

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

**NEPR**

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**IN RE:** PERFORMANCE TARGETS FOR  
LUMA ENERGY SERVO, LLC

**CASE NO.:** NEPR-AP-2020-0025

**SUBJECT:** LEGAL BRIEF

**LOCAL ENVIRONMENTAL AND CIVIC ORGANIZATION'S LEGAL BRIEF**

**TO THE PUERTO RICO ENERGY BUREAU:**

COME NOW, Comité Diálogo Ambiental, Inc., El Puente de Williamsburg, Inc. - Enlace Latino de Acción Climática, Inc., Alianza Comunitaria Ambientalista del Sureste, Inc., Coalición de Organizaciones Anti-Incineración, Inc., Amigos del Río Guaynabo, Inc., CAMBIO, and Sierra Club and its Puerto Rico chapter, and Unión de Trabajadores de la Industria Eléctrica y Riego (collectively, "LECO"), and respectfully state the following:

From February 7 to 10, 2023, the Evidentiary Hearing was held. The hearing was divided into sessions, which in turn were divided into the following issues:

- (1) General approach to performance metrics;
- (2) "Technical, Safety, and Regulatory" performance category;
- (3) "Customer Satisfaction" performance category;
- (4) "Finance" performance category; and
- (5) Major Outage Events and any other remaining topics.

During the course of the Evidentiary Hearing, the Puerto Rico Energy Bureau ("PREB" or "Energy Bureau") admitted into evidence sixty-six documents, which were

marked as admitted exhibits.<sup>1</sup> Additionally, PREB conducted Public Hearings that took place on February 16 and 17, 2023. Only ten people participated in these public hearings. On February 24, 2023, LECO requested PREB's official transcript as specified in PREB's Hybrid Evidentiary Hearing Protocol. On March 9, 2023, PREB issued a Resolution and Order determining that PREB was not going to provide an official transcript to the parties and that the Microsoft Teams recording would serve as the official record of the Evidentiary Hearing. After several procedural events, PREB established May 11, 2023, as the date for filing the final legal and substantive briefs. Therefore, LECO submits its Legal Brief for PREB's consideration.

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<sup>1</sup> LECO's compilation of exhibits admitted during the evidentiary hearing is publicly available at <https://earthjustice.sharefile.com/d-s96c1f0186be644b3a31ab7d26ce494a5>

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## I. INTRODUCTION

Puerto Rico's electrical system is at a unique historical juncture: subsumed by debt, threatened by climate change, and privatization. Puerto Rico's Legislature has set forth a clear energy policy, requiring an urgent movement towards resilient, reliable, and affordable energy. Given such a scenario, the Energy Bureau has before it the opportunity to design and establish a performance-based metric system that makes non-compliance with the chosen energy policy as painful as possible, enforcement as easy and automatic as it can be, and incentives' acquisition as exceptional as it can be for hard work done for a long period of time. Creating such framework can lead to the energy system that Puerto Ricans deserve and so desperately need. After all, the design of any performance incentive mechanism must attain the purpose of maximizing net benefits for customers, and when benefits and costs can be quantified, net benefits shall be bigger than the financial incentive payment.<sup>2</sup>

Over the years, we have seen how an inefficient energy system can cost lives,<sup>3</sup> and we've seen Puerto Ricans raise their voices in opposition to rising energy costs, which have coincided with deteriorating performance. Mr. José Flores of the organization Carraizo Embellece testified at the public hearings on Friday, February 17th, that metrics must reflect Puerto Ricans' concerns. To that end, he stated that people's daily lives have been disrupted by LUMA's deteriorating service, and that they have lost their hard-earned food and electronic appliances due to voltage fluctuations. "All of my facts have faces, have names....," Mr. Flores explained.<sup>4</sup>

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<sup>2</sup> PREB Regulation for Performance Incentive Mechanisms, Num. 9137, (Dec. 13, 2019). (Adm. Exh. 12).

<sup>3</sup> See Marga Parés Arroyo, *Estudio del Departamento de Salud detalla que hubo un exceso de muertes en el 2022*, ENDI, (Feb. 26, 2023), <https://www.elnuevodia.com/noticias/gobierno/notas/estudio-del-departamento-de-salud-detalla-que-hubo-un-exceso-de-muertes-en-el-2022/>.

<sup>4</sup> Negociado de Energía en vivo, *Vista Pública Híbrida Caso Núm.: NEPR-AP-2020-0025* at 4:57:26, YouTube (Feb. 17, 2023), [https://www.youtube.com/live/6dPhlTVC\\_rQ?feature=share&t=17846](https://www.youtube.com/live/6dPhlTVC_rQ?feature=share&t=17846), (translated into English).

Similarly, each metric infiltrates the world of homes and businesses that rely on LUMA's services. The metrics implemented in this proceeding will, if properly designed, unequivocally save lives, help families stay in Puerto Rico and grow without the fear of displacement.

It is to that end that PREB must also look to the principles established in docket CEPR-IN-2016-0002 and ensure that LUMA's metrics address issues such as: reliability, customer satisfaction (residential and business); system costs; system efficiency and operations; customer empowerment; network support systems; and environmental goals.<sup>5</sup> PREB made it clear that the Puerto Rico Electric Power Authority's ("PREPA") use of third-party providers, like LUMA, must lead to "improved efficiencies, reduced costs, and improved performance...", ultimately leading to "lower cost electric service."<sup>6</sup> Those aforementioned metrics are consistent with the underlying motives behind Puerto Rico's Electric Power System Transformation Act which underscored the dire condition of Puerto Rico's electric system: "... our electric power generation and distribution systems are deficient and obsolete which results in suboptimal service with frequent interruptions and high rates that punish the consumer..."<sup>7</sup>

Upon drafting the Transformation Act, policy makers recognized the need to reconcile the existing energy legal frameworks with the need to have a system resilient to weather events and the effects of climate change, and to address Puerto Rico's outdated energy system

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<sup>5</sup> PREB, *Notice of Investigation to Identify Opportunities to Improve Performance of the Puerto Rico Electric Power Authority*, In Re: The Performance of the Puerto Rico Electric Power Authority Dkt, No. CEPR-IN-2016-0002 (Nov. 15, 2016) <https://energia.pr.gov/wp-content/uploads/sites/7/2016/11/15-nov-2016-Notice-of-Investigation-AEE-CEPR-IN-2016-0002.pdf>.

<sup>6</sup> *Id.*

<sup>7</sup> *Statement of Motives, Puerto Rico Energy Public Policy Act*, Act 120-2018 from June 21, 2018, 2018 LPR 120.

by allowing for “the use of distributed generation, microgrids, and more renewable energy, among others. Consistent with that goal, Act 17:

[P]rovides the means to establish an effective programming that allows for the setting of clear parameters and goals for energy efficiency, the Renewable Portfolio Standard, the interconnection of distributed generators and microgrids, and the management of electricity demand. In doing so, it imposes, among other measures, responsibility for lack of diligence in or noncompliance with the implementation of the energy public policy of Puerto Rico, and it adopts incentive mechanisms that make the enforcement thereof feasible.<sup>8</sup>

Furthermore, Act 17 creates a direct mandate to modernize the energy grid through the integration of “distributed generation, renewable energy sources, and energy efficiency mechanisms”<sup>9</sup>. It also directs LUMA to empower consumers to “be a part of the energy resources portfolio through the adoption of energy efficiency strategies, demand response, the installation of distributed generators, among others.”<sup>10</sup> Clearly, policymakers envisioned the creation of a 21<sup>st</sup> century system that is designed to serve the people and the environment.

LECO’S expert, Dr. Agustín Irizarry, emphasized the significance of performance metrics in his testimony by underscoring their role in defining the essential goals and carrying out the necessary steps to create the 21st-century energy system that the people of Puerto Rico deserve.<sup>11</sup> In light of a utility business model like LUMA’s, where capital investments and expanded sales are the top priorities, he also pointed out the importance of performance metrics in the context of safeguarding public policy objectives, consumer

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<sup>8</sup> *Statement of Motives, Puerto Rico Energy Public Policy Act*, Act17-2019 from April 17, 2019, 2019 LPR 17.

<sup>9</sup> See Act 17 § 1.6 (1): “To promote the fastest and most efficient reconstruction, modernization, and revamping of the transmission and distribution system for the purpose of developing a robust and flexible system that can integrate new technologies, distributed generation, renewable energy sources, and energy efficiency mechanisms as well as provide consumers with alternatives in the energy sector, thereby maximizing available state and federal resources.”

<sup>10</sup> Act 17 § 1.5 (2).

<sup>11</sup> LECO, *Motion to Submit Expert Testimony – Expert Testimony of Agustín A. Irizarry-Rivera on Behalf of Local Environmental and Civil Organizations* at 9, PREB Dkt. NEPR-AP-2020-0025 (Nov. 17, 2021) [hereinafter *Irizarry Direct Testimony*]. (Adm. Exh. 7).

interests, and environmental protection.<sup>12</sup> With that in mind, Dr. Irizarry noted that to achieve these purposes, the designed and implemented metrics must encompass three zones known as: (1) penalties for underperformance; (2) a “deadband” around adequate performance; and (3) incentives for excellence. Metrics designed with these principles in mind can safeguard the public’s interest and galvanize the transition to a 21<sup>st</sup> century energy system.

Consequently, the Energy Bureau must reject metrics that are contrary to Puerto Rico's public policy objectives and the PREB's December 2020 order. Moreover, the Energy Bureau should also reject self-serving metrics that are based on outdated data and reward tasks that are easy to achieve. Only the desire to increase Puerto Ricans’ social well-being should be reflected in the metrics that the Energy Bureau chooses to implement. In that sense, the approved metrics should matter deeply to customers and their safety. The Energy Bureau should also impose an outage compensation scheme and include independent monitoring of LUMA’s metrics. That is the appropriate course of action to ensure metrics adhere to the goals for which they were developed.

## **II. LUMA’S PROPOSED PERFORMANCE METRICS AND INCENTIVES WOULD NOT ACHIEVE PUERTO RICO’S PUBLIC POLICY OBJECTIVES.**

Consistent with its order at the outset of this proceeding, the Energy Bureau should implement a system of metrics that only rewards difficult tasks. PREB should also add penalties for failure to perform required tasks or meet minimum required performance levels and add other important metrics necessary to incentivize the transformation required by Law 17, Law 120, and even the Transmission and Distribution Operations & Maintenance

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<sup>12</sup> *Id.* at 9-10.



Agreement, to achieve a 21<sup>st</sup> Century “modern, sustainable, reliable, efficient, cost-effective, and resilient system.” All metrics must meet the criteria set forth for performance incentives in Law 17-2019:

- a) the volatility and affordability of the electric power service rates;
- b) the economic incentives and investment payback;
- c) the reliability of the electric power service; customer service and commitment, including options to manage electric power costs available to customers
- d) customers’ access to the electric power companies’ information systems including, but not limited to, public access to information about the aggregated customer energy and individual consumers’ access to the information about their electric power consumption;
- e) compliance with the Renewable portfolio standard and rapid integration of renewable energy sources, including the quality of the interconnection of resources located in consumers’ properties;
- f) compliance with metrics to achieve the energy efficiency standards established in this Act;
- g) infrastructure maintenance.<sup>13</sup>

Each metric that PREB approves must also meet the mandates set forth by PREB at the outset of this case:

- (1) **Go above and beyond:** targets or levels for which an incentive may be proposed shall be subject to and dependent on performance above and beyond the minimum required compliance level;
- (2) **Further the earlier compliance with public policy:** targets or levels for which an incentive may be proposed shall encompass the accelerated implementation of public policy such as the renewable energy portfolio, demand response, energy efficiency or other similar mandated;
- (3) **Further efficiencies and savings:** targets or levels for which an incentive may be proposed shall pursue the highest level of efficiencies and savings;
- (4) **Impact areas with significant performance issues:** targets or levels for which an incentive may be proposed shall positively impact or address areas of unsatisfactory performance with a direct impact to the electric service user;
- (5) **Benefits for the Public Interest:** targets or levels for which an incentive may be proposed shall result in a clear benefit for the public interest and rate payers; and
- (6) **Incentives Reward Difficult Tasks:** targets or levels for which an incentive may be proposed shall be tied to difficult tasks, and not too [sic] easy to fix areas.<sup>14</sup>

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<sup>13</sup> Act 17-2019 § 5.21.

<sup>14</sup> PREB, *Resolution and Order - Commencement of Proceeding for the Establishment of a Performance-Based Incentive Mechanism Targets*, PREB Dkt. NEPR-AP-2020-0025 (Dec. 23, 2020) [hereinafter *PREB Commencement of Proceeding Order*]. (Adm. Exh. 13).

LUMA hides under the veil of their contract in order to not comply with these requirements and mandates, including opposing both the imposition of penalties as well as the establishment of metrics other than those proposed by LUMA or those outlined in the contract. So much so that LUMA, as a party in the contract, did not recognize PREB's authority to decide the performance metrics to be established,<sup>15</sup> and in the case, LUMA initially opposed to PREB's authority to incorporate additional metrics because it seems that to LUMA, PREB's authority is limited to merely "consider and approve the performance targets and metrics that are included in the revised [draft] Annex IX."<sup>16</sup> What LUMA has done wrongly in this case is to submit their performance metrics proposal as an amendment to their contract that they agreed, not with the Energy Bureau, but with PREPA and the Puerto Rico Public-Private Partnerships Authority ("P3A").<sup>17</sup> Therefore, for the purposes of this proceeding, we will be referring to what LUMA calls "Revised Annex IX" as LUMA's proposal.

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<sup>15</sup> In Section 4.2 (f) of the Operation and Maintenance Agreement ("OMA") the contracted parties dared to interfere with the authority of PREB by indicating that "[i]f PREB does not respond within ninety (90) days after receipt of the proposed revised Annex IX (*Performance Metrics*) or any update thereto, ManagementCo may proceed for purposes of this Agreement as if PREB had approved such proposed revised Annex IX (*Performance Metrics*)." But, Section 20.17 of the OMA clearly establishes the following: "Notwithstanding anything to the contrary herein, no provision of this Agreement shall be interpreted, construed or deemed to limit, restrict, supersede, supplant or otherwise affect, in each case in any way, the rights, responsibilities or authority granted to PREB under Applicable Law with respect to the T&D System, Owner or Operator." [hereinafter *OMA*] (Adm. Exh. 18).

<sup>16</sup> See LUMA's Response in Opposition and Objection to December 22, 2021 Resolution and Order and Request to Vacate or Grant LUMA Relief from the December 22, 2021 Resolution and Order on Additional Metrics, at 12, In Re: Performance Targets for LUMA Energy Servco Motion, NEPR- AP-2020-0025, Feb. 17, 2022, <https://energia.pr.gov/wp-content/uploads/sites/7/2022/02/LUMAs-Response-in-Opposition-tand-Objection-to-December-22-2021.pdf>.

See also LUMA's Response in Opposition and Objection to December 22, 2021 Resolution and Order and Request to Vacate or Grant LUMA Relief from the December 22, 2021 Resolution and Order on Additional Metrics, at 5: "[...] the revised [draft] Annex IX is the [...] cardinal document defining its scope[...]" PREB has clearly ruled on multiple occasions that it has the authority to determine what the metrics will be and that the contract does not bind it.

<sup>17</sup> This is basic Contract Law, but also Section 20.3 of the OMA establishes that: "[n]either this Agreement nor any provision hereof may be changed, modified, amended or waived, except by written agreement duly executed by the Parties."

In any case, LUMA's performance metrics proposal would only result in a reasonable 20<sup>th</sup> century utility service for Puerto Rico, even if LUMA hits all of its proposed targets. LUMA's testimony urged that establishing a 20<sup>th</sup> century system (by definition already obsolete), with no established timeline, was an absolutely necessary first step before moving to a 21<sup>st</sup> century system.<sup>18</sup> At the hearing, however, under questioning by PREB consultants and Commissioners, LUMA witness Donald Hall acknowledged that "most" critical aspects of a 21<sup>st</sup> century system could be implemented right away:

Cmmr. Mateo Santos: So it's feasible to do most of the work [in parallel]. Maybe some in sequence, but it's not impossible to do the work in parallel.

Mr. Donald Hall: Yes. Apologies if I misspoke.<sup>19</sup>

Mr. Hall provided two examples of the tasks that did not need to wait for LUMA to finish building a 20<sup>th</sup> century system: automation of distribution feeders and interconnection of rooftop solar systems.<sup>20</sup> Mr. Wood later testified about significant improvements in rooftop solar + storage interconnections, which are a feature of a 21<sup>st</sup> century system that can be implemented right away. Regulation 9367 and Act 17-2019 Section 5.25 require immediate implementation of 21<sup>st</sup> century energy efficiency and demand response programs, without waiting for LUMA to first build a 20<sup>th</sup> century system.<sup>21</sup> PREB Commissioner Mateo Santos rejected LUMA's earlier position that a 20<sup>th</sup> century system had to be built first: "We don't have the time to go to one century and then the other. We don't have time. The need for the system to catch up is very dire and urgent."<sup>22</sup> The Commissioner noted that LUMA knew

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<sup>18</sup> LUMA, *LUMA's Motion Submitting Additional Rebuttal Testimonies – Rebuttal Testimony of Don Cortez* at lines 116-117, 249-250, PREB Dkt. NEPR-AP-2020-0025 (Feb. 17, 2022) [hereinafter *Cortez Rebuttal Testimony*] (Adm. Exh. 24).

<sup>19</sup> AP-2020-0025 Evidentiary Hearing-20230207\_Meeting Recording 2 [1:39:12]. *See also* [01:25:00].

<sup>20</sup> AP-2020-0025 Evidentiary Hearing-20230207\_Meeting Recording 2 [1:24:55].

<sup>21</sup> In fact, Act 17-2019 expressly contemplates short-term energy efficiency programs to begin immediately, and Section 5.21.

<sup>22</sup> AP-2020-0025 Evidentiary Hearing-20230207\_Meeting Recording 2 [01:36:30].

about this urgent need, as well as the state of the Puerto Rico grid, before the company agreed to take on operation of the T&D grid, along with the necessary transformation of that grid. LUMA's unnecessary sequential approach, set forth in written testimony but abandoned at the hearing, is not only timid, but also self-serving – allowing LUMA to earn fixed fees and incentives for performing easier tasks and merely propping up an obsolete 20<sup>th</sup> century system.

### **III. PREB'S PERFORMANCE INCENTIVE MECHANISM MUST INCLUDE PENALTIES, DEADBANDS, AND AN OUTAGE COMPENSATION MECHANISM.**

#### **A. The Performance Incentive Mechanism Must Include Penalties**

Section 6.3 (j) of Act 57 prescribes that one of the Energy Bureau's powers and duties is to establish performance-based incentives and penalty mechanisms.<sup>23</sup> LUMA's proposed metrics, in contrast to our legal system and to performance metrics in other jurisdictions, include no penalties for underperformance, which is particularly problematic given that LUMA is already demonstrating underperformance in key areas, including reliability. LECO's arguments for penalties have already been briefed at length in our May 26, 2022, Motion Requesting Imposition of Penalties and our July 15, 2022, Reply to LUMA's Opposition to that motion, so we will not repeat those here, but LECO sustains their request that PREB decide said motion.

Penalties should be included in performance metrics that would be triggered if LUMA's performance falls below a baseline of acceptable performance, set by PREB. One measure for that baseline, at least for Year One performance, would be PREB's baselines set

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<sup>23</sup> *Puerto Rico Energy Transformation and RELIEF Act*, Act 57 of May 27, 2014, 2014 LPRA 57 § 6.3 (j).

in Attachment B of its July 2, 2021 Order in Docket NEPR-MI-2019-0007.<sup>24</sup> the baseline performance of PREPA in the year leading up to June 1, 2021. PREB should adopt metrics analogous to the “Gating Performance Metrics” and “Default Performance Metrics” from the Long Island Power Authority’s contract with PSEG in the performance-based mechanism to be applied to LUMA.

If LUMA consistently under performs, during a number of evaluation periods, in key metrics such as: public and labor safety, sustainability, reliability, resiliency, interconnection, and customer service, then the performance-based mechanism **should provide for a significant financial penalty in the fixed payment LUMA receives.** For noncompliance with the interconnection of distributed generation or microgrids, for example, Section 1.14 of Act 17 explicitly imposes penalties to PREPA’s successor corresponding to \$1,000 per day which will be deposited in the Green Energy Fund of Puerto Rico to subsidize photovoltaic and energy storage systems.<sup>25</sup> **In any case, if LUMA fails to correct these deficiencies, its contract and or certificate should be terminated.**

LUMA provided two witnesses specifically in rebuttal to LECO's proposal to add penalties. LUMA's witnesses seem quite confused as to who exactly the scheme applies to. Dr. Lara's testimony discusses penalty schemes applied to PREPA: "Puerto Rico's regulated power utility, which is a publicly-owned, not-for-profit entity subject to rate regulation and other regulation..."<sup>26</sup> Mr. Terzic also opposes penalties, but against PREPA rather than LUMA: “Public owned entities such as PREPA or municipally owned electric systems in the

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<sup>24</sup> PREB, *Resolution*, PREB Dkt. NEPR-MI-2019-0007 (July 2, 2021). [hereinafter *July 2, 2021 Resolution*]. <https://energia.pr.gov/wp-content/uploads/sites/7/2021/07/20210702-MI20190007-Resolution-Request-for-Clarification.pdf>.

<sup>25</sup> Act 17, § 1.14. This section also states that this fine does not limit PREB's power to impose any other fine or administrative penalty to enforce its orders and public energy policy.

<sup>26</sup> LUMA, *LUMA’s Motion Submitting Additional Rebuttal Testimonies – Rebuttal Testimony* of Dr. Juan Lara at lines 125-129, PREB Dkt. NEPR-AP-2020-0025 (Feb. 16, 2022) [hereinafter *Lara Rebuttal Testimony*]. (Adm. Exh. 6).

United States of America do not have either a motivation for increased capital investment or increasing sales as goals.”<sup>27</sup>

Mr. Terzic is also oblivious to the significant changes that LUMA has made to their proposal since June 2020. Mr. Terzic is actually advocating for PREB to approve the obsolete and superseded LUMA’s June 2020 proposal, which even his own client no longer seeks: “The issue before the PREB in this proceeding is whether to approve the Performance Incentive Mechanism or Performance Incentive Metrics (PIM) in the [June 2020] OMA signed between PREPA and LUMA.”<sup>28</sup>

Dr. Lara and Mr. Terzic present diametrically opposed views on how penalties would affect an energy company. Dr. Lara was concerned that penalties would drive LUMA to present too much attention to avoiding penalties, arguing that dread of losses could cause “undue avoidance of risk and disproportionate attention to some metrics...”<sup>29</sup> Mr. Terzic, on the other hand, claims that penalties would have no effect on LUMA's performance, citing with approval a paper that states: “in a capitalist, profit motivated economy, companies are not driven by the need to avoid penalties...”<sup>30</sup>

Dr. Lara's arguments are not against penalties, but against the entire scheme of performance-based mechanisms that we are discussing in this case: “why would [PREB] aim at reducing rates indirectly through an incentives scheme?”<sup>31</sup> Dr. Lara later expresses doubts that an incentives scheme would even work: “...there is no unqualified guarantee that a reward and penalty scheme will automatically generate better performance.”<sup>32</sup> Finally, Dr.

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<sup>27</sup> LUMA, *LUMA’s Motion Submitting Additional Rebuttal Testimonies – Rebuttal Testimony of Branco Terzic* at lines 233-235, PREB Dkt. NEPR-AP-2020-0025 (Feb. 16, 2022) [hereinafter *Terzic Rebuttal Testimony*]. (Adm. Exh. 5).

<sup>28</sup> *Id.* at line 580.

<sup>29</sup> Lara Rebuttal Testimony, lines 164-167.

<sup>30</sup> Terzic Rebuttal Testimony, lines 378-379.

<sup>31</sup> Lara Rebuttal Testimony, line 205.

<sup>32</sup> *Id.*, lines 316-317.

Lara highlights the importance of a balancing test, which LUMA never conducted - Dr. Lara explains that LUMA should "still be required to evaluate how much benefit is actually created for customers and how that benefit compares to the costs of complying with and enforcing the scheme; in other words, to show that the end result would not be an unfavorable benefit-cost balance."<sup>33</sup>

Ultimately, the arguments of Dr. Lara and Mr. Terzic are either irrelevant as to penalties against LUMA, or weigh equally against either penalties or incentives for the company. The one thing that is clear is that LUMA bitterly opposes any attempt by PREB to exercise its authority to include penalties for bad performance; indeed, LUMA's counsel opposed discussion of the reality of LUMA's performance during Hurricane Fiona throughout the hearing.<sup>34</sup> How far out of step is LUMA's proposal with Puerto Ricans' expectations? LUMA could fail to meet even the minimum performance level in any metric, including major outage metrics – and still be eligible to earn the maximum \$20M annual incentive fee.<sup>35</sup>

LUMA only recognizes the termination clause contained in their contract (if LUMA fails 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 executed by a Force Majeure Event, an Outage Event or Owner Fault”),<sup>36</sup> and not a penalty framework for failing to meet targets on metrics (that definitely can and must include termination of contract and certificates) that is clearly established in the legal system and promoted in the energy public policy to which LUMA submitted to when starting to do business in Puerto Rico. LUMA even admits that “[t]he attainment or performance on the

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<sup>33</sup> *Id.*, lines 319-322.

<sup>34</sup> AP-2020-0025 Evidentiary Hearing 20230210\_Meeting Recording 2 [00: 31: 45].

<sup>35</sup> LUMA, *Disc. Resp. to PREB's 11<sup>th</sup> Req. of Information* - RFI-LUMA-AP-2020-0025-R11-PREB-05JAN23-018(c) and RFI-LUMA-AP-2020-0025-R11-PREB-05JAN23-033(f) (Jan. 19, 2023).

<sup>36</sup> OMA at 122, Section 14.1(k). (Adm. Exh. 18).

different performance incentive metrics...” contained in their contract “was not designed with a penalty.”<sup>37</sup>

Mr. Mario Hurtado: We’ve also recognized the contract has other measures that would penalize LUMA for not attaining certain metrics and certain minimum performance thresholds for those metrics. There’s key performance metrics and under certain conditions, a result that’s below the minimum threshold on key performance metrics would give the right to the governor of Puerto Rico to cancel the contract under certain conditions. And that’s an important penalty that’s contained. More broadly, the Energy Bureau has broad jurisdiction over electric service companies, of which LUMA is one, and certainly the Energy Bureau has the ability to penalize LUMA for noncompliance with specific orders or specific measures or attainment that they are ordering, and that’s not something that’s I think at issue at all.

Mr. Jay Griffin: Okay. Just to clarify, the three-year review mark when the Bureau is considering, you know, a potential new set of metrics, revisions, to existing ones, I think you said your position is that penalties would be inappropriate?

Mr. Mario Hurtado: Our position is that the incentive fee and the calculation of the incentive fee is specified under the OMA and that the inclusion or non-inclusion of certain metrics is certainly up for question. There’s lots of other things. But that having metrics which have specific penalties within the context of the incentive fee goes outside the bound of what was agreed to in the OMA and is a fundamental change to the terms of the OMA.<sup>38</sup>

For the purpose of this proceeding, LUMA’s position is flawed. First of all, the parties in the contract decided which metrics are key performance metrics.<sup>39</sup> PREB has the authority to determine not only the performance metrics but also which ones are key performance metrics to advance energy policy goals and desired outcomes, such as achieving energy efficiency and renewable portfolio standards with rapid integration of renewable energy sources,<sup>40</sup> metrics that LUMA did not consider as key performance metrics in its contract. Second, one of the “conditions” LUMA kept referring to is that in order to activate what

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<sup>37</sup> AP-2020-0025 Evidentiary Hearing 20230207\_Meeting Recording 1 [1:35:33 – 1:35:50].

<sup>38</sup> AP-2020-0025 Evidentiary Hearing 20230207\_Meeting Recording 1 [1:37:39 – 1:39:51].

<sup>39</sup> The Key Performance Metrics identified in the contract are: “Average Speed of Answer (minutes)”; “First Call Resolution”; “OSHA Fatalities”; “OSHA Severe Injuries”; “System Average Interruption Frequency Index (SAIFI)”; “Customer Average Interruption Duration Index (CAIDI)”; “System Average Interruption Duration Index (SAIDI)”; “Operation Budget”; “Capital Budget – Federally Funded”; “Capital Budget – Non-Federally Funded”. OMA at Annex IX-4, 5. (Adm. Exh. 18).

<sup>40</sup> Reg. 9137, Section 7.1 (A)(6)-(7).



LUMA considers a “penalty” under their contract, the termination, must pass three (3) uninterrupted years of underperformance in three (3) “Key Performance Metrics”, and an outage event does not count for that. In other words, LUMA can underperform consistently without triggering the termination clause at a great cost to Puerto Rico customers, the government finances, and to the electric grid’s reliability and transformation towards renewable energy, and still get incentive fees for underperformance.

Again, not only PREB has the power to establish performance metrics, which ones are “key performance metrics”, but also which ones will have a reward and/or penalty, which ones will trigger the termination of LUMA as an electric service company, the frequency of underperformance to trigger penalties or termination, among multiple other decisions. That is because PREB’s authority is independent of the parties in the contract. LUMA’s position expressed by Mario Hurtado is “we expect the OMA to be enforced and the different parts of the OMA to be followed by the government of Puerto Rico”,<sup>41</sup> as implying the Puerto Rico Energy Bureau must follow the contract as it is part of the government. But the truth is that PREB is an independent and specialized agency in charge of regulating, supervising and enforcing the energy public policy of the Government of Puerto Rico. The parties in the contract cannot expect PREB to be adhered by the contract, much less pretend PREB can only impose the termination clause as it is and not impose its own performance financial incentive (reward or penalty) mechanism pursuant to the applicable laws and regulations. Granting LUMA the evasion of penalties is not only inappropriate, but also goes against the public energy policy that seeks to provide the best energy service for Puerto Ricans.

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<sup>41</sup> AP-2020-0025 Evidentiary Hearing 20230207\_Meeting Recording 1 [1:42:10 – 1:42:16].

## **B. The Performance Incentive Mechanism must incorporate Deadbands**

The Energy Bureau recognizes the importance of the implementation of deadbands in designing each financial incentive. Regulation 9137 incorporates as a design feature “[a] deadband reflecting the range above and below the target level of performance within which no penalty or reward is earned.”<sup>42</sup> LUMA’s proposal does not incorporate a deadband: it allows LUMA to start earning points towards an incentive as soon as the company exceeds the baseline for a metric by any amount. At the hearing, LUMA witness Lee Wood acknowledged that anything less than meeting the target did not constitute success and did not merit any incentive: “To be honest we look at the 100% level as being successful and the 25% as not necessarily success, in our eyes. ...In my personal subjective definition of success, we're trying to achieve 100%. And in that personal subjective definition, 50% or 25% is not successful, regardless of what the number is.”<sup>43</sup> Cmmr. Torres accurately explained that without a deadband around the baseline, the people of Puerto Rico are going to pay for unsuccessful work, as an incentive.”<sup>44</sup>

## **C. The Performance Incentive Mechanism must include outage compensation**

PREB should impose an outage compensation scheme, to at least mitigate the damage to appliances from increased voltage fluctuations and outages Puerto Ricans have experienced under LUMA. The Direct Testimony of Dr. José Alameda recommends that PREB impose a compensation outage scheme on LUMA, in order to provide restitution for customers harmed by outages and voltage fluctuations caused by LUMA.<sup>45</sup> Dr. Irizarry’s

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<sup>42</sup> Reg. 9137, Section 7.3 (A)(2)(h).

<sup>43</sup> AP-2020-0025 Evidentiary Hearing-20230208\_Meeting Recording 2 [01: 52: 13].

<sup>44</sup> *Id.* Meeting Recording 2 [01: 54:33]

<sup>45</sup> LECO, *Motion to Submit Expert Testimony – Expert Testimony of José Alameda on Behalf of Local Environmental and Civil Organizations* at 16-18, PREB Dkt. NEPR-AP-2020-0025, (Nov. 17, 2021) [hereinafter *Alameda Direct Testimony*]. (Adm. Exh. 8).

testimony, as well as numerous news reports, provide details of the widespread appliance damage due to the voltage fluctuations and outages that have increased since LUMA's takeover.<sup>46</sup> Adding to the various news reports, Mr. José Flores testified during the public hearings that:

The reality is that your devices become damaged, you can't pay the electricity bill, and if you ask for a payment plan, they charge you an additional 8% [...]. On top of that your devices remain damaged. Many of the devices are medical and thus necessary to extend the lives of the elderly.<sup>47</sup>

LUMA's witnesses do not have any response to these widely-circulated news reports, or any explanation for the increase in voltage fluctuations and outages. LECO will discuss this topic further in the Reliability Metrics Section.

#### **IV. LUMA HAS NOT SUBMITTED ADEQUATE, UPDATED DATA TO SUPPORT ITS PROPOSED METRICS.**

PREB should reject the proposed incentives based on outdated and inadequate data and require that any future submission be supported by new data, and incorporate updated improvement programs and new federal funding for rooftop solar + storage. The process to incorporate those items into the metrics should include feedback from stakeholders and customers.

LUMA's senior representative, Mario Hurtado, began the hearing by explaining that LUMA's proposed incentives were based on stale data and since-updated programs and budgets:

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<sup>46</sup> See also LECO's *Responses and Objections to LUMA's First Set of Interrogatories and Requests for Production of Documents Addressed to Engineer Agustín Irizarry* at 68, PREB Dkt. NEPR-AP-2020-0025, (Jan. 13, 2022).

<sup>47</sup> Negociado de Energía en vivo, *Vista Pública Híbrida Caso Núm.: NEPR-AP-2020-0025* at 4:57:26, YOUTUBE (Feb. 17, 2023) (Original in Spanish language), [https://www.youtube.com/live/6dPhlTVC\\_rQ?feature=share&t=17846](https://www.youtube.com/live/6dPhlTVC_rQ?feature=share&t=17846).

PREB Consultant Question: Can the Bureau still use that information (from 2021) to set the targets?

Mr. Mario Hurtado: That's what I said... I think that there are a number of things that are at issue with the metrics that LUMA will be measured by... The targets that were set (in 2021) on that (2021) data so there's a direct relationship between the data that was there, the programs, and the targets now. As I said in my testimony and in Annex IX, we think it's appropriate with the passage of time and with new information to be able to submit new information to the Bureau to inform them to set appropriate targets at the appropriate time. In the context of where we are today, a lot of time has passed, so there is much more information, and there's also uncertainty as to when these metrics will start to apply to LUMA.<sup>48</sup>

Mr. Hurtado explained that LUMA was only seeking approval of the form of metrics in this case, and would seek new targets and baselines in the future, with new information:

LUMA would propose that there be determination on what metrics are going to be applied to LUMA and when there's more information about the exit from Title III ... LUMA can provide updated data, because certainly there's a lot of time has passed and there's a lot of information, so that the Bureau can take that into account, and decide whether these targets should be adjusted or the baseline should be adjusted based on that data.<sup>49</sup>

On Wednesday, LUMA witness Mr. Cortez stated that LUMA had only conducted a high-level analysis of the grid, and barely begun to do a detailed review – and that the detailed review would not be complete for another **four years**.<sup>50</sup> PREB should reject LUMA's metrics, given this incomplete and outdated data, and develop and approve metrics appropriate to ensure that the mandates of Regulation 9137, applicable laws, and PREB's December 2020 Order are satisfied.

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<sup>48</sup> AP-2020-0025 Evidentiary Hearing-20230207\_Meeting Recording 1 [01: 02: 15].

<sup>49</sup> *Id.* Meeting Recording 1 [01: 02: 15].

<sup>50</sup> AP-2020-0025 Evidentiary Hearing-20230208\_Meeting Recording 1 [01: 33: 40 through 01: 43: 05].

V. LUMA'S PROPOSAL DOES NOT PROVIDE APPROPRIATE WEIGHT TO THE MOST IMPORTANT METRICS.

The effective weights for each metric do not correspond to their relative importance. At best, the effective weights appear to be arbitrary. At worst, they may maximize LUMA's ability to earn the annual \$20M incentive by focusing on simple tasks and ignoring harder ones.

LUMA proposes different effective weights for each metric in their proposal. The effective weights should correspond to the relative importance of each metric, but at the hearing, LUMA witness Mario Hurtado admitted that they did not: "the weighting assigned for each one doesn't necessarily reflect that we think one [metric] is more important than the other."<sup>51</sup> Mr. Hurtado used the example that LUMA's proposal assigns less points to OSHA Metrics than to the J.D. Power survey, and explained that the difference in effective weights did not correspond to LUMA's weighting of these tasks: "It's not necessarily a reflection that we think safety is less important than the J.D. Power customer survey, for example. That's not the case."<sup>52</sup>

The failure to match effective weight to relative importance creates perverse incentives for LUMA, the most troubling of which concern the OSHA metrics on safety. LUMA claims to have prioritized safety-on February 7, 2023, Mr. Hurtado stated that safety was the top goal of LUMA.<sup>53</sup> But - the proposed effective weights of metrics do not reflect that. LUMA earns more points towards its incentive by picking up the phone more quickly

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<sup>51</sup> AP-2020-0025 Evidentiary Hearing-20230207\_Meeting Recording 2 [03: 03: 02].

<sup>52</sup> AP-2020-0025 Evidentiary Hearing 20230207\_Meeting Recording 3 [01: 15: 02]; Witness Hurtado could not agree that the effective weights in the table corresponded to the weight that LUMA places, or that Puerto Ricans might place, in each metric. AP-2020-0025 Evidentiary Hearing 20230207\_Meeting Recording 2 [03: 01: 54].

<sup>53</sup> AP-2020-0025 Evidentiary Hearing 20230207\_Meeting Recording 2 [03: 02: 52]; AP-2020-0025 Evidentiary Hearing 20230207\_Meeting Recording 3 [03 :40: 02]: "Safety is always at the top."

on customer calls, than by limiting severe injuries. When asked how LUMA would address the contradiction between its stated priorities and the effective weights, Mr. Hurtado insisted this was a "hypothetical that doesn't exist."<sup>54</sup>

Yet - a brief examination of LUMA's proposal clearly shows that it does. By improving Average Speed of Answer from the Minimum Performance Level (9.7) to the target of 9 minutes, LUMA would earn 7 points towards the incentive. By improving to 4.5 minutes, LUMA would earn 10.5 points towards the incentive. By contrast, by improving OSHA Recordable Incident Rate from the baseline set in the PREB Order (6.9) or the LUMA's proposal (8.75) or the Minimum Performance Level (7.88) to the 6.56 target, LUMA would earn only 5 points.<sup>55</sup> And of course, LUMA's proposal includes no penalty at all if LUMA workers suffer more incidents than the minimum performance level.

Would this potential loss in incentive payments, from focusing on Average Speed of Answer over OSHA metrics, impact LUMA's decisions? Mr. Hurtado admitted that if LUMA could earn an incentive more easily through improving Average Speed of Answer rather than OSHA metrics, "We'd have to be conscious of it..."<sup>56</sup>

In fact, LUMA could fail to meet the minimum performance level for ALL OSHA safety metrics, and still be eligible for the full \$20M annual performance incentive.<sup>57</sup>

Key Performance Metrics would be another way to determine the relative importance of tasks. Here again, the Effective Weights that LUMA proposes are not aligned with relative importance. The ten key performance metrics, as defined in LUMA's proposal, comprise less

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<sup>54</sup> AP-2020-0025 Evidentiary Hearing 20230207\_Meeting Recording 2 [03: 10: 02].

<sup>55</sup> LUMA, *Submission of Revised Annex IX to the T&D OMA - Performance Metrics Targets: In Compliance with the PREB Resolution and Order of August 1, 2022* at 11-12, 16-17, PREB Dkt. NEPR-AP-2020-0025 (Oct. 28, 2022). [hereinafter *LUMA's proposal*]. (Adm. Exh. 11).

<sup>56</sup> AP-2020-0025 Evidentiary Hearing 20230207\_Meeting Recording 3 [02: 10: 02].

<sup>57</sup> RFI-LUMA-AP-2020-0025-R11-PREB-05JAN23-018(c) and RFI-LUMA-AP-2020-0025-R11-PREB-05JAN23-033(f).

than 40% by Effective Weight.<sup>58</sup> The other thirteen metrics count for more than 60% of the Effective Weight. LUMA could fail to even hit the minimum performance level on ANY of the key performance metrics and still earn the full annual \$20M annual incentive fee, by reaching best-case scenario performance on the other non-key performance metrics. In this case, PREB can determine which metrics are important enough to qualify as Key Performance Metrics, and assign Effective Weights accordingly. In this proceeding, PREB has already highlighted the importance of Distributed Interconnections, Energy Efficiency, Demand Management, and Vegetation Management - LECO requests those be added as Key Performance Metrics with corresponding Effective Weights.

## **VI. THE PERFORMANCE INCENTIVE MECHANISM SHOULD INCLUDE INDEPENDENT MONITORING AND VERIFICATION.**

One of the principles for establishing a performance incentive mechanism is that it shall be “clearly defined, easily interpreted, and easily verified.”<sup>59</sup> In developing metrics for this case, it is important that there be opportunities for independent monitoring and verification of LUMA’s performance. LUMA itself has acknowledged the possibilities of errors and biases affecting the calculation of reliability indices. The numerous delays and misinterpretations by LUMA require an independent verification of its submissions.<sup>60</sup>

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<sup>58</sup> LUMA's proposal incorrectly lists Abandonment Rate as a Key Performance Metric as defined in the T&D OMA. The T&D OMA lists the Key Performance Metrics at IX-4 and IX-24: neither page lists Abandonment Rate as a key metric. LUMA must withdraw its proposal, inspect for further errors, and resubmit a corrected version.

<sup>59</sup> Reg. 9137, Section 7.1(C).

<sup>60</sup> PREB’s January 12, 2023 Order in Docket NEPR-MI-2019-0007 describes LUMA’s failure to provide properly reported data on metrics like Average Speed of Answer, Wait Times in Customer Service Centers, and Percent of Customer Calls, OSHA DART Rate, OSHA Severity Rate, OSHA Fatality Rate, OSHA Recordable Incident Rate, the *Resumen Metricas* Excel File. PREB’s Order at 7 “REMINDS LUMA that the availability of prompt and accurate reliability data is critical to understanding how LUMA operates the Puerto Rico electric grid.” (*Emphasis in original*).

At a minimum, the Bureau should require public disclosure of raw outage data so that reliability indices can be independently verified and so that the Bureau and interested parties can better understand the causes, locations and trends of transmission and distribution outages on LUMA's system. This goes directly to the Law 17-2019 criteria: "(d) customers' access to the electric power companies' information systems including, but not limited to, public access to information about the aggregated customer energy and individual consumers' access to the information about their electric power consumption..."

Mr. Donald Hall opposed disclosure of this data in rebuttal testimony, but at the hearing, he acknowledged that professional engineers (like the alumni of University of Puerto Rico's excellent engineering school) could indeed use the data to calculate reliability metrics and double-check LUMA's results.<sup>61</sup> Mr. Hall further acknowledged he could not think of a single example of data being withheld from the public on the mere possibility of misinterpretation.<sup>62</sup> Mr. Cortez offered several unsatisfactory substitutes, which would provide (by his own admission, "rudimentary") information about current outages, with no way to know when outages would end, and no way to verify LUMA's claims about reliability metrics: outage map, load shed map, summary table.<sup>63</sup>

Mr. Hall raised a spurious anecdote of sabotage of equipment in the continental U.S., with few details, but later admitted LUMA had no reason to believe that outage data would or even could be used for that purpose in Puerto Rico.<sup>64</sup>

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<sup>61</sup> AP-2020-0025 Evidentiary Hearing-20230207\_Meeting Recording 3 [01: 59:48].

<sup>62</sup> *Id.* Meeting Recording 3 [2:00:31].

<sup>63</sup> Cortez Rebuttal Testimony at 15.

<sup>64</sup> AP-2020-0025 Evidentiary Hearing-20230207\_Meeting Recording 3 [02:00:40].



## VII. LABOR SAFETY PERFORMANCE METRICS

For convenience purposes, in this section the Labor Safety Performance Metrics discussed in this case are summarized. Pursuant to LUMA's proposal and LUMA's expert witness testimony, the Labor Safety Performance Metrics include the OSHA Recordable Incident Rate ("RI Rate"); OSHA Severity Rate ("Severity Rate"); OSHA Days Away, Restricted and Transfer Rate ("DART Rate"); and OSHA Fatalities ("Fatalities").<sup>65</sup> Each of these four metrics was assigned a weight of 4.17%, for a total of around 16% of weight for Labor Safety Performance Metrics, and five basepoints each.<sup>66</sup> Of these metrics, only Fatalities and Severity Rate are considered Key Performance Metrics for the purposes of the OMA.<sup>67</sup>

Generally, the RI Rate records injuries or illnesses that result in death, days away from work, restricted work, transfer, loss of consciousness, medical treatment beyond first aid and significant injury or illness diagnosed by a healthcare professional.<sup>68</sup> This metric has an 8.75 baseline, compared to PREB's 6.9 baseline.<sup>69</sup> On the other hand, the Severity Rate measures the severity of workplace injuries, calculating the amount of lost or restricted workdays that result from those injuries.<sup>70</sup> This metric has a 58.03 baseline, compared to PREB's 31 baseline.<sup>71</sup> Moreover, the DART Rate refers to the calculation of the total number of injuries that result in lost or restricted work time and/or transfers.<sup>72</sup> This metric has a

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<sup>65</sup> LUMA, *LUMA's Motion Submitting Rebuttal Testimonies on Supplemental Testimony on Additional Metrics – Direct Testimony of Curtis Clark* at lines 65-79, PREB Dkt. NEPR-AP-2020-0025 (Jan. 24, 2023) [hereinafter *Clark Direct Testimony*]. (Adm. Exh. 19).

<sup>66</sup> LUMA's proposal at 12. (Adm. Exh. 11).

<sup>67</sup> *Id.*

<sup>68</sup> Clark Direct Testimony, lines at 65-69.

<sup>69</sup> LUMA's proposal at 17; July 2, 2021 Resolution at 8.

<sup>70</sup> Clark Direct Testimony, lines 73-76.

<sup>71</sup> LUMA's proposal at 17; July 2, 2021 Resolution at 8.

<sup>72</sup> Clark Direct Testimony, lines 77-79.

6.85 baseline, compared to PREB's 4.8 baseline.<sup>73</sup> These three metrics operate by providing a percentage of incentive rewards for any performance above the minimum performance level, meaning that every tier between the baseline and the target, and beyond, earns LUMA an monetary reward.<sup>74</sup> Once the target threshold is met, the incentive reward begins to surpass 100%.<sup>75</sup> Lastly, Fatalities includes all work-related deaths, which must be reported to OSHA within eight hours.<sup>76</sup> Here, the metric is binary. Therefore, the baseline is always zero and the incentive is either awarded or not.<sup>77</sup>

#### **A. Lack of credibility of LUMA's expert witness testimony**

Before discussing the substance of the Labor Safety Performance Metrics, as defined above, LECO requests that the PREB consider the faults in credibility for LUMA's expert testimony in this area. While LUMA presented three different expert witnesses for this metric, each one replaced by the next—seemingly due to an issue of employee turnover—the testimony remained unaltered. This goes to the credibility of the testimony because these witnesses hold different positions in LUMA and do not share the same qualifications or experiences. Yet, the testimony was unaltered. The only reasonable conclusion is that the prefabricated testimony is based on LUMA's interests and not on the expertise of the named witnesses.

Chronologically, the irregularity happened as follows: On August 18, 2021, LUMA filed a *Motion Submitting Pre-Filed Testimonies* before the PREB, wherein, among others, it submitted the direct testimony of Ms. Esther C. González, Vice President of Health, Safety,

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<sup>73</sup> LUMA's proposal at 17; July 2, 2021 Resolution at 8-9.

<sup>74</sup> AP-2020-0025 Evidentiary Hearing-20230208\_Meeting Recording 3 [01: 40: 50].

<sup>75</sup> LUMA's proposal at 17; July 2, 2021 Resolution at 9.

<sup>76</sup> Clark Direct Testimony, lines 70-72.

<sup>77</sup> LUMA's proposal at 17; AP-2020-0025 Evidentiary Hearing-20230208\_Meeting Recording 3 [01: 39: 50].

Environmental & Quality for Management Co. Ms. González's testimony covered the labor safety performance metrics, described above. However, on September 9, 2021, LUMA filed a *Motion Requesting Authorization to Substitute the Pre-Filed Testimony of Esther González*. At this time, LUMA replaced Ms. González with Mr. Jorge Meléndez, Safety and Training Lead for ServCo. The reason provided by LUMA was because Ms. González was no longer employed with the company, since September 1, 2021. Nonetheless, the direct testimony was not altered in any significant or substantive way. The only changes were to reflect the change in the person and their background.

Then, on January 26, 2023, just days before the pre-hearing conference, LUMA filed a *Motion Requesting Authorization to Substitute Pre-Filed Testimonies*. This time, among other things, it petitioned to replace the direct and rebuttal testimonies of Mr. Meléndez with that of Mr. Curtis Clark, Functional Lead of Emergency Preparedness for ServCo. The reason provided was that Mr. Meléndez also left the company's employment. However, this time LUMA did not include the date in which the witness left its employment. Again, the submitted pre-filed testimony was identical to its replacement, changing only the information on the witness.

Even though the witness for these performance metrics was changed twice, the testimony remained the same. The only modifications were those regarding the background information of each witness. This leads LECO to question the credibility of said testimony and request that the PREB not grant it probative value.

## **B. Labor Safety Performance Metrics**

As previously summarized and defined, under the category of Labor Safety Performance the metrics are RI Rate, Severity Rate, DART Rate and Fatalities. In essence, these metrics measure LUMA's performance in terms of employee safety. As Dr. Irizarry

mentioned in his oral testimony, a safe work environment is related to safety protocols, training, equipment, etc.<sup>78</sup>

### i. Regulatory Principles

Overall, these metrics should be examined considering the principles established in Section 7.1 of Regulation 9137. Performance incentives “should induce behavior consistent with public policy **that would not otherwise occur to a sufficient degree in the absence of the [incentive mechanism]**.”(emphasis added).<sup>79</sup> In his testimony, Mr. Clark admitted that this regulation did not directly inform the development of these metrics.<sup>80</sup> Additionally, he acknowledges that generally utilities do not receive incentives to improve OSHA recordable incidents.<sup>81</sup> Upon examination of these metrics, they are deeply inconsistent with that principle and should not be considered for the purposes of performance incentives.

While Mr. Clark stated in the hearing that the metrics were consistent with that principle, there was visible hesitation when he was asked whether LUMA would simply not achieve these targets in absence of an incentive.<sup>82</sup> Specifically, he stated that he could not confidently say whether LUMA would meet or to what degree it would prioritize the proposed safety standards in the absence of the monetary incentive rewards.<sup>83</sup> However, this answer has two complementing issues. First, the parties recognize that OSHA sets the standards for employee safety and there is a legal obligation to provide a safe work environment. Second, Mr. Clark himself admitted that studies show that there are non-financial incentives for

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<sup>78</sup> AP-2020-0025 Evidentiary Hearing-20230208\_Meeting Recording 2 [02: 32: 31].

<sup>79</sup> Reg. 9137 Section 7.1(B).

<sup>80</sup> AP-2020-0025 Evidentiary Hearing-20230208\_Meeting Recording 1 [00: 27: 10 – 00: 00:29], Mr. Clark stated, “I didn’t review the specific document when I was developing the metrics.” *Id.*

<sup>81</sup> *Id.* Meeting Recording 1 at 00: 29: 30.

<sup>82</sup> *Id.* Meeting Recording 1 at 00: 30: 20.

<sup>83</sup> *Id.* “Q: “Are you suggesting that in the absence of this performance incentive mechanism, you do not believe LUMA would achieve its target performance?

A: “I don’t know if I can confidently answer that. I don’t know.”

improved employee safety standards, because these result in improvement of other performance areas.<sup>84</sup> These two points clearly indicate that the proposed Labor Safety Performance Metrics **directly contradict this regulatory principle**. Regardless of any incentive mechanism, LUMA must comply with providing a safe work environment, otherwise it would be violating the law. Therefore, it would be absurd to affirm that in the absence of an incentive reward, this behavior would not occur.

On the other hand, these metrics should be considered in relation to the principle that incentive mechanisms “shall be designed to **maximize net benefits for customers**. Where benefits and costs are quantifiable, the net benefits should be greater than the Financial Incentive payments.”.<sup>85</sup> To the extent that, as previously mentioned and discussed below, LUMA has a legal obligation to meet safety standards, providing a financial incentive to promote that conduct would increase the costs of LUMA’s operation and result in more spending rather than benefits for customers.

In addition to these two fundamental regulatory issues with the Labor Safety Performance Metrics, there are two other problems with the proposed mechanism.

## **ii. Performance Incentive Mechanism and imposition of penalties**

The first issue to address is LUMA’s one-sided performance incentive mechanism. A performance incentive mechanism is not necessarily nor exclusively a reward system. On the contrary, it should include both rewards and penalties, depending on the desired result of the metrics.<sup>86</sup> However, in this case, LUMA is advocating for an incentive mechanism based solely on reward incentives, meaning that it would receive a monetary incentive for meeting certain performance standards under the Labor Safety Performance Metrics. Nonetheless,

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<sup>84</sup> *Id.* Meeting Recording 1 at 00: 31: 24. Mr. Clark acknowledged that he is “not particularly familiar with those studies.” *Id.* at Meeting Recording 1 at 00: 32: 00.

<sup>85</sup> Section 7.1(E). (*Emphasis added*).

<sup>86</sup> Irizarry Direct Testimony at 178.

poor performance would not be met with penalties, simply reduced incentive payments. For the following reasons, LECO vehemently opposes this form of incentivizing, particularly in the Labor Safety Performance Metrics.

As Dr. Agustín Irizarry-Rivera stated in his pre-filed testimony, **if** incentives for Labor Safety Performance Metrics are to be considered by the PREB, it should only be in the form of penalties imposed upon LUMA when the minimum standards are not met.<sup>87</sup> That is, any incentive reward for meeting or exceeding the minimum standards on employee safety is unwarranted. This responds to various concerns.

First, providing incentive rewards to LUMA for meeting employee safety standards is a wasteful use of public funds, as LUMA needs to comply with these safety standards under both OSHA and local law.<sup>88</sup> Moreover, as Dr. Irizarry pointed out in the hearing, these legal safety standards are the bare minimum that **any** enterprise must comply with.<sup>89</sup> Granting an incentive for that contradicts the purpose of incentives, which is to promote overperformance in difficult to meet target areas and promote conduct that is otherwise unlikely to occur.

Second, providing rewards for below target performance or despite poor performance below minimum thresholds— i.e., the existence of dangerous labor conditions resulting in death and/or injury of its workers—does not incentivize LUMA to overperform in these metrics and puts its employees at risk. The ranges that are set for the metrics in LUMA's proposal reward LUMA despite not having reached its target standards. Rather than place a

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<sup>87</sup> *Id.* at 8, 11-16.

<sup>88</sup> In Puerto Rico, employee workplace safety is a right enshrined in the Constitution. *See* Const. P.R. Art. II, § 16.

<sup>89</sup> AP-2020-0025 Evidentiary Hearing-20230208\_Meeting Recording 2 [02: 28: 25].

deadband in between the minimum threshold and the target rates,<sup>90</sup> the incentive mechanism provides LUMA with a percentage of the incentive fee for every percentage of improvement, even if that improvement is just barely above the minimum threshold. This provides no benefit for customers and makes operations much more costly, to the extent that LUMA would be receiving extra income for doing what it must. These costs are passed through from ratepayers and affect customers negatively.

Lastly, by not imposing penalties on LUMA for poor performance in these metrics, safety standards can be ignored in favor of reaching other more lucrative metrics or metrics with more visibility. This would result in a precarious work environment for LUMA's employees, as there is no deterrent for this conduct. In his Rebuttal Testimony, Mr. Clark expressed that penalties are unwarranted for these metrics because "LUMA falls under OSHA regulations and is subject to penalties and fines for noncompliance. [Thus, imposing] additional penalties will not promote incremental improvement in performance and **could instead amount to double or multiple penalties.**"<sup>91</sup> However, on cross examination, Mr. Clark admitted that underperformance of Labor Safety Performance Metrics **does not** always result in penalties or fines by OSHA.<sup>92</sup> Even in his pre-filed Rebuttal Testimony, Mr. Clark states that "OSHA does not impose penalties for all recordable incidents, **nor does OSHA impose penalties for failure to meet minimum standards.**"<sup>93</sup> This makes perfect sense because OSHA has nationwide jurisdiction, whereas state entities like the PREB have direct contact with entities like LUMA. Mr. Clark even provides an example where a fatality was not fined by OSHA because, while under the proposed metrics it would constitute underperformance, the

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<sup>90</sup> LUMA's proposal at 10-11. Section 2.3(C) explains that LUMA earns points towards an incentive for ANY level of performance above the Minimum Performance Level. If the performance is one iota above the Minimum Performance Level, LUMA earns 25% of the base points for that metric.

<sup>91</sup> Clark Rebuttal Testimony, lines 79-82.

<sup>92</sup> AP-2020-0025 Evidentiary Hearing-20230208\_Meeting Recording 3 [01: 46: 30].

<sup>93</sup> Clark Rebuttal Testimony, lines 119-121. (*Emphasis added*).

situation was not a legal violation.<sup>94</sup> Therefore, Mr. Clark's testimony contradicts the reasoning against imposing penalties. Moreover, when questioned about whether regulatory penalties might motivate LUMA to meet the standards and avoid more serious situations that could result in OSHA violations, Mr. Clark responded he could not say for sure.<sup>95</sup> However, Mr. Clark's rebuttal testimony does state that **"penalties are . . . useful for deterring poor performance in this area."**<sup>96</sup> As previously mentioned, incentives are not only rewards and, for some metrics, deterrence is a worthy goal for an incentive mechanism. In the case of labor standards, deterring LUMA from ignoring safety in favor of other pursuits is undoubtedly a desired outcome for the performance metrics. Thus, penalties, as described by Mr. Clark, would be warranted under this performance metric.

To distance deterrence from the proposed metrics, Mr. Clark goes as far as to say that "LUMA's proposed metrics, baselines, and targets will allow LUMA and [PREB] **to assess LUMA's safety performance over time. The purpose of the performance metric is to measure performance,** not to deter conduct."<sup>97</sup> However, this assertion contradicts LUMA's main contention in this case, which is that these metrics be a vehicle of monetary incentive. If the **only** purpose of the performance metrics were, in fact, to measure performance, there would be neither reward incentives nor penalties. However, LUMA expects payment for its performance, even when that performance is the bare minimum.<sup>98</sup> Therefore, it is incorrect

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<sup>94</sup> Clark Rebuttal Testimony, lines 127-131.

<sup>95</sup> In the hearing, Commissioner Mateo asked Mr. Clark who will pay for LUMA's fines if it incurs in OSHA violations and whether it is fair for ratepayers to absorb that expense. While Mr. Clark's answer did not satisfy Commissioner Mateo, we would like to note that one of the benefits of imposing penalties for these metrics is that, rather than wait for an OSHA violation, LUMA would be forced to deal with poor performance periodically. Additionally, because penalties are part of an incentive mechanism, they would be paid out of LUMA's operator fees and not as an operational expense. AP-2020-0025 Evidentiary Hearing-20230208\_Meeting Recording 1 [01:38:43].

<sup>96</sup> Clark Rebuttal Testimony, lines 85-86. (*Emphasis added*).

<sup>97</sup> Clark Rebuttal Testimony, lines 86-89. (*Emphasis added*).

<sup>98</sup> To questions on this topic, Mr. Clark was unresponsive, only stating that the purpose is always to measure performance. AP-2020-0025 Evidentiary Hearing-20230208\_Meeting Recording 3 [01:47:25].



to discard the application of penalties on the basis that performance metrics are only measurements, because incentive mechanisms *do* go both ways.

While arguing that penalties are improper for Labor Safety Performance Metrics, LUMA also claims that it is already subject to the highest penalty for its poor performance. Specifically, LUMA refers to the termination clauses in the OMA, wherein the OMA can be “canceled for failure to meet three (3) Key Performance Metrics (including OSHA Fatalities and OSHA Severity Rate) during three (3) or more consecutive Contract Years [subject to exceptions].”<sup>99</sup> First, it should be noted that only **two of the four** Labor Safety Performance Metrics are Key Performance Metrics. This means that LUMA could be failing to meet even the minimum standards of employee safety in the other two metrics without **any** consequence to the OMA. Second, it should be further noted that failure to meet even the two Labor Safety Performance Metrics that are also Key Performance Metrics is **not** enough to trigger termination, there would need to be a third unrelated metric for that.<sup>100</sup> Third, it should be noted that the trigger for termination is **three (3) uninterrupted years** of underperformance in those three (3) metrics. Thus, to say that termination is a penalty for underperforming Labor Safety Performance Metrics is a gross stretch of the contractual stipulation. Truthfully, LUMA can underperform the Labor Safety Performance Metrics consistently, at great cost to its employees, without ever triggering the termination clause. Yet, LUMA

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<sup>99</sup> Clark Rebuttal Testimony, lines 95-97. *See Also* OMA Section 14.1(k).

<sup>100</sup> Given that OSHA Fatalities is a Key Performance Metric, we encourage PREB to seriously consider whether it is willing to “let slide” a suspicious increase in labor related fatalities, so long as other metrics are properly met and whether this creates an incentive to disregard labor safety in favor of meeting other metrics. It should be noted that in the past few months several deaths have been reported relating to LUMA’s workforce. *See Fallece trabajador de empresa subcontratada por LUMA Energy*, TELEMUNDO (March 21, 2023, 5:59 p.m.), <https://www.telemundopr.com/noticias/puerto-rico/fallece-trabajador-arrollado-por-camion-de-luma-energy-en-gurabo/2463903/>; *Muere empleado de LUMA tras recibir descarga eléctrica en Barranquitas* TELEMUNDO (Feb. 22, 2023, 7:03 p.m.), <https://www.telemundopr.com/noticias/puerto-rico/muere-empleado-de-luma-tras-recibir-descarga-electrica-en-barranquitas/2453980/>

considers this a sufficient penalty and boasts that to their knowledge, “other utilities do not face similar type of penalty.”<sup>101</sup> However, the same can be said for the incentive payments LUMA claims. LUMA can point to no other jurisdiction where external incentives are in place for these metrics.<sup>102</sup> This has not stopped them from requesting an incentive reward for meeting its obligations.<sup>103</sup> Thus, it is not an impediment for imposing penalties.

In view of the foregoing, and specifically regarding the Labor Safety Performance Metrics, the exclusion of penalties is outrageous and the providing of incentive rewards is absurd. LUMA should not be incentivized to meet its legal obligation to keep employees safe. Moreover, LUMA has provided no real reasoning in favor of the proposed incentive mechanism. The party line seems to be that these incentives are provided for in the OMA and that should be sufficient for the mechanism to be reasonable and approved. To questions regarding why this tier mechanism and lack of deadband was chosen for these metrics, the answers were also limited to reference to the original OMA. These intermediate levels of performance and overall trendlines were agreed to under the OMA and adapted to the numbers in LUMA’s proposal revisions. However, there is nothing in evidence to support the mechanism, particularly under the regulatory principles for incentive mechanisms.

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<sup>101</sup> Clark Rebuttal Testimony, line 99.

<sup>102</sup> See LUMA’s Responses to RFI-LUMA-AP-2020-0025-PREB-R1-10SEPT21-002 through 005, pp. 255-259 of Adm. Exh. 7. LUMA’s witness admits that he “is personally not aware of any other utility with externally driven performance incentives” for OSHA Recordable Incident Rate, OSHA Severity Rate, OSHA DART Rate, or OSHA Fatalities.

<sup>103</sup> While LECO does not find that the answer merits profound discussion, it would be remiss not to mention that, in his Rebuttal Testimony, Mr. Clark takes issue with Dr. Irizarry’s assertion that Labor Safety Performance Metrics are meant to eliminate excessive risk. Mr. Clark states that, in his experience, the goal is to eliminate **all risk**. Clark Rebuttal Testimony, lines 137-141. While LECO finds it implausible that any metric scheme can eliminate all risk in such a volatile field, it should be noted that this calls for deterrence which is what Mr. Clark himself says penalties provide.

### iii. Performance Metric baselines and targets

The second issue that must be addressed are the targets and baselines provided by LUMA for the Labor Safety Performance Metrics.

In its *May 21, 2021, Resolution and Order* (“May 21 Order”), the PREB provided principles and methods for setting the benchmarks or **baselines** for performance metrics. These principles include: (a) cost-benefit balance, wherein the costs of achieving the benchmark is balanced with the benefits to customers;<sup>104</sup> (b) historical performance, which refers to PREPA’s prior performance but presumes that (i) the data is collected and available, (ii) there has been fundamentally little change in the key factors influencing performance, and (iii) that historical performance was satisfactory;<sup>105</sup> (c) peer utility performance, which should be considered accounting for the unique circumstances of PREPA’s system;<sup>106</sup> and (d) the use of deadbands, a zone in which the utility does not receive a reward or a penalty, to account for variances.<sup>107</sup>

That said, the baseline rates for the Labor Safety Performance Metrics proposed in LUMA’s proposal vary from those the PREB issued in its *May 21 Order* and reaffirmed in its *July 2, 2021, Resolution and Order* (“July 2 Resolution”).

According to Mr. Clark, these variations were the result of studying PREPA’s data further and reconciling inconsistencies previously not considered in the thresholds.<sup>108</sup> In his pre-filed direct testimony, Mr. Clark declared that PREPA’s data was inaccurate,<sup>109</sup> because it excluded some potential recordable incidents from the year 2020 that had been segregated

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<sup>104</sup> PREB, *Resolution and Order* at 4, PREB Dkt. NEPR-MI-2019-0007 (May 21, 2021) [hereinafter *May 21 Resolution and Order*].

<sup>105</sup> *Id.*

<sup>106</sup> May 21 Resolution and Order at 4-5.

<sup>107</sup> May 21 Resolution and Order at 5.

<sup>108</sup> AP-2020-0025 Evidentiary Hearing-20230208\_Meeting Recording 3 [01: 39:00].

<sup>109</sup> Clark Direct Testimony, lines 142-153.

from the OSHA logs and instead recorded in a different report, denominated the Casi Casi report.<sup>110</sup> Nonetheless, LUMA confirms that it does not know why these incidents were excluded nor the purpose of the Casi Casi report.<sup>111</sup> However, LUMA maintains that the baseline performance levels are derived from the evaluation of PREPA's historical data.<sup>112</sup>

Additionally, Mr. Clark stated that LUMA used the data for the years 2017 through 2019 to reconcile a sharp change in PREPA's historical performance of these metrics, seemingly resulting from the exclusion of the Casi Casi incidents.<sup>113</sup> It should be noted that the historical context of these years includes two hurricanes, Irma and María; the Title III petition filed for PREPA's bankruptcy; and the series of earthquakes in the south of Puerto Rico where the majority of PREPA's power plants are. When Mr. Clark was questioned as to whether these years, which may well be the worst years for PREPA's performance, should be considered rather than years where PREPA was at its best, his response was that he believes the most recent data is what should be considered.<sup>114</sup> However, this contradicts PREB's *May 21 Order*, which establishes that historical performance is used under the assumption that **there has been fundamentally little change in factors influencing performance and that the historical performance reviewed is satisfactory.**<sup>115</sup> This presents a fundamental problem with the incentive proposal. LUMA is setting the bar for its performance arguably the lowest possible threshold and receiving monetary incentive for reaching a degree of normalcy, rather than for exceeding expectations pursuant to the principles of incentive mechanisms.

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<sup>110</sup> Clark Direct Testimony, lines 116-122.

<sup>111</sup> LECO posits that this information should be made available in this proceeding before the PREB determines whether it is proper to consider the numbers in the Casi Casi report as part of PREPA's previous performance, pursuant to the *May 21 Resolution's* description of this factor.

<sup>112</sup> LUMA's proposal at 12.

<sup>113</sup> AP-2020-0025 Evidentiary Hearing-20230208\_Meeting Recording 3 [01:44:00].

<sup>114</sup> *Id.* at Meeting Recording 3 [01: 44: 55].

<sup>115</sup> May 21 Resolution and Order at 4.

In his testimony, Mr. Clark declared that he had a role in the development and revision of LUMA's and, specifically, developed the Labor Safety Performance Metrics.<sup>116</sup> Mr. Clark declared that while the rate of improvement was retained from the original OMA, the key parameters of the metrics were changed.<sup>117</sup> When questioned about the proposed metrics and targets, Mr. Clark repeatedly stated that the proposals were based on the original OMA agreements.<sup>118</sup> The target thresholds were already established and only updated after additional information was obtained.

According to LUMA's experts, to develop the **targets** for these metrics, they referenced the EEI industry standards and then considered the feasibility of those standards based on PREPA's current state regarding this metric.<sup>119</sup> That is, while there is an industry standard, LUMA's targets do not meet those standards.

In response to questions by the PREB Consultants, Mr. Clark stated that the EEI standards on average were approximately: 2.5 for RI Rates, compared to the Year Three target of 4.2 target in LUMA's proposal; between 1.6 and 1.8 for DART Rates, compared to the Year Three target of 3.29 in LUMA's proposal; and around 30-40 in Severity rates, compared to the Year Three target of 35.64 target in LUMA's proposal.<sup>120</sup> In his oral testimony, Mr. Clark stated that LUMA's **long term goal**—meaning its goal **over the fifteen-year** period of the OMA that has yet to begin—is to be **competitive** with EEI standards.<sup>121</sup> His declaration is based on the premise that these goals will be attainable when the T&D

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<sup>116</sup> With the exception of Fatalities which was agreed to in the original OMA and not changed.

<sup>117</sup> AP-2020-0025 Evidentiary Hearing-20230208\_Meeting Recording 3 [01: 38: 30].

<sup>118</sup> *Id.*

<sup>119</sup> Clark Direct Testimony, lines 186-188.

<sup>120</sup> AP-2020-0025 Evidentiary Hearing-20230208\_Meeting Recording 1 [00:23:00]. LUMA's proposal at Table 2-3.

<sup>121</sup> AP-2020-0025 Evidentiary Hearing-20230208\_Meeting Recording 2 [02: 28: 56 – 02: 29: 35].

infrastructure is brought up to industry standards. The PREB should not accept this reasoning.

As Dr. Irizarry expressed in the hearing, the contention that LUMA will eventually meet industry standards, and continue to receive monetary incentives in the meantime, is unsound.<sup>122</sup> Firstly, as Dr. Irizarry states, this directly contradicts the purpose of incentive mechanisms and performance metrics.<sup>123</sup> Secondly, because a safe work environment is based on existing protocols, training, equipment, and other basic safety measures within LUMA's control, the age of the T&D infrastructure is not relevant.<sup>124</sup> LUMA was well aware of the state of the system before the company assumed the legal obligation to ensure that its employees are aware and prepared to navigate those risks safely. That is what these performance metrics ultimately measure, whether LUMA is doing its part to provide a safe work environment within the circumstances of the system, which were well known to all before the OMA was agreed to. For that reason, Dr. Irizarry contends that similar jurisdictions should be consulted when the targets are set.<sup>125</sup>

### **C. Public Safety Performance Metrics**

While it is not the subject of his Direct Testimony, Mr. Clark's Rebuttal Testimony expresses disagreement with Dr. Irizarry's proposal that public safety performance metrics should be imposed upon LUMA. Mr. Clark's opposition is based on multiple factors. Firstly, Mr. Clark posits that LUMA should not be held responsible for the behavior of third-party contractors nor the public, because these behaviors are out of its control.<sup>126</sup> However, it should be noted that many of the proposed metrics are also affected by external factors and

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<sup>122</sup> *Id.* Meeting Recording 2 [02: 29: 35 – 02: 29: 44].

<sup>123</sup> *Id.* Meeting Recording 2 [02: 32: 45 – 02: 33: 32].

<sup>124</sup> *Id.* Meeting Recording 2 [02: 33: 40 – 02: 33: 56].

<sup>125</sup> *Id.*

<sup>126</sup> Clark Rebuttal Testimony, lines 162 – 166.

factors that are arguably out of LUMA's control. Nevertheless, LUMA does not oppose those metrics. It stands to reason that LUMA's performance, regarding those things that it can control such as emergency response, be measured to promote LUMA's involvement in taking public safety measures and deter the neglect of deteriorated infrastructure and dangerous conditions.

Second, Mr. Clark argues that there are already legal processes to address public safety incidents and determine responsibility.<sup>127</sup> However, pursuant to the OMA, PREPA and P3 provided LUMA with a general Liability Waiver for third party damage, including where there has been gross negligence or willful misconduct on LUMA's part.<sup>128</sup> Thus, any potential legal processes to determine LUMA's responsibility over public safety incidents is limited, if not inexistent. As such, a metric in this area would provide precisely what a metric should: incentive to perform in an area that, in absence of an incentive mechanism, would likely be ignored. Additionally, the PREB should consider whether it makes sense to relieve LUMA from performance measurement and responsibility if it creates situations that put the people of Puerto Rico in danger.

#### **VIII. PREB SHOULD REJECT LUMA'S PROPOSED INTERCONNECTIONS' METRICS IN FAVOR OF THOSE PROPOSED BY DR. IRIZARRY**

Ten months after PREB ordered LUMA to do so, the company submitted half-hearted and timid performance metrics for rooftop solar interconnections. As detailed below, PREB should reject the proposal, in favor of better interconnection metrics proposed by Dr. Irizarry.

In December 2021, PREB accepted Dr. Irizarry's recommendation, over LUMA's objection, to consider penalties and incentives related to LUMA's performance on rooftop

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<sup>127</sup> Clark Rebuttal Testimony, lines 164-166.

<sup>128</sup> OMA at 43-44, Section 4.1(g).

solar + storage interconnections. These performance metrics would fit solidly within the Law 17-2019 criteria for metrics: “compliance with the Renewable portfolio standard and rapid integration of renewable energy sources, including the quality of the interconnection of resources located in consumers’ properties...”<sup>129</sup>

Dr. Irizarry’s November 2021 testimony pointed out that Hawai’i’s distributed generation interconnection metrics were especially relevant here, because PREB had already determined that Hawai’i Electric Light Company and Hawaiian Electric Company are both useful peer utilities for Puerto Rico.<sup>130</sup> Dr. Irizarry recommended that Puerto Rico adopt distributed generation (“DG”) interconnection metrics based on Hawai’i’s metrics:<sup>131</sup>

Metric: The metric will be the mean (average) number of business days it takes the Companies to complete all steps within the Companies' control to interconnect DER systems 1 <100kW in size, in a calendar year. The PIM will be applied to each of the Companies' performances, respectively. The time within the Companies' control for each installation used to determine the average will be capped at two standard deviations above the mean (the "updated adjusted average").

Mr. Wood’s rebuttal testimony did not explicitly disagree with implementation of Hawai’i’s DG interconnection metrics to Puerto Rico. Mr. Wood instead recommended that the threshold be lowered from 100 kW to 25 kW. He further testified that the Hawai’i metrics were indeed well-designed and included specific provisions that LUMA desired – and that LUMA could implement these provisions once the company had completed its DG portal.<sup>132</sup>

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<sup>129</sup> Act 17-2019 § 5.21(e).

<sup>130</sup> May 2021 Resolution and Order at 8.

<sup>131</sup> Irizarry Direct Testimony at 19, 40-43.

<sup>132</sup> LUMA, *LUMA’s Motion Submitting Additional Rebuttal Testimonies – Rebuttal Testimony of Lee Wood* at lines 430-433, PREB Dkt. NEPR-AP-2020-0025 (Feb. 17, 2022) [hereinafter *Wood Rebuttal Testimony*]. “[The Interconnection Approval Performance Incentive Mechanisms implemented in Hawaii, described on page 40, lines 19-22 of Dr. Irizarry's November 2021 testimony] acknowledges that only certain parts of the interconnection process are within the utilities' control; it is based on average approval times and corrects for outliers. In these ways, the metric is better designed and more appropriate than the other metrics previously suggested...”.



Mr. Wood explained, in February 2022, that the DG portal would be complete in about 12 months.<sup>133</sup>

Mr. Wood argued that the anticipated completion of this DG portal, by February 2023, demonstrated that penalties were unnecessary to compel LUMA to comply with its requirements, like those in Law 17-2019 to satisfy the RPS and rapidly integrate distributed energy resources.<sup>134</sup> However, at the hearing, Mr. Wood acknowledged that the DG portal was not complete and would not be for at least 1-2 more months. By Mr. Wood's own logic, LUMA's failure to meet its anticipated completion date demonstrates the need for penalties to keep LUMA on track. When debating the performance metrics requirements in Law 17-2019, Puerto Rico's legislators emphasized the importance of penalties to induce better performance on interconnections: "Penalidades por incumplimiento. Quien incumpla con la interconexión, ya sea el concesionario, ya sea la Autoridad, van a tener penalidades."<sup>135</sup>

Commissioner Mateo Santos highlighted this at the hearing:

Cmmr. Mateo: You testified that you don't have capability of timestamping delays by the applicant, or similar events in the tracking of dockets, etc. In the interconnection docket, the Energy Bureau has been pressing, very aggressively, and has required LUMA to modify the platform for exactly those points [...] Frankly, taking the case of the calculation of the metric, when you are the one with the problem of not time-stamping it, doesn't make sense. Do you think that there's a disconnect in this topic, as well, with the metric?<sup>136</sup>

In October 2022, ten months after being ordered to do so, LUMA finally submitted testimony with proposed metrics on interconnections. LUMA's proposal fails to meet PREB's requirements in several ways.

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<sup>133</sup> *Id.*

<sup>134</sup> *Id.*

<sup>135</sup> P.R. SENATE, Diario de Sesiones, 4rta Sesión Ordinaria VOL. LXVI No. 20 at 8778. ([https://senado.pr.gov/document\\_vault/session\\_diary/241/document/110618.pdf](https://senado.pr.gov/document_vault/session_diary/241/document/110618.pdf)). Section 1.14 of Act 17-2019 further emphasizes improved performance on interconnections by explicitly imposing penalties on PREPA's successor corresponding to \$1,000 per day which will be deposited in the Green Energy Fund of Puerto Rico to subsidize photovoltaic and energy storage systems.

<sup>136</sup> AP-2020-0025 Evidentiary Hearing-20230208\_Meeting Recording 2 [01: 27: 35].

First, LUMA's proposed Net Energy Metering Project Activation Duration metric would not incentivize improvement, year over year: the target threshold would remain at 28 days for all three years, and the minimum performance level would stay at 30 days for all three years. LUMA's performance with respect to Net Energy Metering Project Activation Duration should improve year after year, and that performance metric should reflect that.<sup>137</sup> PREB's expectation is fully realistic: Mr. Wood's testimony stated that LUMA observed average activation duration decreasing during Fiscal Year 2022 and expected the average to continue to drop, but the proposed metric does not reflect that.<sup>138</sup>

Second, LUMA failed to calculate "the highest level of efficiencies and savings" when calculating its target threshold of 28 days, as PREB ordered at the very start of this proceeding:

- Q: Did you consider or evaluate more aggressive targets?  
A: Not in any analytical way. I considered the difficulty of getting down to 20 days, getting down to 25 days... I have more uncertainty, subjectively. I would not feel confident with such an aggressive target.<sup>139</sup>

Third, LUMA's proposed metric conflicts with the metric that LUMA reports in other dockets, which excludes older applications. Commissioner Mateo Santos pointed out that was the more accurate metric to track what Law 17-2019 and interconnection public policy requires, and made clear the deficiencies of LUMA's proposed metric:

What I'm hearing today is completely different from the other docket, and it's completely misaligned with what the Energy Bureau has required in the interconnection docket. Let's make clear ... the interconnection public policy is very clear in what it requires. ... The public policy is very clear. And this metric

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<sup>137</sup> RFI-LUMA-AP-2020-0025-R11-PREB-05JAN23-023.

<sup>138</sup> LUMA, *LUMA's Submission of Testimonies on Additional Metrics – Additional Testimony of Lee Wood* at lines 171-172, PREB Dkt. NEPR-AP-2020-0025 (Oct. 28, 2022) [hereinafter *Wood Add'l Testimony*], "LUMA expect this average [Net Energy Metering Project Activation] duration to continue decreasing in FY23, though not at the rate seen in FY22."

<sup>139</sup> AP-2020-0025 Evidentiary Hearing-20230208\_Meeting Recording 2 [00: 57: 25].

needs to be targeted to achieving that public policy. ... This needs to be designed for LUMA to achieve public policy and go beyond that.<sup>140</sup>

Finally, LUMA's proposed metric includes a minimum performance level below that required by law. The minimum performance level would allow an average duration of thirty days, whereas Act 114-2007 only allows a maximum duration of thirty days. At the hearing, during cross examination of Mr. Wood, Commissioner Torres, Commissioner Mateo Santos, and PREB consultant Mr. Havumaki all highlighted that LUMA's metric failed to comply with the statutory maximum:

Cmmr. Mateo Santos: This table reflects that the people of Puerto Rico would be paying an incentive in a situation where the requirements haven't been met. Is that correct?

Mr. Wood: That's correct.<sup>141</sup>

In sum, LUMA's proposed metrics on interconnections are too timid and would not induce improved performance in an area critical to implementing Puerto Rico's energy policy favoring distributed renewables. PREB should reject LUMA's proposal and instead implement penalties and incentives modeled on Hawai'i's performance metrics on interconnections. LUMA's delays and misalignments demonstrate the need for penalties for failure to improve performance in this area, as Puerto Rican legislators demanded.

## **IX. ENERGY EFFICIENCY/DEMAND RESPONSE**

Energy efficiency and demand response have been identified as key strategies to reduce energy costs for consumers and achieve greater stability and reliability in the electrical system.<sup>142</sup> As expert Dr. Agustín Irizarry testified, energy efficiency and demand

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<sup>140</sup> AP-2020-0025 Evidentiary Hearing-20230208\_Meeting Recording 2 [01: 29: 33].

<sup>141</sup> AP-2020-0025 Evidentiary Hearing-20230208\_Meeting Recording 2 [01: 56: 35].

<sup>142</sup> Act 17-2019, § 1.5(5)(f), 1.6 (10). Energy efficiency is defined as "reduction in energy use attributable to appliances and equipment replacement, technology modernization, or a more efficient operation of existing equipment and materials, as well as any other program developed by the Bureau for the

response “will lower customer bills while also increasing resiliency and reliability, by easing the strain on the grid, especially at peak times.”<sup>143</sup> These strategies are also part of a modern electric power system that Puerto Rico deserves and that it is urgently necessary to integrate. Consequently, “[u]tilities must work to increase *the value of the services they provide to citizens*. Effective grid modernization will increase the perceived value of the electricity service for customers, reducing the likelihood they want to take their demand elsewhere by going off-grid. This value comes from enabling the platform functionalities that increase efficiency, allowing storage and renewables to enter the market, and facilitating customer bill control.”<sup>144</sup> Ultimately, on December 22, 2021, PREB issued a Resolution and Order determining the need for additional performance targets to be evaluated in this proceeding, including performance target specifically addressing energy efficiency and demand response. This is a recognition of what the energy public policy laws envisioned as part of the much-needed transformation of the electric system and for those to be part of the performance incentives and penalties mechanisms, in addition to the other targets included in said Resolution and Order.

Section 1.03 of the Regulation for Energy Efficiency establishes that “[e]nergy efficiency has a significant role to play in rebuilding a stronger energy system that is

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purpose of reducing electric power consumption.” See Act 57-2014, Section 1.3(u). Demand response means “changes in utility-supplied electric usage by end-use customers from their normal consumption patterns in response to changes in the price of electricity during a day and/or season, or to other economic compensation designed to induce change in the use of utility-supplied electricity, to provide a resource option for electric system planners and operators in balancing supply and demand.” See Section 1.09 (B)(5) of Regulation No. 9246, Regulation for Demand Response, December 21, 2020.

<sup>143</sup> See Adm. Exh. 9, LECO, *Motion to Submit Expert Testimony of Agustín A. Irizarry-Rivera on Additional Performance Targets on behalf of Local Environmental and Civil Organizations*, at 3, lines 7-10, PREB Dkt.NEPR-AP-2020-0025 (March 22, 2022).[hereinafter Irizarry Addt’l Targets Testimony]. It is worth emphasizing that Dr. Irizarry has served as a consultant on renewable energy and energy efficiency projects to Puerto Rico’s government agencies, municipalities, private developers, and consulting firms, both in and outside Puerto Rico. See Irizarry Direct Testimony at 3, lines 23-26.

<sup>144</sup> See Irizarry Direct Testimony at 16, lines 8-14. (*Emphasis in the original*).

responsive to customers' needs, as demonstrated by the significant level of energy efficiency required in the new energy public policy."<sup>145</sup> Act 17-2019 and Act 57-2014 require PREPA and LUMA to attain thirty percent (30%) energy efficiency goal by 2040.<sup>146</sup> Therefore, Section 3.01 (A) of the aforementioned regulation sets the 2040 target for Annual Cumulative Reduction in electric consumption resulting from increased energy efficiency at 4,744 GWh per year (30% of PREPA's fiscal year 2019 sales). Puerto Rico has 17 years left to achieve that minimum percent but could achieve far more than that.<sup>147</sup>

It is important to note that Act 57-2014 specifically mentions the establishment of performance-based incentives and penalty mechanisms for the “compliance with metrics to achieve the energy efficiency standards established in this Act.”<sup>148</sup> Dr. Irizarry’s suggestion for PREB, as an expert, is to set forth several energy efficiency metrics to measure LUMA’s performance and for PREB to set baselines for those metrics that should be designed to achieve the 30% goal by 2040.<sup>149</sup> These metrics are: (1) **percent of customers signed up per year**; (2) **annual and lifecycle energy savings**; (3) **annual and lifecycle peak demand savings**; and (4) **program costs per MWh saved**.<sup>150</sup> These metrics measures the participation of customers in the programs, the actual energy and demand savings, and how cost-effective are the programs. Dr. Irizarry also encourages PREB to include similar metrics established by Hawai’i Public Utility Commission to benefit low- and moderate-income customers: (1) Residential Hard-to-Reach Energy (kWh) Savings Beyond Hawai’i Energy’s Target; (2)

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<sup>145</sup> Reg. 9367, *Regulation for Energy Efficiency*, March 25, 2022. (Adm. Exh. 34).

<sup>146</sup> Act 17-2019, § 1.6 (11).

<sup>147</sup> See Puerto Rico Energy Efficiency Scenario Analysis Tool (PREESAT), where using a uniform adoption of all potential energy efficiency measures presented in the study could lead up to 62% of total energy savings by 2040. National Renewable Energy Laboratory at 28 (Sept. 2021). Available at <https://www.nrel.gov/docs/fy21osti/79977.pdf> (last visit on May 8, 2023).

<sup>148</sup> Act 57-2014, § 6.25B (f).

<sup>149</sup> Irizarry Addt’l Targets Testimony at 6, lines 14-22.

<sup>150</sup> *Id.* These proposed metrics are suggested in the Utility Performance Incentive Mechanisms: A Handbook for Regulators, Synapse Energy Economics, Table 12.

Residential Hard-to-Reach Peak Demand (kW) Reduction Beyond Hawaii Energy's Target;  
(3) A&A Customers Served Beyond Hawaii Energy's Target.<sup>151</sup> The threshold created to qualify for an incentive for each of these metrics is 100%.

Consistent with the above, Regulation No. 9367 envisions performance incentive mechanisms for metrics such as annual MWh savings; lifetime MWh savings; annual MW savings; lifetime net benefits; greenhouse gas reductions; comprehensiveness; and customer equity.<sup>152</sup> Aligned with the principles of *go above and beyond, further efficiencies and savings, impact areas of significant performance issues, incentives rewards difficult tasks, and benefits for the public interest*, a performance incentive for an energy efficiency metric shall be one that “makes significant progress in securing all cost-effective energy efficiency resources while ensuring that those resources are secured as efficiently as possible” and “that customers retain most of the benefit from the implementation of energy efficiency”.<sup>153</sup> Regulation No. 9367 already sets the targets for the first-year savings (at least 0.1% of annual sales in the first year and at least 0.25% of annual sales in the second year).<sup>154</sup>

On the other hand, PREB has the duty to establish “short-, medium-, and long term demand response programs through effective incentive mechanisms for consumers that facilitate a change in their behavior.”<sup>155</sup> Demand response is another element of a performance-based incentives and penalty mechanism as it entails “services that inure to the benefit of the electrical system and consumers.”<sup>156</sup> Since 2020, PREB has had available the Regulation for Demand Response, which applies to LUMA.<sup>157</sup> Dr. Irizarry’s testimony set

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<sup>151</sup> *Id.* at 8, lines 8-25 and at 9, lines 1-23.

<sup>152</sup> Art. 2.02 (A)(2) of Reg. No. 9367.

<sup>153</sup> Art. 4.02 (D)(6)(A)(1) and (4) of Reg. 9367.

<sup>154</sup> *Id.* at Art. 4.02 (D)(6)(A)(2).

<sup>155</sup> Act 57-2014, Section 6.3 (h).

<sup>156</sup> *Id.*, Section 6.25B.

<sup>157</sup> Reg No. 9246, *Regulation for Demand Response*, Dec. 21, 2020, Section 1.04.

forth several metrics to measure LUMA's performance on demand response, specifically the participation of customers in the programs and the deployment of demand response resources: (1) percent of customers signed up per year; (2) percent of customers enrolled; (3) MWh of demand response provided over past year; and (4) potential and actual peak demand savings.<sup>158</sup>

Luma's proposal for energy efficiency and demand response performance metrics, without making any distinction which one is for energy efficiency and which one is for demand response, is comprised of two metrics: (1) Energy Savings as a Percent of Total Energy Sales, and (2) Peak Demand Savings as a Percent of Total Peak Demand.<sup>159</sup> These metrics are part of metrics that PREB should consider establishing to measure LUMA's performance to achieve energy efficiency and demand response standards. However, the proposal falls short since it does not include other metrics that measure important considerations such as consumer participation in the programs to be implemented, benefits specifically aimed at the low- and moderate-income population (customer equity), and greenhouse gas reductions.

Another deficiency in LUMA's proposal is the use of the energy savings targets established by regulation for the first and second year to receive 100% of the base points for that metric, and consequently, receive compensation. 0.10% for the first year and 0.25% for the second year are the minimums required by regulation. The People of Puerto Rico should not pay incentives for meeting the minimum. The above does not comply with the established principles of *go above and beyond*. Furthermore, establishing a grading system where LUMA would be compensated for reaching less than 100% of the minimum established by regulation

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<sup>158</sup> See Irizarry Addt'l Targets Testimony at 10, lines 3-9. These proposed metrics are suggested in the Utility Performance Incentive Mechanisms: A Handbook for Regulators, Synapse Energy Economics, Table 12.

<sup>159</sup> See LUMA's proposal at 30-31.

(25% and 50% tiers) would go against the regulation and public energy policy. In addition, over-compensation would be incurred, an action prohibited by Section 7.1 (G) of Regulation No. 9137. PREB will decide when an incentive is reasonable considering all the principles and guidelines applicable to the performance incentive mechanisms. One incentive that LECO can definitely agree upon is if LUMA achieves 30% energy efficiency before 2040;<sup>160</sup> an incentive compatible with the principle of *further the earlier compliance with public policy*: “targets or levels for which an incentive may be proposed shall encompass the accelerated implementation of public policy such as the renewable energy portfolio, demand response, energy efficiency or other similar mandated.”

Despite the great benefits for the electrical system, the environment and the customer and the cost relief for the customer and the system itself, to urgently implement energy efficiency and demand response strategies, LUMA assigns one of the lowest amounts of base points and one of the lowest percentages of effective weight.<sup>161</sup> An indication that LUMA does not assign the importance that these strategies deserve is that LUMA argues that the minimum regulatory targets cannot be achieved until the programs are fully funded through a cost-recovery mechanism such as an EE Rider.<sup>162</sup> First of all, LUMA is obliged to set aside in its annual budget a budget for energy efficiency.<sup>163</sup> Secondly, LUMA must look for other revenue sources such as grants and federal funds to avoid having to resort to ratepayer funding, or at least reduce the amount to be collected from ratepayers.<sup>164</sup> LUMA did not provide evidence that they are in the process of requesting federal funds or grants. They are,

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<sup>160</sup> See Irizarry Addt'l Targets Testimony at 6, lines 22-23.

<sup>161</sup> See LUMA's proposal at 12.

<sup>162</sup> *Id.* at 31.

<sup>163</sup> Art. 4.05 (B) of Reg. 9367.

<sup>164</sup> *Id.*, Art. 4.05 (F).



once again, relying on passing all the costs to the already over-burdened customers through an EE Rider.

Lastly, in the evidentiary hearing, PREB consultants focused on the difference between the metrics during the Transition Period Plan and the metrics for Years 1 to 3 concerning energy efficiency.<sup>165</sup> PREB consultants went through the Transition Period Plan requirements, specifically the following:

In accordance with Section 4.02(E)(1)-(2) of this Regulation, PREPA shall propose, and the Energy Bureau shall approve, reject, or modify, performance targets and associated payments for the Transition Period Plan that measure performance of utility actions. These activity-based targets could include establishing programs covering particular sectors or end uses, stakeholder engagement activities, and market development, education, and capacity-building actions. For the Transition Period Plan, PREPA may not propose payments for achievement of performance targets that are based on the outcomes of those actions (such as measured energy saved by energy efficiency programs).<sup>166</sup>

It seems like it was expected from LUMA to propose activity-based targets in consideration of the Energy Efficiency and Demand Response Transition Period Plan docket (NEPR-MI-2022-0001). However, this LUMA performance targets proceeding does not exclude metrics in transition periods and subsequent periods. It is LECO's understanding that PREB has the authority to establish in this proceeding performance targets for metrics related to the Transition Period Plan and subsequent periods, like Year 1 to 3. It is important to note that on February 13, 2023, PREB issued a Resolution and Order in the Energy Efficiency and Demand Response Transition Period Plan docket.<sup>167</sup> PREB expressed the following:

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<sup>165</sup> AP-2020-0025 Evidentiary Hearing-20230208\_Meeting Recording 2 [00: 18: 40].

<sup>166</sup> Art. 2.02 (B) of Reg. No. 9367.

<sup>167</sup> PREB, *Resolution and Order*, PREB Dkt. NEPR-MI-2022-001 (Feb. 16, 2023). See <https://energia.pr.gov/wp-content/uploads/sites/7/2023/02/20230216-MI20220001-Resolution-and-Order.pdf>. Subsequently, PREB vacated its decision related to the activity-based metrics and incentives established in the previous order. PREB. Resolution and Order, PREB Dkt. NEPR-MI-2022-

Table 2 below lists 10 activity-based metrics and associated deadlines and allocations to be adopted by LUMA. The metrics represent key milestones for EE and DR program launch and, for simplicity and ease of application, each metric carries the same weight. With quality completion of each metric by the deadline, LUMA will earn 10 points for a total of 100 points across the 10 metrics. In other words, completion of each metric represents 10 percent of the total incentive pool for EE and DR, which will be established in Docket NEPR-AP-2020-0025. For example, if the total incentive pool for EE and DR is 42 million, then each metric completed would be worth \$200,000.<sup>168</sup>

The 10 Transition Period Performance Incentive Metrics established in that docket and that potentially will be established in this proceeding, for which LUMA would be entitled to receive payment as incentive, are not aligned with the principle of *Incentives Reward Difficult Tasks*: targets or levels for which an incentive may be proposed shall be tied to difficult tasks, and not easy to fix areas. Activities like entering into a contract with EE and DR Program Implementer; filing EE and DR Program Rate Rider; enrolling customers in emergency DR Programs without setting a quantity goal or target; processing EE and DR Incentive Applications without setting a quantity goal or target or covering particular sectors like low- and moderate-income customers; filing Annual Report; celebrating a single Stakeholder Meeting without meaningful, effective, and participatory safeguards; and filing FY2025-FY2027 Three-Year Plan, **should not be considered as metrics worthy of payments and incentives**. Accepting those metrics to measure LUMA's performance during the Transition Period Plan would destroy the purpose of the principles established by law, regulations and in this proceeding.

In any case, if activity-based metrics were to be established in this proceeding, incentives fees are unwarranted and only penalties should be put in place as they are required by the EE Regulations. In terms of the energy efficiency and demand response

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001 (April 3, 2023). See <https://energia.pr.gov/wp-content/uploads/sites/7/2023/04/20230403-MI20220001-Resolution-and-Order.pdf>.

<sup>168</sup> *Id.* at 20.

performance metrics discussed above (percent of customers signed up per year; annual and lifecycle energy savings; annual and lifecycle peak demand savings; and program costs per MWh saved), PREB should impose penalties upon LUMA when the minimum standards and targets are not met. If PREB decides to include an incentive or reward mechanism for those metrics, the funds provided to LUMA in case LUMA achieves the targets or exceeds the targets should be conditioned to be used for the actual achievement of the energy efficiency goal of 30% energy savings.

**X. ON VEGETATION MANAGEMENT, LUMA HAS NOT MET THE BURDEN OF PROOF IN ESTABLISHING THAT THE METRIC THEY ARE PROPOSING WOULD ACTUALLY IMPROVE THE SYSTEM.**

Before discussing the substance of the Vegetation Management Performance Metrics, LECO requests that the PREB consider the faults in credibility for LUMA's expert testimony in this area. While LUMA presented two different expert witnesses for this metric, each one replaced by the next, the testimony remained basically unaltered.

Chronologically, the irregularity happened as follows: On February 1, 2022, LUMA filed a *Motion Submitting Rebuttal Testimonies* before the PREB, wherein, among others, it submitted the rebuttal testimony of Mr. Brent Bolzenius, Director of Vegetation Management for LUMA Energy ServCo.<sup>169</sup> On April 27, 2022, LUMA filed a motion, among other things, submitting a supplemental rebuttal testimony from Mr. Bolzenius.<sup>170</sup> On

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<sup>169</sup> *LUMA's Motion Submitting Rebuttal Testimonies*, PREB Dkt. NEPR-AP-2020-0025 (Feb. 1, 2022). See <https://energia.pr.gov/wp-content/uploads/sites/7/2022/02/Motion-Submitting-Rebuttal-Testimonies-NEPR-AP-2020-0025.pdf>.

<sup>170</sup> *LUMA's Motion Submitting Supplemental Rebuttal Testimonies and Urgent Request for an Extension of Time to File Rebuttal Testimony of Witness Lee Wood*, PREB Dkt. NEPR-AP-2020-0025 (April 27, 2022). See <https://energia.pr.gov/wp-content/uploads/sites/7/2022/05/Lumas-Motion-Submitting-Supplemental-Rebuttal-Testimonies-and-Urgent-Request-for-Extension-of-Time-to-File-Rebuttal-Testimony-of-Witness-Lee-Wood-NEPR-AP-2020-0025.pdf>.

October 28, 2022, LUMA filed Mr. Bolzenius's direct testimony regarding the vegetation management performance metric.<sup>171</sup> However, on January 26, 2023, just days before the pre-hearing conference and twelve days before the evidentiary hearing, LUMA filed a *Motion Requesting Authorization to Substitute Pre-Filed Testimonies*.<sup>172</sup> In what is pertinent, it petitioned to replace the direct and rebuttal testimonies of Mr. Bolzenius with that of Ms. Diane Watkins, Vice President of Vegetation and Work Management for LUMA Energy ServCo. The reason provided was that the company made changes in the internal and management structure of their Vegetation Management program and that Ms. Watkins was the person authorized to offer testimony.

Because at the time of the hearing, Mr. Bolzenius, the person that originally provided the testimonies, was still LUMA's employee and there was no indication that he was not available to testify, and the testimonies remained the same, this leads LECO to question the credibility of said testimony and request that the PREB not grant it probative value. Moreover, at the hearing, Ms. Watkins explained that she disagreed with a previous discovery response provided by Mr. Bolzenius, but was unable to explain Mr. Bolzenius' reasoning.<sup>173</sup> LUMA's action goes to the credibility of the testimony because these witnesses hold different positions in LUMA and do not share the same qualifications or experiences. Yet, the testimony was basically unaltered (changes reflected the change in the person and their background and minor grammar and spelling edits). The only reasonable conclusion is that the prefabricated testimony is based on LUMA's interests and not on the expertise of

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<sup>171</sup> *LUMA's Submission of Testimonies on Additional Metrics*, PREB Dkt. NEPR-AP-2020-0025 (Oct. 28, 2022). See <https://energia.pr.gov/wp-content/uploads/sites/7/2022/11/LUMAS-Submission-of-Testimonies-on-Additional-Metrics-NEPR-AP-2020-0025.pdf>.

<sup>172</sup> *Motion Requesting Authorization to Substitute Ore-Filed Testimonies*, PREB Dkt. NEPR-AP-2020-0025 (Jan. 26, 2023). See <https://energia.pr.gov/wp-content/uploads/sites/7/2023/01/20230126-Motion-Requesting-Authorization-to-Substitute-Pre-Filed-Testimonies-1.pdf>.

<sup>173</sup> AP-2020-0025 Evidentiary Hearing-20230208\_Meeting Recording 3 [01: 22: 15].

the named witnesses. Having made this request, let's discuss the vegetation management metrics.

One of the goals of the energy public policy is specifically to “set priorities for the maintenance of the Electrical System infrastructure and create vegetation management programs.”<sup>174</sup> This aspect of the system in the tropical archipelago is so important that lawmakers included a whole section about the creation of a comprehensive vegetation management program and imposed a specific duty on patrolling and trimming vegetation that is next to the power lines.<sup>175</sup> Among LUMA’s responsibilities as an electric service company in charge of PREPA’s T&D lines is to ensure public safety, reliability, and resiliency. Vegetation management and maintenance in Puerto Rico is critically important and an essential part of that duty.<sup>176</sup> As PREB came to realize in their Resolution and Order establishing additional metrics, that lack of vegetation management is a significant contributor to poor system reliability, since “vegetation related outages represent approximately a quarter of both the number and duration of total outages for the three months of June, July, and August 2021.”<sup>177</sup> PREB specifically asked for performance targets to address vegetation management that could ultimately tackle and reduce vegetation related outages, contributing to the safety and reliability of the system.<sup>178</sup>

However, LUMA’s proposal on vegetation management metric is only to monitor the number of line miles completed for vegetation maintenance each fiscal year along 230kV, 115kV, and primary Distribution lines. As Dr. Irizarry stated during the evidentiary hearing,

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<sup>174</sup> Act 17-2019, § 1.6 (5).

<sup>175</sup> *Id.*, Section 1.16.

<sup>176</sup> *See* Irizarry Addt’l Targets Testimony at 3, lines 10-12, and at 10, line 14..

<sup>177</sup> PREB, *Resolution and Order* at 4-5, PREB Dkt. NEPR-AP-2020-0025 (Dec. 22, 2021) [hereinafter *Dec. 22 Resolution and Order*].

<sup>178</sup> *Id.*

this activity is a standard part of running a utility, is not going above & beyond,<sup>179</sup> and therefore is not consistent with PREB's mandate that the "targets or levels for which an incentive may be proposed shall be subject to and dependent on performance above and beyond the minimum required compliance level". How would PREB know if LUMA has effectively reduced outages caused by vegetation with this metric?

And LUMA's proposed metrics do not include secondary distribution lines.<sup>180</sup> LUMA argued that the primary lines maintenance would cover the maintenance of the secondary ones.

Cmmr. Ugarte: In your testimony you stated about the monitor of the 230kV, 115kV, and primary Distribution lines. Why only the primary Distribution lines are included in the metric?

Ms. Diane Watkins: Yes. Thank you for that question. The secondary, which are the low-voltage lines, are much more difficult to track than a primary. We don't keep mileage data on secondary. As an example, secondary lines represent service drops from a pole to an individual customer's home. That's an example of secondary service. And we have other measures in place to assure that we will still do that work. It doesn't have to be included in the metrics for us to perform that work. Much of the secondary is underbuilt on the primary, meaning that the primary is on top and the secondary is below in the same right-of-way. Meaning that if we maintained that primary, the secondary is also here. So there are a number of factors where we're not proposing to track secondary standalone, but that doesn't mean that the vegetation will be addressed.

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Cmmr. Mateo: I have a question: How prevalent in the system is that condition? If you haven't seen the whole system to make an assumption or take that approach that by taking care of the primary, you're taking care of the secondary?

Ms. Diane Watkins: I don't know the exact percentage, so we would not take care of all secondary by addressing the primary. We know that. One of the examples I gave was: Secondary also represents service drops for individual customers. That's an example that's not underbuilt on primary. So those types of situations would not be addressed from the perspective of calculating mileage for the metrics.

Cmmr. Mateo: Do you know how what the percentage of what ratio of outages or issues with the system are caused by problems with vegetation on secondary lines?

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<sup>179</sup> AP-2020-0025 Evidentiary Hearing-20230208\_Meeting Recording 2 [02: 22: 25].

<sup>180</sup> AP-2020-0025 Evidentiary Hearing-20230208\_Meeting Recording 1 [02: 05: 10].

Ms. Diane Watkins: I don't know the exact number. Based on the fact that the primary circuit is the longest portion of the line, in terms of the architecture of the distribution there's a primary circuit and then the service drops are relatively small off that primary circuit. So I would surmise that the majority of outages occur off the primary, but I don't have that number.<sup>181</sup>

However, according to this oral testimony, LUMA was unable to produce evidence and data on the percent under that condition. LUMA could not even provide the percentage of outages or system problems related to secondary lines vegetation. LUMA did not perform its analysis assignment. It is not enough to surmise or rely on assumptions. LUMA has not met the burden of proof the metric proposed would improve the system if they are not aware of the data, if they have not analyzed the data or inspected the system.

Furthermore, Ms. Diane Watkins explained that the baseline, minimum performance level, was set through an overly simplistic conclusion that a conservative estimate would be 10% of the target.<sup>182</sup> For example, during the first year the minimum performance level proposed is 160 lines, which is absurd, considering that the system has over 18,000 of transmission and primary distribution lines.<sup>183</sup> This violates the principles set forth by LUMA's own Lead for Performance Metrics, Donald Hall: "LUMA recommends focusing Performance Metrics on areas with adequate historical data to develop an accurate baseline against which performance data can be measured."<sup>184</sup> It also frustrated compliance with PREB's mandate that incentives should be above and beyond the minimum performance level – that mandate necessarily requires that LUMA calculate the minimum performance level

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<sup>181</sup> *Id.*

<sup>182</sup> AP-2020-0025 Evidentiary Hearing-20230208\_Meeting Recording 3 [01: 19: 30].

<sup>183</sup> During the hearing, Ms. Watkins testified that LUMA achieved "900+" miles for fiscal year 2022. It is also important to note that LUMA could not provide an exact number of miles completed, an importance piece of information if your metric to receive an incentive is based on number of miles. AP-2020-0025 Evidentiary Hearing-20230208\_Meeting Recording 2 [02: 18: 37 – 02: 20: 36].

<sup>184</sup> LUMA, LUMA's Motion Submitting Additional Rebuttal Testimonies – Rebuttal Testimony of Donald Hall at lines 107-109, PREB Dkt. NEPR-AP-2020-0025 (Feb. 17, 2022) [hereinafter *Hall Rebuttal Testimony*]. (Adm. Exh. 4).

accurately with historical data. PREB should require LUMA to set a minimum performance level based on an estimate of the worst-case scenario, using the data LUMA has already compiled.

One consequence of allowing this type of proposal is not controlling vegetation, and as Dr. Irizarry expressed during the hearing, the residents of Puerto Rico are the ones who are going to pay the cost in the form of system operation costs or “pass through” and if a significant amount of vegetation is not managed, there would be lack of security and lack of reliability.<sup>185</sup> Raymond Rassi, a resident of Arecibo, attended the public hearing and explained to the Commissioners that the only lamp post on his street is often unusable due to poor maintenance and overgrown vegetation.<sup>186</sup> LUMA allowed the lamp post to remain in an unusable state for a full year before finally repairing it, but LUMA failed to address the problem of vegetation management.<sup>187</sup> As a result, the lamp post rapidly was choked off by vegetation and again became unusable, so LUMA’s refusal to conduct adequate maintenance and vegetation management in remote communities like Mr. Rassi’s creates completely dark streets, and harms public safety. Even Ms. Watkins recognizes that vegetation is a significant cause of outages in terms of SAIDI and SAIFI, and that even she has not done the analysis (which demonstrates the lack of depth and understanding of the system), she suspects LUMA won’t be as effective at reducing the SAIDI and SAIFI numbers and meeting those targets if they do not effectively use the funds for vegetation management.<sup>188</sup>

Another problem with LUMA’s proposed metric is that it does not differentiate between difficult tasks and easy-to-fix areas and PREB’s clear mandate is that “Incentives

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<sup>185</sup> AP-2020-0025 Evidentiary Hearing-20230208\_Meeting Recording 2 [02: 18: 37].

<sup>186</sup> Negociado de Energía en vivo, *Vista Pública Híbrida Caso Núm.: NEPR-AP-2020-0025* at 01:34:20, YouTube (Feb. 16, 2023), <https://www.youtube.com/watch?v=erLurPBEC-I>.

<sup>187</sup> *Id.*

<sup>188</sup> AP-2020-0025 Evidentiary Hearing-20230208\_Meeting Recording 3 [02: 35: 35].



Reward Difficult Tasks,” meaning that “targets or levels for which an incentive may be proposed shall be tied to difficult tasks, and not too easy to fix areas.” Dr. Irizarry’s testimony pointed out that vegetation management projects could be ranked according to relative difficulty, in order to comply with said PREB mandate.<sup>189</sup>

At the hearing, Ms. Watkins acknowledged that LUMA could indeed rank the projects by relative difficulty, by assessing three criteria: availability of crews and their skillsets, and availability of equipment.<sup>190</sup> Ms. Watkins also explained that LUMA could prioritize projects by safety, reliability, outages, and customer impact.<sup>191</sup> She expressed during the hearing that LUMA did not consider location and accessibility when prioritizing work,<sup>192</sup> while in her Rebuttal Ms. Watkins said that location “should not be the only factor in setting goals”, so basically recognizing that in fact it is one factor to consider.<sup>193</sup> By her own acknowledgement, LUMA clearly had not done the exercise, which indicates that they paid no attention to the mandate to set incentives for difficult tasks. PREB should therefore require that LUMA provide a revised metric, focused on completing difficult tasks.

Incentives on vegetation management should be limited to hard-to-reach vegetation management targets. Dr. Irizarry provides an example using the location of the lines, and classify them as hard to reach, that could be in rural and mountainous areas or that requires extensive management activity, or easy to reach, that could be lines next to the highway or in urban areas or that requires little management activity.<sup>194</sup> This can be established using

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<sup>189</sup> See Irizarry Addt’l Testimony at 11, lines 23-24.

<sup>190</sup> AP-2020-0025 Evidentiary Hearing-20230208\_Meeting Recording 3 [01: 16: 32].

<sup>191</sup> *Id.* Meeting Recording 3 [01: 16: 32].

<sup>192</sup> *Id.* Meeting Recording 3 [01: 16: 32].

<sup>193</sup> See *LUMA’s Motion Submitting Rebuttal Testimonies on Supplemental Testimony on Additional Metrics - Rebuttal Diane Watkins* at 5, line 87 PREB Dkt. NEPR-AP-2020-0025 (Jan. 24, 2023) (Adm. Exh. 28).

<sup>194</sup> AP-2020-0025 Evidentiary Hearing-20230208\_Meeting Recording 2 [02: 20: 44]. See also Irizarry Addt’l Testimony at 11, lines 1-24.

an inventory that clearly exposes where the lines are, which ones need to be managed, and which ones do not require much vegetation management.<sup>195</sup> At the hearing, Dr. Irizarry further stated:

Dr. Agustín Irizarry: Bueno, yo he escuchado durante la vista un asunto de como si LUMA, después de un año y medio de estar operando el sistema, no supiera dónde las cosas están o no supiera cuál es la naturaleza del sistema. En Puerto Rico hay como 400 subestaciones. Hay como 1,100 líneas de distribución. Hay 12 subestaciones de transmisión de 230,000 voltios. Hay 17 líneas de 230,000 voltios. La cantidad de líneas, de subestaciones, dónde están esas líneas, todos sabemos dónde están esas líneas. Entonces a mí me resulta inverosímil pensar que no se puede establecer un directorio que identifique claramente cuáles son los activos que hay que inspeccionar, custodiar, mejorar, las servidumbres que hay que manejarles la vegetación. O sea, es imposible pensar que una empresa eléctrica pueda manejar correctamente la empresa eléctrica si no tiene ese inventario, si no se sabe dónde están las cosas. Y, por lo tanto, debe ser capaz también de, una vez tienes ese inventario, de identificar, “mira, esto que está aquí, estas porciones de las líneas, estas líneas en particular no requieren mucha poda”. El Negociado puede establecer eso como no sé si un docket aparte o parte de este, un requisito de esa información para entonces establecer claramente qué es lo que es difícil y qué es lo que es fácil y qué es lo que está en la banda donde no penalizo y tampoco le doy recompensa. Porque, de la forma en que están planteadas las métricas, las métricas que propone LUMA son todas fáciles. Cuando uno examina en detenimiento, las métricas, algunas no cumplen ni siquiera con lo más básico y otras son bien fáciles de alcanzar, y en ésta en particular, hay una manera sencilla de alcanzar la métrica, que es ocupándose de las fáciles porque no hay distinción, no hay distinción entre lo que es difícil y lo que es fácil. Y es bien importante que el Negociado esté alerta a eso y, en efecto, monitoree y pida información suficiente para establecer si lo que yo estoy podando y dando mantenimiento en efecto son los lugares que son difíciles de alcanzar.<sup>196</sup>

The easy to reach should be excluded from any incentives. In contrast, failure to do maintenance on most of the line miles adjacent to roads or highways that could be considered easy to reach, must be penalized.<sup>197</sup> Additionally, considering that ineffective vegetation maintenance and management is a significant contributor to poor system reliability, is a safety hazard that can put life and property at risk, LUMA should be penalized for not

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<sup>195</sup> *Id.*

<sup>196</sup> AP-2020-0025 Evidentiary Hearing 20230208\_Meeting Recording 2 [02: 22: 45 – 02: 26: 06].

<sup>197</sup> *Id.*

achieving baselines, and if LUMA only achieves the compliance baseline, or exceeds it without achieving hard to reach vegetation management targets, then it should not be penalized nor rewarded.<sup>198</sup>

Finally, one would think that in monitoring vegetation and other issues with the lines, LUMA, a private corporation, would have access to drones for vegetation monitoring. They do not even come close to operating a system at a 21st century level. They use visual inspections of the lines and helicopters over the transmission lines,<sup>199</sup> inspections that could be much more cost-effective with the use of drones. But LUMA's response was that they are not using them now, but they might do that.<sup>200</sup> It is also disappointing not to receive other resiliency-based metrics from this corporation that can meet the above and beyond mandate, like biodiversity protection or enhancement, or help rehabilitate the right of ways with native plant species, or community involvement to find creative ways to protect trees, which provide significant ecosystem services or the sustainable use of tree byproducts, like wood. Nevertheless, PREB can include in the near future these important resiliency-based metrics.

**XI. PREB SHOULD REJECT LUMA'S PROPOSED RELIABILITY METRICS, AND INSTEAD IMPOSE PENALTIES AND INCENTIVES AS RECOMMENDED BY DR. IRIZARRY.**

**A. PREB incorrectly calculated the minimum performance level and targets for reliability metrics.**

At the very outset of this hearing, PREB stated that LUMA could not earn points towards incentives merely for achieving the minimum performance level: “targets or levels

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<sup>198</sup> *Id.*

<sup>199</sup> AP-2020-0025 Evidentiary Hearing-20230208\_Meeting Recording 3 [02: 35: 43].

<sup>200</sup> *Id.*

for which an incentive may be proposed shall be subject to and dependent on performance above and beyond the minimum required compliance level;”<sup>201</sup> The minimum performance level should be Puerto Ricans' expectations for LUMA's performance even in the worst-case scenario. PREB further stated that LUMA's target levels for incentives must reflect the “highest level of efficiencies and savings”<sup>202</sup> - in other words, the target level should be Puerto Ricans' expectations for LUMA's performance in the best-case scenario.

At the hearing, Mr. Cortez’s testimony revealed that LUMA had not followed those PREB mandates, and instead created a structure where LUMA would gain points towards an incentive even for worst-case scenario performance:

PREB Consultant Ben Havumaki: Can we look again at the tiers across? Can you explain how you developed the ... 25% [tier] and the 50%[ tiers]?

Mr. Cortez: And you're referring to the 25% up to the 150%?

Mr. Havumaki: Yes.

Mr. Cortez: Once we looked and considered all the factors you were mentioning, plus what we considered was the state of the grid, if things did not go as planned, or we felt if it was worse than what we anticipated, then... based on our experience how we can improve, considering a worst-case scenario and a best case scenario.<sup>203</sup>

PREB's consultant then asked to confirm that LUMA's worst-case scenario would be the minimum performance level, as required by PREB's criteria:

Mr. Havumaki: When you say worst-case scenario, the minimum performance, that ... would be the 0%? The second column?<sup>204</sup>

Surprisingly, Mr. Cortez explained that LUMA was proposing to earn points towards an incentive even in the worst-case scenario, by setting it as the 25% tier: “...That's the

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<sup>201</sup> PREB Commencement of Proceeding Order.

<sup>202</sup> *Id.*

<sup>203</sup> AP-2020-0025 Evidentiary Hearing-20230208\_Meeting Recording 1 [01: 18: 30].

<sup>204</sup> *Id.* Meeting Recording 1 [01: 18: 30].

25%.”<sup>205</sup> Mr. Cortez next explained that LUMA was proposing a target threshold well below its own estimate of the best-case scenario:

Mr. Havumaki: What's the best-case?

Mr. Cortez: Best case, that would be the 150%.<sup>206</sup>

PREB should revise both the minimum performance level and the target as follows,<sup>207</sup> in order to comply with PREB’s mandates:

Metric	Year	LUMA’s 25% tier, Worst-Case Scenario, should be Minimum Performance Level	LUMA’s 150% tier, Best-Case Scenario, should be Target
SAIFI	Year One	10.2	8.2
	Year Two	9.5	6.8
	Year Three	9.0	5.8
SAIDI	Year One	1,181	870
	Year Two	1,081	684
	Year Three	994	497

#### **B. PREB should include metrics that matter deeply to customers, like CAIDI.**

Through Act 17-2019, the Legislature envisioned that performance metrics would include measures of critical importance to customers. The Customer Average Interruption Duration Index (“CAIDI”) is one such metric, which measures, from a customer point of view, “the reliability of the electric power service”, and grants customers “access to the electric power companies’ information systems”.<sup>208</sup> When a customer loses power, the most important piece of information to them is when they’ll get power back. That is measured by CAIDI. Improvement to this metric, therefore, presents a “clear benefit for the public interest and rate payers” and would satisfy PREB’s mandates in opening this proceeding.

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<sup>205</sup> *Id.* Meeting Recording 1 [01: 18: 30].

<sup>206</sup> *Id.* Meeting Recording 1 [01: 18: 30].

<sup>207</sup> LUMA’s proposal at 17-18.

<sup>208</sup> The Legislature emphasized that performance metrics should address both of these topics. Act 17-2019, Section 5.21(c) and (d).

The testimony of Dr. Irizarry provides a compelling explanation of why CAIDI should be included, alongside System Average Interruption Duration Index (“SAIDI”) and System Average Interruption Frequency Index (“SAIFI”).<sup>209</sup> At the hearing, counsel for LUMA attempted to mislead PREB into a false conclusion that Dr. Irizarry was proposing to use only CAIDI as a metric, excluding SAIDI and SAIFI.<sup>210</sup> Dr. Irizarry explained why he proposed, and how LUMA’s own exhibit proved, that LUMA’s performance should be measured across all three metrics.<sup>211</sup>

LUMA itself previously agreed to include CAIDI as a metric, when PREPA and P3 proposed it, as part of LUMA’s proposal in the June 2020 T&D OMA. However, that appears to have been a pretense, as just nine months later, LUMA removed CAIDI from the next draft of LUMA’s proposal.<sup>212</sup> LUMA raises a handful of post-hoc arguments, citing facts that LUMA was well aware of when it agreed to be subject to a CAIDI metric. One fact LUMA omits, which may be the true explanation for why LUMA opposes including penalties and incentives based on CAIDI: the average time for service restoration, as measured by CAIDI, rose nearly 70% in one year under LUMA’s watch.<sup>213</sup>

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<sup>209</sup> Irizarry Direct Testimony at 31, lines 3-10.

<sup>210</sup> AP-2020-0025 Evidentiary Hearing-20230208\_Meeting Recording 3 [01: 57: 02].

<sup>211</sup> *Id.*

<sup>212</sup> *LUMA’s Submittal and Request for Approval of Revised Annex IX to the OMA*, PREB Dkt. NEPR-AP-2020-0025 (Feb. 25, 2021).

<sup>213</sup> Irizarry Direct Testimony, Exhibit 2 at 56: “The time it takes to restore electric service after an interruption (CAIDI) has increased significantly 25 out of 26 regions under LUMA. The average system-wide time to restore electric service after an interruption (CAIDI) increased from 2 hours and 43 minutes during June, July and August 2020 to 4 hours and 38 minutes during June, July and August 2021 under LUMA. This increase in outage duration was also acknowledged by LUMA’s CEO during the October 6 Congressional hearing.”

**C. PREB should impose outage compensation, penalties for failure to meet minimum reliability performance levels, and gating metrics for egregious failures.**

The significant decreases in multiple reliability metrics under LUMA's watch have caused real and measurable harms to the Puerto Rican public. At the hearing, Mr. Cortez explained that the Value of Lost Load was one statistic that could, at least partially, quantify the harm to Puerto Ricans from the drop in SAIDI since LUMA's takeover.<sup>214</sup>

In January 2023, LUMA reported 2,417.75 minutes of outages, per customer served, for the eighteen months between June 2021 and December 2022. This is a significant drop in performance compared to PREB's baseline, measured against PREPA's performance prior to LUMA's takeover, of 1,243 minutes annually - corresponding to 1,864.15 for 18 months.<sup>215</sup> Therefore, by LUMA's own accounting, the drop in SAIDI since LUMA's takeover has cost Puerto Ricans between \$275M and \$500M on Value of Lost Load alone:

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<sup>214</sup> AP-2020-0025 Evidentiary Hearing-20230208\_Meeting Recording 3 [01: 29: 24]. Mr. Cortez also stated that LUMA still has not answered PREB's question about measures to quantify changes to SAIFI.

<sup>215</sup> LUMA, *Submission of Corrected Spreadsheets on Performance Metrics Quarterly Report for October through December 2022, and Corrected Data on Reliability Metrics for July through August 2022*, PREB Dkt. NEPR-MI-2019-0007 (March 3, 2023). See [\*Submission of Corrected Spreadsheets on Performance Metrics Quarterly Report for October through December 2022, and Corrected Data on Reliability Metrics for July through August 2022\*](#).

	SAIDI	SAIDI: mpr <sup>216</sup>	Energy Not Served (MWh) <sup>217</sup>	Value of Lost Load (Method 1)	Value of Lost Load (Method 2)
LUMA's reported figure from June 2021 to Dec 2022	2,147.75 minutes	0.0027	65,396 MWh	\$2,085,963,727	\$3,789,094,221
Comparison to PREB- ordered baseline for that time period	1,864.15 minutes	0.0024	56,761 MWh	\$1,810,522,306	\$3,288,762,655
Difference	283. 6 minutes		8,725 MWh Not Served	\$275,441,422	\$500,331,566

Calculation method and assumptions taken from LUMA's answer to RFI-LUMA-AP-2020-0025-PREB-R1-10SEPT21-022.<sup>218</sup>

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<sup>216</sup> LUMA calculated this figure by dividing SAIDI by the total minutes in one year: 522,800. Here, we calculated SAIDI: mpr by dividing the 18-month SAIDI figure by the total minutes in eighteen months: 788,400 minutes.

<sup>217</sup> LUMA calculated this figure by multiplying SAIDI: mpr by the total energy consumed in 2020: 16,004,000 MWh. Here, we calculated ENS by multiplying SAIDI: mpr by the equivalent energy figure for eighteen months: 24,006,000 MWh.

<sup>218</sup> Irizarry Direct Testimony at 277.



Value of Lost Load does not, however, capture all costs due to outages. Notably, it cannot capture the cost of replacing damaged appliances. LECO's filings document the widespread reports of significant increases in appliance damages since LUMA's takeover:

- "Ashlee Vega, who lives in northwestern Puerto Rico, said the power fluctuations this month were so imperceptible that it took her several hours to realize her appliances were not working right. The new refrigerator she had bought in February - to replace an old one that gave out after enduring years of volatile electrical surges - was fried."<sup>219</sup>
- "It has been hard to expand the business as frequent power cuts force him to close the store and also damage the fridges, which are costly to repair."<sup>220</sup>
- "In early August, the Independent Consumer Protection Office said it had received about twice as many monthly complaints under LUMA than it had when PREPA managed the grid; the complaints have been primarily related to service disruptions and equipment damaged by voltage fluctuations."<sup>221</sup>
- "The latest outage unleashed a flood of complaints on social media as anger spread among thousands of people who were forced to throw out food and refrigerated medication including insulin in recent days. Some also complained about damaged appliances as lights flickered on and off since Thursday's outage that left 900,000 people in the dark."<sup>222</sup>
- "Irizarry worried for his safety ... and the growing list of appliances lost to unexpected voltage changes. .... The unreliable electricity damaged the freezer where he stored pizza ingredients. ... 'We are talking about scenarios where voltage changes have been dramatic and they have destroyed medical equipment and burned down houses...'"<sup>223</sup>
- "Residents of the island say the power cuts have damaged appliances and can be life-threatening to those who rely on certain medical machines."<sup>224</sup>

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<sup>219</sup> Patricia Mazzei, *Why Don't We Have Electricity?: Outages Plague Puerto Rico*, N.Y. TIMES (Oct. 19, 2021), <https://www.nytimes.com/2021/10/19/us/puerto-rico-electricity-protest.html>.

<sup>220</sup> Nina Lakhani, *We want sun: the battle for the solar power in Puerto Rico*, THE GUARDIAN (Oct. 18, 2021) available at <https://www.theguardian.com/environment/2021/oct/18/puerto-rico-solar-power-climate-resilience>.

<sup>221</sup> Cathy Kunkel & Tom Sanzillo, *Puerto Rico Grid Privatization Flaws Highlighted in First Two Months of Operation* (August 2021) available at [http://ieefa.org/wp-content/uploads/2021/08/Puerto-Rico-Grid-Privatization-Flaws-Highlighted-in-First-Two-Months-of-Operation\\_August-2021.pdf](http://ieefa.org/wp-content/uploads/2021/08/Puerto-Rico-Grid-Privatization-Flaws-Highlighted-in-First-Two-Months-of-Operation_August-2021.pdf)

<sup>222</sup> *Massive power outage in Puerto Rico affects hundreds of thousands amid growing outrage*, CBS NEWS (June 16, 2021) available at <https://www.cbsnews.com/news/puerto-rico-power-outage-latest-2021-06-16/>.

<sup>223</sup> María Luisa Paúl, *Two major power outages in a week fuel fear in Puerto Rico – and memories of Hurricane María*, THE WASHINGTON POST (June 18, 2021) available at <https://www.washingtonpost.com/nation/2021/06/18/puerto-rico-power-outages/>.

<sup>224</sup> *Puerto Ricans March to Protest Ongoing Power Outages After Privatization of Electric Grid*, DEMOCRACY NOW! (Oct. 18, 2021) available at [https://www.democracynow.org/2021/10/18/headlines/puerto\\_ricans\\_march\\_to\\_protest\\_ongoing\\_power\\_outages\\_after\\_privatization\\_of\\_electric\\_grid](https://www.democracynow.org/2021/10/18/headlines/puerto_ricans_march_to_protest_ongoing_power_outages_after_privatization_of_electric_grid).

- "The list of recent incidents includes massive power outages and an increase in power surges. These, along with daily complaints of citizens' damaged equipment, are some examples of the company's inability to manage a complex system."<sup>225</sup>

All of these examples were provided in LECO's response to LUMA-LECO-IRIZARRY-ROI-01-059, and also attached to LECO's March 9th Response to LUMA's Motion to Strike Portions of Expert Testimony of Jose Alameda. The Chamber of Representatives filed a Measure requesting that LUMA follow up on complaints filed by citizens who lost electrical appliances during the April 6, 2022 blackout.<sup>226</sup>

In his rebuttal testimony, Mr. Cortez explained that he had examined LECO's evidence of voltage fluctuations, and also examined current and historical data on voltage fluctuations.<sup>227</sup> At the hearing, Mr. Cortez explained that ultimately, LUMA could not issue any opinion disputing LECO's statements on voltage fluctuations or power quality, or appliance damage resulting from voltage fluctuations under LUMA's watch.<sup>228</sup>

LUMA's failure to perform even to a minimum baseline on SAIDI, and LUMA's refusal to reimburse Puerto Ricans for losses caused by LUMA, justify imposition of gating metrics as recommended by Dr. Irizarry, modeled on those found in the LIPA contract:

SAIDI: If PSEG "fails to achieve a result at the 37.5 percentile or better, as calculated by using electric reliability benchmarking data from the US Energy Information Administration for companies with >500,000 customers, and utilizing the IEEE standard for SAIDI without major event days", the incentive compensation pool is reduced by 50%.<sup>229</sup>

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<sup>225</sup> Johnny Irizarry Rojas, *Four years after María, Puerto Rico's power grid still in shambles* / *Commentary*, ORLANDO SENTINEL (Sept. 22, 2021) available at <https://www.orlandosentinel.com/opinion/guest-commentary/os-op-puerto-rico-power-grid-in-shambles-20210922-w6cwdrgrgwfzrb25ruylhigsmy-story.html>

<sup>226</sup> Primera Hora, *Presentan resolución para seguir reclamos por enseres dañados*, (April 9, 2022) available at <https://www.primerahora.com/noticias/gobierno-politica/notas/presentan-resolucion-para-seguir-reclamos-por-enserres-danados-por-el-apagon/>.

<sup>227</sup> Cortez Rebuttal Testimony, lines 419-456.

<sup>228</sup> AP-2020-0025 Evidentiary Hearing-20230208\_Meeting Recording 3 [01: 35: 02].

<sup>229</sup> Irizarry Direct Testimony at 54, lines 3-8.

Gating metrics modeled after the LIPA contract, along with outage compensation and penalties for failure to meet minimum reliability performance levels, are necessary to induce adequate performance from LUMA and at least partially reimburse Puerto Ricans for losses caused by LUMA.

**XII. CUSTOMER SATISFACTION METRICS DO NOT MEASURE THE CUSTOMERS' SATISFACTION AND DO NOT GO ABOVE AND BEYOND AS REQUIRED BY PREB'S DECEMBER 23 ORDER.**

Puerto Rico's legal framework, centers universal access to electric power service at the core of the government's public policy<sup>230</sup>, this includes a pledge to every customer to "receive a reliable, stable and excellent electric power service at a cost that is accessible, just and reasonable, a transparent and easy to understand bill, and a fast service response..."<sup>231</sup> It also creates a commitment to "resolve electricity bill or service disputes equitably and diligently." Moreover, it sets a clear mandate to the transmission and distribution network contractor – in this case LUMA- to "adop[t] technologies that improve customer service including, but not limited to, smart meters, internet access, and minimizing the necessary wait time to receive any customer service."<sup>232</sup> On the other hand, Act 57-2014 also creates a mandate for Certified Electric Power Companies, such as LUMA, to provide " [j]ust and reasonable rules or practices that assess the service provided"<sup>233</sup> as well as "customer services terms and conditions"<sup>234</sup>. This public policy, to which LUMA is bound, integrates an efficient

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<sup>230</sup> Section 1.5 Act 17-2019.

<sup>231</sup> Section 1.5 (10) (a) Act 17-2019.

<sup>232</sup> Section 1.15 (p) Act 17-2019.

<sup>233</sup> Section 6.28 (b) (2) Act 17-2019.

<sup>234</sup> Section 6.28 (b) (6) Act 17-2019.

customer service within the guidelines of a proper energy service. In doing so customer satisfaction garners a crucial role in the performance of certified power companies.

These directives legally oblige LUMA to (1) resolve disputes diligently; (2) provide fast service responses; (3) minimize wait time to receive customer service; and (3) establish mechanisms that assess the service provided. LUMA currently proposes to earn incentives for achieving the latter, which is, as mentioned, already required by Puerto Rico's public energy policy.

In addition to the law, The T& D OMA establishes that LUMA is responsible for:

“Achieving a level of customer satisfaction consistent with the agreed to Performance Metrics by performing the following customer service functions **at minimum**:

1. Determining the approach and methodology for measuring, monitoring and optimizing customer satisfaction;
2. Monitoring customer satisfaction results;
3. Overseeing the performance of perception-based and transactional based customer satisfaction surveys for other service providers; and
4. Interpreting and communication the results of customer surveys; and coordinating initiatives aimed at improving the product portfolio, service delivery mechanisms and overall customer satisfaction across the full spectrum of services provided, such as system operations and electronic transaction and self- help options, customer interaction and back office functions.”<sup>235</sup>

Following the legal mandate to ensure a satisfactory service to customers and the directive to provide a performance metric related to customer satisfaction, LUMA proposes one that aims to ensure achievement of “[a] high level of customer satisfaction across all customer classes”<sup>236</sup> and accounts for 25% of the incentive compensation period.<sup>237</sup> To measure this, LUMA puts forward a Customer Service Metric with baselines established by reviewing the (1) J.D. Power Customer Satisfaction Survey for Residential Customers; (2)

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<sup>235</sup> OMA at 1-14; 1-15.

<sup>236</sup> LUMA's proposal at 11.

<sup>237</sup> *Id.* at 11.

J.D. Power Customer Satisfaction Survey for Business Companies; (3) Average Speed of Answers (ASA); (4) Customer Complaint Rate and; (5) Abandonment Rate.<sup>238</sup>

The metrics that LUMA has proposed stray far from the established goal of ensuring a low customer complaint rate. In addition, LUMA occasionally asks for baselines to be set at a level well below what is considered industry standard. In doing so, LUMA fails to comply with PREB's December 2020 Resolution that demands that metrics "go above and beyond"; "serve the public interest" and incentivize or reward "difficult tasks".<sup>239</sup> LUMA only offers a metric that assesses its own satisfaction, regardless of whether the client is satisfied or not.

**A. PREB should deny, for a third time, the J.D. Power Customer Satisfaction Survey Metrics proposed by LUMA.**

In PREB case NEPR-MI-2019-0007, LUMA proposed that the Energy Bureau include performance baselines based on J.D. Power's Customer Satisfaction Survey for residential customers and business customers.<sup>240</sup> PREB rejected that proposal, pointing out that LUMA had failed to demonstrate the survey's usefulness, and concluding that LUMA had failed to answer questions about the process and the outcome of the survey.<sup>241</sup> LUMA submitted a Motion for Partial Reconsideration on April 28, 2021.<sup>242</sup> LUMA included an exhibit with that motion which only reinforced PREB's rejection of the J.D. Power survey - the exhibit acknowledged that J.D. Power's Puerto Rico survey could not be credibly used to compare LUMA's performance to that of mainland utilities:

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<sup>238</sup> *Id.* at 13, Table 2.4A.

<sup>239</sup> PREB Commencement of Proceeding Order.

<sup>240</sup> LUMA, *Motion for Partial Reconsideration of Resolution and Order of April 8, 2021, Motion Submitting Information in Support Thereof, and Requests for Clarifications*, PREB Dkt. NEPR-MI-2019-0007 (April 28, 2021) [hereinafter *Motion for Partial Reconsideration*].

<sup>241</sup> PREB's rejection stated "...there are still many questions about the process and outcome of the survey that remain. Therefore, the Energy Bureau will not consider this matter at this time in the process of establishing the baseline for PREPA's performance.". PREB, *Resolution and Order* at 17, PREB Dkt. NEPR-MI-2019-0007 (April 8, 2021).

<sup>242</sup> Motion for Partial Reconsideration.

None of the panel companies that J.D. Power uses has statistically significant samples of their panels from Puerto Rico. Therefore, the LUMA survey is a proprietary survey and not part of the study with other utilities. ... LUMA is not part of the 144-utility study... J.D. Power will continue to monitor their panel companies to determine if and when they have statistically significant samples on their panels from Puerto Rico.<sup>243</sup>

In that exhibit, LUMA further acknowledges benchmarking is “for illustrative purposes only”<sup>244</sup> and therefore inappropriate for use as incentives in a performance-based mechanism. It came as no surprise, then, that PREB again rejected the J.D. Power survey in its May 21, 2021, Resolution and Order, finding that LUMA had failed to conduct an adequately “thorough analysis.”<sup>245</sup> Ms. Laird’s testimony in the instant case did not indicate any change to the critical facts underlying PREB’s rejection, and at the hearing Ms. Laird acknowledged that J.D. Power’s study of Puerto Rico still would not be included in the “syndicated” 144-utility study.<sup>246</sup>

In this proceeding, LUMA takes an even more aggressive position on the J.D. Power customer satisfaction survey – now recommending a metric not merely for illustrative purposes, but rather to earn incentives. LUMA’s witness, Jessica Laird, provided self-serving excerpts of information from the survey (“a portion of the overall scores and results of the survey”, rather than all scores and results) – but refused to provide the full results when asked.<sup>247</sup> LUMA’s witness, Melanie Jeppeson, claims to have further information on the process and outcome of the survey – but again, LUMA refuses to actually provide this

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<sup>243</sup> *Id.* Exhibit 1 at 2.

<sup>244</sup> *Id.* Exhibit 2 at 1.

<sup>245</sup> May 21 Order at 15.

<sup>246</sup> AP-2020-0025 Evidentiary Hearing-20230209\_Meeting Recording 1 [02: 32: 33].

<sup>247</sup> See, *LUMA’s Motion Submitting Direct Testimonies on Performance Metrics, Direct Testimony of Mrs. Jessica Laird*, at 5, PREB Dkt. NEPR-AP-2020-0025 (Aug. 18, 2021) [hereinafter *Laird Direct Testimony*] (Adm. Exh. 41);

LUMA’s Motion Submitting Additional Rebuttal Testimonies – Rebuttal Testimony of Jessica Laird, PREB Dkt. NEPR-AP-2020-0025 (Feb. 17, 2022) [hereinafter *Laird Rebuttal Testimony*]. (Adm. Exh. 42).

information when asked. Specifically, in response to discovery questions from LECO and ICPO, LUMA refused to provide the results of its survey, the costs of the survey, or the survey's data on Puerto Ricans' evaluation of LUMA's service. Puerto Ricans paid for this survey, but LUMA refuses to give the public the results of the survey they paid for, or even tell them how much they paid for it.

A study developed for the continental U.S. cannot accurately measure the satisfaction of Puerto Rican customers with LUMA. Questioning from OIPC counsel demonstrated that the survey included nonsensical questions about snow, hail, tornadoes, and competitive energy markets.<sup>248</sup> A Puerto Rican reading these questions would find the survey inapplicable to Puerto Rico at best, and offensive and colonial at worst. The situation is aggravated by Ms. Laird's admission that she had only reviewed the questions in English and had not even seen the actual survey.<sup>249</sup> Ms. Laird unequivocally evidenced that she did not review the questions in Spanish and could not personally verify that the questions were translated properly.

Ms. Laird testified that LUMA maintains numerous avenues to customer service<sup>250</sup> – but only allows customer feedback to this metric through a medium that is inaccessible to more than a quarter of the population and is ignored by about 90% of the individuals that do have access.<sup>251</sup> The Commissioners pointed out the inequities of using an email survey that could not reach the significant population of Puerto Ricans that do not have access to email or are not digitally literate. Consultant Ben Havumaki also highlighted that “[j]ust because

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<sup>248</sup> AP-2020-0025 Evidentiary Hearing-20230209\_Meeting Recording 2 [00: 44: 17].

<sup>249</sup> AP-2020-0025 Evidentiary Hearing-20230209\_Meeting Recording 2 [00: 52: 07].

<sup>250</sup> AP-2020-0025 Evidentiary Hearing-20230210\_Meeting Recording 2 [00: 45: 35].

<sup>251</sup> LUMA developed its baseline based on the answers of 4,008 customers, out of 1.8 million customers. Ms. Laird relied to J.D. Power's (self-serving) conclusion that this 2.2% was a statistically significant sample. AP-2020-0025 Evidentiary Hearing-20230210\_Meeting Recording 2 [00: 38: 33].

there is a random draw doesn't mean that the resulting sample will be representative.”<sup>252</sup> A failure to survey different parts of the population constitutes selection bias. This bias will get worse over time as younger, more digitally literate Puerto Ricans continue to leave the archipelago – leaving behind an older, less digitally literate population that is less likely to have access to an email survey.<sup>253</sup> Over the last years countless reporters have documented an increasing number of abandoned elderly people over the ages of 60.<sup>254</sup> A surveyor with knowledge of Puerto Rico's demographics would of course be well aware of this widely acknowledged fact – but Ms. Laird was not, and called this fact “an assumption that may or may not be true.”<sup>255</sup> Ms. Laird indicated that she was “generally aware of demographic trends” but avoided answering if she had consistently checked demographic trends in Puerto Rico.<sup>256</sup>

In testimony, Ms. Laird argued that email surveys were the most cost-effective survey option<sup>257</sup> – but on cross-examination, Ms. Laird admitted that she had not considered the costs of alternative survey choices.<sup>258</sup> This is problematic because, the methodology behind this survey excludes a large part of the population, mainly older adults, who are not as dexterous with online surveys as younger adults. To that end it is important to take into consideration Puerto Rico's unique populational context, in which Hurricane María, the

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<sup>252</sup> AP-2020-0025 Evidentiary Hearing-20230209\_Meeting Recording 1 [02: 17: 00].

<sup>253</sup> Frances Rosario, *Crece a ritmo acelerado la población envejeciente en la Isla*, PRIMERA HORA (Dec. 8, 2022, 10:45 p.m.) available at <https://www.primerahora.com/noticias/puerto-rico/notas/crece-a-ritmo-acelerado-la-poblacion-envejeciente-en-la-isla/>

<sup>254</sup> “La crisis económica y la histórica emigración que vive Puerto Rico han agravado la situación que sufren decenas de **ancianos en la isla**, quienes viven en hospitales **abandonados por familiares** incapaces de hacerse a cargo de ellos.” *Decenas de ancianos abandonados en hospitales en Puerto Rico por la crisis*, UNIVISION (July 14, 2016, 4:09 p.m.) available at <https://www.univision.com/local/puerto-rico-wlii/decenas-de-ancianos-abandonados-en-hospitales-en-puerto-rico-por-la-crisis>.

<sup>255</sup> AP-2020-0025 Evidentiary Hearing-20230209\_Meeting Recording 2 [01: 34: 20].

<sup>256</sup> *Id.* Meeting Recording 2 [01: 34: 20].

<sup>257</sup> Laird Rebuttal Testimony at 17, lines 325-326.

<sup>258</sup> AP-2020-0025 Evidentiary Hearing-20230209\_Meeting Recording 2 [01: 18: 22].



Earthquakes of 2020, the pandemic and the ongoing financial and energy crisis have triggered a historical and large migration to the continental United States. This phenomenon has spurred a population shift where young people move, leaving behind elderly parents and family members. In fact, Puerto Rico's percentage of older adults is the 10<sup>th</sup> highest in the world, this is because "over the last 10 years, Puerto Rico has nearly doubled its percentage of adults older than age 65 due to the outmigration of over 700,000 working age adults."<sup>259</sup> This is relevant, because while the Census may show that a vast majority of households in Puerto Rico have a broadband internet subscription and computers, experts have long voiced that Census data is not infallible.<sup>260</sup> If LUMA intends to support their use of Census demographics they should be aware of population trends that may alter Census data and compensate with additional survey methods, such as in person surveys.

Given the limited accessibility of email surveys and the low response rate, a survey firm with better knowledge of Puerto Ricans may well have found that phone, mail, or a different method would receive better results at the same cost. It is evident that LUMA needs to work with a survey company that is knowledgeable about Puerto Rico's unique and changing demographic trends and can provide options for those who don't have access to email surveys.

In addition, LUMA's planned targets, which are set at 427 for residential users and 380 for corporate customers, are far below the industry standards of 731 and 774, respectively. LUMA's targets for Years 2 and 3 only offer meager improvements, still leaving

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<sup>259</sup> *Demographers identify the causes, challenges of a rapidly aging Puerto Rico*, PennState Social Science Research Institute, (Feb. 8, 2023) available at <https://ssri.psu.edu/news/demographers-identify-causes-challenges-rapidly-aging-puerto-rico>

<sup>260</sup> See U.S. CENSUS, *Census Bureau Releases Estimates of Undercount and Overcount in the 2020 Census*, (March 10, 2022) available at <https://www.census.gov/newsroom/press-releases/2022/2020-census-estimates-of-undercount-and-overcount.html>; See also Peter V. Miller, *Is there a future for surveys?* At 205–212, *Public Opinion Quarterly*, Vol. 81, Special Issue, (2017) available at <https://academic.oup.com/poq/article/81/S1/205/3749195>.

Puerto Rico far below industry standards.<sup>261</sup> These targets would not reflect performance “above and beyond”, or the “highest possible efficiencies and savings”, and therefore fail to meet PREB’s standards for incentives.

In sum, J.D. Power Survey should not be used by LUMA to establish benchmarks because it does not avoid selection bias, does not accurately represent Puerto Rico's electric system, -and facilitates payment for services that do not adhere to the guidelines outlined in the December 23, Order and Resolution.

**B. LUMA’s proposed metric only measures LUMA’s own satisfaction.**

LUMA’s proposed metric does not measure whether customers are satisfied. The metric only measures whether, as Ms. Jeppesen says, LUMA followed its own policies, procedures, and the laws and regulations that LUMA must follow.<sup>262</sup> These requirements are not in themselves sufficient to allow LUMA to get awarded financial bonuses because LUMA can only be rewarded for difficult tasks that “go above and beyond. As Dr. Irizarry testified in his Direct Testimony<sup>263</sup> and on the first day, LUMA is seeking an incentive for tasks LUMA is already required to do. This violates the PREB mandate to “Go Above and Beyond”: “targets or levels for which an incentive may be proposed shall be subject to and dependent on performance above and beyond the minimum required compliance level...”<sup>264</sup>

Specifically, LUMA proposes that the Customer Complaint rate metric measure the “total annual complaints registered with PREB (NEPR-QR) per 100,000, customers.”<sup>265</sup> And

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<sup>261</sup> LUMA’s proposal at 16.

<sup>262</sup> AP-2020-0025 Evidentiary Hearing-20230209\_Meeting Recording 1 [00: 38: 35].

<sup>263</sup> Irizarry Direct Testimony at 63, lines 14-15: “LUMA proposes to be rewarded for meeting basic expectations.”.

<sup>264</sup> PREB Commencement of Proceeding Order.

<sup>265</sup> LUMA’s proposal at Table 2-2.

that it seeks to reduce the number of formal QR complaints.<sup>266</sup> This measure displays a lack of thoroughness, a misunderstanding of the PREB complaint process, and it ignores complaints that are not made to PREB. During the Evidentiary Hearing, Ms. Jeppesen stated her mistaken belief that all complaints filed by consumers who sought to contact LUMA for billing, net meeting, interconnection, or tariff activation but did not hear back from the company are referred to as "QR."<sup>267</sup> Commissioner Mateo corrected Ms. Jeppesen, pointing out that there are complaints filed under both nomenclatures "QR" and "RV" that are related to complaints of customers who have gone before LUMA and then PREB.<sup>268</sup>

Along the same lines, further questions from PREB consultant Ben Havumaki underscored the faulty logic behind LUMA's assumptions that only "QR" complaints can be factored into the metric. Mr. Havumaki highlighted that the principal LUMA is offering is that "in an instance where the customer is not satisfied with the outcome you don't think that that in its own right is a reason to count that as a complaint in the metric."<sup>269</sup> Ms. Jeppesen replied that LUMA proposes a metric in which the utility can measure its actions and not whether the customer is satisfied.<sup>270</sup> In fact, further questions from Commissioner Torres prompted Ms. Jeppesen to restate that the metric only "measures LUMA's ability to respond."<sup>271</sup>

Ms. Jeppesen's testimony demonstrates that LUMA's understanding of the PREB customer complaint process was badly mistaken, and that LUMA excluded the RV dockets based on that erroneous understanding. Commissioner Mateo's questions demonstrated that

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<sup>266</sup> LUMA, Motion Submitting Rebuttal Testimonies – Rebuttal Testimony of Melanie Jeppesen at lines 227-228, PREB Dkt. NEPR-AP-2020-0025 (Feb. 1, 2022) [hereinafter *Jeppesen Rebuttal Testimony*]. (Adm. Exh. 44).

<sup>267</sup> AP-2020-0025 Evidentiary Hearing-20230209\_Meeting Recording 1 [00: 34: 40].

<sup>268</sup> AP-2020-0025 Evidentiary Hearing-20230209\_Meeting Recording 1 [00: 33: 54].

<sup>269</sup> *Id.* Meeting Recording 1 [00: 36: 36].

<sup>270</sup> *Id.* Meeting Recording 1 [00: 38: 32].

<sup>271</sup> *Id.* Meeting Recording 1 [01: 30: 43].

LUMA's examination of the publicly available information on PREB's docket was incomplete at best – and therefore the metrics based on LUMA's examination should be rejected. Questions from Commissioners Mateo and Torres further pointed out that LUMA could game the system and artificially improve the performance metric by pushing complaints to the RV dockets rather than the QR dockets, and by withholding information on the PREB complaint process from customers calling with grievances unrelated to billing.<sup>272</sup>

Moreover, Commissioner Ramos inquired about informal complaints, and complaints not related to billing. Commissioner Ramos asked if these were categorized and asked for the number of categories. Ms. Jeppesen stated that informal complaints not related to billing, net metering, interconnection, and tariff do generate a work order, but would not be considered complaints and would not be counted under LUMA's proposed metric. Certainly, problems with voltage and outages are related to customer satisfaction, so much so that customers have filed lawsuits against LUMA.<sup>273</sup> These complaints should be categorized and included as part of the metric to avoid a limited complaint rate. Further questions from OIPC's Counsel confirmed that LUMA complaint rate metric expressly measures LUMA's ability to comply with actions already required by the laws and regulations, not one that measures whether the customer was truly satisfied."<sup>274</sup>

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<sup>272</sup> "As I understand it the Law only requires LUMA to inform customers of the PREB complaint option for billing complaints". AP-2020-0025 Evidentiary Hearing-20230209\_Meeting Recording 1 [01: 23: 21].

<sup>273</sup> See *Cooperativa de Agricultores del Suroeste – CASO Coop v. LUMA Energy Company et al*, Civil No. MZ2023CV00024 (Court of First Instance, Mayagüez Superior Court, filed Jan 9, 2023); *Herrero Domenech et al v. LUMA Energy, LLC et al* and *Wendco of Puerto Rico Inc. et al, v. LUMA Energy, LLC et al*, Civil Nos. SJ2022CV02868 and SJ2022CV03169, respectively filed in the Court of First Instance, San Juan Superior Court, and consolidated by Order entered by the San Juan Superior Court on May 17, 2022.

See also Oscar J. Serrano, Restaurantes y abonados demandan a LUMA por daños tras apagón, Noticel, (April 27, 2022) available at <https://www.noticel.com/tribunales/ahora/top-stories/20220427/restaurantes-y-abonados-demandan-a-luma-por-danos-tras-apagon/>.

<sup>274</sup> AP-2020-0025 Evidentiary Hearing-20230209\_Meeting Recording 3 [01: 45: 55].

LUMA's Customer Complaint Rate metric, as currently written, should be attached to a penalty for failure to follow LUMA policy or follow the law, rather than an incentive for basic compliance. If LUMA wants an incentive, that metric should be tied to complaints where the customer was satisfied. PREB cannot approve a metric based on incomplete or incorrect information, or a metric that LUMA can skew through its own actions.

**C. The data presented by LUMA is outdated and therefore the baselines are not hard to reach.**

PREB's December 23 Order and Resolution stated that LUMA's performance targets needed to "go above and beyond" and incentivize and reward "difficult tasks." Notwithstanding this unambiguous directive from PREB, LUMA is recommending that rewards be given for meeting benchmarks that are already being met. Ms. Laird and Ms. Jeppesen both stated on multiple occasions that the baselines in the T&D OMA were out of date and that LUMA was already meeting them. In other words, if the baselines are approved, they will begin earning incentives immediately because they are already complying with them.

When questioned by PREB consultant Courtney Lane, Miss Jessica Laird stated that the abandonment rate for FY 22 was 19%, which was higher than the 125% tier performance targets for all three years.<sup>275</sup> Ms. Laird added that LUMA's ASA's were higher than year 1 targets and had increased over the previous 12 months.<sup>276</sup> Additionally, Ms. Laird mentioned that LUMA has more recent power surveys that have been finished and might present more up-to-date data in relation to the J.D. Power Survey.<sup>277</sup> Ms. Laird also testified that LUMA

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<sup>275</sup> AP-2020-0025 Evidentiary Hearing-20230209\_Meeting Recording 1 [00: 21: 51].

<sup>276</sup> *Id.* Meeting Recording 1 [00: 12: 01].

<sup>277</sup> AP-2020-0025 Evidentiary Hearing-20230209\_Meeting Recording 1 [02: 29: 34].

was in the process of adding the capability to track First Call Resolution.<sup>278</sup> Therefore, LUMA's request to defer this metric should be denied. It was unequivocally demonstrated throughout the evidentiary hearing that LUMA's baselines and information were not up to date, and that in many cases they were already being complied with, violating the mandate to go above and beyond and reward difficult to achieve tasks.

LUMA's patent violation of the legal mandate to comply with and measure the customers' satisfaction was more than exemplified during the public hearings held by PREB. Here many customers attested to their discontent with LUMA's established call center. Specifically, electrician Lisa Spickers provided various examples of customers whose disconnection from the grid required "various calls and messages" and in one case "six in person visits."<sup>279</sup> Along that same line, Raquel González testified that there have been instances in which she has called LUMA and has been left waiting an hour in line, only to have the call drop.<sup>280</sup> Jesus Manuel Santiago, another of the various electricians that appeared before PREB, shared the story of a client whose home was running on less voltage than normal.<sup>281</sup> Mr. Santiago mentioned that his client had filed numerous claims and communicated with LUMA on numerous occasions, all to no avail.<sup>282</sup> These shared stories reflect a dissonance between LUMA's proposed Customer Satisfaction metric and the one needed by LUMA's customers that should not be ignored by PREB. To that end, PREB should not ignore the value behind these stories, but rather use them to ensure that the metric approved goes above and beyond and reflects the harsh truth experienced by LUMA's customers.

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<sup>278</sup> *Id.* Meeting Recording 1 [01: 22: 10].

<sup>279</sup> Negociado de Energía en vivo, *Vista Pública Híbrida Caso Núm.: NEPR-AP-2020-0025* at 2:03:11, YouTube (Feb. 16, 2023), <https://youtu.be/erLurPBEC-I?t=7398> (*translated into English*).

<sup>280</sup> *Id.* Vista Pública Híbrida [2:29:35].

<sup>281</sup> *Id.* Vista Pública Híbrida [2:51:39].

<sup>282</sup> *Id.*

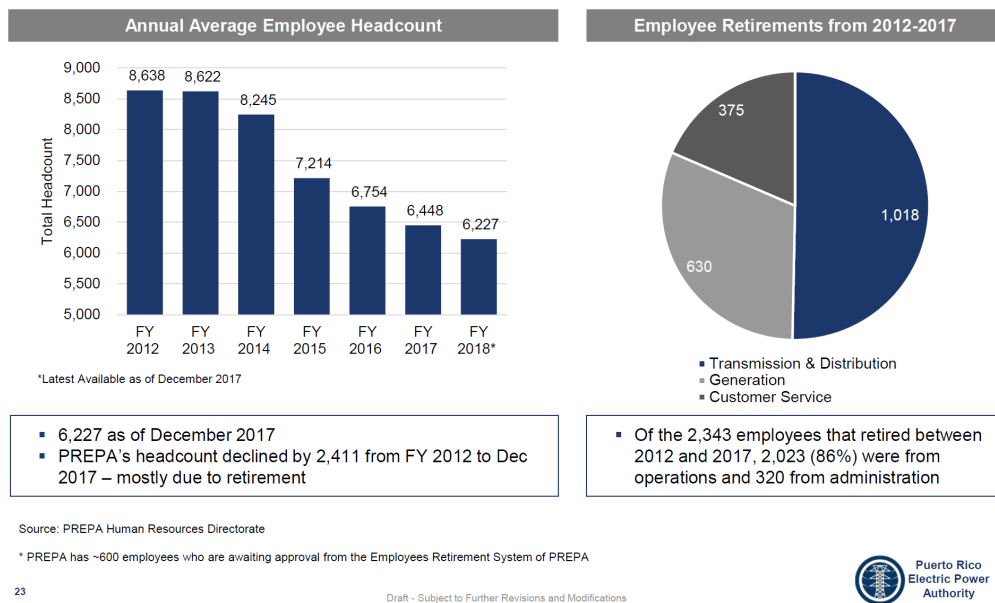
### **XIII. PREB SHOULD REJECT LUMA’S PROPOSED FINANCE METRICS.**

#### **A. LUMA’s proposed Finance and DSO metrics are based on incomplete and cherry-picked data.**

LUMA’s proposal to use PREPA’s 2021 approved Budget as a baseline for overtime metrics is not appropriate given the significantly different circumstances facing PREPA in 2021. PREPA’s Fiscal Plans certified by the Financial Oversight and Management Board for Puerto Rico (“FOMB”) indicate that PREPA was understaffed<sup>283</sup>

#### **Key Operational Areas – Headcount Reduction**

**The loss of almost 30% of its workforce since 2012 has constrained PREPA’s ability to respond to challenges**



The FOMB has recognized consistently that PREPA has been understaffed, a matter that has directly impacted its service and overall performance, including PREPA’s ability to collect on accounts. PREPA’s understaffing caused much higher workforce overtime

<sup>283</sup> PREPA, *2021 Fiscal Plan for the Puerto Rico Electric Power Authority* as certified by the Financial Oversight and Management Board for Puerto Rico (May 27, 2021).

compensation, through 2021. Therefore, using PREPA's 2021 approved Budget, as proposed by LUMA, is clearly not an adequate baseline for the overtime metric.

LUMA recommends not using PREPA's 2021 budget information in case NEPR MI 2019-0007 (In Re: The Performance of the Puerto Rico Electric Power Authority) but proposes to use it as a metrics for incentives in this docket. In other words, LUMA seeks to cherry-pick data on which to establish metrics based on what would be most beneficial to LUMA rather than on the basis of consistent and fair standards. Furthermore, LUMA should not collect an overtime metric incentive payment if LUMA does not comply with other critical service metrics, such as duration of service interruptions.

PREPA's understaffing also impacted PREPA's ability to collect on accounts, and therefore its Days Sales Outstanding. The baseline for Days Sales Outstanding selected by LUMA was calculated using very limited data for periods of extreme irregularity in the electric system after Hurricane Maria. LUMA's proposed baseline is calculated over a nine-month period (May 2019 – Feb 2020) instead of a 12-month period. Measures related to PREPA's bankruptcy have had adverse impacts on PREPA's DSO numbers. The closure of many commercial offices in 2019 created havoc for customers to make timely payments which affected DSO numbers and should not anchor the DSO metric to the low bar that LUMA proposes. LUMA's DSO metric should not be based on nine months of PREPA's worst performance years due to understaffing and underinvestment, but rather, it should follow industry standards. Several years should be used to generate the baseline. LUMA's responses in the Revised Metrics dated October 2022 demonstrate further deficiencies in calculation of the DSO metric. The "uncollectible reserve" included in DSO in the PREPA



Finance Monthly Report (MOR) was not included in the proposed baseline for General Customers which was 131 days during May 2019 – February 2020.<sup>284</sup>

In addition, LUMA's submission does not give PREB or the public adequate information to understand LUMA's budget process. Exhibit E is very vague. It fails to indicate the functions or events that drive the budgeting process claiming that "All" functions or events drive the process. Similarly, Exhibit E fails to demonstrate where the internal inputs for the budget process are coming from other than general references to "Internal Dependencies." LUMA fails to establish whether there are other "External Dependencies" besides professional services, vendor or external fees and whether payments to affiliated corporations would be included in the "External Dependencies." Some of the budgeting process information related to the steps involved in the process is left blank.<sup>285</sup> LUMA's document review for the budgeting process fails to consider the Integrated Resource Plan and other important applicable plans.<sup>286</sup> The documents required to be reviewed are vague and skimpy, listing only H.R. Policy.<sup>287</sup> In addition, LUMA does not state the overtime criteria and who "reviews, cleanses, and analyzes output..."<sup>288</sup>

Finally: LUMA does not consider the impact of decreased energy production (-9%) and sales (-7.5%) on the budget.<sup>289</sup> FOMB and the Department of Energy ("DOE") PR100 projections of decreased electric demand in Puerto Rico would have an adverse impact on DSO. LUMA's largest customers are government entities, like the Puerto Rico Aqueduct and

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<sup>284</sup> LUMA's proposal at 35, Sec. 4A Days Sales Outstanding: General Customers.

<sup>285</sup> *LUMA's Motion Submitting Direct Testimonies on Performance Metrics, Direct Testimony of Kalen Kostyk* at Exhibit E of the Financial Performance Workpapers, Overtime, Question #9, PREB Dkt. NEPR-AP-2020-0025 (Aug. 18, 2021) [hereinafter *Kostyk Direct Testimony*] (Adm. Exh. 59).

<sup>286</sup> *Id.* at Capital Budget – Not Federal Funded, Question #10.

<sup>287</sup> *Id.* at Overtime, Question #14.

<sup>288</sup> *Id.*

<sup>289</sup> PREPA, Monthly Report to the Governing Board (Dec. 2022).

Sewer Authority (“PRASA”) and schools that are planning to implement public facilities microgrids.<sup>290</sup> This will further decrease energy demand from the grid.

**B. LUMA’s finance metrics should only apply to its original budget, not revised budgets.**

LUMA should not be rewarded for meeting budgets, if LUMA is able to subsequently able to adjust its budget estimates to fit circumstances. For example: LUMA submitted a budget amendment for the FY 2022 budget on June 6, 2022, which was approved by the PREB.<sup>291</sup> It is not difficult for LUMA to stay within an approved annual budget that is filed within a month of the close of the fiscal year. LUMA should not receive an incentive payment for staying within budget when in fact the budgets can be amended. It is important to determine why LUMA didn’t stay within budget in setting the budget metric going forward.

LUMA should be able to estimate its annual budget relatively accurately from the outset. Exhibit E of the Financial Performance Workpapers states that the objective of the initial budget process is to assess the accuracy of the process by verifying variances at the end of the year, which calls into question why variances are not verified at shorter intervals. In addition, variances in the budget should be limited to emergency and unforeseeable circumstances. Variances should be strictly limited to excess expenses resulting from the emergency or the unforeseeable situation.

LUMA’s budgeting process seems to oscillate around the use of federal funds rather than compliance with PREB’s performance metrics. LUMA’s “External Inputs/Dependencies” excludes PREB approval while listing, “Government Federal Agency Approval (FEMA)”. The exclusion of the requisite PREB approval is indicative of the relative importance that LUMA

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<sup>290</sup> FEMA, [Programmatic Environmental Assessment for Public Facilities Infrastructure Recovery and Resiliency, Puerto Rico, FEMA-DR-4336-PR, FEMA-DR-4339-PR, FEMA-DR-4473-PR, \(2022\)](#).

<sup>291</sup> Kostyk Direct Testimony, lines 75-77.

ascribes to FEMA approval and that LUMA assumes that PREB will largely grant its requests.

LUMA cites OMA Sec. 7.3(b) on the budget including excess expenditures up to 2% “treated as T&D Pass thru as if initially budgeted”<sup>292</sup> It is doubtful that the referenced section provides any incentive for LUMA to stay within budget. The ability to treat 2% of spending above the budgeted amount as pass thru expenses without consequences will likely result in LUMA routinely exceeding the budget. That, coupled with the fact that LUMA can easily seek amendments to the budget promotes excess spending that will have adverse rate impacts.

**C. LUMA’s proposed metrics are too timid and easy to achieve – they do not go “Above and Beyond”.**

DSO is a measure of cash available and liquidity. A low DSO is important to achieve in order to have access to cash to pay employees and suppliers and meet budgets and service requirements. Problems with cash flow and liquidity were some of the main arguments made by the FOMB to justify privatization and contracting LUMA. And yet, LUMA is just proposing a 2% reduction in DSO for years 1,2,3 and starting from a very low performance baseline. A 2% reduction implies that it will take LUMA 53 years to reach industry standards of less than 45 days.<sup>293</sup> A DSO target of 2% reduction for years 1, 2, 3 on LUMA’s selected baseline is not difficult to achieve and should not merit an incentive or bonus payment to LUMA.

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<sup>292</sup> LUMA’s proposal at 32.

<sup>293</sup> AP-2020-0025 Evidentiary Hearing-20230209\_Meeting Recording 3, [2:09:04].

LUMA claims that it's proposed metrics are consistent with the OMA language<sup>294</sup> but contradictorily seeks to eliminate the application of metrics during outage events.<sup>295</sup>

LUMA's "performance measurements in place to further support metric annual reporting" should be more frequent in order to avoid budget overruns.

As to the Capital Budget – Federal Funded LUMA argues that the fact that "Budget approval is limited to federal allowances' approval process"<sup>296</sup> is a problem. The very nature of budgets requires complying with allowance processes.

LUMA's proposed minimum performance levels of 148 to 142 days would substantially exceed the baseline of 131 days and yet entitle LUMA to an incentive payment. LUMA should not be awarded an incentive payment for merely scoring the minimum DSO. LUMA's request proposing relief from the DSO metric for 3 – 6 months after a non-payment moratorium is lifted is unreasonably long and would not make achieving the DSO metric a difficult task for which it should be rewarded.<sup>297</sup>

Mr. Fonseca testified that government agencies were now including electric utility payments in their budgets. Therefore, the minimum performance level of 850 to 815 DSO (for government agencies) is exceedingly low performance that should not be rewarded. The higher the DSO target, the easier it will be to achieve the goal.

**D. LUMA's proposed metrics have loopholes that would allow LUMA to game the system.**

LUMA's approach to Capital Budget – Not Federal Funded projects is problematic. LUMA states that it "Must correctly prioritize projects and assess which initiatives are not

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<sup>294</sup> Kostyk Direct Testimony, lines 126-27.

<sup>295</sup> *Id.* at lines 140-156.

<sup>296</sup> Kostyk Direct Testimony at Exhibit E of the Financial Performance Workpapers, Capital Budget – Federal Funded, Question #13.

<sup>297</sup> LUMA's proposal at 37.

eligible for federal funds.”<sup>298</sup> Prioritizing the use of federal funds could adversely impact important nonfederal funded projects and performance.

LUMA notes as a problem: “Previous data shows increase in Overtime reporting due to existing policy<sup>299</sup>- but fails to explain how the problem will be addressed. LUMA’s suggests, “Providing limitations or guidelines to employee policy in regard to overtime submission”<sup>300</sup> which seems to propose that employees work overtime but not submit claims for their work.

Technical losses and theft affect DSO numbers. If LUMA doesn’t issue an invoice, DSO will appear to be lower than it actually is. So LUMA can artificially appear to be meeting DSO targets if it fails to issue invoices for technical losses and theft. LUMA should be required to issue invoices in a timely manner. LUMA’s billing practices allegedly include overcharging for fuel.<sup>301</sup> Delays in sending out bills, especially if excess charges are involved could have adverse effects on low-income ratepayers, particularly. A metric that requires sending out bills within a reasonable time could promote energy justice and accessibility. Similarly, holding back the issuance of invoices and incorrect billing adversely affects DSO numbers.

#### **XIV. MAJOR OUTAGE EVENTS**

It is undeniable that events causing major outages – namely, hurricanes, floods, and other major storm events – are occurring with greater frequency as the climate warms.<sup>302</sup>

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<sup>298</sup> Kostyk Direct Testimony at Exhibit E of the Financial Performance Workpapers, Capital Budget – Not Federal Funded, Question #9.

<sup>299</sup> *Id.* at Question #13.

<sup>300</sup> *Id.* at Question #17.

<sup>301</sup> Noticel, “Senado: LUMA debe acreditar a abonados ingresos cobrados por alzas innecesarias en facturas”, (Oct. 9, 2022) available at <https://www.noticel.com/legislatura/ahora/20221009/senado-luma-debe-acreditar-a-abonados-ingresos-cobrados-por-alzas-innecesarias-en-facturas/>.

<sup>302</sup> See, e.g., Irizarry Direct Testimony at 38, lines 17-19 (“The North American Electric Reliability Corporation (NERC) reported that the number of so-called major disturbances increased dramatically

The performance of the electric system during and after major outage events is, as the residents of Puerto Rico know too well, a fundamental determinant of health and safety and a matter of life or death. Recent analysis underscores this: a study conducted by the Puerto Rico Department of Health found that the risk of death in Puerto Rico was **24%** higher in 2022 than it was in 2015, with Hurricane Fiona as a major contributing factor; the second-greatest number of excess deaths occurred after Hurricane Maria in 2017.<sup>303</sup>

When power is interrupted for extended periods, as happened after Hurricanes Maria and Fiona, sickly patients dependent on equipment or medicines requiring refrigeration face grave risks and may perish.<sup>304</sup> Communities are forced to try to survive without running water, lacking the power to pump water to their taps.<sup>305</sup> And residents may be trapped in dire circumstances in their own homes, with food and medicines spoiling<sup>306</sup> and communication limited as phones and other electronic devices cannot be charged. These

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from 1992 to 2009”); *LUMA’s Motion Submitting Direct Testimonies on Performance Metrics, Direct Testimony of Terry Tonsi* at line 120 PREB Dkt. NEPR-AP-2020-0025 (Aug. 18, 2021) (noting the “preponderance of ever-increasing 100-year events.”). [hereinafter *Tonsi Direct Testimony*] (Adm. Exh. 63).

<sup>303</sup> See *Estudio del Departamento de Salud detalla que hubo un exceso de muertes en el 2022*, *EL NUEVO DIA* (Feb. 26, 2023) available at <https://www.elnuevodia.com/noticias/gobierno/notas/estudio-del-departamento-de-salud-detalla-que-hubo-un-exceso-de-muertes-en-el-2022/>

<sup>304</sup> See, e.g., Daniella Silva and Nicole Acevedo, NBC News, “Lack of power in Puerto Rico creates life-or-death situations for those with medical needs: In the aftermath of Hurricane Fiona and in the fifth day without power and water, families of sick patients need generators as islanders worry about the availability of fuel and other supplies,” (Sept. 23, 2022) available at <https://www.nbcnews.com/news/latino/lack-power-puerto-rico-creates-life-death-situations-medical-needs-rcna49151>; Molly Hennessy-Fiske, Los Angeles Times, “Amid power outages, hospitals pushed to their limits in Puerto Rico,” (Sept. 26, 2017) available at <https://www.latimes.com/nation/la-na-puerto-rico-hospital-20170926-story.html>.

<sup>305</sup> See Arelis Hernandez, WASH. POST, *Puerto Rico was promised billions for safe water. Taps and still running dry: A fragile power grid and haphazard backup system leave the island’s water system prone to collapse*, (Dec. 8, 2022), available at <https://www.washingtonpost.com/nation/2022/12/08/puerto-rico-maria-fiona-water-crisis/>.

<sup>306</sup> See, e.g., Kevin Crowe, USA Today, “In Comerio, Puerto Rico, Hurricane Fiona has left people without water, food and medicine: ‘we are not OK,’” (Sept. 21, 2022) available at <https://www.msn.com/en-us/news/us/in-comerio%3Apuerto-rico-hurricane-fiona-has-left-people-without-water-food-and-medicine-we-are-not-ok/ar-AA126EW2>; Ben Fox, A.P. News, “Puerto Rico emerges from storm; water and some food scare,” (Sept. 26, 2017) available at <https://apnews.com/article/puerto-rico-us-news-ap-top-news-international-news-hurricanes-26175c2cb7154af3bbc909b3571d59fd>.

severe impacts – each of which alone constitutes a crisis – are exacerbated by the disproportionate percentage of elderly residents in Puerto Rico, many of whom suffer from challenging health conditions that leave them unable to “make do” when another outage hits.<sup>307</sup> The need to limit the duration and frequency of outages of the electric system in Puerto Rico cannot be overstated.

It is therefore essential that the metrics established for major outage events ensure that LUMA reconnect power as soon as possible, as safely as possible, for as many people as possible. Likewise, the metrics must push LUMA to direct additional resources toward restoring power in the communities that repeatedly have been left in the dark the longest. PREB’s mandates for these metrics<sup>308</sup> and energy justice, which Comm. Avilés agreed must be part of these metrics,<sup>309</sup> demand nothing less.

LUMA’s metrics for major outage events fall short on all counts. They achieve neither these common-sense goals nor the clear standards PREB set out for these performance metrics. LUMA’s proposal: (1) fails to include metrics essential to benefit the public interest; (2) arbitrarily assigns weights to metrics in a scheme that reflects neither the public interest nor PREB’s standards concerning when incentives may be granted; (3) makes no attempt to address well-known geographic disparities in how quickly electricity is restored after storms; (4) would offer LUMA easy access to monetary incentives for performing easy tasks that are

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<sup>307</sup> See Arelis Hernandez, Washington Post, *In graying Puerto Rico, the elderly face climate disasters alone*, (Jan. 13, 2023) available at <https://www.washingtonpost.com/nation/2023/01/13/puerto-rico-hurricanes-climate-elderly/>.

<sup>308</sup> PREB Commencement of Proceeding Order (specifying that the performance metrics “must be aligned with the principles beneficial to the public interest,” including “(4) Impact areas with significant performance issues: targets for levels for which an incentive may be proposed shall positively impact or address areas of unsatisfactory performance with a direct impact to the electric service user...”).

<sup>309</sup> AP-2020-0025 Evidentiary Hearing-20230207\_Meeting Recording 2 [01: 00: 10].

basic aspects of utility operations during emergencies; and (5) with one extremely limited exception, would impose no penalty on LUMA for any failure to satisfy any metrics.

**A. LUMA’s proposed Major Outage Metrics provide no clear benefit for the public interest.**

First, LUMA’s proposal does not satisfy PREB’s mandate that, in order for the metrics to warrant an incentive, they “shall result in a clear benefit for the public interest and ratepayers.”<sup>310</sup> To begin with, LUMA’s proposal fails to include *any* metric for restoring electric service to Puerto Ricans.<sup>311</sup> Given that restoration of electricity is a fundamental need of Puerto Ricans following a major outage event, the omission of that single metric alone should disqualify LUMA from receiving any incentive payments for major outage events.

LUMA’s proposal also does not result in a clear benefit for the public interest because it assigns points to metrics in a manner that could allow LUMA to receive incentive payments for carrying out various ministerial tasks, or tasks of limited utility, while failing to perform *entire phases* of major outage operations. LUMA Vice President Mario Hurtado admitted that LUMA would reach its proposed “minimum performance level,” qualifying it for incentives, if it carried out only the “preparation” portion of its proposed major outage metrics.<sup>312</sup> Indeed, under LUMA’s proposal, LUMA could receive an incentive even if it entirely failed to respond to and repair downed wires, which – as LUMA witness Terri Tonsi recognized<sup>313</sup> – pose a “huge potential” risk of injury to the public and first responders.

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<sup>310</sup> PREB Commencement of Proceeding Order at 5-6.

<sup>311</sup> AP-2020-0025 Evidentiary Hearing-20230210\_Meeting Recording 2 [1: 42: 41]. Q. is there any metric in this table that tells me when LUMA has actually repaired the system? A no. Q. re the ETR metrics, it doesn’t say if its repaired or not, just how long it is estimate to take to restore? A. right.”)

<sup>312</sup> AP-2020-0025 Evidentiary Hearing-20230210\_Meeting Recording 2 [01: 38: 40 – 01: 39: 37].

<sup>313</sup> AP-2020-0025 Evidentiary Hearing-20230210\_Meeting Recording 1 [00: 42: 25 – 00: 42: 46]. (Downed wires present a “huge potential of injury to the public and first responders”).



A deeper dive into LUMA’s proposed metrics reveals just how little LUMA would need to do in a major outage event in order to qualify for incentives. 250 points is all LUMA would need to qualify for the portion of the incentive fee that corresponds to the MOE period.<sup>314</sup> Issuing press releases, holding conference calls with municipalities, and participating in “pre-event mutual assistance group calls” together would sum 75 points.<sup>315</sup> Maintaining its website – an action that would offer little solace or assistance to communities that lack power – would add 75 points.<sup>316</sup> Recording an outgoing message on its telephone line would earn LUMA another 50 points. Add two metrics which Comm. Ramos identified at the hearing as essentially the same<sup>317</sup> – those for “mutual assistance” and “crewing” – and LUMA would reach 250 points without needing to satisfy *any other* major outage metric, including alerting critical facilities that a major outage is likely, completing a damage assessment, responding to or repairing downed wires, estimating the time of restoration, or reporting key updates to PREB.

This illustration underscores the arbitrary nature of LUMA’s allocation of points. LUMA could not, and did not, offer any reasoned basis for the allocation of points,<sup>318</sup> and the arbitrariness of that allocation is manifest in the weights proposed. For example, responding to downed wires – the only activity included in the metrics that directly involves physical reparation of the system<sup>319</sup> and which addresses a grave risk to public safety<sup>320</sup> – counts for

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<sup>314</sup> AP-2020-0025 Evidentiary Hearing-20230210\_Meeting Recording 1 [01: 16: 21 – 01: 18: 59]; AP-2020-0025 Evidentiary Hearing-20230210\_Meeting Recording 2 [01: 39: 41 – 01: 40: 39]; LUMA’s proposal, Table 2-27.

<sup>315</sup> LUMA’s proposal at Table 2-26.

<sup>316</sup> *Id.*

<sup>317</sup> *See* Tonsi Direct Testimony and Statement to Comm. Ramos, AP-2020-0025 Evidentiary Hearing-20230210\_Meeting Recording 1 [01: 35: 51 – 01: 43: 36].

<sup>318</sup> Mario Hurtado, Chief Regulatory Officer for LUMA, admitted that there is and was no scientific methodology for assigning points, acknowledging that it was a “subjective” exercise and that LUMA generally based point allocations on the “imperfect” New York scorecard. AP-2020-0025 Evidentiary Hearing-20230210\_Meeting Recording 2 [01: 46: 54 – 01: 50: 14] (*translated into English*).

<sup>319</sup> AP-2020-0025 Evidentiary Hearing-20230210\_Meeting Recording 2 [01: 39: 55 – 01: 40: 48].

<sup>320</sup> AP-2020-0025 Evidentiary Hearing-20230210\_Meeting Recording 1 [00: 42: 25 – 00: 42: 56].

40 points, fewer than the points LUMA receives for recording an outgoing message on its telephone line.<sup>321</sup> Moreover, LUMA acknowledges that there are events such as earthquakes and tsunamis that can cause major outages for which advanced notice is not available,<sup>322</sup> yet it offered no proposal to re-allocate points for the metrics that are simply not possible to complete in those situations. LUMA's unsupported, unreasonable allocation of points plainly does not result in a clear benefit for the public interest. Any incentive payment for these metrics is thus unacceptable.

LUMA's proposal is also arbitrary, and thus not in the public interest, because LUMA did not demonstrate that its proposal is consistent with the primary document – the New York major outages “scorecard” – upon which LUMA based its major outage metrics. LUMA's proposal excludes all “regular” metrics during major outages.<sup>323</sup> But LUMA does not show that the New York scorecard excludes all other metrics during major outages. To the contrary, the NY Public Service Commission order approving the MOE scorecard indicates that NY is excluding *only* SAIFI and CAIDI during MOE, not otherwise-applicable metrics such as safety.<sup>324</sup>

LUMA's proposal also does not result in a clear benefit for the public interest because, even when it does include metrics for important actions, those metrics do not press LUMA to improve public or worker safety. For example, Mr. Tonsi admitted that the 18-hour target to respond to downed wires “sounds fairly large.”<sup>325</sup> Moreover, while trained technicians would

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<sup>321</sup> LUMA's proposal, Table 2-26.

<sup>322</sup> AP-2020-0025 Evidentiary Hearing-20230210\_Meeting Recording 2 [01: 29: 22 – 01: 31: 49].

<sup>323</sup> See LUMA's proposal at 8.

<sup>324</sup> State of New York Public Service Commission, *Order Approving the Scorecard for Use by the Commission as a Guidance Document to Assess Electric Utility Response to Significant Outages*, Case 13-E-0140, Nov. 14, 2012, available at <https://documents.dps.ny.gov/public/Common/ViewDoc.aspx?DocRefId=%7B9FFD6E37-BF89-4124-94E0-EC23BE43E71B%7D>.

<sup>325</sup> AP-2020-0025 Evidentiary Hearing-20230210\_Meeting Recording 1 [00: 42: 46 – 00: 44: 16].

be necessary for “wire down” crews, he explained, “wire guard” crews that keep the public away from the wires need fewer skills.<sup>326</sup> LUMA nowhere explains why the less-trained “wire guard” crews, let alone the “wire down” crews, could not respond to downed wires in fewer than 18 hours. The “safety metric” that LUMA proposes for major outage events is even more flawed: rather than any numeric or percentage target for worker injuries to limit such injuries, LUMA’s proposal is solely to “record safety incidents” and include them in a safety report.<sup>327</sup> If these incidents are recorded, LUMA would receive 80 points regardless of whether there are 2, or 200, employees or contractors injured during major outages.<sup>328</sup> Such metrics simply do not adequately advance or protect the public interest.

Finally, LUMA’s proposed metrics do not result in a clear benefit for the public interest for two more reasons. First, LUMA admits it has not figured out how the major outage metrics can account for major outages that hit only one area of Puerto Rico, without affecting the entire archipelago.<sup>329</sup> Second, LUMA’s metrics do not make clear distinctions between outages for purposes of triggering the definitional end of major outage event.<sup>330</sup> As Comm. Mateos explained, this flaw risks a major outage event continuing for a potentially indefinite time.<sup>331</sup> Because LUMA’s proposal is that, during major outage events, only the major outage metrics apply, this proposal risks limiting LUMA’s accountability in severe and significant ways (e.g., limiting applicability of metrics for reliability, interconnection, vegetation management, and other important metrics).

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<sup>326</sup> AP-2020-0025 Evidentiary Hearing-20230210\_Meeting Recording 1 [00: 54: 22 – 00: 55: 33].

<sup>327</sup> LUMA’s proposal at Table 2-26.

<sup>328</sup> *Id.*

<sup>329</sup> AP-2020-0025 Evidentiary Hearing-20230210\_Meeting Recording 1 [01: 54: 14 – 01: 59: 04].

<sup>330</sup> AP-2020-0025 Evidentiary Hearing-20230210\_Meeting Recording 2 [00: 50: 12 – 01: 01: 22].

<sup>331</sup> *Id.* AP-2020-0025 Evidentiary Hearing-20230210\_Meeting Recording 2 [00: 50: 12 – 01: 01: 22].

**B. LUMA’s proposed Major Outage Metrics would not impact areas with significant performance issues.**

Second, LUMA’s proposal fails to establish “targets or levels” that “positively impact or address areas of unsatisfactory performance with a direct impact to the electric service user” and thus, under PREB’s Dec. 23, 2020 order, may not qualify for incentives. One area of longstanding unsatisfactory performance is the geographic inequity of electric service: specifically, the fact that mountainous areas in Puerto Rico repeatedly experience longer prolonged outages when major outages occur.<sup>332</sup> As Prof. Jose Alameda and Prof Agustin Irizarry underscored in their testimony at the hearing, metrics to improve performance in those areas are essential – yet LUMA’s metrics make no attempt to address those well-known geographic disparities, ignoring PREB’s standards and a clear energy justice imperative.<sup>333</sup>

**C. LUMA’s proposed Major Outage would give away incentives for easy tasks that form part of basic operations**

Third, contrary to PREB’s mandates, LUMA’s proposal would offer it incentives for plainly easy tasks that form part of the basic operations of any utility. PREB made clear at the outset of this docket that targets for which an incentive may be proposed must “go above

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<sup>332</sup> AP-2020-0025 Evidentiary Hearing-20230207\_Meeting Recording 2 [00: 48: 29 – 00: 49: 57]; AP-2020-0025 Evidentiary Hearing-20230207\_Meeting Recording 2 [00: 51: 14 – 00:53: 29]; AP-2020-0025 Evidentiary Hearing-20230207\_Meeting Recording 2 [01: 01: 07 – 01: 01: 57]. *See Also* Marcel Castro-Sitiriche, ATG22 – Marcel Castro-Sitiriche – Critical Infrastructure, Equity, and Resilience, *available at* <https://soundcloud.com/advancedenergygroup/ats22-marcel-castro-sitiriche-critical-infrastructure-equity-resilience>.

<sup>333</sup> *See* Testimony of Jose Alameda at AP-2020-0025 Evidentiary Hearing-20230207\_Meeting Recording 1 [00: 47: 30 – 00: 49: 27], Testimony of Agustin Irizarry at AP-2020-0025 Evidentiary Hearing-20230207\_Meeting Recording 1 [00: 51: 14 – 01: 20: 00]; Statement of Comm. Avilés, AP-2020-0025 Evidentiary Hearing-20230207\_Meeting Recording 1 [00: 59: 23 – 01: 00: 13]; Testimony of Terri Tonsi, AP-2020-0025 Evidentiary Hearing-20230210\_Meeting Recording 1 [00: 54: 19 – 00: 56: 58]; *See Also* testimony of Don Cortez and statements of Comm. Mateos, AP-2020-0025 Evidentiary Hearing-20230208\_Meeting Recording 1 [ 02: 24: 18 – 02: 31: 43] (describing how municipalities with inadequate service that have fewer customers can be hidden by broader average reliability measurements).

and beyond;” that is, they must be “beyond the minimum required compliance level.”<sup>334</sup> In addition, they must be “tied to difficult tasks, and not to[] easy to fix areas.”<sup>335</sup> “Rewarding entities with incentives for achieving required compliance,” PREB clarified, “is the antithesis of the performance incentives concept and contrary to the public interest.”<sup>336</sup>

As OIPC witness Gerardo Cosme explained, many of the major outage event metrics that LUMA proposes are basic, necessary actions to restore service; actions that any utility must take to satisfy their basic obligation to provide electric service.<sup>337</sup> They are, by definition, not “above and beyond.” One obvious example is the metric for notifying critical facilities and customers about forecasted events that will likely create major outages. LUMA witness Terri Tonsi testified that focusing on critical facilities and customers is “what all utilities do” for major outages.<sup>338</sup> Here, LUMA simply notifies those facilities and customers that have *already* identified themselves to LUMA as critical; LUMA itself takes no action to go out and find such customers to ensure they haven’t been left off the list.<sup>339</sup> Nor has LUMA availed itself of lists of such customers already compiled by the federal government.<sup>340</sup> It could not be easier for LUMA to satisfy this metric.

Similarly, LUMA’s proposed metric for safety during major outages is in no way “above and beyond” – it simply calls for LUMA to satisfy the OSHA requirement of recording safety incidents and noting them in a safety report.<sup>341</sup> Safety must not and may not be ignored

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<sup>334</sup> PREB Commencement of Proceeding Order at 5.

<sup>335</sup> *Id.* at 5-6.

<sup>336</sup> *Id.* at 3.

<sup>337</sup> AP-2020-0025 Evidentiary Hearing-20230210\_Meeting Recording 1 [02: 43: 52 – 02: 45: 55].

<sup>338</sup> AP-2020-0025 Evidentiary Hearing-20230210\_Meeting Recording 1 [00: 54: 05 – 00: 54: 31].

<sup>339</sup> AP-2020-0025 Evidentiary Hearing-20230210\_Meeting Recording 1 [02: 18: 07 – 02: 22: 02].

<sup>340</sup> See Hernandez, *supra*; Eliván Martínez Mercado, *Puerto Rico Health Dept. Repeats Hurricane Maria’s Mistakes During Fiona With Patients Who Depend On Electricity*, Centro de Periodismo Investigativo de Puerto Rico, (Sept. 25, 2022) available at <https://periodismoinvestigativo.com/2022/09/puerto-rico-health-dept-repeats-hurricane-marias-mistakes-during-fiona-with-patients-who-depend-on-electricity/>.

<sup>341</sup> LUMA’s proposal at Table 2-26.

during major outages; the bar LUMA sets for itself is so low, it's underground. These metrics do not satisfy the mandate of Regulation 9137 that "Performance Incentive Mechanisms should induce behavior consistent with public policy that would *not otherwise occur to a sufficient degree* in the absence of the Performance Incentive Mechanism."<sup>342</sup>

**D. The need for penalties for unsatisfactory performance is clear.**

The hearing made abundantly clear that penalties for inadequate performance are necessary to bring about the just transformation of the energy grid that Puerto Rico's policymakers have determined is the path forward for the archipelago. Repeatedly, LUMA's witnesses revealed that LUMA has not taken the necessary measures to carry out properly its obligations as an electric service provider in Puerto Rico. LUMA has yet to develop comprehensive maps of the electric system;<sup>343</sup> LUMA could have, but did not, update its web portal to facilitate rapid integration of renewables;<sup>344</sup> LUMA has done limited inspections and "does not know the health of the majority of the assets of the system";<sup>345</sup> and, for major outage events, LUMA could have, but failed to, purchase software to allow for mass notifications when major outages are imminent.<sup>346</sup> As Prof. Jose Alameda explained in his testimony, penalties are essential to motivate entities to improve service and avoid shifting costs onto consumers.<sup>347</sup> Penalties are authorized, necessary, and appropriate here, and PREB should incorporate them into the major outage metrics and all other metrics.

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<sup>342</sup> Reg. 9137, Section 7.1 (*Emphasis added*).

<sup>343</sup> Testimony of Don Cortez and statements of Comm. Mateos and Comm. Aviles, AP-2020-0025 Evidentiary Hearing-20230208\_Meeting Recording 1 [01: 33: 39 -- 01: 46: 50].

<sup>344</sup> Testimony of Lee Wood, AP-2020-0025 Evidentiary Hearing-20230208\_Meeting Recording 2 [01: 08: 26 – 01: 15: 31].

<sup>345</sup> Testimony of Don Cortez, AP-2020-0025 Evidentiary Hearing-20230208\_Meeting Recording 1 [00:57: 12 – 00: 32: 49].

<sup>346</sup> Testimony of Abner Gómez Cortes, AP-2020-0025 Evidentiary Hearing-20230210\_Meeting Recording 2 [00: 32: 36 – 00: 37: 57].

<sup>347</sup> Alameda Direct Testimony at 15-16; *See Also id.* at 5-7, 10-13.

In short, LUMA has entirely failed to satisfy the requirements, under Reg. 9137 and PREB's Dec. 23, 2020, order in this docket, to obtain incentives for major outage event metrics. PREB should refuse to allow incentives for the metrics proposed by LUMA for major outages and reject the metrics that LUMA proposes. Instead, PREB should (1) adopt metrics that will, to the greatest extent possible, ensure LUMA restores electricity as quickly as possible, as safely as possible, and to the greatest number of people possible following a major outage event; (2) impose penalties for failure to complete basic, necessary actions for preparation, operational response, and communications related to major outages; and (3) incorporate energy justice into the metrics to ensure that the same communities are not left, yet again, without power for extended periods after major outages.

#### **XV. OTHER PROCEDURAL CONSIDERATIONS**

Effective public participation is the cornerstone of a democratic society such as ours. Different perspectives – which are frequently silenced—can be brought to the forefront through public participation. To ensure this happens agencies must develop guidelines and tools to guarantee the most effective public participation. Along that same line, the agency should provide necessary materials such as documents in the public's main language and translation or subtitles during hearings along with technical support to make complex and technical information more understandable. It is the agencies' responsibility to carry out the necessary actions to encourage fair public participation.

The Puerto Rico Energy Transformation and Relief Act, which gives PREB the authority to hold public hearings, request, and gather all pertinent information necessary for the proper performance of their power and duties, recognizes the value of public

participation.<sup>348</sup> One of the goals of the aforementioned law is to encourage transparency in the procedures set forth in the energy public policy and make viable active citizen participation.<sup>349</sup> Along that same line, Act 17-2019 mandates PREB to encourage transparency and participation from the public in all procedures pertaining to energy service in Puerto Rico.<sup>350</sup> According to Section 1.2 of PREB's Regulation No. 9137, this regulation "shall be interpreted so it promotes the highest public good and the protection of the interests of the residents of Puerto Rico" in accordance with these legal requirements.

LECO has asked PREB to uphold the mandate to ensure effective public participation throughout this proceeding, which is necessary to reach a well-informed decision. As the primary focus of this legal matter pertains to the contents of LUMA's performance metrics proposal, LECO made a request to PREB to require LUMA to submit a non-technical translation of said proposal into Spanish, similar to the translation LECO provided for their own expert testimonies.<sup>351</sup> Subsequently, as per the directive of PREB, LUMA only furnished a summarized version of the now outdated proposal, and failed to provide an updated version that included the three additional metrics not present in the summarized version. Consequently, the public was unable to access a Spanish version of the most recent version of the proposal submitted by LUMA, which significantly differed from the translated summary provided. It is imperative that documents be made accessible to Spanish speakers, as over 90% of the population in Puerto Rico identifies Spanish as their primary language.

It should also be noted that PREB did not adequately address the needs of the Spanish speaking public during the evidentiary hearings, which despite being broadcasted on the

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<sup>348</sup> Article 6.3(o) Puerto Rico Energy Transformation and Relief Act 22 LPRA §1054b.

<sup>349</sup> *Id.* 22 LPRA §1051 (c) (o).

<sup>350</sup> Article 1.5 (10) Puerto Rico Energy Public Policy Act. 22 LPRA § 1141d.

<sup>351</sup> LECO, *Moción Solicitando la traducción, adaptación y resumen de la propuesta sobre las métricas de desempeño presentadas por LUMA Energy*, PREB Dkt. NEPR-AP-2020-0025 (Dec.17, 2021).



YouTube platform, lacked live translation and subtitles for the vast majority of the population in Puerto Rico, which are non-English speakers.

Furthermore, LECO has asked PREB to implement the necessary safeguards and procedures to encourage the effective participation of the public in public hearings. Specifically, LECO has advocated for better translation services and clearer instructions regarding public hearings and comments. LECO did so by compiling a series of instructions issued by PREB to the effects of public hearings in this case in its motion to address outstanding issues filed on January 27th, 2023. Here, LECO cited PREB's Resolution and Order from April 8, 2021, in which PREB stated that it would promptly publish a notice of the public hearings in a newspaper of general circulation in Puerto Rico. However, PREB never published a notice of public hearing.<sup>352</sup>

PREB's failure to make available Spanish-language versions of relevant documents that are devoid of technical jargon effectively and LUMA's opposition and lack of interest in doing so, results in the exclusion of diverse perspectives and viewpoints from individuals who ought to be regarded as stakeholders in the process. This decision to withhold translations carries an implication that the only valuable perspective is LUMA's; and that is inconsistent with Puerto Rico's public policy. PREB should ensure that the public is duly included, and in line with this, it must provide them with the necessary tools to guarantee an effective and equitable participation.

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<sup>352</sup> LECO reached out to Sonia Seda on February 15, 2023, to confirm and she replied via email “*Disculpe la demora. Verificado el expediente, la respuesta es que no, no se publicó el aviso.*” E-mail from Sonia Seda, PREB Oficina de Secretaria, to Lorena Velez, Earthjustice Attorney (Feb. 15, 2023, 3:42 p.m. AT) (*on file with author*).

## **XVI. CONCLUSION**

Wherefore, it is respectfully requested that the Energy Bureau accepts LECO's legal brief and grant all the above specified reliefs, including, but not limited to:

1. Impose penalties as part of LUMA's performance-based mechanism as requested here and on May 26, 2022, *Motion Requesting Imposition of Penalties* and our July 15, 2022, *Reply to LUMA's Opposition* to that motion.
2. Find that Law 17-2019 Section 5.21, Regulation 9137, and PREB's initial December 23, 2020 order in this case impose a burden of proof upon LUMA, to demonstrate that its proposed incentives will induce LUMA to take the steps necessary to achieve a 21st Century "modern, sustainable, reliable, efficient, cost-effective, and resilient system." Find LUMA has failed to satisfy the burden of proof, and therefore LUMA's proposal must be rejected.
3. Include as key performance metrics, Distributed Interconnections, Energy Efficiency, Demand Management, and Vegetation Management with corresponding Effective Weights.
4. Consider the faults in credibility for LUMA's expert testimonies in Labor Safety and Vegetation Management metrics as described above in Section VII(A) and Section X, respectively, and therefore, LECO requests that PREB not grant probative value to those testimonies.
5. For each of the metrics, LECO requests that PREB impose metrics as follows:
  - a. Safety
    - i. OSHA Recordable Incident Rate. **LECO Request: Restore the Baseline Set in the PREB July 2, 2021 Order of 6.9. As described in Section VII of our brief: PREB should eliminate any incentive**

for reaching targets on safety metrics, and impose a penalty for failing to meet baselines.

- Points For Reaching Best-Case Scenario: 0.0
- Point Deduction for Failing to Meet Minimum Performance Level: (5.0)

	Best-Case Scenario (Labeled as “150%” in LUMA’s proposal Table 2-3)	Minimum Performance Level: Restore to the Baseline Set in the PREB Order
Year One	5.68	6.9
Year Two	3.99	6.9
Year Three	2.79	6.67

- ii. OSHA Fatalities. **LECO Request:** As described in Section VII of our brief: PREB should eliminate any incentive for reaching targets on safety metrics, and impose a penalty for failing to meet baselines:

- Points For Reaching Best-Case Scenario: 0.0
- Point Deduction for Failing to Meet Minimum Performance Level: (5.0)

	Best-Case Scenario (Labeled as “150%” in LUMA’s proposal Table 2-3)	Target Threshold	Minimum Performance Level
Year One	0	0	0
Year Two	0	0	0
Year Three	0	0	0

- iii. OSHA Severity Rate. **LECO Request:** the Baseline set in the PREB Order is 31.00. LUMA’s targets and minimum performance levels for all three years indicate worse performance than the baseline.

**PREB should reject these and impose more aggressive targets and minimum performance levels, and impose penalties for failure to meet the Baseline of 31.00. As described in Section VII of our brief: PREB should eliminate any incentive for reaching targets on safety metrics, and impose a penalty for failing to meet baselines:**

- Points For Reaching Best-Case Scenario: 0.0
- Points For Reaching Target Threshold: 0.0
- Point Deduction for Failing to Meet Minimum Performance Level: (5.0)

iv. **OSHA DART Rate. LECO Request: The Baseline set in the PREB Order is 4.80. LUMA's proposed Threshold for Year One, and Minimum Performance Levels for all three years, indicate worse performance than this baseline. PREB should reject these and impose more aggressive targets and minimum performance levels, and impose penalties for failure to meet the Baseline of 31.00. As described in Section VII of our brief: PREB should eliminate any incentive for reaching targets on safety metrics, and impose a penalty for failing to meet baselines:**

- Points For Reaching Best-Case Scenario: 0.0
- Points For Reaching Target Threshold: 0.0
- Point Deduction for Failing to Meet Minimum Performance Level: (5.0)

b. Distributed Interconnection, Energy Efficiency, & Demand Response

- i. NEM Project Activation. **LECO Request: Reject LUMA's proposed metric, and direct LUMA to create a new metric aligned with the interconnection metric adopted by the Hawaii Public Utility Commission, adapted to the smaller rooftop systems in Puerto Rico: the average number of business days it takes the Companies to complete all steps within the Companies' control to interconnect DER systems 1 <25kW in size, in a calendar year. PREB should also incorporate a penalty for failure to connect any system within thirty days, as required by Act 114-2007.**
- ii. Add metrics recommended by Dr. Irizarry:
  - % of customers signed up to Energy Efficiency and Demand Response programs each year.
  - Program costs per MWh saved through Energy Efficiency and Demand Response programs.
- iii. Add metrics aligned with those adopted by the Hawai'i Public Utilities Commission:
  - Residential Hard-to-Reach Energy (kWh) Savings Beyond Energy's Target.
  - Residential Hard-to-Reach Peak Demand (kW) Reduction Beyond Energy's Target; Low-Income Customers Served Beyond Hawaii Energy's Target.
- iv. Add metrics envisioned by Regulation 9367:
  - Annual MWh savings

- Lifetime MWh savings
  - Annual MW savings
  - Lifetime net benefits
  - Greenhouse gas reductions
  - First-year savings (at least 0.1% of annual sales in the first year)
  - Second-year savings (at least 0.25% of annual sales)
- v. Energy Savings as % of Sales. **LECO Request: Implement this metric immediately, instead of deferring it as LUMA proposes, as inducement to seek funding for, and accelerate implementation of, quick-start energy efficiency and demand response programs. Award points for reaching the Best-Case Scenario or the Target Threshold, and Deduct Points for Failure to Meet the Minimum Performance Level.**
- Points For Reaching Best-Case Scenario: 2.5
  - Points For Reaching Target Threshold: 1.25
  - Point Deduction for Failing to Meet Worst-Case Scenario (Labeled as 25% by LUMA): (2.5)

	Best-Case Scenario (Labeled as “150%” in LUMA’s proposal Table 2-3)	Target Threshold	Worst-Case Scenario (Labeled as “25%” in LUMA’s proposal Table 2-3)
Year One	0.15%	0.10%	0.03%
Year Two	0.38%	0.25%	0.06%
Year Three	0.50%	0.40%	0.10%

vi. Peak Demand Savings as % of Peak Demand. **LECO Request:**  
**Implement this metric immediately, instead of deferring it as LUMA proposes, as inducement to implement quick-state energy efficiency and demand response programs immediately. Award points for reaching the Best-Case Scenario or the Target Threshold, and Deduct Points for Failure to Meet the Minimum Performance Level.**

- Points For Reaching Best-Case Scenario: 2.5
- Points For Reaching Target Threshold: 1.25
- Point Deduction for Failing to Meet Worst-Case Scenario  
(Labeled as 25% by LUMA): (2.5)

	Best-Case Scenario (Labeled as “150%” in LUMA’s proposal Table 2-3)	Target Threshold	Worst-Case Scenario (Labeled as “25%” in LUMA’s proposal Table 2-3)
Year One	0.08%	0.10%	0.01%
Year Two	0.15%	0.20%	0.03%
Year Three	0.25%	0.30%	0.05%

c. Reliability

i. System Average Interruption Frequency Index. **LECO Request:**  
**PREB should revise the points awarded and deducted for this metric as follows:**

- Points For Reaching Best-Case Scenario: 5.0
- Points For Reaching Target Threshold: 2.5
- Point Deduction for Failing to Meet Worst-Case Scenario  
(Labeled as 25% by LUMA): (5.0)

	Best-Case Scenario (Labeled as “150%” in LUMA’s proposal Table 2-3)	Target Threshold	Worst-Case Scenario (Labeled as “25%” in LUMA’s proposal Table 2-3)
Year One	8.2	9.8	10.2
Year Two	6.8	8.5	9.5
Year Three	5.8	7.4	9.0

ii. System Average Interruption Duration Index. **LECO Request:**

**PREB should revise the points awarded and deducted for this metric as follows:**

- Points For Reaching Best-Case Scenario: 5.0
- Points For Reaching Target Threshold: 2.5
- Point Deduction for Failing to Meet Worst-Case Scenario: (5.0)
- **PREB must also include an outage compensation mechanism, which will at least partially reimburse customers for damaged appliances and spoiled food caused by outages that were LUMA’s fault.**

	Best-Case Scenario (Labeled as “150%” in LUMA’s proposal Table 2-3)	Target Threshold	Worst-Case Scenario (Labeled as “25%” in LUMA’s proposal Table 2-3)
Year One	870	1,119	1,181
Year Two	684	932	1,081
Year Three	497	746	994

iii. Customer Average Interruption Duration Index. **LECO Request:**

**PREB should impose penalties for failure to meet the CAIDI Baseline of 145 minutes established in PREB’s May 21, 2021 Order in Docket NEPR-MI-2019-0007.**

iv. Vegetation Maintenance Miles Completed. **LECO Request: Reject this metric, and require LUMA to propose a new vegetation**



**maintenance metric or PREB establishes said metric which accounts for Relative Difficulty of Vegetation Maintenance Projects.**

v. **Distribution Line Inspections & Targeted Corrections. LECO Request: award points for reaching the Best-Case Scenario or the Target Threshold, and Deduct Points for Failure to Meet the Minimum Performance Level.**

- Points For Reaching Best-Case Scenario: 5.0
- Points For Reaching Target Threshold: 2.5
- Point Deduction for Failing to Meet Minimum Performance Level: (5.0)

	Best-Case Scenario (Labeled as “150%” in LUMA’s proposal Table 2-3)	Target Threshold	Minimum Performance Level
Year One	159	106	16
Year Two	555	370	56
Year Three	1,031	687	103

vi. **Transmission Line Inspections & Targeted Corrections: LECO Request: award points for reaching the Best-Case Scenario or the Target Threshold, and Deduct Points for Failure to Meet the Minimum Performance Level.**

- Points For Reaching Best-Case Scenario: 5.0
- Points For Reaching Target Threshold: 2.5
- Point Deduction for Failing to Meet Minimum Performance Level: (5.0)

	Best-Case Scenario (Labeled as “150%” in LUMA’s proposal Table 2-3)	Target Threshold	Minimum Performance Level
Year One	39	26	4
Year Two	137	91	14
Year Three	254	169	25

vii. T&D Substation Inspections & Targeted Corrections: **LECO**

**Request: award points for reaching the Best-Case Scenario or the Target Threshold, and Deduct Points for Failure to Meet the Minimum Performance Level.**

- Points For Reaching Best-Case Scenario: 5.0
- Points For Reaching Target Threshold: 2.5
- Point Deduction for Failing to Meet Minimum Performance Level: (5.0)

	Best-Case Scenario (Labeled as “150%” in LUMA’s proposal Table 2-3)	Target Threshold	Minimum Performance Level
Year One	59	39	6
Year Two	206	137	21
Year Three	383	255	38

d. Customer Service

i. J.D. Power Customer Satisfaction Survey (Residential Customers).

**LECO Request: strike this metric, for the reasons detailed in Section XII(A).**

ii. J.D. Power Customer Satisfaction Survey (Business Customers).

**LECO Request: strike this metric, for the reasons detailed in Section XII(A).**

iii. Average Speed of Answer (minutes). **LECO Request: Reject LUMA’s proposed baseline of 10 minutes, and impose the baseline of 8.3 minutes set in PREB’s July 2, 2021 Order in NEPR-MI-2019-0007. Award points for reaching the Best-Case Scenario or the Target Threshold, and Deduct Points for Failure to Meet the Minimum Performance Level.**

- Points For Reaching Best-Case Scenario: 7.0
- Points For Reaching Target Threshold: 3.5
- Point Deduction for Failing to Meet Minimum Performance Level: (7.0)

	Best-Case Scenario (Labeled as “150%” in LUMA’s proposal Table 2-3)	Target Threshold (Taken from LUMA’s proposal Table 2-3)	Minimum Performance Level
Year One	4.5	Revise Year One Target Threshold	8.3
Year Two	3.2	6.4	7.1
Year Three	2.9	5.8	6.4

iv. Customer Complaint Rate. **LECO Request: Reject the metric proposed by LUMA, as it measures only LUMA’s satisfaction rather than customer satisfaction.**

v. Abandonment Rate. **LECO Request: award points for reaching the Best-Case Scenario or the Target Threshold, and Deduct Points for Failure to Meet the Minimum Performance Level.**

- Points For Reaching Best-Case Scenario: 7.0
- Points For Reaching Target Threshold: 3.5

- Point Deduction for Failing to Meet Minimum Performance

Level: (7.0)

	Best-Case Scenario (Labeled as “150%” in LUMA’s proposal Table 2-3)	Target Threshold	Minimum Performance Level
Year One	20%	40%	45%
Year Two	16%	32%	35%
Year Three	14.5%	29%	34%

e. Financial Performance

- i. Operating Budget
- ii. Capital Budget – Federally Funded
- iii. Capital Budget – Non-Federally Funded
- iv. Days Sales Outstanding – General Customers
- v. Days Sales Outstanding – Government Customers
- vi. Overtime

**LECO Request for All Financial Performance Metrics: Reject LUMA's Proposed Finance Metrics, as they are timid, too easy to achieve, based on incomplete and cherry-picked data, and riddled with loopholes that would allow LUMA to game the system. Require LUMA to propose aggressive new metrics. Prohibit LUMA from collecting incentives based on meeting revised budgets well into the fiscal year, as opposed to meeting the original budget.**

- f. Major Outage Events - **LECO Request: Reject LUMA’s proposed Major Outage Metrics, as they provide no clear benefit for the public interest, fail to impact areas with significant performance issues, give away incentives for basic and easy tasks, and fail to penalize unsatisfactory performance during a major outage. Require LUMA to propose new**

metrics, including penalties for unsatisfactory performance as described above, that will ensure LUMA restores electricity as quickly as possible, as safely as possible, and to the greatest number of people possible following a major outage event. Also, those should incorporate energy justice to ensure that the same communities are not left, yet again, without power for extended periods after major outages.

Respectfully submitted. In San Juan Puerto Rico, May 11, 2023.

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### CERTIFICATION OF SERVICE

I hereby certify that on May 11, 2023, I served this brief to the following parties:

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