LUMA’S MOTION SUBMITTING SUPPLEMENTAL REBUTTAL TESTIMONIES AND URGENT REQUEST FOR AN EXTENSION OF TIME TO FILE REBUTTAL TESTIMONY OF WITNESS LEE WOOD

TO THE HONORABLE PUERTO RICO ENERGY BUREAU:

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

1. On December 22, 2021, the Puerto Rico Energy Bureau (“Energy Bureau”) issued a Resolution and Order determining that additional performance metrics should be evaluated in this proceeding on Interconnection, Energy Efficiency/Demand Response, and Vegetation Management (“December 22nd Order”). The Energy Bureau amended the procedural calendar to incorporate a timeframe to allow intervenors to submit supplemental testimonies limited to those additional metrics.

2. On January 14, 2022, the Energy Bureau issued a Resolution and Order amending the procedural calendar in this instant proceeding (“January 14th Resolution and Order”). It granted intervenors until March 22, 2022, to submit supplemental written testimonies limited to the
additional performance metrics. The Energy Bureau also ordered LUMA to submit its witnesses’ supplemental rebuttal testimonies on the additional performance metrics on or before April 27, 2022.

3. On March 22, 2022, the Local Environmental and Civil Organizations (“LECO”) filed the supplemental pre-filed expert witness testimony of Mr. Agustín Irizarry on the additional performance metrics.

4. In compliance with the January 14th Resolution and Order, LUMA respectfully submits with this motion as Exhibit 1 the following pre-filed witnesses’ supplemental rebuttal testimonies. All of these witnesses are employees of LUMA and are presenting their supplemental rebuttal testimonies on behalf of LUMA:

   a. Mr. Mario Hurtado - Chief Regulatory Officer
   b. Mr. Don Cortez – Vice President, Utility Transformation
   c. Mr. Brent Bolzenius – Director, Vegetation Management

5. One of LUMA’s witnesses, Mr. Lee Wood, had an unexpected family emergency outside the jurisdiction of Puerto Rico that made it unattainable for him to finalize his testimony by the due date. Therefore, LUMA respectfully requests an extension of time until May 4th, 2022, to file Mr. Wood’s rebuttal testimony. The extension request is made in good faith and does not intend to cause undue delay in the proceeding. LUMA believes Mr. Wood’s family situation is sufficient just cause for this Energy Bureau to grant the extension request.

6. In view of the foregoing, LUMA respectfully requests that this Energy Bureau receive and accept the above-described pre-filed witnesses’ supplemental rebuttal testimonies.
WHEREFORE, LUMA respectfully requests that the Energy Bureau receive and accept the rebuttal testimonies submitted as Exhibit 1 of this Motion; and deem that LUMA partially complied with the requirements of this Energy Bureau’s Resolution and Order dated January 14, 2022, with regards to the pre-filed witnesses supplemental rebuttal testimonies. Furthermore, LUMA requests that the Energy Bureau extend the deadline for LUMA to submit the supplemental rebuttal testimony of witness Lee Wood until May 4th, 2022.

RESPECTFULLY SUBMITTED.

We hereby certify that we filed this motion using the electronic filing system of this Energy Bureau and that I will send an electronic copy of this motion to the attorneys for PREPA, Joannely Marrero-Cruz, jmarrero@diazvaz.law; and Katiuska Bolaños-Lugo, kbolanos@diazvaz.law, the Office of the Independent Consumer Protection Office, Hannia Rivera Díaz, hrivera@jrsp.pr.gov, and counsel for the Puerto Rico Institute for Competitiveness and Sustainable Economy (“ICSE”), Fernando Agrait, agraitfe@agraitlawpr.com, counsel for the Colegio de Ingenieros y Agrimensores de Puerto Rico (“CIAPR”), Rhonda Castillo, roncat@netscape.net, and counsels for Comité Diálogo Ambiental, Inc., El Puente de Williamsburg, Inc., Enlace Latino de Acción Climática, Alianza Comunitaria Ambientalista del Sureste, Inc., Coalición de Organizaciones Anti-Incineración, Inc., Amigos del Río Guaynabo, Inc., CAMBIO, Sierra Club and its Puerto Rico Chapter, and Unión de Trabajadores de la Industria Eléctrica y Riego (jointly, Puerto Rico Local and Environmental Organizations), larroyo@earthjustice.org, lvelez@earthjustice.org, rmurthy@earthjustice.org, rstgo2@gmail.com, notificaciones@bufete-emmanuelli.com, pedrosaade5@gmail.com, jessica@bufete-emmanuelli.com; rolando@bufete-emmanuelli.com.

In San Juan, Puerto Rico, this 27th day of April 2022.
DLA Piper (Puerto Rico) LLC
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Exhibit 1

Pre-Filed Witnesses’ Supplemental Rebuttal Testimonies
IN RE: PERFORMANCE TARGETS FOR LUMA ENERGY SERVCO, LLC

CASE NO.: NEPR-AP-2020-0025

Rebuttal Testimony of
Mr. Mario Hurtado
Chief Regulatory Officer, LUMA Energy LLC, and LUMA Energy ServCo LLC
April 27, 2022
Q. Please state your name.

A. My name is Mario Hurtado.

Q. Please state your business mailing address, title, and employer.

A. My business mailing address is PO Box 363508 San Juan, Puerto Rico 00936-3508. I am the Chief Regulatory Officer for LUMA Energy.

Q. Please state your educational background.

A. I received a Bachelor of Arts degree in Political Science from Columbia University in 1990.

Q. Please state your professional experience.

A. I have over 25 years of professional experience developing and managing large electric utility and energy businesses throughout the United States and Latin America. My experience includes the execution of multiple transactions and management of electric utility public-private partnerships, including the assumption of operations and management of formerly government-run operations. I have been part of the senior management and on the Board of Directors of utility companies, serving millions of customers. I have developed electric utility and other energy infrastructure, including power generation. In October 2021, I was appointed as a member of the Committee advising the Department of Energy on electric policy. In 2020, I joined LUMA Energy as Vice President of Regulatory.

Q. Please describe your work experience prior to joining LUMA.

A. Prior to joining LUMA, I was an advisor for Quanta Services, focused on the Request for Proposal for Operation & Maintenance of the Puerto Rico Transmission and Distribution System.

Q. Have you previously testified and appeared before the Puerto Rico Energy Bureau?

A. Yes. I have provided testimony under oath in Technical Conferences in several
proceedings, including: Initial Budgets, Case No. NEPR-MI-2021-0004, System Operation
Principles, Case No. NEPR-MI-2021-0001; System Remediation Plan, Case No. NEPR-
MI-2020-0019; Review of LUMA’s Terms of Service, Case No. NEPR-MI-2021-0007,
LUMA’s Model Bill, NEPR-MI-2021-0008; Vegetation Management Plan, Case No.
NEPR-MI-2019-0005, PREPA’s 10 Year Plan, Case No. NEPR-MI-2020-0021,
Despliegue de Infraestructura de Cargadores para Vehículos Eléctricos, NEPR-MI-2021-
0013, Performance of the Puerto Rico Electric Power Authority, Case No. NEPR-MI-2019-
0007; Performance Targets for LUMA Energy ServCo, NEPR-AP-2020-0025; Emergency
Response Plan for the Puerto Rico Electric Power Authority, Case No. NEPR-MI-2019-
0006; PREPA’s Permanent Rate Case, NEPR-MI-2020-0001; and Implementation of the
Puerto Rico Electric Power Authority Integrated Resource Plan and Modified Action Plan,
NEPR-MI-2020-0012.

Q. **On whose behalf are you testifying before the Puerto Rico Energy Bureau?**

A. My testimony is on behalf of LUMA as part of the Puerto Rico Energy Bureau (“Energy
Bureau”), Commonwealth of Puerto Rico Public Service Regulatory Board proceeding
Case No. NEPR-AP-2020-0025, the Performance Targets for LUMA Energy ServCo,
LLC.

Q. **Are there any exhibits attached to your testimony?**

A. No.

Q. **What is the purpose of your rebuttal testimony?**

A. To respond to those portions of the additional pre-filed testimony of Mr. Agustín Irizarry
(“Mr. Irizarry”) on behalf of the Local Environmental and Civil Organizations (“LECO”),
filed on March 22, 2022, in this proceeding, regarding his recommendations on

Q. **Did you consider any documents for your rebuttal testimony?**

A. Yes, I did.

Q. **Which documents did you consider for your rebuttal testimony?**

a. LUMA’s Performance Metrics Targets Revised filing submitted on September 24, 2021, in this proceeding, Case No. NEPR-AP-2020-0025,

b. The direct testimonies of LUMA’s witnesses filed on August 18, 2021, September 9, 2021, and September 24, 2021,

c. The pre-filed testimony of Mr. Agustín Irizarry of November 16, 2021, filed in this proceeding, Case No. NEPR-AP-2020-0025 and his expert report, which is an exhibit of his pre-filed testimony,

d. The additional pre-filed testimony of Mr. Agustín Irizarry of March 22, 2022, filed in this proceeding, Case No. NEPR-AP-2020-0025,

e. The responses provided by Mr. Agustín Irizarry to LUMA’s First and Second Sets of Interrogatories and Requests for Production of Documents notified on January 13, 2022,

f. The responses provided by Mr. Agustín Irizarry to LUMA’s Third Set of Interrogatories and Request for Production of Documents notified on April 21, 2022,

g. The responses provided by Mr. Agustín Irizarry to the Puerto Rico Energy Bureau’s Requirements for Information notified on December 20, 2021,
h. The supplemental responses provided by Mr. Agustín Irizarry to LUMA’s First and Second Sets of Interrogatories and Requests for Production of Documents, notified on February 4, 2022,

i. The rebuttal testimonies of experts Juan Lara and Branko Terzic dated February 16, 2022, and the rebuttal testimonies of LUMA’s witnesses filed on February 1st and 17th, 2022, and

j. My rebuttal testimony filed on March 3, 2022, in this proceeding, Case No. NEPR-AP-2020-0025.

Q. Did you rely on any other information for your testimony?

A. My professional experience, including my experience in connection with the Transmission and Distribution System of the Puerto Rico Electric Power Authority (“PREPA”) and its operations (“T&D System”).

Q. Do you agree with Mr. Irizarry’s statement on page 3, line 24, and page 4, lines 1-3, of his additional pre-filed testimony that rewarding LUMA for achieving required compliance or for performance comparable to PREPA’s baseline performance in the Fiscal Year 2020 is the antithesis of the performance base mechanism concept and contrary to the public interest?

A. No.

Q. Please state and explain your response.

A. Firstly, PREPA was a failed operating utility, and one of the failures was the lack of written procedures that were followed to carry out utility functions. This includes the collection of data and the calculation of metrics, and reporting of results. As stated in LUMA’s Performance Metrics Targets petition and evidenced by the testimonies of several LUMA
witnesses who have testified, LUMA’s subject matter experts have reviewed PREPA’s data, and it is, in many cases, highly suspect. Data sources do not match. PREPA’s recording of the data did not follow established procedures. As a general matter, PREPA did not systematically follow industry practice, and in particular, it did not follow industry practice in the collection, calculation, and reporting of performance metrics. As a result, it is challenging to establish reliable baselines based on PREPA’s reported performance.

Secondly, LUMA has provided ample evidence of how PREPA’s performance was below industry standards in this case, and in the System Remediation Plan case NEPR-MI-2020-019 (specifically the Gap Assessment). Achieving required compliance is precisely one of LUMA’s main challenges in taking over the operations of a failed utility. Going from PREPA’s performance levels to required compliance requires a high degree of expertise, effort, and focus on the part of LUMA as Operator. And going from PREPA’s level of performance to required compliance is a significant improvement over the situation under the previous operator and results in not only compliance with Puerto Rico public policy goals, the OMA, and regulations but provides customers with improvements in service levels and positions LUMA to further achieve performance in further in the future line with leading utilities. Both achieving a compliance level where previous performance was not compliant, and establishing the basis for performance in line or better than industry peers are in the public interest as they will result in improved service to customers and achievement of Puerto Rico’s public energy policy goals.

Finally, LUMA’s Performance Metrics Targets provide incentives to the operator and are not structured to be penalties. Introducing a penalty system is a punitive measure that would punish LUMA and erode the Puerto Rico Transmission and Distribution System Operation
and Maintenance Agreement ("T&D OMA"). LUMA, as the Operator, is not the equity owner, and the terms of the T&D OMA limit LUMA’s financial upside. LUMA’s downside is also defined by the terms of the T&D OMA.

Q. Do you agree with Mr. Irizarry’s statement on page 4, lines 5-8, of his additional pre-filed testimony that performance significantly below PREPA’s baseline should warrant severe penalties, like reduction in LUMA’s fixed fees, shortening its contract, or termination of the contract?

A. No.

Q. Please state and explain your response.

A. As a threshold matter, what Mr. Irizarry is proposes would constitute a substantive modification to the terms and conditions of the T&D OMA, a matter that is not at issue in this proceeding.

The T&D OMA resulted from an 18 month-long, competitive proposal process. Prior to the procurement process, the Puerto Rico government decided that an operator structure under a public-private partnership was the most appropriate method to improve the administration and management of the electric utility. Under this structure, the operator was selected based on a specific allocation of risks and rewards, specifically designed for an operator and not an equity owner. LUMA’s compensation is limited based on the fee structure as an operator. Article 7 of the T&D OMA specifically includes an Incentive Fee as a component of the total Service Fee for the operator. The Service Fee is not structured as a variable fee to reduce the fixed fee. The penalties or the disincentives for the operator are established as default provisions in the T&D OMA and were part of the overall risk and reward equation presented. LUMA’s proposal was judged to be superior to other
competitors, including the acceptance by LUMA of the structure of the performance
metrics and the incentive structure proposed by the Government of Puerto Rico. This
structure is a fundamental part of the public-private partnership that was established in the
context of a failed electric utility. The assumption of operations of such a utility is in itself
a risky enterprise because of the multiple additional risks to execution not present in a
normally functioning utility. While Mr. Irizarry repeatedly refers to a “fixed fee,” the
performance metrics are tied to an incentive that is not fixed. The incentive is established
within certain bounds, including that there are incentives for performance to add to the
overall fee.

Additionally, the T&D OMA already includes a clause calling for cancellation for non-
performance. Under Section 14.1(k) of the T&D OMA, it shall constitute a default by
LUMA the failure to meet “the Minimum Performance Threshold for any three (3) Key
Performance Metrics during three (3) or more consecutive Contract Years and no such
failure shall have been excused by a Force Majeure Event, an Outage Event or Owner
Fault”. The Key Performance Metrics under the OMA are: OSHA Fatalities (number of
work-related fatalities), OSHA Severe Injuries (number of total work-related injury cases
with severity days), SAIFI (measures average outage frequency), SAIDI (measures average
outage duration), Operating Budget, Capital Budget – Federally Funded, and Capital
Budget – Non-Federally Funded (the last three measure the ability to stay within budget).
Therefore, the T&D OMA has envisioned a mechanism in which a default by LUMA to
meet the minimum standard on specific performance metrics for consecutive years will
allow for the cancellation of the contract. The cancellation of the contract is the most
substantial penalty there can be. Additional financial penalties to be triggered for
underperformance is a fundamental alteration of the risk and reward equation for an operator given the language of the T&D OMA.

Q. Do you agree with Mr. Irizarry’s statement on page 5, lines 1-5, of his additional pre-filed testimony that the Energy Bureau must examine whether LUMA complied with the expectation of successfully interconnecting all backlogged applications into the net metering program?

A. No.

Q. Please state and explain your response.

A. The Energy Bureau examines LUMA’s progress in interconnecting all backlogged applications into the net metering program in Case No. NEPR-MI-2019-0016, a dedicated proceeding initiated to oversee interconnection of distributed resources. An addition of a metric on interconnections would also be redundant and overlap with the labor carried out in Case No. NEPR-MI-2019-0016.

As the Energy Bureau is aware, LUMA has made multiple changes to the process for approval of net metering and has achieved activation of net metering customers well above rates achieved by the previous operator. LUMA has activated over 18,000 customers to net metering in the first ten months of operations. The rate of interconnection and activation is much higher than the historical baseline. However, the interconnection of net metering customers is not entirely dependent on LUMA. It also requires that the documents submitted by the customers for the interconnection project are complete once the requests reach the validation stage. About 35% of the interconnection requests submitted have to be corrected at the validation stage because they are incomplete or include incorrect information. The required documents are necessary to verify that the security and integrity
of the network are not affected by the interconnection and correctly identify the account to be activated in the Net Metering Program. Incomplete and incorrect applications --which are outside LUMA’s control-- add to a delay in processing the applications and ultimately activating net metering customers.

Q. Do you agree with Mr. Irizarry’s recommendation on page 9, lines 19-23, that LUMA has not adequately evaluated whether its proposed incentives are tied to difficult tasks or easy to fix areas?

A. No.

Q. Please state and explain your response.

A. Whether a task is difficult or easy is highly subjective. LUMA has documented the high degree of deterioration and deficiency of the electric utility in Puerto Rico extensively prior to June 1, 2021, when LUMA began operations. In fact, as measured by safety, reliability, and customer satisfaction, PREPA was the worst-performing utility of comparable size in the United States. As I have stated, there were no written procedures for fundamental utility and business operations. Assuming the operation of such a deteriorated and neglected utility operation and then working on getting the operation to an acceptable minimum industry standard and ultimately to the level of its peers in North America is a monumental task. Some tasks are more complex than others, but at this stage in transforming the utility, practically all of the critical tasks are difficult.

One of the key criteria for appropriate performance metrics is suitability to the goal sought, and for LUMA, in particular, alignment with energy policy objectives and customer benefit. That does not include a subjective assessment of whether the work is difficult. At this point, it is entirely fair to state that LUMA’s Performance Metrics Targets are tied to
complex tasks.

Q. Does this complete your testimony?

A. Yes.
ATTESTATION

Affiant, Mr. Mario Hurtado, being first duly sworn, states the following:

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

[Signature]
Mario Hurtado

Acknowledged and subscribed before me by Mr. Mario Hurtado in his capacity as Chief Regulatory Officer of LUMA Energy, of legal age, married, and resident of San Juan, Puerto Rico, who is personally known to me.

[Signature]
identified by driver's license 7195688

In San Juan, Puerto Rico, this 27th day of April 2022.

[Signature]
Public Notary
GOVERNMENT OF PUERTO RICO
PUERTO RICO PUBLIC SERVICE REGULATORY BOARD
PUERTO RICO ENERGY BUREAU

IN RE: PERFORMANCE TARGETS FOR LUMA ENERGY SERVCO, LLC

CASE NO.: NEPR-AP-2020-0025

Rebuttal Testimony of
Mr. Don Cortez
Vice President – Utility Transformation, LUMA Energy ServCo. LLC
April 27, 2022
Q. Please state your name.
A. My name is Don Cortez.

Q. Please state your business address, title, and employer.
A. My business address is LUMA Energy, P.O. Box 363508, San Juan, Puerto Rico 00936-3508. I am the Vice President of Utility Transformation for LUMA Energy ServCo. (LUMA), LLC.

Q. On whose behalf are you testifying before the Puerto Rico Energy Bureau (the “Energy Bureau”).
A. My testimony is on behalf of LUMA as part of the Commonwealth of Puerto Rico Public Service Regulatory Board, Puerto Rico Energy Bureau (Energy Bureau) proceeding NEPR-AP-2020-0025, addressing Performance Targets for LUMA.

Q. Are there any exhibits attached to your testimony?
A. No.

Q. What is your educational background?
A. I graduated from Texas A&M University in 1976 with a Bachelor of Science Degree in Electrical Engineering.

Q. What is your professional experience?
A. I have approximately 40 years of professional experience in the utility industry. In 2020, I joined LUMA Energy as Vice President of Utility Transformation.

Q. Please describe your work experience prior to joining the LUMA?
A. I have approximately 33 years with CenterPoint Energy and its predecessor companies. I spent ten of the 33 years transforming companies bought from governments in Argentina, Colombia, and Brazil. In my last overseas assignment, I was the Director of Operations in
Eletropaulo (now Enel Distribuição São Paulo), responsible for all Transmission and Distribution operations. The company served the Sao Paulo metropolitan area and had (at that time) approximately 4.4 million customers. In my last assignment with CenterPoint Energy, I was the Vice President of Operations Technology, responsible for designing the smart grid and Advanced Metering Infrastructure. I also worked for approximately 4 years with IBM in a Global Utilities Business Development Executive role. My last assignment prior to LUMA was working for Quanta Services in an Executive Business Development role.

Q. **Have you previously testified or made presentations before the Puerto Rico Energy Bureau (PREB)?**

A. Yes. I have presented and/or testified before the Energy Bureau in several proceedings, including the following:


b. Initial Budgets Technical Conference, Case NEPR-MI-2021-0004 – May 3 - May 5, 2021,


d. System Remediation Plan Technical Conference NEPR-MI-2020-0019 – May 14 and May 17, 2021, and


Q. **What is the purpose of your rebuttal testimony?**
To respond to several portions of the additional pre-filed testimony of Mr. Agustín Irizarry (“Mr. Irizarry”), on behalf of the Local Environmental and Civil Organizations (“LECO”), filed on March 22, 2022, in this proceeding, Case No. NEPR-AP-2020-0025. Finally, I also testify to support further LUMA’s Performance Metrics Targets filing of September 24, 2021 (“LUMA’s Performance Metrics Targets”).

Q. Did you consider any documents for your rebuttal testimony?

A. Yes, I did.

Q. Which documents did you consider for your rebuttal testimony?

a. LUMA’s Performance Metrics Targets Revised filing submitted on September 24, 2021, in this proceeding, Case No. NEPR-AP-2020-0025,

b. Puerto Rico’s Transmission and Distribution System Operation and Maintenance Agreement (“T&D OMA”),

c. The pre-filed testimony of Mr. Agustín Irizarry of November 16, 2021, filed in this proceeding, Case No. NEPR-AP-2020-0025 and his report, which is an exhibit of his pre-filed testimony,

d. The additional pre-filed testimony of Mr. Agustín Irizarry of March 22, 2022, filed in this proceeding, Case No. NEPR-AP-2020-0025,

e. The responses provided by Mr. Agustín Irizarry to LUMA’s First Set of Interrogatories and Request for Production of Documents notified on January 13, 2022,

f. The responses provided by Mr. Agustín Irizarry to LUMA’s Second Set of Interrogatories and Request for Production of Documents notified on January 13, 2022,

g. The responses provided by Mr. Agustín Irizarry in the Document entitled LECO’s Responses to Objections Raised by LUMA to Discovery Responses Provided by Agustín


Irizarry, notified on February 4, 2022,

h. The responses provided by Mr. Agustín Irizarry to LUMA’s Third Set of Interrogatories and Request for Production of Documents notified on April 21, 2022,

i. The Puerto Rico Transmission and Distribution System Operation and Maintenance Agreement of June 22, 2020,


k. Partnership Committee Report, Puerto Rico Public-Private Partnership for the Electric Power Transmission and Distribution System,

l. LUMA’s System Remediation Plan ("SRP"), approved in Case No. NEPR-MI-2020-0019,

m. Resolution and Order by the Puerto Rico Energy Bureau approving LUMA’s SRP, dated June 22, 2021, Case No. NEPR-MI-2020-0019,

n. LUMA’s Initial Budgets filed and approved in Case No. NEPR-MI-2021-0004,

o. Resolution and Order by the Puerto Rico Energy Bureau approving LUMA’s Initial Budgets, dated May 31, 2021, Case No. NEPR-MI-2021-0004.

p. LUMA Energy Quarterly Report, Second Quarter Fiscal Year 2022, October 1-December 31, 2021, February 14, 2022,

q. Resolution and Order of the Puerto Rico Energy Bureau of May 31, 2021, Case No. NEPR-MI-2021-0007, In re Review of LUMA’s Terms of Service (Liability Waiver), and

r. LUMA’s Motion Resubmitting LUMA’s Comments on Performance Baselines and Metrics Based on Data Presented on January 19th, 2020 by the Energy Bureau, and Resubmitting Proposed Performance Metrics and Baselines, Case NEPR-MI-2019-
Q. Do you agree with Mr. Irizarry’s statement on page 3, lines 1-17 of his additional pre-filed testimony that the Energy Bureau’s additional metrics fit the criteria of Act 17-2019 and Regulation 9137?

A. No.

Q. Please explain your response.

A. Mr. Irizarry’s statement does not consider that the Transmission and Distribution System ("T&D System") of the Puerto Rico Electric Power Authority ("PREPA") requires significant investment to reach the level of safe and reliable service expected of a 20th century system, which is needed as a platform on which to transform into a safe and reliable 21st-century system. The findings of the Puerto Rico Legislature in approving Act 120-2018 allowed the process to select a private operator for the T&D System and laid the groundwork for the transformation of Puerto Rico’s electric power system; and Act, 17-2019, established that PREPA was not a 20th-century utility. For example, in Act 120-2018, the Puerto Rico legislature indicated that PREPA was “no longer synonymous with services that are efficient and cost-effective for the consumer.”¹ The legislature also stressed that the electric power generation system was then twenty-eight (28) years older than the electric power industry average in the United States, that its dependence on oil rendered the system increasingly more expensive, more polluting, less efficient, and that “[p]ractically no infrastructure maintenance was performed during the past decade.”² Notably, the Puerto Rico legislature stated that Puerto Rico’s “electric power generation and distribution systems are deficient and obsolete, which results in suboptimal service.

¹ Act No. 120-2018, Statement of Motives, at page 2.
² Id. at page 4.
with frequent interruptions and high rates that punish the consumer."³ Additionally, in Act 17-2019, the legislature explained that "Electric power services in Puerto Rico are inefficient, unreliable, and provided at an unreasonable cost to residential, commercial, and industrial customers despite a vertically integrated monopolistic structure. This is mainly due to a lack of infrastructure maintenance, the inadequate distribution of generation vis-à-vis demand, the absence of the necessary modernization of the electrical system to adjust it to new technologies, energy theft, and the reduction of the Electric Power Authority’s personnel."⁴

Furthermore, Mr. Irizarry does not provide any plan or details of how this could be practically funded and implemented. Mr. Irizarry’s mention of a modern 21st-century grid is an end state, the goal. Still, he does not provide a path to get there, even with the adoption of additional performance metrics, nor the time required to achieve and the financial resources necessary to achieve the goals set forth in the additional performance metrics he recommends to incentivize the transformation of the T&D System. If the Puerto Rico electric grid had been maintained and well planned, designed, and constructed over the recent past decades and had not been devastated by hurricanes over the recent past, a platform (that would include the electric system, I.T. systems, and communication systems) on which to transform more quickly might well be available. This is not the case. Given the state of the existing transformation platform, applying the additional metrics suggested by the witness in his statement and throughout his testimony is premature. It would be nothing more than a distraction from that which requires laser focus in the near term, which is remediating and rebuilding the existing T&D System as a necessary component to

³ Id.
provide efficient, safe, and reliable electric power services at just and reasonable costs and paving the way to meet policy goals on the transformation to support the integration of renewable energy sources and energy efficiency.

LUMA has set goals to achieve a 21st Century Power Grid System. The U.S. Office of Electricity has a Technology Project, Grid Modernization, and the Smart Grid. LUMA is in the process of replacing the following technologies to meet Smart Grid requirements:

- Substation controls – from electromechanical relays/controls to state of the art digital relays and controls,
- Energy Management System (EMS) – necessary to be able to monitor and control the state of the art substation controls, renewable utility-scale power projects,
- Telecommunications – New digital communication system for substations, and
- Automated feeder switches – switches that can be controlled remotely and eventually automated switching.

In addition, LUMA is assessing potential funding mechanisms for an advanced metering infrastructure (“AMI”). An AMI system with smart meters will be a critical component of the smart grid to bridge the last mile to the customers and provide them with additional benefits.

LUMA is also working with the Energy Bureau on initiated large-scale renewables, Tranche 1 proponents. For Tranche 1 alone, 18 large-scale approved projects represent a capacity of 844 MW of large-scale renewable energy, which, added to the nearly 500 MW (between Utility-Scale and Distributed Generation) currently in service, would increase the participation of the renewable sector to 1,344 MW or approximately 13.7% of the total annual energy production. The Tranche 1 addition represents a rapid increase from the
current participation of renewables, including distributed resources, of approximately 2%. Smart grid technologies in a 21st Century Grid require a resilient infrastructure foundation. Achieving a resilient infrastructure foundation in Puerto Rico’s current dilapidated electric grid and its associated controls is a difficult and hard-to-achieve task(s); otherwise, it would have already been done by PREPA. For example, an automated feeder switch on a pole will not work when the pole breaks and the switch is on the ground.

LUMA is committed to transforming Puerto Rico’s grid into a modern, 21st-century electric system, but this cannot be achieved overnight, even if LUMA was starting with a mature, robust 20th-century grid, which is not the case. Utilities pursuing similar transformation have plans to do so over many years as approved budgets⁵ and practical resourcing permit. The customers of Puerto Rico must be provided reliable electric service as the grid transformation takes place. LUMA follows parallel paths to provide reliable electric service and modernize the system. LUMA is working to concurrently implement a resilient infrastructure foundation prudently and reasonably while working to implement a 21st Century Grid.

Q. Do you agree with Mr. Irizarry’s statement on page 4, lines 1-8 of his additional pre-filed testimony that rewarding LUMA for achieving required compliance or for performance comparable to PREPA’s baseline performance in the Fiscal Year 2020 is the antithesis of the performance base mechanism concept and contrary to the public interest?

A. No.

⁵ “LUMA has projected $237 million of expenditures for the distribution system in FY2022.166 Seventy percent, or $166 million, of those expenditures are categorized as System Remediation Plan items and $199 million of these expenditures will be eligible for federal funding.” Id. at page 30.
Q. Please explain your response.

A. Mr. Irizarry’s suggestion that the benchmarks set by the Energy Bureau should be used as targets instead of aspirations is ludicrous upon a simple comparison of the baselines and the benchmarks. For example, the SAIDI baseline is 1,241 minutes, and the Energy Bureau’s benchmark is 102 minutes. Meeting the benchmark requires an improvement of approximately 92%. However, attaining this level of improvement requires time and money. Any entity operating the T&D system during the time necessary to reach the benchmark must earn a reasonable income to remain viable. Imposing otherwise as Mr. Irizarry does is irresponsible and, worse, a deliberate attempt to ensure LUMA’s failure.

Q. Do you agree with Mr. Irizarry’s statement on page 5, lines 22-26, and page 6, lines 1-10, of his additional pre-filed testimony on his portrayal of a difficult task in the interconnection of distributed renewables?

A. No.

Q. Please explain your response.

A. Mr. Irizarry’s portrayal is based on a simplistic view of the operation of an electric system not devoid of challenges such as the T&D System. The number of interconnections to a distribution line is limited by the capacity of the lines, regardless of whether the voltage is 4.16KV or 13.2KV. An incentive metric requires that the accomplishment of the metric is achievable. While this metric is possible, LUMA does not have an unlimited budget to convert 4.16kv lines to 13.2kv. Therefore, LUMA would not have total control over the metric. The achievement is limited by the capacity of the distribution lines and the budget capacity. Converting distribution line voltages requires a plan to flip over several years with an associated budget.
Q. Do you agree with Mr. Irizarry’s Recommendation 2 on page 12, lines 24-26 of his additional pre-filed testimony that the Energy Bureau should limit incentives to LUMA’s efforts to achieve a greater number of interconnections only in distribution lines that operate at 4.16 kV?

A. No.

Q. Please state and explain your response.

A. As stated previously, the achievement of the metric proposed by Mr. Irizarry is limited by the capacity of the distribution lines and the capacity of the budget. LUMA does not have an unlimited budget to convert 4.16kv lines to 13.2kV. The metric is unrealistic given the current economic constraints on the operation of the T&D System.

Q. Do you agree with Mr. Irizarry’s Recommendation 3 on page 13, lines 4-5 of his additional pre-filed testimony that the Energy Bureau should mandate grid-side metrics to improve energy efficiency at the electric grid level?

A. No.

Q. Please state and explain your response.

A. Mr. Irizarry provides examples for grid-side metrics to improve energy efficiency without mentioning that there is a cost to each of these examples, and the cost to implement may exceed the benefits in many cases. In my experience, indiscriminately working on items as described in Recommendation 3 without a well-thought-out plan will result in costs exceeding the benefits. Mr Irizarry merely proposes a metric without providing a plan that meets such a standard to avoid falling into a situation where the costs will surpass any positive benefits.
Q. Does this complete your testimony?

A. Yes.
ATTESTATION

Affiant, Mr. Don Cortez, being first duly sworn, states the following:

The prepared Rebuttal Testimony constitutes my rebuttal testimony in the above-styled case before the Puerto Rico Energy Bureau. Affiant states that he would give the answers set forth in the Rebuttal Testimony if asked the questions that are included in the Rebuttal Testimony. Affiant further states that the facts and statements provided herein is his rebuttal testimony and, to the best of his knowledge, are true and correct.

Sworn statement (3)

Acknowledged and subscribed before me by Mr. Don Cortez in his capacity as Vice President, Utility Transformation, LUMA Energy ServCo. LLC, of legal age, single, and resident of San Juan, Puerto Rico, who is personally known to me.

In San Juan, Puerto Rico, this 27 day of April 2022.

Public Notary
Rebuttal Testimony of
Mr. Brent Bolzenius
Director, Vegetation Management, LUMA Energy ServCo LLC
April 27, 2022
Q. Please state your name.

A. My name is Brent Bolzenius.

Q. Please state your business mailing address, title, and employer.

A. My business mailing address is PO Box 363508 San Juan, Puerto Rico 00936-3508. I am the Director of Vegetation Management for LUMA Energy.

Q. Please state your educational background.

A. I hold a Bachelor Degree in Forestry from University of Missouri having graduated in December 2003. I also hold a Masters of Business Administration from Black Hills State University having graduated in May 2014.

Q. Please state your professional experience.

A. I have approximately 18 years of experience in vegetation management in the United States utility industry with multiple notable utilities. In January 2021, I joined LUMA.

Q. Please describe your work experience prior to joining LUMA.

A. Prior to joining LUMA, I managed the overall vegetation programs at two of Xcel Energy’s operating companies in Colorado, Texas, and New Mexico. Furthermore, prior to Xcel Energy, I spent over 5 years in a leadership role at Black Hills Energy, a utility whose three vegetation programs over three states were centralized and where tree-caused outages were reduced by 76% during my tenure. Prior roles included: supervision of all vegetation management activities related to vegetation contractors, their financial management, safety, and work planning at Ameren Union Electric in Missouri and Aquilla (merged with Evergy) in Missouri.

Q. Do you hold any professional licenses?

A. Yes. Two credentials from the International Society of Arboriculture: Certified Arborist &
Utility Specialist and one from the Project Management Institute as a Project Management Professional.

Q. Have you previously testified or made presentations before the Puerto Rico Energy Bureau?


Q. On whose behalf are you testifying before the Puerto Rico Energy Bureau?

A. My testimony is on behalf of LUMA as part of the Puerto Rico Energy Bureau (“Energy Bureau”), Commonwealth of Puerto Rico Public Service Regulatory Board proceeding Case No. NEPR-AP-2020-0025, the Performance Targets for LUMA Energy ServCo, LLC.

Q. Are there any exhibits attached to your testimony?

A. No.

Q. What is the purpose of your rebuttal testimony?

A. To respond to those portions of the additional pre-filed testimony of Mr. Agustín Irizarry (“Mr. Irizarry”) on behalf of the Local Environmental and Civil Organizations (“LECO”), filed on March 22, 2022, in this proceeding, regarding his proposed metric on Vegetation Management.

Q. Did you consider any documents for your rebuttal testimony?

A. Yes, I did.

Q. Which documents did you consider for your rebuttal testimony?

a. LUMA’s Performance Metrics Targets Revised filing submitted on September 24, 2021, in this proceeding, Case No. NEPR-AP-2020-0025,
b. The pre-filed testimony of Mr. Agustín Irizarry of November 16, 2021, filed in this proceeding, Case No. NEPR-AP-2020-0025 and his expert report, which is an exhibit of his pre-filed testimony,

c. The additional pre-filed testimony of Mr. Agustín Irizarry of March 22, 2022, filed in this proceeding, Case No. NEPR-AP-2020-0025,

d. The responses provided by Mr. Agustín Irizarry to LUMA’s First and Second Sets of Interrogatories and Requests for Production of Documents notified on January 13, 2022,

e. The responses provided by Mr. Agustín Irizarry to the Puerto Rico Energy Bureau’s Requirements for Information notified on December 20, 2021, and

f. The responses provided by Mr. Agustín Irizarry to LUMA’s Third Set of Interrogatories and Request for Production of Documents notified on April 21, 2022.

Q. Do you agree with Mr. Irizarry’s recommendations that LUMA should only be rewarded if its performance in the vegetation management area achieves a hard-to-reach target, as stated on page 13, lines 11-17 and 19-24 of his additional direct pre-filed testimony?

A. No.

Q. Please explain your response.

A. LUMA disagrees with such a recommendation. Vegetation management aims to ensure safe and reliable service to all customers regardless of access, limitations or perceived ease of access to vegetation work. Contrary to Mr. Irizzary’s concerns, there are many “hard-to-reach targets” along roadside transmission and distribution infrastructure or within short distances of roads. Examples include vegetation located in back yards, in urban areas
where the only access points are through or over a home or building. Consequentially all equipment and debris must pass over or through the domicile to address the tree risk electrical conductors; or where vegetation located roadside and where the conditions warrant multiple days of work to remediate risk to the overhead conductor. The Puerto Rico Transmission and Distribution (T&D) System is fragile, and the vegetation conditions are poor across the entire island. Whether vegetation work is easily accessible or “hard-to-reach”, LUMA is committed finding the best way to completing the necessary vegetation work regardless if the targets are “hard-to-reach" or considered road side. The work location is entirely subjective and should not be the only factor in setting goals.

Q. Do you agree with Mr. Irizarry’s recommendation that the Energy Bureau also require LUMA to identify the relative difficulty for vegetation maintenance for each line or region, as stated on page 13, lines 26, and page 14, lines 1-2 of his additional direct pre-filed testimony?

A. No.

Q. Please explain your response.

A. Mr. Irizarry’s recommendation is impractical. The “relative difficulty” concept he proposes is entirely subjective. Moreover, Irizarry does not provide a basis for this “concept”. There are no industry standards, definitions, or criteria for “relative difficulty” in vegetation management. Additionally, the configuration of most electrical feeders or circuits will have a combination of roadside, backyard, and cross-country sections of line within the same feeder or circuit. Vegetation management on a day-to-day basis is not as categorically encapsulated as Mr. Irizarry tries to portray in his testimony. Mr. Irizzary’s concerns that LUMA would only complete easily accessible work is incorrect, LUMA
intends to address vegetation management work across the system regardless of the challenges, including access to specific work sites.

Q. Do you agree with Mr. Irizarry’s statement on page 11, lines 14-24 of his additional pre-filed testimony that tree trimming of lines adjacent to roads and highways is easy as these lines are easy to reach than lines that cross mountainous regions?

A. No.

Q. Please explain your response.

A. Mr. Irizarry’s statement characterizes vegetation management in such a manner that, based on what he implies, the Puerto Rico Electric Power Authority should have had no problems managing vegetation in the past. The idea that tree trimming of lines adjacent to roads and highways is easy as these lines are easy to reach is incorrect. As stated before, “hard-to-reach targets” in vegetation management can be found everywhere and are not only limited to cross mountainous regions. Mr. Irizarry’s statement comes from a very simplistic understanding of vegetation management and fails to consider challenges present in “urban” vegetation management scenarios.

Q. Do you have a response to Mr. Irizarry’s statement on page 10, lines 14-15, of his additional pre-filed testimony in which he states that vegetation management is critically important for reliability, resiliency, and public safety?

A. Yes, I do.

Q. Please state and explain your response.

A. Vegetation management is only one of several things that can impact customer service reliability. SAIFI and SAIDI are the metrics that directly indicate the reliability of service to customers and already captures the impact of vegetation management related to service
reliability to customers among many other outage causes. The addition of an enhanced vegetation management incentive metric is duplicative of other technical metrics such as SAIDI & SAF, and would lead to a situation where the metric would result in a redundant incentive structure.

Q. Do you agree with Mr. Irizarry’s proposal on page 11, lines 1-10, of his additional pre-filed testimony that the Energy Bureau can set some metrics on LUMA’s overall progress on vegetation management using as baselines and benchmarks the responses requested by the Energy Bureau in a discovery request?

A. No.

Q. Please state and explain your response.

A. LUMA believes that metrics regarding vegetation management are already incorporated in the SAIDI and SAIFI metrics performance. Therefore, adding vegetation management metrics would be duplicative, and overly prescriptive effort that would incentivize less than cost-effective spending on reliability improvement.

The objectives of most utility vegetation management programs are to address vegetation in both short-term reliability and long-term cost control. Compliance-based programs typically address the short-term reliability for compliance with regulations and not the best value or use of available resources and budgets.

Q. Do you have a response to Mr. Irizarry’s statement on page 11, lines 8-10, of his additional pre-filed testimony in which he states that the Energy Bureau should avoid setting a compliance benchmark and, even more so, a target that offers an incentive, that is a global percentage based on all lines?

A. Yes, I do.
Q. Please state and explain your response.

A. This would not be good for Puerto Rico. These “commission-based” specifications typically, in both the short and long run, tend to raise the cost of service; and usually fail to fully identify or remediate the risks associated with vegetation management along electrical lines.

Q. Does this complete your testimony?

A. Yes.
ATTESTATION

Affiant, Mr. Brent Bolzenius, being first duly sworn, states the following:

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

Brent Bolzenius

Affiant, sworn statement (2)

Acknowledged and subscribed before me by Mr. Brent Bolzenius in his capacity as Director of Vegetation Management of LUMA Energy, of legal age, single, and resident of Bayamón, Puerto Rico, who is personally known to me.

also identified by driver's licence ID: 17-084-6499

In San Juan, Puerto Rico, this 27th day of April 2022.

Cristina

Public Notary