

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

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CASE NO.: NEPR-AP-2023-0003

PUERTO RICO ELECTRIC POWER
AUTHORITY RATE REVIEW

Surrebuttal Testimony of

Ángel R. Marzán

Expert Witness for LUMA Energy, LLC and LUMA Energy ServCo, LLC

November 3, 2025

1 **Q.1 Please state your name, address, and occupation.**

2 A. My name is Ángel R. Marzán. I am an attorney and financial consultant with more than
3 thirty (30) years of professional experience in taxation, financial analysis, and forensic
4 accounting. I am the founder and principal of MARZÁN LLC, a law firm and financial
5 consulting practice based in San Juan, Puerto Rico. My firm provides legal services in
6 taxation and financial advisory services in the capacity of a financial expert, including
7 expert witness engagements and forensic financial analysis. My business address is
8 MARZÁN LLC, San Juan, Puerto Rico.

9 **Q.2 On whose behalf are you testifying in these proceedings?**

10 A. I am testifying on behalf of LUMA Energy LLC and LUMA Energy Servco LLC (jointly
11 “LUMA”).

12 **Q.3 Please describe your educational background and experience.**

13 A. I hold a Bachelor’s degree in Business Administration with a concentration in
14 Accounting from the University of Puerto Rico, Río Piedras Campus, and a Master of
15 Laws (LL.M.) in Taxation from Georgetown University Law Center.

16 I have more than thirty (30) years of professional experience in taxation, financial
17 analysis, and forensic accounting. My work has focused on complex financial
18 evaluations, including the analysis of accounting records, tax positions, and financial
19 reporting in litigation and expert witness contexts.

20 I began my professional career in public accounting and taxation before dedicating my
21 practice fully to legal and financial advisory work. I previously qualified as a Certified
22 Public Accountant and am an active member of the Puerto Rico Society of Certified
23 Public Accountants, where I have maintained membership since 1993.

I am currently the founder and principal of MARZÁN LLC, a law firm and financial consulting practice based in San Juan, Puerto Rico. The firm provides legal services in taxation and financial advisory services in the capacity of a financial expert, including expert witness engagements, forensic accounting, and the evaluation of financial information in regulatory or administrative contexts.

Q.4 Please describe your professional experience.

A. I have over thirty (30) years of professional experience in financial analysis, taxation, and forensic accounting. Throughout my career, I have provided advisory and expert services to businesses, professional firms, and individuals in complex financial, accounting, and tax matters.

My experience includes the preparation and evaluation of financial statements, the analysis of accounting records in dispute or litigation contexts, and the development of expert opinions on financial and tax issues. I have served as an advisor and expert in matters involving financial reporting, valuation, and compliance with tax and regulatory requirements.

In my practice at MARZÁN LLC, I combine legal and financial analysis to provide clients with integrated advisory services, including forensic financial reviews, support in tax and financial controversies, and the preparation of expert reports and testimony. This experience has provided me with a deep understanding of how accounting data and financial systems interact with legal and regulatory frameworks, skills that are directly relevant to the evaluation of LUMA's accounting treatment of bad debt and legacy receivables.

Q.5 Have you filed testimony previously in these proceedings?

A. No, I have not.

Q.6 What is the purpose of this testimony?

A. The purpose of my testimony is to support LUMA's proposals regarding the uncollectible or bad debt rate of 2.97% and to provide an independent financial and accounting perspective that complements the testimony of LUMA's Chief Financial Officer, Mr. Andrew Smith (Mr. "Smith"). My testimony confirms that the methodology used to determine the proposed bad debt factor is consistent with sound accounting principles and reflects a prudent approach based on the available data and the operating realities described in LUMA's filings.

Q.7 What information did you consider in preparing your testimony?

A. In preparing my testimony, I reviewed LUMA's filings, supporting exhibits, and discovery responses submitted in this proceeding, including Support for Bad Debt Proposal submitted on September 3, 2025, and the testimonies of Mr. Smith, Ms. Jessica Laird, Mr. Alejandro Figueroa, and Ms. Sarah Hanley. I also reviewed the Answering Testimony of Mr. Jaime Sanabria Hernández, identified, and the expert report prepared by Mr. Ralph Smith and Mr. Mark Dady, identified as PC Exhibit 62.0.

In addition, I examined LUMA's discovery responses produced under the "Non-Physical Operations" category, specifically: OIPC-of-LUMA-NONPHYS_OPS-43, -45, -47, -50, and -52; PC-of-LUMA-NONPHYS_OPS-62 (and its Attachment 1), -74, -80, and -108. These materials provide information on revenue protection, collection activities, third-party attachers, and the recovery of legacy receivables.

I also reviewed ROI-LUMA-AP-2023-0003-20250324-PREB-072 (March 24, 2025 Response), which includes data on accounts receivable aging, allowance for doubtful accounts, and collection procedures. This filing explains LUMA's implementation of a standardized 30/60/90-day collection process, the use of automated account flagging

through the Customer Care and Billing system, and the establishment of a dedicated team to focus on overdue debt collection.

Finally, I also considered LUMA's responses to the Energy Bureau's requests for information issued on December 20, 2024, and January 10, 2025, together with the financial data included in those filings, which provide sufficient information for my analysis.

Q.8 Please describe your interview interactions with LUMA's personnel.

A. In preparing my testimony, I interviewed several members of LUMA's management and operational teams to obtain additional context regarding the accounting treatment of bad debt and the company's collection processes. I met with Mr. Smith; Ms. Karla Narváez, Senior Director of Finance; Ms. Sarah Hanley, Interim Senior Vice President of Customer Experience; and Ms. Melanie Jeppesen, AMI Billing Services. These discussions helped me understand the operational and accounting factors affecting collection performance, as well as the corrective measures implemented by LUMA to improve data integrity, billing accuracy, and overall collections management

Q.9 Please explain LUMA's bad debt proposals.

A. LUMA's proposal seeks to maintain a bad debt factor of 2.97%, which represents the portion of billed revenues that is prudently estimated to be uncollectible. This factor is identical to the rate approved by the Energy Bureau in the 2017 PREPA Rate Order and reflects a continuation of established regulatory precedent. The proposal recognizes that, under generally accepted accounting principles, utilities must record an allowance for doubtful accounts to reflect expected credit losses.

The 2.97% factor was derived from audited financial data showing historical uncollectible ratios between 1.95% and 3.52%, and a normalized average of

approximately 2.86% after adjusting for the extraordinary write-offs of legacy PREPA accounts recorded in fiscal years 2024 and 2025. Those write-offs were one-time accounting corrections to remove aged, time-barred, or inactive balances from PREPA's books and are not part of LUMA's ongoing operational losses.

LUMA's proposal therefore distinguishes between legacy adjustments and current operations, ensuring that the bad debt factor used for rate purposes reflects the performance of LUMA's current collection activities. The 2.97% figure represents a prudent, data-based estimate consistent with both accounting standards and the Energy Bureau's prior determinations.

Q.10 What are your recommendations on LUMA's bad debt proposals?

A. Based on my review of the record evidence, accounting data, and supporting analyses, I recommend that the Energy Bureau approve LUMA's proposed bad debt factor of 2.97%. This percentage is consistent with the Bureau's 2017 Rate Order, reflects observed historical experience under both PREPA and LUMA operations, and represents a prudent allowance for expected credit losses given current economic and operating conditions. I further recommend that the Bureau continue to require LUMA to monitor and report actual collection performance on a periodic basis, so that future rate proceedings can adjust the bad debt factor as new information becomes available. This approach maintains regulatory continuity while promoting transparency and accountability.

In my opinion, LUMA's proposal appropriately distinguishes between extraordinary write-offs of legacy accounts and the ongoing level of uncollectible receivables arising from current operations. It aligns with generally accepted accounting principles, supports realistic financial planning, and provides a reasonable mechanism to ensure that the utility's reported revenue more accurately reflects expected collections.

Q.11 Why do you believe that LUMA's approach to calculating a bad debt factor is reasonable?

A. LUMA's approach is reasonable because it applies a sound and consistent methodology grounded in established accounting principles and regulatory precedent. The calculation is based on verified historical data, adjusted to exclude extraordinary legacy write-offs, and reflects the expected level of uncollectible revenue under normal operating conditions.

The proposed 2.97 % factor is not arbitrary. It is supported by audited financial information showing bad debt ratios ranging from 1.95 % to 3.52%, which normalize to approximately 2.86% when the effects of historic PREPA balances are removed. This approach ensures that the bad debt factor reflects current performance rather than inherited deficiencies in PREPA's customer accounts.

LUMA's methodology also aligns with standard utility accounting practices, which require maintaining an allowance for doubtful accounts sufficient to cover probable credit losses. By distinguishing between legacy adjustments and ongoing operations, LUMA has established a transparent and data-based process that produces a reasonable and defensible estimate of expected uncollectibles.

Q.12 What are the bases for your opinions?

A. My opinions are based on my professional experience in financial analysis and forensic accounting, my review of the documentary and accounting evidence in this proceeding, and my evaluation of LUMA's methodology in light of established accounting and regulatory standards.

Specifically, I relied on LUMA's filed materials, including the Support for Bad Debt Proposal, the testimonies of Mr. Smith and other LUMA witnesses, and the financial data

144 contained in LUMA's discovery responses. I also reviewed and considered the
145 Answering Testimony of Mr. Jaime Sanabria Hernández and the expert report of Mr.
146 Ralph Smith and Mr. Mark Dady, focusing on their analysis of bad debt ratios and their
147 proposed alternative methodologies.

148 In forming my opinions, I applied generally accepted accounting principles concerning
149 the recognition of uncollectible accounts, as well as standard practices used by regulated
150 utilities for determining appropriate bad debt allowances. I also considered the economic
151 and operational context in which LUMA assumed management of Puerto Rico's
152 transmission and distribution system, including the legacy challenges associated with
153 customer data quality, system limitations, and collection restrictions imposed by prior
154 moratoriums.

155 **Q.13 Do you have an opinion on the data used by Mr. Sanabria Hernández to arrive at his**
156 **opinions?**

157 A. Yes. Based on my review, Mr. Sanabria Hernández relied on incomplete and, in some
158 cases, misinterpreted data sets. His analysis appears to conflate legacy PREPA balances
159 with current LUMA receivables, without distinguishing between the two categories of
160 data. This approach overstates the level of uncollectible accounts and does not accurately
161 represent LUMA's collection performance. In addition, some of the figures he referenced
162 do not correspond to the verified data contained in LUMA's filed exhibits or discovery
163 responses, suggesting that his data sources were not fully reconciled with the official
164 record.

165 **Q.14 Did Mr. Sanabria Hernández explain what criteria he used to select all documents,**
166 **data sets, and sources he relied upon?**

167 A. No. Mr. Sanabria Hernández did not identify or explain any criteria for selecting the
168 documents or data sets he used. His testimony references certain financial figures but

does not specify their origin, validation process, or how they were extracted from PREPA or LUMA systems. The absence of this disclosure makes it difficult to evaluate whether his selections were representative, relevant, or consistent with the scope of the proceeding.

Q.15 Did Mr. Sanabria Hernández include any quantitative models, spreadsheets, or calculations to support his opinions?

A. No. Mr. Sanabria Hernández did not present any quantitative models, worksheets, or supporting calculations demonstrating how he arrived at his stated percentages or conclusions. His numerical assertions, such as the claim that the bad debt factor should be limited to 1.5%, are not accompanied by data tables or replicable computations. As a result, his conclusions cannot be independently verified or subjected to analytical validation.

Q.16 Did Mr. Sanabria Hernández disclose any accepted professional standards, frameworks, or peer-reviewed methodologies employed to arrive at his opinions?

A. No. Mr. Sanabria Hernández's testimony does not reference any recognized accounting, auditing, or regulatory standards to support his methodology. There is no citation to generally accepted accounting principles, utility accounting guidelines, or financial modeling frameworks. His approach does not follow accepted practices for evaluating uncollectible accounts, such as normalization of historical data or adjustment for extraordinary items. The absence of these methodological safeguards limits the transparency, reproducibility, and reliability of his conclusions.

Q.17 Did Mr. Sanabria Hernández follow any recognized expert protocols, such as forensic accounting, valuation, or regulatory economics frameworks?

A. No. Mr. Sanabria Hernández did not disclose the use of any recognized professional framework or analytical protocol to support his conclusions. His testimony does not

reference any established methods commonly applied in the evaluation of uncollectible accounts, such as normalization of historical data, adjustment for extraordinary items, or correlation of results to audited financial statements. The absence of a defined analytical structure limits the transparency and reliability of his conclusions.

Q.18 Are there specific data gaps that limit LUMA's estimations?

A. Yes. LUMA's estimations are subject to certain data limitations that arise primarily from the quality and structure of the customer information systems inherited from PREPA. The legacy billing and accounting platforms did not contain fully reconciled customer records, and in many cases, accounts were duplicated, inactive, or lacked sufficient historical payment data. These deficiencies affect the precision of historical comparisons and complicate the direct measurement of collection performance.

To address these gaps, LUMA has undertaken a multiyear data cleanup and account legalization project aimed at verifying customer responsibility, correcting service record inconsistencies, and improving the accuracy of billing and collection data. As these initiatives progress, the reliability of accounts receivable reporting will continue to improve, allowing for more precise estimation of future uncollectible balances.

While these data limitations remain a challenge, LUMA's current methodology for estimating bad debt is reasonable and prudent under the circumstances because it relies on verified historical data, normalized adjustments, and consistent accounting principles that mitigate the effects of incomplete legacy information.

Q.19 Do you have an opinion on how those gaps may be resolved in the future?

A. Yes. The data gaps that currently affect LUMA's estimations can be resolved through continued modernization of its customer information and billing systems, combined with the completion of the account legalization and data cleanup initiatives now underway.

These efforts are designed to establish accurate customer identification, confirm account ownership, and ensure that all billed revenue is properly linked to verified service addresses and payment histories.

As LUMA transitions to more robust systems and standardized data management processes, it will be able to generate more precise reports on collections, account aging, and write-offs. The introduction of enhanced automation and analytics will also improve LUMA's ability to identify delinquency trends early and to apply targeted collection strategies more effectively.

Over time, these improvements will significantly strengthen the reliability of LUMA's financial and operational data, enabling the Energy Bureau to assess future bad debt factors using more complete and accurate information.

Q.20 In conclusion, what are your recommendations to the Energy Bureau?

A. Based on my review and analysis, I recommend that the Energy Bureau approve LUMA's proposed bad debt factor of 2.97%. This percentage reflects a prudent, data-supported estimate of expected uncollectible revenue under current economic and operating conditions. It is consistent with the Energy Bureau's 2017 Rate Order and aligned with accepted accounting and regulatory principles that require utilities to recognize a reasonable allowance for doubtful accounts.

I further recommend that the Energy Bureau direct LUMA to continue reporting actual collection results and progress on its ongoing data cleanup and system modernization efforts. Periodic review of those results will allow the Energy Bureau to refine future bad debt factors as data quality improves and collection performance stabilizes.

In my professional opinion, LUMA's proposal represents a balanced and transparent approach that distinguishes between legacy adjustments and current operations, promotes

242 accountability, and supports the long term financial health and reliability of Puerto Rico's
243 electric system.

244 **Q.21 Does that complete your testimony?**

245 A. Yes, it does.

ATTESTATION

Affiant Ángel R. Marzán, being first duly sworn, states the following:

The prepared Surrebuttal Testimony constitutes my Surrebuttal Testimony in the above-styled case before the Puerto Rico Energy Bureau. I would give the answers set forth in the Surrebuttal Testimony if asked the questions that are included in the Surrebuttal Testimony. I further state that the facts and statements provided herein are my Surrebuttal Testimony and are true and correct to the best of my knowledge.

Ángel Marzán

Acknowledged and subscribed before me by Ángel R. Marzán, in his capacity as Expert Witness, of legal age, married, and resident of _____, Puerto Rico, identified by _____.

In _____, _____, this ____ day of November 2025.

Notary Public