUBJECT

Contracted Labor

REQUEST

Describe the cost impact of FEMA's disallowance of ineligible or unreasonable costs for seconded employees, as outlined in FEMA's Procurement Non-compliance and Remedy Action Notification PACU ID: 34365.

RESPONSE

As of February 25, 2025, LUMA has appealed Federal Emergency Management Agency (FEMA's) determination and filed that appeal with Central Office for Recovery, Reconstruction and Resiliency (COR3). As such, FEMA's determination is not final and remains subject to further review.

Please see *ROI-LUMA-AP-2023-0003-20250324-PREB-067_Attachment 1* for LUMA's appeal.

Rate Review

Pre-Application Questions from PREB Consultants NEPR-AP-2023-0003

Response: ROI-LUMA-AP-2023-0003-20250324-PREB-068

SUBJECT

Title III Debt

REQUEST

Explain how debt service obligations affect LUMA's capital planning process, with specific attention to balancing debt repayment with necessary infrastructure investments and operational expenditures.

RESPONSE

For information on the effect debt service obligations have on LUMA's capital planning process, please refer to Andrew Smith's testimony, *Exhibit 2.00*.

Rate Review

Pre-Application Questions from PREB Consultants NEPR-AP-2023-0003

Response: ROI-LUMA-AP-2023-0003-20250324-PREB-069

SUBJECT

Miscellaneous

REQUEST

Provide a listing of LUMA's work force by full time equivalent (FTE) positions and job titles as of (1) 7/1/2024, (2) 12/31/2024, (3) the most current month-end actual available and (4) as projected for FY 2026 (7/1/2025 through 6/30/2026). Also, for each period show the related labor costs for LUMA's work force.

RESPONSE

LUMA reports on Labor Costs and FTE on a quarterly basis therefore the most current month-end available provided in the attachments will be March 2025.

Please refer to *ROI-LUMA-AP-2023-0003-20250324-PREB-069_Attachment 1* for LUMA's work force as of (1) 7/1/2024, (2) 12/31/2024, (3) the most current month-end actual available. (4) Please refer to department testimonies for projected headcount and costs for FY2026.

Please refer to *ROI-LUMA-AP-2023-0003-20250324-PREB-069_Attachment 2* for the related labor costs for LUMA's work force as of (1) 6/30/2024, (2) 12/31/2024, (3) the most current month-end actual available. LUMA notes it included 6/30/2024 as it would not have recorded any costs on 7/1/2024.

Rate Review

Pre-Application Questions from PREB Consultants NEPR-AP-2023-0003

Response: ROI-LUMA-AP-2023-0003-20250324-PREB-070

SUBJECT

Miscellaneous

REQUEST

Provide a listing of outside services employed by LUMA for (1) the 12 months ending 7/1/2024, (2) the 12 months ending 12/31/2024, and (3) as projected for 7/1/2025 through 6/30/2026. For each outside services for each period, list (a) the firm name, (b) the type of services provided, (c) the total cost, and (d) the cost by FERC account.

RESPONSE

LUMA has made best efforts to respond to this inquiry with the information available in its systems.

- Please see ROI-LUMA-AP-2023-0003-20250324-PREB-070_Attachment 1 for a listing of outside services employed from 7/1/2023 to 7/1/2024 and 1/1/24-12/31/24.
- Please see the testimony of LUMA witnesses for projections for outside services for FY2026.

Notes:

Type of service is not a field that is currently tracked in LUMA's systems. Outside services are generally coded to the *Technical and Professional Services* and *Vegetation Management* KOEs in LUMA's accounting structure.

As previously stated, the utility as a whole is not yet compliant with Federal Energy Regulatory Commission (FERC) Uniform System of Accounts (UsoA).

Rate Review

Pre-Application Questions from PREB Consultants

NEPR-AP-2023-0003

Response: ROI-LUMA-AP-2023-0003-20250324-PREB-071

SUBJECT

Miscellaneous

REQUEST

Provide a listing of internal audits of LUMA for FY 2023, FY 2024 and to-date in FY 2005. The listing should identify each internal audit by name/subject matter, and the date of the internal audit report, and a summary of the findings and recommendations.

RESPONSE

Please refer to Andrew Smith's testimony, *Exhibit 2.00*, question 98.

Rate Review

Pre-Application Questions from PREB Consultants

NEPR-AP-2023-0003

Response: ROI-LUMA-AP-2023-0003-20250324-PREB-072

SUBJECT

Miscellaneous

REQUEST

As of the most current month-end available, provide: (1) the balance of Accounts Receivable, (2) the Allowance for Doubtful Accounts, and (3) an aging of Accounts Receivable showing the amounts by each customer class in total and outstanding for (a) 0-30 days, (b) 30-60 days, (c) 60-90 days, (d) 90-120 days, (e) 120 days to 365 days and (f) beyond 365 days. (4) Also, describe in detail the efforts LUMA has employed to collect Accounts Receivable in each customer class for amounts that have been outstanding for 120 days or more. (5) Additionally, identify and provide all analysis prepared by or for LUMA concerning whether any of the Accounts Receivable amounts outstanding for 365 days or longer are believed to be collectible.

RESPONSE

- 1) Please refer to *ROI-LUMA-AP-2023-0003-20250324-PREB-072_Attachment 1*.
- 2) Please refer to *ROI-LUMA-AP-2023-0003-20250324-PREB-072_Attachment 2*.
- 3) Please refer to *ROI-LUMA-AP-2023-0003-20250324-PREB-072_Attachment 1*.
- 4) In an effort to collect Accounts Receivable, LUMA established a dedicated team solely focused on the collection of overdue debt. This is a team that LUMA implemented at commencement to ensure there is a dedicated focus on this task to prevent past-due accounts from continuing to build up arrears.

LUMA has established a standardized 30/60/90-day collection process that includes customer outreach through phone, email and letters to establish payment plans to enable customers to pay their past due balance. LUMA is also implementing automated processes through the Customer Care and Billing System (CC&B) system to automatically flag accounts that require a collection activity on daily billing cycles. Standardizing processes and automation will drive consistent, efficient and effective collection activities across customer classes.

At 90 days past due, customers will receive a 30-day disconnection notice. If a customer fails to pay the past-due amount in full, or does not make a payment arrangement prior to the elapse of 30 days post receipt of the disconnection notice, then will LUMA disconnect their service. Further, LUMA will close the account and move the monies to a "write off service agreement" if payment is

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not received for reconnection prior to 194 days past due. At this point, amounts owed by that account would be considered *bad debt*. LUMA understands that it cannot legally write off any amount owing until a period of four (4) years has elapsed.

- 5) LUMA has stated that the amount of AR is overstated in the CC&B system. PREPA never standardized dunning or disconnection processes; therefore, bad debt was never contemplated. Thus, the utility has not written off the several years of uncollectable accounts that need to be written off. LUMA has also found a number of the sites that are disconnected are actually vacant. Lastly, total customer account numbers do not significantly decrease pre- versus post-Hurricane Maria, even though it is widely known that a significant number of the population departed in the aftermath of Hurricane Maria. This clearly implies an inaccurately high number of customer accounts.

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Pre-Application Questions from PREB Consultants NEPR-AP-2023-0003

Response: ROI-LUMA-AP-2023-0003-20250324-PREB-073

SUBJECT

Miscellaneous

REQUEST

Provide a monthly listing of each type of Other Revenue recorded for the Puerto Rico electric system, showing the amounts and descriptions for (1) the 12 months ending 7/1/2024, (2) the 12 months ending 12/31/2024, and (3) as projected for 7/1/2025 through 6/30/2026.

RESPONSE

Please refer to *ROI-LUMA-AP-2023-0003-20250324-PREB-073_Attachment 1*.

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Pre-Application Questions from PREB Consultants NEPR-AP-2023-0003

Response: ROI-LUMA-AP-2023-0003-20250324-PREB-074

SUBJECT

Miscellaneous

REQUEST

Provide a listing of all amounts received from FEMA during each period: (1) the 12 months ending 7/1/2024, (2) the 12 months ending 12/31/2024, and (3) as projected for 7/1/2025 through 6/30/2026. The listing should show the dollar amounts received from FEMA, the dates received, and a short description of what the amounts are for and how they were applied for and accounted for.

RESPONSE

Please refer to *ROI-LUMA-AP-2023-0003-20250324-PREB-074_Attachment 1*.

Rate Review

Pre-Application Questions from PREB Consultants NEPR-AP-2023-0003

Response: ROI-LUMA-AP-2023-0003-20250324-PREB-075

SUBJECT

Miscellaneous

REQUEST

Provide a listing as of the most recent month-end available, of amounts requested from FEMA that are pending review for reimbursement. Include the related documentation that was submitted for each request of over \$10 million.

RESPONSE

Please refer to ROI-LUMA-AP-2023-0003-20250324-PREB-075_Attachment 1, and the documents bates-stamped LUMA RFI 75 000001 - LUMA RFI 75 046862. A memorandum of law in support of confidentiality is submitted for those documents that are entirely or partially privileged or confidential under federal and Puerto Rico laws.

Rate Review

Pre-Application Questions from PREB Consultants NEPR-AP-2023-0003

Response: ROI-LUMA-AP-2023-0003-20250324-PREB-076

SUBJECT

Miscellaneous

REQUEST

During the most recent 12 month period were any amounts requested for FEMA reimbursement rejected or reduced? If so, identify the rejected amounts and explain the reasons for the rejection. Include the related documentation concerning the reasons for rejection of the reimbursement requests and for reductions to the amounts of reimbursement requested.

RESPONSE

Please refer to *ROI-LUMA-AP-2023-0003-20250324-PREB-076_Attachment 1*. In response to the documentation concerning the reasons for the rejection of reimbursement requests and reductions in the requested reimbursement amounts, LUMA does not receive formal documents. The explanations provided in the comments (column J) originate from the Disaster Recovery Solution, which is the Central Office for Recovery, Reconstruction and Resiliency's (COR3's) platform where all information related to Federal Emergency Management Agency (FEMA) approved projects is uploaded.

Rate Review

Pre-Application Questions from PREB Consultants NEPR-AP-2023-0003

Response: ROI-LUMA-AP-2023-0003-20250324-PREB-077

SUBJECT

Cost of Service Study

REQUEST

Describe all methods employed in the current Cost-of-Service Study (COSS) including, functionalization method, classification method, and allocation method.

RESPONSE

Please refer to the testimony of Sam Shannon, *Exhibit 20.00, Section II. Electric Cost of Service*.

Rate Review

Pre-Application Questions from PREB Consultants NEPR-AP-2023-0003

Response: ROI-LUMA-AP-2023-0003-20250324-PREB-078

SUBJECT

Cost of Service Study

REQUEST

Provide the complete COSS model in Excel spreadsheet form with all formulas intact. Spreadsheet(s) should include all functionalization, classification, and allocation calculations.

RESPONSE

Please refer to *Schedule K. Cost Allocation and Cost of Service Study*.

Rate Review

Pre-Application Questions from PREB Consultants NEPR-AP-2023-0003

Response: ROI-LUMA-AP-2023-0003-20250324-PREB-079

SUBJECT

Cost of Service Study

REQUEST

Describe all data sources used in the COSS and explain any changes in data sources from the COSS completed for CEPR-AP-2015-0001.

RESPONSE

Please refer to the testimony of Sam Shannon, *Exhibit 20.00, Section II. Electric Cost of Service*. LUMA notes it did not and does not intend to review or identify or explain any differences from the cost-of-service study (COSS) completed in CEPR-AP-2015-0001⁵⁰. Per the technical conferences and after discussion with the Energy Bureau's consultants on the rate design filing requirements, there is no relevant comparison between the COSS filed in this case and the one used by the Puerto Rico Electric Power Authority (PREPA) in 2017.

⁵⁰ *In Re: Revisión de Tarifas de La Autoridad de Energía Eléctrica de Puerto Rico*, Docket No. CEPR-AP-2015-0001.

Rate Review

Pre-Application Questions from PREB Consultants

NEPR-AP-2023-0003

Response: ROI-LUMA-AP-2023-0003-20250324-PREB-080

SUBJECT

Cost of Service Study

REQUEST

Describe all methods used for estimating or calculating data that are not directly available. Explain any changes in methodology from the COSS completed for CEPR- AP-2015-0001.

RESPONSE

Please refer to the testimony of Sam Shannon, *Exhibit 20.00, Section II. Electric Cost of Service*, for methods used for estimating or calculating data that are not directly available. LUMA notes it did not and does not intend to identify or explain any changes in methodology from the cost-of-service study (COSS) completed for CEPR-AP-2015-0001⁵¹. Per the technical conferences and after discussion with the Energy Bureau's consultants on the rate design filing requirements, there is no relevant comparison between the COSS filed in this case and the one used by the Puerto Rico Electric Power Authority (PREPA) in 2017.

⁵¹ *In Re: Revisión de Tarifas de La Autoridad de Energía Eléctrica de Puerto Rico*, Docket No. CEPR-AP-2015-0001.

Rate Review

Pre-Application Questions from PREB Consultants

NEPR-AP-2023-0003

Response: ROI-LUMA-AP-2023-0003-20250324-PREB-081

SUBJECT

Cost of Service Study

REQUEST

In CEPR-AP-2015-0001, the Final Resolution and Order issued January 10, 2017 (PDF page 121, paragraph 320-324) summarizes several problems that the Commission identified in PREPA's COSS. (a) Identify all problems that have been addressed and explain how they have been addressed. (b) Identify all problems that have not been addressed and explain why they were not addressed.

RESPONSE

(a-b) In its Phase I Report that has been filed on the record of this rate review, LUMA identified and discussed the problems with the Puerto Rico Electric Power Authority (PREPA's) cost of service study (COSS), particularly load data and functionalization and classification determinations.⁵² With respect to load data, LUMA indicated at the time of the Phase I Report, that it was collecting load data to develop demand allocators in line with industry standard methodologies. LUMA is pleased to inform the Energy Bureau that it has now collected sufficient data to be able to measure and allocate transmission demand costs based on coincident peak and distribution demand costs using non-coincident peak.

With respect to cost functionalization and classification, LUMA indicated at the time of the Phase I Report that it does not have meaningful historical balance sheet information to allow full and proper functionalization of costs. As the Energy Bureau is aware, PREPA's balance sheet remediation work remains ongoing.⁵³ However, LUMA informed the Energy Bureau in its first round of information responses that functionalization and classification can be done to the level available in the annual budget process.⁵⁴ That is, operations and maintenance expenses and non-federal capital will be functionalized to generation, transmission and distribution, billing and administrative and general, but not necessarily down to the industry-standard Federal Energy

⁵² Page 7-11 of Exhibit 3, Section 2.0 Progress Since the 2017 Rate Order, LUMA's Responses to First Requirement of Information, Docket No. NEPR-AP-2023-0003, available at <https://energia.pr.gov/wp-content/uploads/sites/7/2023/11/20231103-Motion-Submitting-Responses-to-First-Requirement-of-Information-in-Compliance-with-October-24th-Resolution-and-Order-1.pdf>.

⁵³ RFI-LUMA-AP-2023-0003-2024122-PREB#5 of LUMA's Responses to December 20, 2024, Requests, Docket No. NEPR-AP-2023-0003.

⁵⁴ RFI-LUMA-AP-2023-0003-20231024-PREB-LUMA-01-01(b) of LUMA'S Responses to October 24, 2023, Requests, Docket No. NEPR-AP-2023-0003.

Rate Review

Regulatory Commission (FERC) Uniform System of Accounts (UsoA) level.⁵⁵ In LUMA's respectful submission, this approach remains appropriate.

⁵⁵ Where a full COSS follows the guidance in the 1992 NARUC Cost Allocation Manual.

Rate Review

Pre-Application Questions from PREB Consultants NEPR-AP-2023-0003

Response: ROI-LUMA-AP-2023-0003-20250324-PREB-082

SUBJECT

Cost of Service Study

REQUEST

Provide a comparison of the final cost allocation factors by rate class to the cost allocation factors from the COSS completed for CEPR-AP-2015-0001. Explain key drivers behind all differences in cost allocation factors for each rate class.

RESPONSE

Please refer to the testimony of Sam Shannon, *Exhibit 20.00, Section II. Electric Cost of Service*, and *Schedule K. Cost Allocation and Cost of Service Study*, for the cost allocation factors for each rate class and the key drivers behind them. LUMA notes it did not and does not provide a comparison to the cost of service study (COSS) completed for CEPR-AP-2015-0001⁵⁶. Per the technical conferences and after discussion with the Energy Bureau's consultants on the rate design filing requirements, there is no relevant comparison between the COSS filed in this case and the one used by the Puerto Rico Electric Power Authority (PREPA) in 2017.

⁵⁶ In Re: Revisión de Tarifas de La Autoridad de Energía Eléctrica de Puerto Rico, Docket No. CEPR-AP-2015-0001.