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

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PUERTO RICO ELECTRIC POWER AUTHORITY RATE REVIEW

Surrebuttal Testimony of
Sarah Hanley
Interim Senior Vice President, Customer Experience
LUMA Energy ServCo, LLC
November 3, 2025

Summary of Surrebuttal Testimony of SARAH HANLEY ON BEHALF OF LUMA ENERGY LLC AND LUMA ENERGY SERVCO, LLC

Ms. Sarah Hanley, Interim Senior Vice President of Customer Experience for LUMA Energy ServCo, LLC, submits this surrebuttal testimony on behalf of LUMA Energy LLC and LUMA Energy ServCo, LLC (collectively, "LUMA") in Case No. NEPR-AP-2023-0003, *In Re: Puerto Rico Electric Power Authority Rate Review*. The purpose of Ms. Hanley's surrebuttal is to respond to criticisms and mischaracterizations of Ms. Hanley's direct testimony, responses to requests for information, and collection efforts undertaken by LUMA. Specifically, Ms. Hanley responds to several portions of the answering testimony of Mr. Jaime L. Sanabria Hernández, submitted on behalf of the Independent Consumer Protection Office ("ICPO"). Moreover, Ms. Hanley rebuts portions of expert reports submitted by Energy Bureau consultants Mr. Zachary Ming, Mr. Guímel Cortés, and Ms. Courtney Lane, respectively.

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1		I. INTRODUCTION
2	Q.1	Please state your name, business address, title, and employer.
3	A.	My name is Sarah Hanley. My business address is LUMA Energy, PO Box 363508, San
4		Juan, Puerto Rico 00936-3508. I am the Interim Vice President of the Customer
5		Experience department for LUMA Energy ServCo, LLC.
6	Q.2	On whose behalf are you submitting this Surrebuttal Testimony?
7	A.	My surrebuttal testimony is provided on behalf of LUMA Energy LLC and LUMA
8		Energy ServCo, LLC (hereafter referred to as "LUMA") as part of the Commonwealth of
9		Puerto Rico Energy Bureau's proceeding NEPR-AP-2023-0003, the Puerto Rico Electric
10		Power Authority ("PREPA") Rate Review.
11	Q.3	What is the purpose of your Rebuttal Testimony?
12	A.	To respond to several portions of the pre-filed testimony of Mr. Jaime L. Sanabria
13		Hernández ("Answering Testimony") filed in this proceeding on September 8, 2025, on
14		behalf of the Independent Consumer Protection Office ("OIPC" for its Spanish acronym);
15		the report of Zachary Ming ("Ming Report"), consultant to the Energy Bureau, dated
16		October 6, 2025; the report of Guímel Cortés ("Cortés Report"), consultant to the Energy
17		Bureau, dated October 10, 2025; and the report of Courtney Lane ("Lane Report"),
18		consultant to the Energy Bureau, dated October 3, 2025. The main purpose of my
19		surrebuttal testimony is to respond to criticisms and mischaracterizations of my
20		testimony, responses to requests for information, and collection efforts undertaken by
21		LUMA. I will also respond to reports and statements made by others that I believe are
22		inaccurate or incomplete.
23	Q.4	Are there any exhibits attached to your testimony?
24	A.	Yes.

- 25 Q.5 Please identify and enumerate those exhibits.
- 26 A. The following responses to Requests for Information received during the discovery phase
- 27 provide additional context to my surrebuttal testimony:
- LUMA Response to PC-of-LUMA-NONPHYS OPS-80.
- LUMA Response to PC-of-LUMA-NONPHYS OPS-22.
- 30 Q.6 Did you consider any documents for your rebuttal testimony?
- 31 A. Yes, I did.
- 32 Q.7 Which documents did you consider for your rebuttal testimony?
- 33 A. I considered the following documents in the development of my surrebuttal testimony:
- The Puerto Rico Transmission and Distribution System Operation and Maintenance
- 35 Agreement executed by PREPA, the Puerto Rico Public-Private Partnerships Authority
- 36 ("P3A"), and LUMA, dated as of June 22, 2020 ("T&D OMA").
- Resolution and Order Establishing Scope and Procedures for Rate Case, Case No. NEPR-
- 38 AP-2023-0003 (Feb. 12, 2025) ("February 12th Order").
- Puerto Rico Energy Public Policy Act No. 17-2019, as amended.
- Answering Testimony of Jaime Sanabria Hernández dated September 2, 2025.
- Expert Report of Zachary Ming of Energy and Environmental Economics, Inc. ("E3") on
- billing determinants, cost of service, and rate design, dated October 6, 2025.
- 43 Expert Report of Guímel Cortés of MAXeta Energy, PLLC on Federal Funding, dated
- 44 October 10, 2025.
- Expert Report of Courtney Lane of Synapse Energy Economics, Inc. on LUMA's Electric
- Vehicle Adoption Plan, dated October 3, 2025.
- Direct Testimony of Andrew Smith, Chief Financial Officer, LUMA Energy ServCo,
- 48 LLC, dated July 3, 2025.

49		II. OVERVIEW
50	Q.8	In reviewing Mr. Sanabria Hernández's Answering Testimony and the Expert
51		Reports of Ming, Lane, and Smith & Dady, are there any thematic elements you
52		would rebut?
53	A.	Yes. Related to Mr. Sanabria Hernández's Answering Testimony, I object to
54		mischaracterizations of LUMA's collection practices and Accounts Receivable balances.
55		For that reason, I provide some additional context around these important topics.
56		Additionally, I address some factors that impact collections and reporting, which are
57		absent from Mr. Sanabria Hernández's testimony but influence the conclusions he has
58		drawn. Regarding the Expert Reports of Ming and Cortés, I object to their disregard for
59		the limitations of the Customer Care and Billing system that LUMA inherited from
60		PREPA, as well as the challenges this presents to system agility and reporting
61		capabilities.
62	Q.9	Please expand upon your objection regarding Mr. Sanabria Hernández's
63		mischaracterization of LUMA's collection practices.
64	A.	I will address statements made by Mr. Sanabria Hernández regarding this topic in my
65		surrebuttal testimony. Mr. Sanabria Hernández is incorrect in his claim that LUMA has
66		not implemented best practices in this area. I will describe in my testimony the changes
67		that LUMA has implemented and what is planned for the rate period, and provide context
68		as to the behavior of the customer base that LUMA inherited from PREPA just four years
69		ago, as it relates to payments and collections.
70	Q.10	Please explain your objection regarding Mr. Sanabria Hernández's
71		mischaracterization of Accounts Receivable balances.

- 72 Mr. Sanabria Hernández has reviewed gross Accounts Receivable balances from the A. CC&B subledger, which were missing the context of adjustments made at the general 73 ledger level, and misconstrued them to be reflective of collection inefficiencies. In my 74 75 testimony, I will refute this misinterpretation and explain that the overstated balances are 76 the result of the poor quality of the legacy data that LUMA inherited from PREPA, which 77 had not properly written uncollectable amounts off in its billing system. I will describe 78 the magnitude of this problem and outline the efforts required to remediate the challenges 79 associated with PREPA's legacy customer billing data that persist despite years of 80 cleanup efforts.
- 81 Q.11 Please expand upon the other factors impacting collections and reporting.
- 82 While Mr. Sanabria Hernández frames challenges with collections as entirely within A. 83 LUMA's control, I will detail in my testimony the additional factors impacting 84 collections' effectiveness. This includes external factors such as the statutory moratorium 85 on disconnections for nonpayment, which was in place for the first two years of LUMA's 86 tenure. This also includes the limitations of the billing system that LUMA inherited from 87 PREPA, which is becoming costlier to update and maintain as it approaches the end of its 88 supported lifecycle. I will describe the relevant challenges with the billing system, as they 89 relate to both data quality (i.e., the information contained within the system) and system 90 configuration (i.e., how PREPA had customized the system to function), and the 91 significant remediation required in both areas.
 - Q.12 Please elaborate on your objections as they relate to the recommendations made in the Expert Reports of Ming, Smith & Dady, and Lane.
- 94 A. My objections to the Expert Reports of Ming, Smith & Dady, and Lane generally relate

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to the theme of their minimization or disregard for the limitations that the current billing system places on its ability to implement changes in a cost-effective manner with appropriate risk mitigations. I describe why the priority should be a long-term strategy that focuses first on remediation of, and then on upgrade to, the billing system, and how this will enable billing efficiency and flexibility as we step toward a future that includes automated metering infrastructure and the options that this can bring to a stable billing environment. I caution against the risks and additional costs that making changes to this billing system introduces, and propose instead that the focus be on setting up for billing success in the long term.

III. COLLECTION OF PAST DUE BALANCES

Q.13 What is the purpose of this section entitled "Collection of Past Due Balances"?

- A. The purpose of this section is to rebut specific comments made by Mr. Sanabria Hernández around the topic of collections of past due bills, and to clarify many of the statements made, with references back to my responses to Questions 8 through 11 of this surrebuttal testimony.
- 111 Q.14 On page 10, lines 144-152 of the Answering Testimony, Mr. Sanabria Hernández
 112 claims that LUMA has failed to comply with the Energy Bureau's expectation "to
 113 implement best practices on collections and revenue protection." What does LUMA
 114 understand to be the Energy Bureau's expectations in this area?
- 115 A. The Energy Bureau has set its expectations related to collections and revenue protection
 116 by formalizing relevant performance metrics that measure operational performance.
 117 Specifically, as it relates to collections, the measures are the *Days Sales Outstanding*118 General Customers and Days Sales Outstanding Government Customers metrics, which

119		measure LUMA's ability to collect payment for customer billings.
120	Q.15	Has LUMA complied with the Energy Bureau's expectations in this area?
121	A.	Yes. LUMA has implemented a number of industry-standard practices, and the results of
122		such are demonstrated by a downward-trending Days Sales Outstanding (DSO) metric for
123		both general and government customers.
124	Q.16	Are there additional indicators that demonstrate the efficiency of LUMA's
125		collection efforts?
126	A.	Yes. Please refer to my response to the discovery request PC-of-LUMA-
127		NONPHYS_OPS-80. LUMA's Revenue Protection team has recovered more than \$1.6
128		billion in collections since 2021 and has established more than 120,000 payment plans for
129		past due balances. For absolute clarity, all funds collected are deposited into PREPA's
130		bank accounts.
131	Q.17	Please describe the best practices in collections and revenue protection that LUMA
131132	Q.17	Please describe the best practices in collections and revenue protection that LUMA has implemented since assuming responsibility for these areas in 2021.
	Q.17 A.	
132		has implemented since assuming responsibility for these areas in 2021.
132 133		has implemented since assuming responsibility for these areas in 2021. LUMA has implemented several industry-standard practices in collections and revenue
132133134		has implemented since assuming responsibility for these areas in 2021. LUMA has implemented several industry-standard practices in collections and revenue protection:
132133134135		has implemented since assuming responsibility for these areas in 2021. LUMA has implemented several industry-standard practices in collections and revenue protection: As of the time of this filing, LUMA has completed data clean-up to write off
132 133 134 135 136		has implemented since assuming responsibility for these areas in 2021. LUMA has implemented several industry-standard practices in collections and revenue protection: As of the time of this filing, LUMA has completed data clean-up to write off approximately \$400 million of PREPA's historical accounts receivable across more than
132 133 134 135 136 137		has implemented since assuming responsibility for these areas in 2021. LUMA has implemented several industry-standard practices in collections and revenue protection: As of the time of this filing, LUMA has completed data clean-up to write off approximately \$400 million of PREPA's historical accounts receivable across more than 400,000 service agreements deemed uncollectable. The write-offs performed have been
132 133 134 135 136 137 138		has implemented since assuming responsibility for these areas in 2021. LUMA has implemented several industry-standard practices in collections and revenue protection: As of the time of this filing, LUMA has completed data clean-up to write off approximately \$400 million of PREPA's historical accounts receivable across more than 400,000 service agreements deemed uncollectable. The write-offs performed have been related to balances that have reached the legal prescriptive term for what can be collected
132 133 134 135 136 137 138	A. •	has implemented since assuming responsibility for these areas in 2021. LUMA has implemented several industry-standard practices in collections and revenue protection: As of the time of this filing, LUMA has completed data clean-up to write off approximately \$400 million of PREPA's historical accounts receivable across more than 400,000 service agreements deemed uncollectable. The write-offs performed have been related to balances that have reached the legal prescriptive term for what can be collected (i.e., these amounts are related to PREPA's tenure).

- business reporting.
- LUMA designed and implemented a robust automated severance process whereby the
 billing system was programmed to generate customer communications based on
 established timelines and update customer accounts to reflect the appropriate status, such
 as determining whether an account meets the criteria for a disconnection notice,
 disconnection of service, or write-off. The programmatic changes also required the
 implementation of logic in the billing system to determine the age of a specific
 outstanding balance for systematic handling of severance and collections activities.
 - Ahead of the automated severance process, LUMA did not hesitate to begin
 implementing standard practices to communicate with customers, before the moratorium
 was lifted from the COVID-19 pandemic, regarding their outstanding balances. LUMA's
 work was to establish clarity with customers that there are past-due balances that need to
 be addressed.
- 155 Q.18 Does LUMA plan to implement additional best practices during the rate period 156 (FY2026 – FY2028) being examined in this rate proceeding?
- 157 A. Yes.

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- Q.19 Please describe the best practices that LUMA plans to implement during the rate
 period.
- 160 A. Several initiatives to continue to implement industry standard practices in collections and 161 revenue protection are planned for the rate period:
 - Procurement activities are planned in the proposed rate case for collections agencies to support recovery for past due amounts. These activities, however, will require additional budgetary support as they require not only procurement and contracting but also

integration with technology systems, onboarding, training, and ongoing management.

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- Additionally, LUMA is implementing standard reporting to have visibility and clarity of the status of collections and severance activities.
 - LUMA is evaluating options to implement skip tracing or similar. No skip tracing was previously in place before LUMA commencement, and it is still in progress to be implemented. Skip tracing is a term used to describe the industry-standard practice to address situations in which a customer attempts to transfer or start service at a location previously disconnected for nonpayment, using a different entity or person, such as a family member, while still receiving electric service at the property. Skip tracing is key to avoiding uncollectible balances, yet PREPA never implemented it. LUMA is attempting to implement such methods to prevent these issues; however, vendors with this expertise do not exist in Puerto Rico, and, when surveyed, vendors from the mainland United States are not interested in providing these services in Puerto Rico. Thus, LUMA must pursue alternative methods to address this issue. The alternatives being explored include developing internal resourcing to manually address this issue, developing or acquiring a technological solution for evaluating creditworthiness and potential familial relationships for individuals, or working with a local provider capable of establishing this as a new line of business in Puerto Rico.
 - Addressing account legalization issues where an account holder is actually deceased, but
 the account and services continue to be active. The methodology being explored is a
 collaboration with the Department of Health to validate confidentially and securely
 Social Security Numbers with those known to be deceased in the records for the
 Department of Health. This would aid in two ways, one of which is to support more

188		effective and efficient collections and thus recovery of funds by ensuring customer
189		records are up to date and maintained accurately, so bills are sent to the correct person,
190		mailing address, and thus can manage active collections with the correct living account
191		holder. Secondly, in the event that the deceased account holder was receiving a reduced
192		bill due to a legitimate subsidy rate, such as those provided for under the Lifeline
193		Residential Service Tariff, that in the event the current service recipient does not qualify
194		for that subsidy that the accurate tariff is applied and revenue recovered appropriately.
195	95 Q.20 Please describe the other factors that influence collections and revenue prot	
196		that are not addressed in Mr. Sanabria Hernández's answering testimony.
197	A.	Certainly. While LUMA continues to implement industry standard practices in
198		collections and revenue protection, there are some additional factors that do not appear to
199		have been contemplated in the Answering Testimony. I object to these omissions because
200		they lead to inaccurate conclusions in the Answering Testimony about LUMA being
201		inefficient in collections and revenue protection. The Answering Testimony appears not
202		to consider the impacts of Act No. 39-2020, which significantly impacted LUMA's
203		ability to collect for the duration of the COVID-19 pandemic. Also not contemplated in
204		Mr. Sanabria Hernández's Answering Testimony is the state of the legacy customer
205		information and billing data that LUMA inherited from PREPA, or the payment behavior
206		of its customer base, which, like any behavior, takes time and consistent, intentional
207		effort to change.
208	Q.21	Please describe the impact that Act No. 39-2020 (current through the life of
209		Executive Order No. OE-2020-023), which placed a moratorium on disconnections
210		for nonpayment, had on LUMA's collection efforts.

211	A.	Prior to LUMA's commencement as Operator of the T&D System, Act No. 39-2020
212		(current through the life of Executive Order No. OE-2020-023) was enacted, prohibiting
213		disconnections due to the COVID-19 global pandemic. This moratorium on
214		disconnections was in place for the first two of the four years that LUMA has been the
215		Operator of the T&D System. This is until 2023. Without this important consequence for
216		non-payment, LUMA's abilities to collect were limited to phone calls and letters, which
217		had limited effectiveness.
218	Q.22	Please expand upon the impact that customer behavior patterns have had on
219		collection efforts during the first four years of LUMA's tenure as operator.
220	A.	At LUMA commencement, not only was there a statute prohibiting disconnections for
221		nonpayment due to the COVID-19 global pandemic, but there also had not been a
222		consistent and systematic methodology for conducting disconnections for nonpayment in
223		Puerto Rico since Hurricane Maria in 2017. Customer behavior was thus not accustomed
224		to notices and communications regarding maintaining account balances current, nor was
225		it familiar with actual disconnections for nonpayment.
226		Perhaps the more complex aspect of the customer behavior challenges LUMA inherited is
227		the behavior of Government accounts and the lack of maintenance of current balances. At
228		LUMA commencement, the Government accounts total balances exceeded \$267 million
229		(not including public lighting or CELI balances in the system), with 90% of them 120
230		days or older. Currently, the balance for the Government accounts totals \$163,006,837, as
231		shown in the response to ROI-PROV-39 Attachment 1 for June 2025, representing a
232		significant reduction.
233	Q.23	Please expand upon the impact that the quality of customer data inherited from

234		PREPA has had on LUMA's ability to ramp up collection efforts.	
235	A.	Customer account maintenance is a key aspect of customer service at a utility and is	
236		especially key to managing customer arrears. For example, if a customer has been	
237		disconnected for nonpayment, their account should be maintained so that the service	
238		agreement ends and does not give the impression that it is still active if disconnected.	
239		However, PREPA did not maintain this information. This is evidenced by tens of	
240		thousands of active service agreements that are disconnected but do not reflect this status	
241		in the service agreement or service point. This is key in managing data, status, and key	
242		components of the customer lifecycle and data management.	
243		IV. ACCOUNTS RECEIVABLE BALANCES	
244	Q.24	What is the purpose of this section entitled "Accounts Receivable Balances"?	
245	A.	The purpose of this section is to rebut specific statements made by Mr. Sanabria	
246		Hernández relating to gross accounts receivable balances evaluated without context, and	
247		the relevant collection complexities that are omitted from his testimony. The surrebuttal	
248		testimony of my colleague Andrew Smith elaborates on the discussion of accounts	
249		receivable once they meet the criteria for write-off and become bad debt.	
250	Q.25	On page 10, lines 153-155 of the Answering Testimony, Mr. Sanabria Hernández	
251		claims that the data provided by LUMA on account receivables reveals multiple	
252		discrepancies in the reported balances for the same customer classes during the	
253		same periods. Does LUMA have a response?	
254	A.	Yes.	

When LUMA's billing system closes to its financial system as part of its month-end

Q.26 Please state and explain LUMA's response.

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processes, the data is rolled up and loses customer account-level detail, such as customer class. Any accounts receivable listing that requires customer-level detail must be extracted from the customer information system, which PREPA deployed as the Oracle Customer Care & Billing (CC&B) System, rather than the financial system, which serves as the financial system of record. The problem is that when LUMA inherited the customer information and financial systems from PREPA, it found that PREPA had made entries to write off bad debts in the financial system but had not completed the write-off at the individual customer level in the billing system.

The buildup by the time LUMA took over was such that a massive data cleanup initiative was required. The data clean-up assessment initially has been complex, requiring expertise in systems, integrations, accounting, finance, regulations, and customer service governance of terms and conditions. As discussed in Andrew Smith's surrebuttal testimony, the financial system assessments and transformation are still underway. The customer information system data cleanup efforts include, but are not limited to:

1. Updating individual customer account and service agreement level status (active or inactive, connected or disconnected, abandoned or occupied). This effort requires field visits and/or direct customer discussions to update, and this is a significant challenge given that no cleanup has been conducted for demolished or abandoned properties following Hurricanes Maria and Irma. Furthermore, PREPA did not utilize the standard practices and functionality of the system to manage this information, and LUMA is now managing a complex cleanup of records that have not been maintained for a decade or more. This cleanup alone requires technology experts to facilitate mass updates to the system, updating hundreds of

thousands of records.

- 2. Updating account holder information for outage management and revenue processing for billing, payments, and collections. My testimony addresses the challenges of account legalization, which are similar to item one (1) above, requiring individual customer interactions to update and maintain, as well as potential systematic updates to maintain this information, with cross-referencing of other data systems outside PREPA/LUMA. We are exploring support from external vendors to facilitate this work, which could include systematically updating thousands of customer records where the account holder is deceased.
- 3. Record management and business object structure are core configuration challenges for the system to enable efficient and effective management of the system. The record management design for the customer information system is non-standard for utility account configuration, where characteristics and segmentation that should be configured into the system were instead managed through manual workarounds.
- 4. Rate and bill factor structure and configuration in the system pose significant challenges for maintenance, reporting, and management. To put it another way, the rate design and structure for Puerto Rico is not overly complex; in fact, the opposite is currently true, given the lack of infrastructure to support Time of Use and complex billing. However, the implementation methodology of rates in the system is overly complex and non-standard.
- Collections and severance management so that accounts are not only disconnected for nonpayment appropriately, but also the appropriate aging and write-off

procedures are applied correctly to prioritize clearly the appropriate aging of account balances.

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6. Asset management records are a part of the function in the system LUMA inherited. The customer information system plays a key role in maintaining which meter is installed at which property. The system inherited from PREPA has significant gaps where, either due to lack of oversight or standardized processes, meter information was not maintained and requires manual updates that are timeconsuming (such as meters installed in the field that do not exist in the system) and systematic updates to ensure processes are efficient. A recent example is a process improvement that required cross-departmental assessment and technological changes, where meter characteristics have now been updated in the system to identify if a meter is bi-directional capable. Prior to this change, a customer care representative would have to manually evaluate each customer service point to determine if a meter exchange was required to enable the Net Energy Metering tariff to recognize the energy produced by the customer. Now, with this configuration change in place, the system will first evaluate the meter characteristics and then automatically create a field activity if the meter indeed needs to be changed. These types of process efficiencies require expertise and funding. However, the most extensive aspect of these projects is data review and cleanup, as there are no historical meter purchase records available from pre-LUMA periods to verify these capabilities. Consequently, extensive research and cross-departmental reviews are key to implementing data updates within the system.

7. Unmetered asset tracking and management is an additional challenge for the customer information system inherited. The unmetered services, such as public lighting, small cells, and pole-attached devices, are not maintained in asset systems from PREPA. There are separate SRPs for these programs, such that these asset tracking systems are being assessed and built for integration or updating to the customer information system; however, the underlying information does not exist. Thus, ensuring proper record management and associated invoicing for these assets is an ongoing effort to collaborate with Asset Information, Operations, and Capital Programs to update the system and integrate it with other systems. These complexities are not individual tasks that can be manually addressed by a customer experience analyst or representative working in the system, but while these projects are underway, our Customer Experience team is faced with day-to-day management and configuration in a system that is out of date, while we support the projects that will enable them to be updated.

8. Financial transaction management within the system manages payments correctly, so payments are correctly applied to balances and not pending within accounts with multiple service agreements. The system has logic to apply payments that was not designed in a comprehensive way or maintained over the past decade to account for particularly service agreements other than general electrical service. For example, the application of payment priorities for deposits has a separate configuration from that of a contribution for aid in construction, and these configurations require expertise across multiple disciplines, in addition to technological configuration and financial expertise.

9. Accounting transaction management, particularly for processes related to CELI and Public Lighting, is highly complex. Part of the clean-up effort requires review and manual adjustments, and additionally requires technological processes to handle tens of thousands of lines of transactions to precisely adjust historical CELI and Public Lighting balances to adjust to zero and reflect a zero balance, based on manual review, to address the more than \$2 billion of unadjusted balances that appear in the system as accounts receivable. While this balance is not reported externally, as it is not true accounts receivable, it does impact internal analysis, reporting, and management of accounts receivable, given the methods in which it was implemented and configured.

As described above, there are several million lines of legacy data that require evaluation for cleanup. This analysis is critical for all processes and especially critical when prioritizing collectability and write-off criteria in accordance with laws and industry standard practices. This is a massive undertaking, well beyond what is possible to do manually, given the volume, complexity, and requirement to update system configuration. Each of these items is a compounding challenge for the daily management of customer service processes and impact reporting. The list above is not intended to be an exhaustive list but rather a demonstration of the issues. None of these items could be assessed in the Front End Transition due to a lack of access to the systems. Further, assessing the depth and complexity of these issues is an evolving and expanding effort as LUMA addresses one process or program area for improvement, the teams identify additional challenges or issues. LUMA intends to address these issues prior to upgrading the customer information system, but these efforts require funding for the changes to be

made, both for the expertise and for the system configuration.

Q.27 On page 11, lines 169-170 of the Answering Testimony, Mr. Sanabria Hernández claims that the data provided by LUMA on accounts receivable demonstrates persistent inefficiencies in the collection of overdue balances. Does LUMA agree?

376 A. No.

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Q.28 Please state and explain LUMA's response.

378 A. The characterization by Mr. Sanabria Hernández fails to address balances prior to LUMA 379 commencement and the barriers or challenges inherited by LUMA to address overdue 380 balances. The balance of accounts receivable is a significant result of the inherited 381 systems, processes, and policies from PREPA. 382 At commencement, LUMA assumed responsibility for T&D services, including credit 383 and collections activities. This occurred despite the billing system having more than \$4 384 billion in current and past-due balances, with no subject matter experts available to 385 provide a comprehensive history and context for those balances, the billing system 386 configuration, and related regulations. No access to the billing system was provided 387 ahead of LUMA commencement, preventing any preliminary analysis from being 388 performed. Since June 2021, LUMA has been actively working on prioritized initiatives 389 to stabilize and then optimize systems, associated business processes, and overall 390 performance improvement. 391 As discussed above, the billing system and reports reflected arrears of \$4.0 billion, and 392 LUMA was required to conduct extensive work to identify the nature, age, collectability, 393 and historical context for these balances. Beyond analysis, LUMA has been diligently 394 processing through data cleanup and processes to address these data challenges. In

addition to the complexity of the arrears amount, the system lacked basic functionality to determine and track the age of a customer account balance. The reporting implemented by PREPA relied on customized logic that accounted for balances beyond the billing system's base functionality. Thus, any logic previously used by PREPA in the billing system to address arrears was highly manual and account-specific, resulting in errors, potential oversight, or improper prioritization. LUMA has initially addressed this issue with limited funding through the implemented severance and collections processes.

- Q.29 On page 11, lines 170-172 of the Answering Testimony, Mr. Sanabria Hernández claims that the inefficiencies in the collection of overdue balances directly inflate the utility's revenue requirements and shift costs onto paying customers. Does LUMA have a response to this?
- 406 A. Yes.

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- 407 Q.30 Please state and explain LUMA's response.
- 408 A. LUMA agrees that a utility is expected to implement efficient collection of overdue 409 balances, and the inability to reach a level of efficiency may inflate the utility's revenue 410 requirements and shift costs onto paying customers. LUMA identified, during the front-411 end transition, the lack of processes for collection activities and has been working to 412 implement industry-standard practices. A System Remediation Plan (SRP) has been in 413 place to address some of the gaps inherited from PREPA regarding processes associated 414 with Back Office Billing and Accuracy, as outlined in the program brief PBCS-03. 415 However, the evaluation of the front-end transition was unable to identify differences in 416 the utility's expected roles and responsibilities, including those related to Government 417 accounts. Further, there was no direct access to the billing system during the front-end

transition, which limited LUMA's ability to fully appreciate the scale of the system's configuration needs and the reporting gaps. Since its commencement, LUMA has been working to address these issues, but issues of this scale require time, energy, and resources. LUMA has implemented centralized teams for Billing and Credit, and Collections, such that these core functions requiring additional expertise and oversight are standardized. In addition to these teams, LUMA implemented standardized credit and collections practices to ensure that customer communications are made to address collections and facilitate payment receipt. LUMA outsourced its bill printing and delivery vendor and received approval from the Energy Bureau for a clear and transparent new bill design, ensuring customers have visibility and clarity regarding their bills and consumption, which supports effective collections. LUMA further implemented activities to stabilize and optimize the customer information system, addressing billing issues that may impact a customer's bill payment behavior. Specifically, LUMA addressed more than 1.7 million exceptions in Oracle CC&B and implemented processes and procedures to resolve these exceptions going forward, thereby reducing unbilled and estimated accounts. Further, LUMA implemented enhancements in the system to avoid estimated bills due to meter read rejection on valid reads by addressing configuration misalignment from historical changes in the system as a result of Hurricanes Maria and Irma. LUMA implemented automated severance and collections communications whereby automated and prerecorded messaging is sent to customers in addition to implementing automated letter mailing to facilitate efficiencies for severance and collections activities. LUMA has automated the process for ending a service agreement after a disconnection due to

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441		nonpayment, ensuring accurate management of customer records. LUMA implemented a	
442		mobile application and back-office processing systems, as well as reporting for field	
443		activities such as disconnections for nonpayment, to eliminate the paper handling of these	
444		activities from the prior operator. These processes enable standard handling and broad	
445		tracking of behavior to limit or detect human error.	
446	Q.31	On page 11, lines 176-178 of the Answering Testimony, Mr. Sanabria Hernández	
447		claims that LUMA has identified a customer class with the category designated	
448		"other" with an account receivable of \$170,371,213, but has not identified what type	
449		of customers make up this category. Does LUMA has a response?	
450	A.	Yes.	
451	Q.32	Please state and explain LUMA's response.	
452	A.	The category for "Other" included in the referenced document is amounts past due	
453		related to service agreements, such as bankruptcy service agreements, bankruptcy write-	
454		off service agreements, prior fees or fines associated with irregularities charged by	
455		PREPA, and amounts converted from PREPA's prior billing system that are uncollectible	
456		accounts receivable. These amounts, as clearly shown in the referenced table, show that	
457		the bulk of the balance exceeds 120 days across all customer classes.	
458	Q.33	On page 12, lines 180-182 of the Answering Testimony, Ms. Sanabria Hernández	
459		states that LUMA's arrears balance on government accounts is \$125,425,107.61.	
460		Does LUMA have a response to this?	
461	A.	Yes.	
462	Q.34	Please state and explain LUMA's response.	
463	A.	Government accounts are not eligible for the Write-Off Phase and are expected to settle	

their debts. This balance reflects LUMA's ongoing efforts to address challenges across
the Government customer class and maintain accounts without overdue balances. Since
its commencement, LUMA has identified that, historically, Government entities have not
annually adjusted their budgets and energy forecasts. If their consumption or energy costs
changed, the agency did not adjust its budget or payments, and thus incurred past-due
balances. For some agencies, this was a systemic issue that resulted in multi-million, even
tens of millions of dollars in arrears. Beyond agencies, municipalities also carry
significant arrears with PREPA. Since its commencement, LUMA has taken significant
steps to address these balances, including, for the first time in history, implementing
disconnections for nonpayment of municipal facilities. LUMA has made significant
efforts to collect payments from all types of government accounts, including regular face-
to-face meetings with these customers to address any questions or issues regarding meter
estimation or billing adjustments. Thus, LUMA continues to make efforts far beyond
standard utility practice to collect funds owed from even perceived sophisticated
government entities.
These current balances persist even after an extensive effort at collaboration between
PREPA and LUMA, with the Governor's Office, from 2023 to 2024, to address the
historical balances of central government agencies, where nearly all balances that existed
prior to June 1, 2021, were resolved.
Additional challenges persist with Government accounts, as agencies or municipalities
did not maintain inventories or complete records of their facilities and their condition. For
example, some government agencies would dispute whether or not a specific location
should be active and billing, then they would request service to be disconnected formally

as they believed the facility to be vacant and not in use, only then, after disconnection, to immediate determine that the facility is in fact in use and the service needed to be connected. An expectation arose that PREPA and then LUMA were, in some capacity, expected to know or play a role in the Government agencies' facilities management.

Disputes over balances and arrears arise in part because some accounts do not pay their balances, as they lack accurate records of whether the facilities in question receiving service belong to them, are in active use, or should have been requested to be disconnected. PREPA attempted to work with government accounts to resolve these open items, and while a level of cooperation is expected, it is not the role of the utility to be responsible for determining if a customer should request a site to be disconnected based on whether it is in use or not, as this is not operational knowledge held by the utility. The Government Account split LUMA undertook was an extensive effort described below:

- a. Split accounts in the billing system in 2022 for pre-commencement and post-commencement.
- b. Created new service agreements in the billing system for more than 12,000 locations, including manual in-office meter exchange transactions in the system, which is required for the configuration of the customer information system, including the transfer of payments between pre- and post-accounts based on dates.
- c. Effort required more than 20 people dedicated nearly full-time for approximately a month to complete the work. This led to clear statements for PREPA to resolve these historical balances with the government, the majority of the historical balances.

510		d. This settlement and the payment received would not have been possible without			
511		the close collaboration between LUMA and PREPA, and the Governor's office.			
512	Q.35 On page 12, lines 186-188 of the Answering Testimony, Mr. Sanabria Hernán				
513		states that when LUMA fails to collect revenues efficiently, the shortfall is			
514		incorporated into the revenue requirement and ultimately recovered through higher			
515		base rates. Does LUMA agree with that statement?			
516	A.	LUMA acknowledges, as a matter of accounting principle, that uncollected receivables			
517		may become bad debt and must be recognized as an operating expense. I rely on the			
518		surrebuttal testimony of my colleague, Andrew Smith, to discuss the issue of bad debt in			
519		greater detail.			
520	Q.36	On page 12, lines 176-177 of the Answering Testimony, Ms. Sanabria Hernández			
521		claims that the high accounts receivable balance directly inflates the utility's			
522		revenue requirement. Does LUMA agree?			
523	A.	No.			
524	Q.37	Please state and explain LUMA's response.			
525	A.	This statement is inaccurate and a misrepresentation. A high accounts receivable balance			
526		does not directly inflate the utility's revenue requirement; it is only if and when these			
527		balances become uncollectible that they impact bad debt. As stated earlier in my			
528		testimony, LUMA acknowledges that uncollected receivables may become bad debt,			
529		which must be treated as an operating expense.			
530	Q.38	On page 12, lines 192-193 of the Answering Testimony, Mr. Sanabria Hernández			
531		states that LUMA's inefficiency is shifted onto consumers, undermining the			
532		principle of just and reasonable rates. Does LUMA have a response to this?			

533	A.	Yes.

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- Q.39 Please state and explain LUMA's response.
- 535 A. Mr. Sanabria Hernández's statement misrepresents the nature of LUMA's receivables, 536 failing to distinguish between legacy balances inherited from PREPA and current 537 receivables generated under LUMA's management. Most balances written off or 538 identified as uncollectible originate from PREPA's historic accounts, many of which are 539 inactive, duplicated, or beyond prescriptive terms, and therefore do not reflect LUMA's 540 current operational performance. As described in my testimony, we measure the success 541 of our collection efforts, in part, through a downward trend in the Days Sales Outstanding 542 (DSO) indicator. Additionally, LUMA is implementing standardized reports to ensure 543 visibility and clarity regarding the status of collection and account cancellation activities.
- On page 12, lines 197-200 of the Answering Testimony, Mr. Sanabria Hernández states that the evidence shows that the measures LUMA has taken to improve collections have not produced meaningful results as large outstanding balances remain, particularly among government entities and municipalities. Does LUMA have a response?
- 549 A. Yes.

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- 550 Q.41 Please state and explain LUMA's response.
- 551 A. The conclusion made by Mr. Sanabria Hernández's statement conflates PREPA's

 552 mismanagement of legacy billing data with LUMA's operational effectiveness when it

 553 comes to collections, and this is an incorrect correlation.

 554 LUMA has established not only a Revenue Protection team but also a Key Accounts team

to manage the overall account needs and interactions with customers, including

government entities and municipalities. A key part of the Key Accounts team's support is ensuring an overall understanding of the status of these Government entities with LUMA. Through coordination, the Revenue Protection team and Key Accounts have established key working procedures. An expected function for Revenue Protection and Key Accounts would address customer questions, ensure objections or inquiries are addressed, and provide clarity on a customer's outstanding balance for their utility service. However, at LUMA the experience in transitioning from PREPA to LUMA has also identified that particularly Government accounts expected PREPA to provide budget figures for their utility costs, provide individualized payment handling specifically for their accounts (such as providing a lump sum payment and expecting PREPA and now LUMA, to manually by hand allocated millions of dollars across tens if not hundreds of accounts monthly), provide detailed information such as to direct a Government account of what facilities were in use or not, and providing exceptionally burdensome processes on the utility that otherwise are not a part of the services typically provided by a utility. For example, Government entities had either simply used the same annual amount for their utility budget or had expected PREPA to provide forecasts of future fiscal-year consumption and costs, even though PREPA lacked in-depth knowledge of the facilities, planned changes, or consumption behavior in those facilities. If a forecasted budget amount was prepared for a Government entity, it would have been based solely on historical information, and a placeholder would not have recognized potential changes in a Government entity's consumption. Further, it would not have meaningfully addressed outstanding balances and the necessary funds required to bring those accounts current.

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579 Thus, for LUMA to manage collections for these accounts, the organization first needed 580 to assess the entire landscape of prior PREPA practices, work with these customers to 581 establish an appropriate division of roles and responsibilities going forward, and then 582 establish and implement industry-standard practices for basic collections activities. 583 Implementing industry standard practices for collections activities at LUMA has not been 584 about simply implementing processes and procedures, but rather about full-scale 585 alignment of ownership between the utility and its customers. 586 Since June 2021, LUMA has created, hired, trained, and conducted continued process 587 improvement for the Revenue Protection team, implemented the automated steps 588 regarding collections activities, established policies where they did not previously exist 589 around collections and write-offs, and conducted full-scale change management with 590 customers regarding responsibilities for account management, budgeting and forecasting, 591 and bill payment. 592 Are there any additional customer behavior challenges LUMA is facing that are 0.42 593 impacting and are expected to continue to impact collections and collection 594 efficiencies? 595 One of the significant issues facing LUMA, which was an issue for PREPA as well, is A. 596 referred to as "Account Legalization", which refers to ensuring a utility service is 597 maintained in the name of the household actively receiving service. The system LUMA 598 inherited contains accounts that are not maintained accurately due to numerous factors. 599 Typically, LUMA encounters an issue with Account Legalization when the service is 600 registered to a deceased head of household, and the account has not been updated to the 601 current resident, who may be a relative of the deceased. This has occurred with

significant frequency in Puerto Rico, possibly due to the island's aging population or the availability of subsidies for utility bills to those over 65. Account legalization, which is not currently in place (work in progress with procurement), is being implemented to address account legalization issues. This issue is recurring and evolving without a reliable process for estimating the expected issue volume. The issue creates challenges for LUMA in recovering past-due balances, as in these situations, the account holder is either deceased or no longer living at the property, resulting in disputes between the current owner/tenant or lengthy processes to work with the current resident to update the account. Often, in the event that the account holder is deceased, there are lengthy and complex processes for the new resident, usually a family member of the deceased, to transfer the account into their name. This involves providing death certificates and resolving legal matters related to financial assets. A function that some utilities implement to improve operational and collection efficiencies is often referred to as a "landlord agreement", "Revert-to-owner," or "landlord revert". This functionality would permit a property owner who rents their facility to a tenant to have the service in the tenant's name, with the responsibility for the property to return to the property owner in the event of a tenant-requested disconnection or disconnection due to nonpayment. PREPA had not implemented this functionality, the policies, or the related processes. Without these in place today, after a disconnection for nonpayment, disputes can arise over which party is responsible for the debt, depending on how service was established. This functionality also supports account maintenance and verification of account status, as the property management would be ultimately responsible for ensuring the account has updated information, such as name, contact

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details, and relevant documents, including a lease agreement with all tenants listed, to facilitate the collection of any uncollectible balances.

V. REPORTING LIMITATIONS

Q.43 What is the purpose of this section titled "Reporting Limitations"?

- A. The purpose of this section is to rebut the recommendation made by Smith & Dady that the Energy Bureau require LUMA to complete an analysis of the June 30, 2025, recorded amounts of Accounts Receivable for collectability, and to report on and document collections and amounts determined to not be collectible, and to have that completed by June 30, 2026.
- 634 Q.44 Does LUMA have a response to this recommendation?
- 635 A. Yes.

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- 636 Q.45 Please elaborate on LUMA's response.
- 637 A. This is not a realistic timeline to complete this initiative, as to do this would necessitate 638 completion of a substantial and extended data remediation project. As I described earlier 639 in my surrebuttal testimony, to remediate the massive volumes of legacy data within the 640 customer information and billing system is a massive undertaking that requires cross-641 functional expertise in systems, integrations, accounting, finance, laws and regulations, 642 and PREPA's Terms and Conditions. This is not a small side project that the existing 643 resource base can address; this is a large initiative that will require the dedicated focus of 644 a team over an extended period of time. The current team chips away at remediating 645 customer accounts and billing data as they can, but the magnitude of the problem must be 646 acknowledged. LUMA agrees that this should be addressed during the rate period and advocates for the approval of sufficient funding to do so. 647

VI.MODERNIZATION OF RATE STRUCTURE

A.

Q.46	What is the purpose of this section entitled "Modernization of Rate Structure"?

- The purpose of this section is to rebut specific recommendations made by Ming, Smith & Dady, and Cortés regarding modernizing PREPA's rate structure at this time. In this section, I will provide the context regarding the current state of the CC&B system inherited from PREPA, the limitations of the system as they relate to the recommendations made in the Expert Reports, and outline the risks to billing and revenues that any changes in configuration entail. I describe the estimated costs and timelines of the proposals made by Ming and Cortés, consolidating the known and proposed riders to be added to LUMA's CC&B system into a single discussion.

 Furthermore, I will reiterate the efforts required to prepare for the unavoidable major system upgrade and clarify the risks associated with not properly preparing for the upgrade during this rate period.
- Q.47 Please describe the current state of the CC&B system as it relates to the modernizing enhancements recommended by Ming and Cortés.
- A. Because it sets important context to frame the recommendations of Ming and Cortés, I will describe the current state of the CC&B system. LUMA is currently using the same version of Oracle CC&B that PREPA implemented prior to LUMA's takeover. This system, last upgraded in 2019, is highly customized with intricate code, and LUMA understands that the rate structure was customized in a nonstandard manner. The system that LUMA inherited from PREPA has been modified significantly from any off-theshelf product available. As a result, making enhancements to this system is expensive, time-consuming, and fraught with risk. LUMA's ability to update the rate structure is

restricted, and the current system lacks the flexibility and agility that LUMA requires. In addition to significant complexity within the system itself, PREPA had built numerous integrations between the CC&B system and other tools and applications, including both the financial system and the data lake. These integrations were largely undocumented, and changes to the CC&B system inherently introduce additional risks to its integrations, which could impact financial recordkeeping and reporting. An upgrade to the system and the rate engine therein is required.

Q.48 You mention that an upgrade to the billing system is required. Can you please explain why?

A.

Yes. The CC&B system is no different from any other system in that there is a lifecycle associated with each version. LUMA understands that the existing CC&B system reaches the end of its current version support in 2026. This means that in 2027, LUMA's CC&B system will be unsupported by Oracle, and, in turn, fewer resources will be available, as the knowledge base will dwindle, with vendors focusing their resources on supporting current versions. Put simply, it is becoming increasingly challenging to recruit, retain, or hire the resources necessary to support the intricate and highly customized nature of the CC&B system. It is expected that, as the system ages out of its supported life, it will experience an increasing number of incidents, and the likelihood of this risk increases with each additional modification we attempt to this structure. With fewer resources and a diminishing knowledge base, technical and professional services to address these incidents are expected to become more costly. Indeed, the Customer Experience department's Professional and Technical Outsourced Services budget for FY2027 and FY2028 contains an additional \$5 million to account for the anticipated increase in costs

associated with operating an outdated customer information and billing system.

As the version approaches the end of vendor support, an upgrade is necessary to ensure ongoing support and security patches. LUMA has a business strategy to remain on vendor-supported information technologies. As vendor support declines, the risk of cybersecurity threats increases. Based on the foregoing, LUMA submits that an upgrade to a cloud platform will ensure critical business functions continue to operate reliably and securely, and that LUMA will have access to the improved functionality of modern cloud-based software.

Q.49 Is an upgrade to the current billing system contemplated in the Customer Experience department's revenue requirement for FY2026 to FY2028?

A.

No. While an upgrade to a cloud product is planned, this project is not expected to start until FY2029. I highlight the upcoming upgrade in my surrebuttal testimony to emphasize that LUMA's roadmap for this system includes transitioning from a highly customized solution to a cloud-based system with minimal customization in the coming years. This will involve significant simplification of system processes and elements, including the rate structure. It is essential to recognize that investments in modifying the current system will need to be retired, as many of these elements will require redesign or rebuilding upon upgrade. It is my strong recommendation that the Energy Bureau prioritize activities focused on stabilizing the CC&B system to the extent possible during this rate period as part of a longer-term strategy to provide rate flexibility to the customer base and minimize changes to the rate structure to the extent possible. Funding for breakfix and necessary enhancements should be approved, as should funding related to the data remediation initiative and the development of any riders deemed necessary at this time,

717		given my previous comments regarding the upcoming replacement of existing system
718		customization.
719	Q.50	The Ming Report recommends that LUMA develop a robust plan to study and
720		implement Time of Use rates in the coming years, such that these can be rolled out
721		on a large scale as soon as possible. Does LUMA have a response to this?
722	A.	Please refer to the response to the discovery request PC-of-LUMA-NONPHYS_OPS-22
723		As noted by LUMA during the Technical Conference on May 7, 2025, the
724		implementation of dynamic pricing options such as time-of-use (TOU) rates is not
725		feasible at this time due to infrastructure and system limitations. Specifically, a Meter
726		Data Management System (MDMS) integrated with the billing system is critical for
727		dynamic pricing, and the MDMS is still in procurement. Industry-standard MDMS
728		implementation requires up to 24 months for integration and testing, and LUMA's
729		island-wide Automated Metering Infrastructure (AMI) deployment is not expected to be
730		completed until the end of calendar year 2028. I strongly recommend that AMI be fully
731		deployed for all customers and that the system be stabilized before transitioning to TOU
732		rates to ensure equitable access. I am supportive of a plan for Time of Use rates and
733		would advocate for this to be a holistic rate strategy that reflects realistic circumstances
734		and timelines, and is contingent upon adequate funding for the supporting workstreams.
735	Q.51	The Ming Report recommends that LUMA collapse the inclining block structure
736		and move to a flat energy rate. Do you have an opinion on this?
737	A.	Yes. I have concerns about making modifications to the rate structure before an upgrade
738		to the rate engine is completed. Modifications to the current rate structure increase the
739		risk of system incidents and billing errors, and require additional funding to update

reports. Mr. Ming indicates that it is likely there will be no impact on customer bills; however, it would simplify the rate structure. I agree with simplifying the rate structure, but especially in instances where there is no immediate customer benefit, deferring changes to such time as the system is upgraded remains my strong recommendation and is the most prudent use of ratepayer funding.

Q.52 The Cortés Report recommends that LUMA develop a new rider to fund a Restricted Federally Funded Capital Account to use as a liquidity tool. Do you have an opinion on this?

A. Yes. It is important to consider that, as described earlier in my surrebuttal, there is a small team of resources who can support enhancements to the highly customized system. This is not a resource base that can be increased, due to the nonstandard customization of the system and its near-end-of-life status. To give context to the anticipated pipeline of work for these resources, Table 1 consolidates the proposed new riders to be added to the CC&B system that are being discussed in this rate proceeding. This workload is in addition to any required break-fix work that must be done by this team to maintain day-to-day billing operations.

Table 1 – Pipeline of Potential System Enhancements

Source	Enhancement	Time Estimate	Cost Estimate (\$M)
PREB Order –	Convert pension rider to fixed charge	60 - 90 days	\$0.5
7/31	mechanism (in progress)		
PREB Order –	Develop and test provisional rate true-up	60 - 90 days	\$0.5
7/31	rider		
Potential – LUMA	Develop and test major storm costs rider	60 - 90 days	\$0.5
Proposal 7/3			
Potential – LUMA	Develop and test rider for revenue	60 - 90 days	\$0.5
Proposal 7/3	decoupling mechanism		
Potential – LUMA	Convert CILT & SUBA riders to fixed	60 - 90 days	\$0.5
Proposal 7/3	charge mechanisms and exclude low		
	income classes.		

Potential – LUMA	Develop and test legacy debt rider	60 - 90 days	\$0.5
Proposal 7/3			
Potential - Cortés	Develop and test rider for Restricted	60 - 90 days	\$0.5
Report	Federally Funded Capital Account		
Total		420 – 630 days	\$3.5

This is not work that can be performed concurrently; rather, each rider must be developed in LUMA's test environment, fully tested, and elevated to the production environment before work can begin on the next rider. Additionally, work cannot begin until an order from the Energy Bureau is received, finalizing the details of the rider. As the team cannot start design work until it has direction on the final rate structure, including which classes may be excluded and whether the Energy Bureau prefers a fixed or variable mechanism.

Specifically, regarding the recommendation in the Cortés Report to develop a rider that provides working capital for federally funded projects, my concern is the timeliness of implementation and collections. As described earlier, the team requires details from the Energy Bureau regarding the rider's design before the 60- to 90–day timeline can begin. Understanding that the final rate order is expected to be issued in April 2026, the earliest that the first rider established in that order could appear on the customer's bill is sometime in Q1 FY2027. It is important to highlight that there is a timing difference between when an item appears on a bill and when the funds actually appear in PREPA's bank accounts. Considering the current Days Sales Outstanding (DSO) metric of approximately 90 days across all customer classes, this indicates that median collections from the rider deemed the highest priority by the Energy Bureau in the Final Rate Order will occur at some point in Q2 FY2027. I reiterate the concern that this does not seem like a timely solution to what I understand to be an urgent need for funding.

Q.53	Aside from the implementation challenges discussed above, are there any other
	considerations that need to be made when contemplating additions or changes to the
	rate structure?

A.

Yes. It is not just the development and implementation of a new rider in the current system structure that must be considered. Adding further complexity is that the CC&B system lacks reporting functionality, and as such, using canned reports from the system is not possible. Instead, PREPA built a data lake environment to integrate with several of its systems, including CC&B, and it is the data lake from which LUMA's billing and revenue reports are generated. When new riders are added, it requires additional effort from third-party consultants to update these custom reports so that LUMA can report on its financial information. As described earlier in my surrebuttal testimony, changes to the system introduce risk not only to the system itself but also to any reports that rely on integrations with other tools and systems.

Additionally, adding riders beyond those currently represented on the customer bill is expected to push the section describing charges onto an additional page. At a rate of \$0.0586 per page, across 1.5 million customers, this could add approximately \$1 million to the Customer Experience department's costs each year.

VII. ELECTRIC VEHICLE ADOPTION PROGRAM

Q.54 What is the purpose of this section entitled "Electric Vehicle Adoption Program"?

A. The purpose of this section is to rebut specific statements made by Ms. Lane regarding the Electric Vehicle Adoption Program ("EVAP") and her recommendations around developing a new rate specifically for public-facing Direct Current Fast Charging ("DCFC") charging for electric vehicles.

801	Q.55	In the Exhibit 60.0, Expert Report of Courtney Lane ("Lane Report"), Mrs. Lane
802		recommends that the Energy Bureau approve LUMA's Optimal Budget for the PR-
803		EVAP (Sec. IV(A), p. 9), that the Energy Bureau does not need to approve a new
804		rate for public-facing DCFC EV charging in this rate review proceeding and that
805		the Energy Bureau directs LUMA to work with interested stakeholders to develop a
806		new rate for public-facing DCFC EV charging (Sec. IV(B), p. 10.). Do you have an
807		opinion on this?
808	A.	Yes. I agree with the recommendation that the Energy Bureau approve the Optimal
809		Budget for the PR-EVAP as presented in Section IV(A) of the Lane Report. The Optimal

A. Yes. I agree with the recommendation that the Energy Bureau approve the Optimal Budget for the PR-EVAP as presented in Section IV(A) of the Lane Report. The Optimal budget of \$700,000 annually for FY2026–FY2028 is necessary to continue customer education, infrastructure planning, and the EV TOU rate pilot program, as well as to leverage prior investments and manage grid impacts of EV adoption. This approach is reasonable and consistent with the goals of Act No. 33-2019, which emphasizes the need for efficient energy systems and the electrification of motor vehicles.

- Q.56 Do you have an opinion regarding the recommendation in the Lane Report that the Energy Bureau does not need to approve a new rate for public-facing DCFC EV charging at this rate and that LUMA must be directed to work with interested stakeholders to develop a new rate for public-facing DCFC EV charging?
- A. Yes. Given the operational and technical barriers that limit LUMA's ability to implement modernized rate concepts, as discussed earlier in my surrebuttal testimony, LUMA cannot commit to launching a public EV charging rate before the next rate case.

 However, LUMA is prepared to initiate the stakeholder process for rate design in advance.

- 824 Q.57 Does this complete your testimony?
- 825 A. Yes.

ATTESTATION

Affiant, Sarah Hanley, being first duly sworn, states the following:

The foregoing Surrebuttal Testimony constitutes testimony filed in surrebuttal to the answering testimony of Juan Sanabria Hernández, as filed in the captioned proceeding by Independent Consumer Protection Office ("OIPC" for its Spanish acronym), on September 8, 2025. 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 information provided herein is based in part on my personal knowledge, as well as on information provided to me by my staff, and information obtained from relevant documents. The information provided herein is true and correct to the best of my knowledge.

	Sara Hanley
Affidavit No	
Acknowledged and subscribed before me by Sarah Vice President of Customer Experience of LUMA, Puerto Rico, who has been identified by	of legal age, single, and resident of San Juan,
In San Juan, Puerto Rico, on theday of Nove	mber 2025.
	Notary Public

EXHIBIT 78.01

LUMA Response to PC-of-LUMA-NONPHYS_OPS-80

Rate Review

Responses for Information on Permanent Rates NEPR-AP-2023-0003

Response: PC-of-LUMA-NONPHYS_OPS-80

SUBJECT

Permanent Rates – Nonphysical Operations

REQUEST

Refer to LUMA Ex. 7.00 at 13/275 – 289, in which LUMA references activities it is taking for revenue protection and estimated financial benefits.

- a. How long has LUMA been implementing revenue protection activities?
- b. What revenue protection activities has LUMA been implementing?
- c. Quantify the cost and results of these activities to date.
- d. What new activities is LUMA proposing for revenue protection?
- e. What is the cost of the new activities LUMA is proposing?
- f. How long will it take to develop the baseline that LUMA references?
- g. What cost is LUMA proposing for the collection agency contract?
- h. What does LUMA expect the contract to include?

RESPONDER

Sarah Hanley

RESPONSE

LUMA files this discovery response without in any way implying that it considers this response could be admissible as evidence in this rate review proceeding. LUMA expressly reserves the right to supplement, clarify, revise, or correct this response.

a. LUMA has been implementing revenue protection activities since August 2021. The Department of Revenue Protection is responsible for collecting overdue balances for electricity consumption in Puerto Rico. Under the Puerto Rico Transmission and Distribution System Operation and

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Maintenance Agreement (T&D OMA), LUMA is tasked with collecting revenue and reducing Days Sales Outstanding (DSO).

- b. LUMA has implemented or is working toward the implementation of a comprehensive set of revenue protection activities aimed at recovering overdue balances and reducing Days Sales Outstanding (DSO). These activities include:
 - Customer Outreach: Engaging with customers through phone calls, including outbound call
 reminders, live advisor calls, and 48-hour disconnection notice calls, to notify them of outstanding
 balances and encourage timely payment.
 - Payment Arrangements: Offering structured payment plans to help customers manage and settle their debts while maintaining access to service.
 - Written Communications: Sending formal notices such as overdue letters and 30-day disconnection notices to inform customers of their account status and the consequences of continued non-payment.
 - Service Disconnections: Executing disconnections for accounts that remain delinquent after outreach and notification efforts, as a last resort to enforce payment compliance.
 - Account Monitoring and Enforcement: Continuously reviewing account statuses, following up on payment commitments, and adjusting strategies to improve collection performance and reduce DSO..
 - Automated Severance Process: Applies to all industrial, commercial, and residential customers with balances over \$2,500. Threshold will be gradually lowered over 18–24 months.
 - Third-Party Collections: LUMA plans to contract a collection agency to recover amounts owed on closed accounts.
 - Automated Write-Off Process:
 Designed to ensure uncollectible amounts are not reported as part of accounts receivable.
- c. LUMA has implemented a range of internal revenue protection activities, including customer

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outreach, written communications, and payment arrangement programs. These efforts have primarily targeted active accounts and have been managed using internal resources and systems.

Costs associated with these activities have been absorbed within existing operational budgets, primarily through staffing, system automation, and communication tools.

Results to date include:

Total Outbound Calls Made: 4,692,558

Total Payment Plans Established: 120,451

Total Collections Recovered: \$1,641,806,004

Total Disconnections Executed: 27,624

30-Day Disconnection Notices Sent: 129,158

Overdue Bill Reminder Letters Sent: 46,308

- Funds Received from External Assistance Programs: Includes contributions from Low Income Home Energy Assistance Program (LIHEAP) and COVID-related rental assistance programs: \$165,408,646
- A measurable reduction in Days Sales Outstanding (DSO) metric for active accounts¹.
- Increased payment compliance.
- d. LUMA is advancing several new initiatives to strengthen its revenue protection strategy, improve recovery rates, and address long-standing challenges with delinquent accounts. These proposed activities include both policy changes and operational enhancements:
 - Reduction of the Residential Severance Threshold: By lowering the disconnection threshold for residential customers, additional customers will become eligible for disconnection due to non-payment, targeting additional arrears. This measure is expected to drive earlier customer engagement and improve payment compliance.
 - Outsourcing Terminated Accounts to a Collection Agency: LUMA plans to recover balances from terminated service agreements. These monies would be recovered through a contingency-based collection agency contract.
 - Implementation of Law 22: LUMA is working to implement Law 22, which requires a
 detailed review of customer data in CC&B and a clear definition of LUMA's responsibilities
 under the law.
 - Recovery of Government Agency Debt: LUMA is also targeting outstanding balances from government agencies. Progress has been limited due to inter-agency coordination challenges and delays in decision-making around payment agreements and debt resolution strategies.

¹ See Case No. NEPR-MI-2019-0007, In Re: The Performance of the Puerto Rico Electric Power Authority, Submission of Performance Metrics Report for April through June 2025, filed on July 21, 2025, Exhibit 1. Available at https://energia.pr.gov/wp-content/uploads/sites/7/2025/07/Resumen-Metricas-Master July2025.xlsx

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Continued engagement is planned to address these barriers and secure long-term repayment commitments.

- e. LUMA is proposing a contingency-based compensation model for the collection agency contract, which is standard practice in the utility industry. This model ensures that costs are directly tied to performance and recovery outcomes, minimizing upfront financial risk while incentivizing effective collections. Final rates will be determined through the procurement requests for proposals (RFP) and negotiation process.
- f. It would take 12-18 months post implementation of a collection agency to develop a baseline.
- g. LUMA is proposing a contingency-based compensation model for the collection agency contract, which is standard practice in the utility industry. This model ensures that costs are directly tied to performance and recovery outcomes, minimizing upfront financial risk while incentivizing effective collections. Final rates will be determined through the procurement RFP and negotiation process.
- h. LUMA expects the collection agency contract to focus primarily on the recovery of terminated accounts with outstanding balances. The contract will be structured around a performance-based compensation model, most likely a contingency fee arrangement, where the agency is paid a percentage of the funds it successfully recovers. This approach aligns incentives and ensures that costs are directly tied to results.

In addition to the financial structure, the contract will include clear expectations around compliance with all applicable federal, state, and local regulations, including consumer protection and data privacy laws. The agency will be required to maintain high standards of professionalism and customer service, ensuring that all interactions with former customers are respectful, non-aggressive, and aligned with LUMA's values and brand reputation.

The contract will also include provisions for regular reporting and transparency, requiring the agency to provide detailed updates on collection activities, recovery performance, and customer engagement. Finally, strong data security and confidentiality protocols will be mandated to protect customer information throughout the collections process.

Attestation

I, Sarah Hanley, state that the information contained in this response is complete, true, and accurate to the best of my knowledge and belief.

/s/ Sah Hanley

EXHIBIT 78.02

LUMA Response to PC-of-LUMA-NONPHYS_OPS-22

Responses for Information on Permanent Rates NEPR-AP-2023-0003

Response: PC-of-LUMA-NONPHYS_OPS-22

SUBJECT

Permanent Rates – Non-Physical Operation

REQUEST

Refer to Response: PC-of-LUMA-NONPHYS_OPS-6(a).

When does LUMA anticipate dynamic pricing options will be available?
Will LUMA be able to offer an EV time-of-use rate using AMI infrastructure if the constrained Customer Experience budget is adopted? Please explain why or why not.

RESPONDER

Jessica Laird

RESPONSE

LUMA files this discovery response without in any way implying that it considers this response to be relevant or could be admissible as evidence in this rate review proceeding. LUMA expressly reserves the right to supplement, clarify, revise, or correct this response.

As noted by LUMA during the Technical Conference on May 7, 2025, 1 a Meter Data Management System (MDMS) that plugs into the billing system is critical and necessary to implement dynamic pricing such as time-of-use (TOU) rates. Currently, MDMS is still in the procurement phase and several more months of bid evaluations, contracts, and general procurement processes are expected. Industry standard MDMS implementation takes up to 24 months to ensure proper integration and testing with the billing engine. Even with a standard 24-month MDMS implementation, LUMA's island-wide installation and deployment of Automated Metering Infrastructure (AMI) is not scheduled to be completed until the end of calendar year 2028. It is highly recommended that AMI be fully deployed for all customers before moving to TOU rates to ensure fair access across LUMA's customer base.

At the May 7th Technical Conference, LUMA also clarified that an upgrade to the rate engine within the Customer Care & Billing (CC&B) system would be needed to implement TOU rates. While funding for this

Rate Review Technical Conference of May 27, 2025, Docket No. NEPR-AP-2023-0003. Available at https://www.youtube.com/watch?v=2pQbhUiiwWg.

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upgrade is requested in the current rate review, it would be highly unlikely and cost-prohibitive to implement TOU rates before 2028.² Additionally, LUMA faces challenges in reconfiguring the system from the way it is highly customized today.³ As a result, LUMA anticipates that dynamic pricing options will not be available before the next rate case. Atypical options to implement TOU rates could include shadow billing, but that is only suitable for small pilot programs rather than a general tariff offering.⁴

Based on the foregoing limitations created by the timeline for completion of the AMI program (which could be impacted by supply chain disruptions or potential logistical challenges associated with getting items to Puerto Rico), LUMA is not currently proposing an electric vehicle (EV) TOU rate using AMI infrastructure in the current rate case, regardless of the budget adopted. In fact, as described in response to *PC-of-LUMA-NONPHYS_OPS-23*, if the constrained budget is adopted, the current EV TOU pilot program will be eliminated, and no EV TOU rate will be available. LUMA further notes that at this time, given the limited number of participants and the data obtained from the current interim EV TOU rate, it would also be premature to develop and recommend a successor rate.

Attestation

I, Jessica Laird, state that the information contained in this response is complete, true, and accurate to the best of my knowledge and belief.

/s/ Jessica Laird

^{2 1:02:54} to 1:05:25 of Rate Review Technical Conference of May 27, 2025, Docket No. NEPR-AP-2023-0003. Available at https://www.youtube.com/watch?v=2pQbhUiiwWq.

³ *Id.*, 1:05:25

⁴ *Id.*, 1:04:35 to 1:04:52.