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

IN RE: REVIEW OF THE PUERTO RICO ELECTRIC POWER AUTHORITY INTEGRATED RESOURCE PLAN	**CASE NO.:** NEPR-AP-2023-0004 **SUBJECT:** Resolution and Order on the Completeness of LUMA's 2025 Integrated Resource Plan Filing and Request for Confidential Treatment of Portions of the Integrated Resource Plan.

RESOLUTION AND ORDER

I. Summary

The Energy Bureau of the Puerto Rico Public Service Regulatory Board ("Energy Bureau") has completed an initial review of the Integrated Resource Plan ("IRP") filed by LUMA Energy LLC and LUMA Energy ServCo, LLC (jointly referred to as "LUMA").[1] The purpose of this review was to determine whether LUMA's 2025 filing was complete for the purpose of meeting Regulation 9021 requirements.

The Energy Bureau finds that some additional material from LUMA is needed to further explain certain technical aspects of LUMA's multi-part IRP filing. While a compliance filing to provide such further information is necessary, the bulk of Regulation 9021[2] -required substantive materials have been submitted by LUMA in its October 2025, November 2025 and December 2025 IRP filings and in LUMA's two-part responses to the Energy Bureau Requirements of Information ("ROIs") issued on December 3, 2025.

The Energy Bureau thus deems LUMA's 2025 IRP filing complete for the purpose of meeting Regulation 9021 requirements. The Energy Bureau will proceed with the adjudicative phase of the 2025 IRP and develop a procedural calendar for the IRP review process to be issued before the end of February 2026.

The remaining compliance items are necessary to provide the Energy Bureau with a more fulsome record from which to continue review of the 2025 IRP and LUMA's proposed Preferred Resource Plan ("PRP"). Those compliance items are briefly described in the body of this Resolution and Order ("R&O"), and a listing of the specific required items to be submitted by LUMA **within fifteen (15) business days of the noticing of this R&O are included in a table in Appendix A to this R&O**.

The Energy Bureau **EMPHASIZES** that this finding of filing completeness is in no way a finding related to the substance of the LUMA 2025 IRP or its proposed Preferred Resource Plan.

II. Introduction

On October 17, 2025, LUMA filed before the Energy Bureau its proposed Integrated Resource Plan, as part of a filing titled *Motion Submitting 2025 IRP and Request for Confidential Treatment* ("October 17 Motion").[3] LUMA's 2025 IRP Filing on October 17, 2025 included:

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[1] On October 17, 2025, LUMA filed before the Energy Bureau its proposed Integrated Resource Plan, as part of a filing titled *Motion Submitting 2025 IRP and Request for Confidential Treatment* ("October 17 Motion").

[2] *Regulation on Integrated Resource Plan for the Puerto Rico Electric Power Authority*, Regulation No. 9021, April 14, 2018 ("Regulation 9021").

[3] *See Motion Submitting 2025 IRP and Request for Confidential Treatment* ("IRP Filing"), October 17, 2025, Case No. NEPR-AP-2023-0004

- The October 17 Motion submitting the 2025 Integrated Resource Plan ("2025 IRP") and a Request for Confidential Treatment
- Exhibit 1 – the main body of the 2025 IRP and technical appendices
- Exhibit 2 – workpapers and model documentation
- Exhibit 3 – testimonies of seven (7) expert witnesses supporting the relevant portions, chapters, appendices and workpapers of the 2025 IRP.

In its 2025 IRP Filing, LUMA requests that the Energy Bureau accept LUMA's 2025 IRP, approve the request for confidential treatment and recommends approval of its Hybrid Resource Plan A.[4] LUMA also includes recommended actions for the six years 2025 through 2030 as part of its Action Plan, which "are not dependent on the approval of the 2025 IRP" since those actions are associated with the "ongoing progression of the fixed decision projects".[5]

On November 21, 2025, LUMA filed a *Motion Submitting Transmission Needs Studies Report, Request for Confidential Treatment, and Memorandum in Support of Confidentiality* ("November 21 Motion"). The filing included the November 21 Motion and three (3) exhibits. LUMA states that Exhibit 1, the *Transmission Needs Studies Report*, is an addendum to the 2025 IRP. The filing also includes as Exhibit 2 the workpapers, and as Exhibit 3 the expert testimonies of Dr. Ajit Kulkarni and Dr. Daniel Haughton.

On December 19, 2025 LUMA filed its *Motion Submitting Supplemental Scenarios, Request for Confidential Treatment, and Memorandum in Support of Confidentiality* ("December 19 Motion"). The December 19 Motion filing included the following:

- The December 19 Motion submitting Supplemental Scenarios to the IRP and a request for confidential treatment
- Exhibit 1 – Appendix 7 Results of modeling five (5) Supplemental Scenarios (Scenarios 13-17)
- Exhibit 2 – workpapers and models for Supplemental Scenarios
- Exhibit 3 – revised pre-filed direct testimony of Dr. Ajit Kulkarni inclusive of the Supplemental Scenarios

On December 3, 2025, the Energy Bureau issued a Resolution and Order requesting further information from LUMA as responses to ROIs for the purpose of assessing completeness associated with elements of the October 17 Motion. On December 22, 2025, LUMA responded in part to those requests, and on January 15, 2026, LUMA provided the remainder of the required responses. LUMA also included a request for confidential treatment of the entirety of each of four Excel files submitted as part of the response to the ROIs on January 15, 2026.

In conjunction with the filing of its proposed 2025 IRP, LUMA's October 17 Motion, its November 21 Motion and its December 19 Motion included a request for confidential treatment of a portion of the 2025 IRP Filing. LUMA's October 17 Motion was followed by an October 29, 2025 *Memorandum of Law in Support of Request of Confidential Treatment of Revised 2025 IRP and Submission of Public Version and Confidential Version of Revised 2025 IRP* ("October 29 Memorandum of Law").

The October 29 Memorandum of Law, the November 21 Motion and the December 19 Motion each contain tables with detailed information on areas of the 2025 IRP filing for which LUMA requests confidential treatment. The confidentiality requests are premised on LUMA's assertions that the information is protected as Critical Energy Infrastructure Information ("CEII") or as third-party proprietary information. The Energy Bureau will address in detail confidential treatment of filed IRP materials in a subsequent Resolution and Order.

[4] *See* October 17 Motion, pages 12-14. Note that Section 1.08 (B)(1) of Regulation 9021 defines the Action Plan as the actions LUMA will perform during the first five years of the planning period to implement the Preferred Resource Plan.

[5] IRP, Section 10.0 Action Plan, page 292.

Pursuant to Section 3.02(A) of Regulation 9021, LUMA's filing of its 2025 IRP and the provision of response to ROIs concerning filing completeness moves the proceeding into Phase 2 of the IRP process.[6] Upon receiving the 2025 IRP Filing, the Energy Bureau reviewed LUMA's 2025 IRP Filing to determine whether it complies with the requirements of Regulation 9021.

III. Procedural Background

In November of 2021, LUMA submitted Informative Motions to the Energy Bureau concerning the status of IRP activities for the next IRP (subsequent to the completed 2020 IRP process); and following additional Energy Bureau Resolutions and LUMA Motions, an initial technical conference on the 2025 IRP was held on January 25, 2022, more than four years ago.

The Energy Bureau issued a Resolution and Order on April 22, 2022, approving LUMA's requests to streamline the contracting process for a Technical Consultant to LUMA for the IRP.

On October 14, 2022, the Energy Bureau issued a Resolution and Order conditionally approving LUMA's choice of a Technical Consultant. The R&O also ordered LUMA and its Technical Consultant to make all input assumptions and results outputs available to stakeholders in industry standard electronic format (Excel files) to facilitate stakeholder review and quantitative analysis, especially for those without access to PLEXOS software.

On July 12, 2023, the Energy Bureau issued a Resolution and Order initiating the administrative proceeding for IRP review for this Case No. NEPR-MI-2023-0004. The Energy Bureau took notice of the information filed by LUMA in March of 2023 concerning initial technical consultant contract delays. The Energy Bureau issued an agenda for a technical conference held on August 8, 2023. The agenda included discussion for whether an expected IRP filing date of March 2024 was to be retained.

On September 7, 2023, the Energy Bureau approved the revised technical contract between LUMA and Black and Veatch ("B&V"), its technical contractor. In the same R&O, the Energy Bureau scheduled a technical conference for October 31, 2023, and noted its anticipation of an IRP filing from LUMA on March 1, 2024.

On November 14, 2023, LUMA filed a request to extend the IRP deadline from March 1, 2024 to June 28, 2024.

On December 20, 2023, the Energy Bureau issued a Resolution and Order approving LUMA's request to file the IRP on June 28, 2024.

On February 29, 2024, LUMA filed for certain transmission and distribution system information requirement waivers. *Motion for Partial Waiver of Requirements of Regulation No. 9021.*

On March 11, 2024, LUMA filed a *Motion Submitting Revised 2024 Integrated Resource Plan Scenarios and Characteristics (*"March 11 Motion"), following several virtual workshops with the Energy Bureau technical consultant concerning the scope of scenarios under consideration for resource modeling for the IRP.

On March 13, 2024, the Energy Bureau issued a Resolution and Order accepting LUMA's revised set of core and supplemental resource analysis scenarios to be modeled as part of its IRP.

[6] Section 3.02, Filing of the IRP, in *Regulation on Integrated Resource Plan for the Puerto Rico Electric Power Authority*, Regulation No. 9021, April 14, 2018.

On April 15, 2024, the Energy Bureau granted LUMA certain waivers from Regulation 9021 concerning distribution system voltage variations from ANSI standards. In the same Resolution and Order, the Energy Bureau denied LUMA requests for waivers from Regulation 9021 sections concerning the transmission and distribution system planning narratives.

On June 18, 2024, the Energy Bureau granted LUMA's request to suspend the June 28, 2024 IRP filing date due to technical modeling issues LUMA described in a June 7, 2024 filing to the Energy Bureau.

On June 28, 2024, LUMA requested an extension of the IRP filing date to May 2025.

On August 20, 2024, the Energy Bureau denied LUMA's request to wait until May 2025 to file the IRP and ordered LUMA to file the first part of the IRP with resource modeling information in November 2024, and the second part with transmission and distribution materials in May of 2025.

On October 29, 2024 the Energy Bureau issued an R&O outlining revised filing dates requested by LUMA. LUMA was ordered to file initial partial scenario modeling results in November 2024, additional scenario modeling results in February of 2025 and full IRP materials including transmission information in May of 2025.

In March 19, 2025, Puerto Rico passed a new law concerning the relaxation of the renewable portfolio standard (RPS) interim targets, and an extension of the required retirement date for the AES coal plant.[7] The changes in law affected the IRP modeling processes and led to an extension of the filing date for the IRP.

On May 13, 2025, the Energy Bureau issued an R&O establishing October 17, 2025 as the date for LUMA to submit the 2025 IRP. Specifically, LUMA was to file information responding to the primary sections of Regulation 9021 that require resource plan development, selection of a Preferred Resource Plan, and reporting on existing and planned transmission and distribution system elements. The Energy Bureau also required LUMA to file transmission system analysis in respect of the Preferred Resource Plan by November 21, 2025. LUMA was also directed to file Supplemental Scenario results by roughly mid-December 2025.

On October 17, 2025 LUMA submitted its 2025 IRP filing including resource portfolio results for twelve (12) core scenarios, selection of a Preferred Resource Plan, and an IRP structure and multiple appendices in support of Regulation 9021 filing requirements.

On October 29, 2025 LUMA filed its Memorandum of Law in support of its request for confidential treatment of certain aspects of the IRP, including a detailed listing of the elements of the IRP for which it requests such confidential treatment.

On November 21, 2025 LUMA submitted its transmission analysis for purposes of assessing the impact of the Preferred Resource Plan on the transmission and distribution system.

On December 3, 2025 the Energy Bureau issued its first set of post-filing ROIs whose responses from LUMA were required for filing completeness.

On December 19, 2025, LUMA submitted the results of its Supplemental Scenarios.

On December 22, 2025, LUMA submitted responses to most of the questions from the first post-filing ROIs.

On January 15, 2026, LUMA submitted responses to the remaining questions from the first post-filing set of ROIs.

[7] Act 1-2025, which amended the Puerto Rico Energy Public Policy Act ("Act 17-2019").

IV. Determination on Confidentiality

LUMA argues that the information contained in part of the body of the 2025 IRP and in some appendices and workpapers should be kept confidential.[8] This includes information which is deemed Critical Energy Infrastructure Information ("CEII"), which is protected under Federal and Puerto Rico Law. LUMA also argues that some information for which confidential treatment is requested contains third-party proprietary information.

The Energy Bureau will continue review of LUMA's requests for confidential treatment of some material included as part of the 2025 IRP filing and will issue a separate Resolution and Order on the merits of the requests.

LUMA's request for confidential treatment for certain workpapers and underlying Excel file information associated with the resource planning analysis is overly broad. The Energy Bureau made clear that modeling results and input assumptions in machine readable format would be available to stakeholders when it approved LUMA's selection of a technical contractor for the (then 2024) IRP, who would be using the PLEXOS model.[9]

V. Determination on Completeness

Pursuant to Section 3.02 of Regulation 9021, the Energy Bureau is required to review the proposed IRP within thirty days from the date on which LUMA makes its IRP filing "to determine whether it complies in full with the requirements of this Regulation."[10] LUMA has filed required information in three main phases,[11] plus its responses to Energy Bureau ROIs[12] issued on December 3, 2025 are required to address completeness elements.

If the Energy Bureau determines that the proposed 2025 IRP filing complies with the requirements of Regulation 9021, it is required to issue a resolution stating that the IRP is complete and that the adjudicative process may begin.[13] If the Energy Bureau finds that the IRP is not complete, the Energy Bureau "will identify the specific areas in which PREPA's [LUMA] filing is deficient and the information required to correct such deficiency." The Energy Bureau "shall grant a reasonable term for PREPA [LUMA] to refile its proposed IRP."[14]

The Energy Bureau has finished its review for completeness and has determined that LUMA's 2025 IRP filling is in sufficient compliance with the intent of Regulation 9021 and prior Energy Bureau orders; however, there are numerous areas where further material is required to ensure a comprehensive record on which subsequent and continuing analysis of LUMA's 2025 IRP by the Energy Bureau and stakeholders can proceed in accordance with Regulation 9021.

This Resolution and Order sets out the further filing requirements of LUMA necessary to form a full record. Appendix A contains a detailed listing of each item for which LUMA must file further information to comply with this Resolution and Order. LUMA is **ORDERED** to file this information within fifteen (15) business days following the notification of this Resolution and Order.

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[8] LUMA October 29 Memorandum of Law, LUMA November 21 Motion, LUMA December 19 Motion.

[9] Energy Bureau Resolution and Order, NEPR-MI-2020-0012, October 14, 2022, at pages 3-4.

[10] *See* IRP Regulation, Section 3.02(A).

[11] The October 17, 2025, main IRP filing; the November 21, 2025, transmission studies filing; and the December 19, 2025, Supplemental Scenarios filing.

[12] Responses were filed on December 22, 2025 (partial) and January 15, 2026 (completing the responses to the ROIs).

[13] IRP Regulation at Section 3.02 (A) (1).

[14] *Id.* at Section 3.02 (A) (2).

Below is an abbreviated summary of the key compliance filing needs by each major subsection of Regulation 9021 and an explanation of why LUMA needs to provide further information at this time.

A. Workpapers (2.02 E and F)

Additional load forecast and fuel price workpapers are required in electronic (*i.e.*, Excel) format. These are required to provide full transparency and allow for stakeholder analysis of underlying key data streams.

B. Load Forecast (2.03 C)

Additional load forecast materials associated with the combined forecast (net of load modifiers) and broken out by customer sector are required. This is required to help gauge load patterns across the different sectors and in consideration of the effect of "modifiers" to the modeled forecast.

C. Existing Resources (2.03 D)

The existing resources material presented in the IRP excludes the specific, historical average annual capacity factor for the legacy thermal units. Those data are necessary to fully gauge the capabilities and shortfalls of the legacy thermal fleet.

D. Resource Needs Assessment (2.03 E)

LUMA explained the reasoning for using a "loss of load event" ("LOLE") approach instead of a planned reserve margin ("PRM") approach to analyze resource adequacy.[15] Regulation 9021 specifies use of a PRM approach. The PRM approach focuses solely on resource adequacy during peak demand hours, rather than throughout the day, and does not fully consider the age or condition of existing resources. The lack of consideration for the age and condition of existing resources is especially problematic in Puerto Rico, where many units experience significant and prolonged outages.

In Section 5.1 of the 2025 IRP, LUMA indicates that it assessed resource needs using Loss of Load Expectation and Expected Unserved Energy (EUE) metrics, rather than the Planning Reserve Margin metric referenced in the regulation. LUMA justified this approach by stating that EUE hours and loss of load events are more suitable metrics for Puerto Rico, given the age and condition of the existing generation resources.

For the purposes of modeling, LUMA developed annual EUE targets that become increasingly stringent over time. While this methodology deviates from the PRM metric outlined in the regulation, the Energy Bureau does not find this alternative methodology problematic from a completeness standpoint. However, the PRM outputs presented in the 2025 IRP are significantly higher than industry-standard levels, and LUMA did not discuss the implications or reasonableness of having a PRM as high as 163 percent and exceeding 100 percent in all years (except 2025) of the planning horizon.[16]

LUMA also did not provide full context for how operational performance improvements (such as those that would reduce forced outage rates) or increased allowances for operating reserves could be used to structure a simpler modeling approach, *in lieu* of LUMA's complex iterative techniques used in its capacity expansion modeling process.

At later stages of the IRP process, the Energy Bureau will continue to carefully evaluate the underlying methodology used and the resource results of the PRP to determine their reasonableness.

[15] IRP Filing, Sections 5.1, 8.25, and 8.26.

[16] IRP Filing, Table 51, page 177.

E. Assumptions and Forecasts (2.03 G)

Additional work paper materials are necessary to document the underlying components of fuel costs for the thermal resources in Puerto Rico.

F. Resource Plan Development (2.03 H)

Appendix A to this Resolution and Order requests further information from LUMA on the differences between the resource plans, including providing a coherent table or tables that explain how the plans differ from each other.

The Energy Bureau also continues to be concerned over the PRP results, indicating a very high level of resources and a very high planning reserve margin. These appear to flow from the methodology that considered the level of modeled "expected unserved energy" (EUE).

LUMA indicates at page 273 of the 2025 IRP its rationale for selecting the PRP. This meets completeness, but the Energy Bureau is asking for further explanation of LUMA's rationale given the risks and uncertainties associated with biodiesel fuels and relative resource costs (capital and fuel).

LUMA's cash-flow table falls slightly short of the regulation requirements as it does not provide data for each of the categories listed. For example, LUMA does not present fuel spending by type of fuel or data on power purchase agreements.

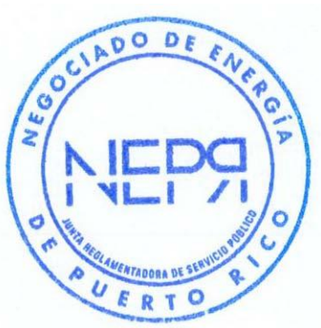
LUMA did not conduct sensitivity analyses on all of its resource plans. For this reason, the Energy Bureau may request further sensitivity analyses if it is needed at later points in the process.

G. Transmission & Distribution Planning (2.03 J)

Additional documentation is required to meet the transmission map and schematic requirements of Regulation 9021. Additional explanation is required concerning how LUMA is proactively addressing distribution system planning to accommodate the continual increase in distributed generation resource installations across Puerto Rico.

VI. Conclusion

As a result of its findings that the IRP filing is considered complete, but additional material is required to ensure a comprehensive record, the Energy Bureau **ORDERS** LUMA to respond to each of the Further Requests listed sequentially in the table in **Appendix A** to this Resolution and Order **within fifteen (15) business days following the notification of this Resolution and Order**.



Be it notified and published.

Edison Avilés Deliz
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Associate Commissioner

Ferdinand A. Ramos Soegaard
Associate Commissioner

Sylvia B. Ugarte Araujo
Associate Commissioner

Antonio Torres Miranda
Associate Commissioner

CERTIFICATION

I certify that the majority of the members of the Puerto Rico Energy Bureau has so agreed on February 13, 2026. I also certify that on February 13, 2026 I have proceeded with the filing of the Resolution and Order issued by the Puerto Rico Energy Bureau and a copy was notified by electronic mail to RegulatoryPREBOrders@lumapr.com; nzayas@gmlex.net; rcruzfranqui@gmlex.net; mvalle@gmlex.net; alexis.rivera@prepa.pr.gov; nzayas@gmlex.net; margarita.mercado@us.dlapiper.com; Yahaira.delarosa@us.dlapiper.com; lrn@roman-negron.com; regulatory@genera-pr.com.

I sign this in San Juan, Puerto Rico, today February 13, 2026.

Sonia Seda Gaztambide
Clerk

NEGOCIADO DE ENERGÍA DE PUERTO RICO
NEPR
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Appendix A: Items Required for Compliance Filing

Regulation Citation	Regulation Requirement	IRP Reference	Further Request
Section 2.02 (E)(2) and related Section 2.03 (C)(2)(d) Section 2.03(C)(1)(a)(i)	Source documents not publicly available or readily accessible are included electronically The Load Forecasts shall take into account all anticipated naturally occurring energy efficiency, as well as any energy efficiency resulting from existing and expected building codes and appliance standards. The coincident peak electricity demand for the utility and each customer class	Exhibit 2 Workpapers Section 3 Load Forecast	Provide (in machine readable electronic form – Excel files) 1) all relevant load forecast workpaper sources used in the development of the load forecasts, such as the tables in the Guidehouse reports. 2) the hourly load forecast for the entire planning period including the base forecast and hourly load modifiers forecast, or state exactly where in the modeling workpapers the data exist. 3) a single file with the aggregated energy efficiency forecast for every hour in the IRP period, or state exactly where in the modeling workpapers the data exist. 4) a file with forecasted energy and demand energy efficiency impacts by year and customer class at the generator level, or state exactly where in the modeling workpapers the data exist. 5) confirmation that LUMA did not use the forecasts provided in the October workpapers in Act17 subfolder in any of the IRP scenarios. 6) provide forecast combined coincident peak electricity demand by customer class at the generator level for the base, low, and high load scenarios for the entire IRP period. Include the date and hour of the peak.
Section 2.02 (F)(1)(b)	Fuel Price Forecast Development workpapers	Exhibit 2 Section 7 Workpaper file provided	Provide the underlying computations showing the explicit commodity cost (e.g., the Henry Hub price projection for gas sources) and the transportation adder for each generator type category contained in the IRP Fuel Workpaper. Show this for the base forecast used in the IRP filing, and for the updated 2025 forecast shown in Table 2 of the response to ROI-2c submitted on December 22, 2025.

Regulation Citation	Regulation Requirement	IRP Reference	Further Request
Section 2.02 (F)(1)(f)	Electronic, spreadsheet-based versions of all tables and figures	Consolidated workpapers list and updated consolidated workpapers list and Workpapers Draft	For all quantitative tables and figures in the IRP, provide a single index that lists each table and figure in the IRP and identifies which electronic file and related worksheet it is sourced from.
Section 2.03 (H) (1) (a) (iii)	Table illustrating the key differences between resource plans	Section 8, esp. 8.2.12 through 8.2.22.	Provide a cohesive Table in Excel file format illustrating the key differences in capacity built or converted and capacity retired across the scenarios, by year and by type including core and supplemental scenarios.
Section 2.03 (D)(1)(b)(iii)	Annual capacity factor for each of the last five years	Section 4.2 Technical Information on Supply-Side Resources	Provide the annual capacity factor for each of the last five years, for each legacy unit, including an indication of the underlying capacity basis (nameplate or available capacity) for the capacity factor.
Section 2.03 (E)(1)	Planning Reserve Margin Assessment and Planned and Forced Outage Modeling	Section 5.1 and 8.2.5 and 8.2.6	Confirm that LUMA has no additional information on the underlying modeling methodology and input assumptions used to develop its iterative approach used in the capacity expansion modeling and the way forced and planned outages are represented in the production cost modeling processes. Provide additional material if or as necessary.
Section 2.03 (F)(1)(a)(vi)	Effective load carrying capacity	No discussion of peak coincidence or ELCC in Section 6 or 7	Add discussion of peak coincidence and ELCC forecast development for all resource types. Account for locational variability in distribution peaks, such as commercial and industrial peaks that occur during daylight hours, as required.
Section 2.03 (F)(2)	Projections by customer class	Sections 3 and 5	1. LUMA provides its base DPV forecast in Table 35 of the IRP report. Table 52 of the report provides annual forecasted DPV capacity. Explain why the values in these tables are not equivalent. 2. LUMA provided multiple .csv files in subfolder "RenewableProfiles" with capacity forecasts for Distributed PV resources. LUMA states it only used the Base case forecast in its IRP scenarios. Confirm which .csv file was used as an input in

Regulation Citation	Regulation Requirement	IRP Reference	Further Request
			LUMA's scenarios and explain why these capacities differ from the DPV capacities in Table 35 and 52. 3. Provide DPV projections broken down by customer class.
Section 2.03 (F)(2)(b)	Inclusion as an expected reduction from baseline load forecasts	Section 3 Load Forecast, Section 8 Modeling workpapers and pre-IRP ROI response to ROI 6-10	LUMA previously stated that "Contributions from DPV installations made prior to January 2024… serve as load modifiers" and that "Incremental DPV installations made from January 2024 onward are modeled as generation-side resources". Provide a forecast or confirm the specific location of these data as already filed for the quantity of DPV modeled on the demand side and a forecast for the quantity of DPV modeled on the supply side.
Section 2.03 (F)(4)(a)	Description of each storage option's anticipated use	None	For each resource scenario: describe storage use, and provide at least sampled modeled output (e.g., one 24-hour day) indicating what services it is providing in each hour. For the PRP scenario, provide hourly production cost output files clearly showing charge and discharge levels for all battery resources for at least one full year at the scenario's maximum storage penetration.
Section 2.03 (F)(4)(b) and sub-parts	Includes valuation framework for energy storage options Ancillary services, which may include avoidance of load shedding Load-shaping services Locational benefits	Workpapers, and Section 8.24, pages 245-246 (control reserves)	Please confirm that batteries can contribute to ancillary service requirements in LUMA's Plexos model. Given that the "Battery ST" tab does not contain any columns describing the ancillary service contributions of the batteries, please explain where data regarding annual ancillary service performance of batteries can be found in the filing, or otherwise provide documentation of this from the Plexo results. Provide a valuation framework that quantitatively assigns value to storage for all ancillary service provisions benefits. Also describe how Plexos treats these resources as part of the commitment and dispatch process. Provide at least example

Regulation Citation	Regulation Requirement	IRP Reference	Further Request
			days for each scenario that shows charging / discharging patterns. Provide information on the load-shaping aspects of the storage resource. Provide information on the relative value of location for storage resources. Do the tabs of the PLEXOS annual output files contained in the "solution spreadsheets" workpaper folder contain documentation of the level and resource identity of the spinning and control reserves used in the modeling runs? If so, please confirm and state where such data can be found. If not, provide documentation for the PRP scenario that shows how the spinning and control reserves are accounted for and which resources are providing these ancillary services, and state where such data can be found in the workpapers or in the detailed modeling files provided elsewhere or in response to the ROIs filed on December 22, 2025 or January 15, 2026.
Section 2.03 (G)(2)(a)(vii) and (G) (2) (b)	Capital costs and basis of forecast range	Section 7.3, Tables 66, 67, 69, 70, and 71	Provide further explanation as to why the PR100 cost scaling factor was applied to thermal unit capital cost trajectories. Provide further explanation and opinion as to the validity of the cost scaling factor given the industry and policy developments currently affecting renewable, battery and thermal unit costs. Explain how the effects of the 2025 federal policy change on tax credits for utility-scale renewable and battery storage resources are, or are not, reflected in the costs used for these resources in the modeling runs.
Section 2.03 (H)(1)(a)(iii)	Table illustrating the key differences between resource plans	Section 8	LUMA's IRP falls short of providing a coherent table that illustrates the key differences between resource plans and includes the metrics prescribed in the regulation. Table 94 and

Regulation Citation	Regulation Requirement	IRP Reference	Further Request
			Figure 75 provide some information, but it is not fully responsive to this requirement. To aid with stakeholder review, LUMA should file additional table(s) that capture the information required by the regulation. Per the regulation, these tables must clearly show resource additions, retrofits, conversions, and retirements by year, NPV, relative differences in T&D infrastructure (if any) across each plan.
Section 2.03 (H)(1)(b)(v)	A cash-flow table comprised of annual cost values for, at a minimum, fuel spending by type of fuel, generation capital, transmission capital, fuel infrastructure capital, total generating unit variable O&M, total generating unit fixed O&M; fuel infrastructure O&M; Co2, NOx, and SO2 emissions; fossil power purchase agreements; and renewable power purchase agreements.	Section 8	LUMA's cash-flow table falls slightly short of the regulation requirements as it does not provide data for each of the categories listed. For example, LUMA does not present fuel spending by type of fuel or data on power purchase agreements. Provide a summary cash flow table for the body of the IRP and as a workpaper, for the Preferred Resource Plan, and for at least the top 5 least-cost plans, including all elements identified in 2.03 H) 1) b) v).
Section 2.03 (H)(2)(b)	Each of the Resource Plans shall be subjected to sensitivity analyses exploring a reasonable range of uncertainty in forecast assumptions.	Section 8	LUMA did not conduct sensitivity analyses on all of its resource plans. For example, no sensitivity analyses were considered for the Supplemental Scenarios. For this reason, the Energy Bureau may request further sensitivity analyses if it is needed at later points in the process.
Section 2.03 (H)(2)	Resource Plan Development Analysis	Resource Plan Results, all scenarios except Scenario 12	Provide a further explanation with supporting quantitative metrics as to why the resource planning process selected the use of biodiesel fuels to meet RPS requirements for the PRP scenario, which produce electricity at a rate generally far exceeding $300/MWh based on fuel cost alone, rather than combinations of solar PV and battery energy storage resources whose combined costs on a delivered per MWh basis appear to be much less than the costs of biodiesel fuel produced electricity. Provide an update to the response given to pre-IRP filing period ROI 6-2(e) on October 29, 2024, including a comparison of the

Regulation Citation	Regulation Requirement	IRP Reference	Further Request
			annual costs associated with biodiesel electricity production in the years 2039-2044 of the PRP scenario, versus the costs of an equivalent amount of renewable energy from a renewable source in combination with battery energy storage capacity. Use this update to demonstrate quantitatively why the biodiesel produced electricity is less costly than the renewable plus battery capacity produced electricity for an equivalent amount of electricity delivered in similar time frames.
Section 2.03 (J)(1)(a)(iii) and (iv)	Existing Transmission Facilities Description iii. A schematic map of the transmission and subtransmission network showing transfer limits, which shall be treated as critical energy infrastructure information and handled in accordance with the procedures set forth in CEPR-MI-2016-0009 as currently amended and may be amended from time to time; and iv. A map showing the actual, physical routing of the transmission and subtransmission lines, geographic landmarks, major metropolitan areas, and the location of substations and generating plants, and interconnections with distribution substations. The map shall be treated as critical energy infrastructure information and handled in accordance with the procedures set forth in CEPR-MI-2016-0009 as currently amended and may be amended from time to time. The IRP	Appendix 1, Transmission and Distribution Plan, including Figure 1 (page 39)	Provide the Energy Bureau with 2 hard copies of the complete schematic map, at a reasonable scale. Provide the Energy Bureau with 2 hard copies of the complete transmission map, at a large scale. Provide a separate electronic copy of the complete schematic map with annotations on transfer limits, if any, or a summary table of limits, if any, with a clear mapping to the critical circuits on the schematic diagram. Provide a separate electronic copy of the physical transmission map at a higher resolution than that provided in the Appendix filing on page 39.

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	shall include two copies of this map on a 1:250,000 scale		
2.03 (J) (1) (e)	e) Planned Distribution Facilities Description- The IRP shall provide a detailed narrative description of any planned changes in approach, standard practice, or broadly applicable substation, circuit, or feeder design for PREPA's distribution system for the next ten years. This description shall address any changes in distribution facilities that impact the ability to accommodate incremental penetration of distributed generation, including intermittent distributed generation, and the ability to receive new loads over time. PREPA shall submit a substantiation of distribution development plans, including, if available:	Appendix 1 Transmission and Distribution Plan	LUMA needs to provide a much fuller description of how the distribution system can accommodate incremental penetration of distributed generation – as opposed to just documenting the concerns that DERs bring, especially concerning voltage issues. There are references to distribution upgrades but there is no concise distillation that describes how LUMA is proactively planning for such an updated system to accommodate more DERs. The distribution section seems to indicate that LUMA envisions DERs as a reliability burden, as opposed to planning to accommodate the resources, given that they are currently being installed at roughly 240 MW per year (e.g., PV) with additional small battery systems. Provide a further explanation, with specificity, of what LUMA is proactively planning to do to accommodate incremental penetration of distributed generation.
Section 2.03 (K)(1)	Action Plan Documentation - The Action Plan shall include a table of key actions in the first five years after approval of the IRP including, at a minimum, expected procurement processes for supply-side resources and energy efficiency, permitting requirements, construction activities, required studies, and other significant events. The Action Plan shall cover	Section 10	LUMA's Action Plan, while providing a general framework, lacks certain detailed information required by Regulation 9021. The Energy Bureau recognizes that many of the critical actions outlined in the Action Plan, such as the procurement, permitting, and installation of fixed resource decisions, fall outside of LUMA's direct responsibilities. Given this limitation, the Energy Bureau will not withhold the completeness determination despite the absence of detailed information on demand-side resource acquisitions. LUMA retains greater control over the implementation of customer programs included in the Preferred

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	intended acquisitions of demand-side, supply-side, transmission, distribution, and/or fuel infrastructure resources; retirements and/or retrofits of existing generating resources; entrance into, renegotiation or cessation of power purchase agreements; and any other resource commitments.		Resource Plan (PRP), such as demand response initiatives and controlled Distributed Battery Energy Storage Systems (DBESS). To ensure clarity and accountability, LUMA is directed to file supplemental information detailing the timing and milestones for key demand-side program implementation dates.
Section 2.04 (B)	Filed IRP published on website.	None	Publish the redacted version of the IRP as filed and/or provide a link on LUMA's webpage where the public can view a copy of the IRP.
Section 3.06 (D)	D) Prefiled written testimony or accompanying work-papers must contain all analyses, facts and calculations necessary for the Commission to perform a comprehensive analysis and assign it the appropriate probative value.	Workpapers	This requirement will be met when all of the identified documents, further work, and detailed descriptions identified in this Appendix and its accompanying Order have been provided.