

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

**IN RE: THE PERFORMANCE OF THE  
PUERTO RICO ELECTRIC POWER  
AUTHORITY**

**CASE NO.: NEPR-MI-2019-0007**

**SUBJECT: Findings on Performance Baseline  
data and analysis and request for additional  
information.**

**RESOLUTION AND ORDER**

**I. Introduction**

Pursuant to Act 57-2014,<sup>1</sup> the Energy Bureau of the Puerto Rico Public Service Regulatory Board (“Energy Bureau”) has jurisdiction over the Puerto Rico Electric Power Authority (“PREPA”) and all other electric service companies. Act 57-2014 clearly states it is public policy that all consumers have the right to a reliable and stable electric service.<sup>2</sup> In the aftermath of the destruction caused by Hurricanes Irma and Maria, it is of the utmost importance that PREPA transforms the power grid and its operations to provide a more reliable and stable service to its clients.

Act 17-2019<sup>3</sup> broadened the Energy Bureau’s authority and reinforced the foregoing public policy by declaring that, “(t)he electric power system should be reliable and accessible, promote industrial, commercial, and community development, improve the quality of life at just and reasonable cost, and promote the economic development of the Island.”<sup>4</sup>

Furthermore, Act 17-2019 established certain express mandates to the Energy Bureau including, but not limited to, developing incentive mechanisms to make the enforcement of the energy policy more feasible.

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<sup>1</sup> Known as the *Puerto Rico Energy Transformation and RELIEF Act*, as amended.

<sup>2</sup> *Id.*, Article 1.2(l).

<sup>3</sup> Known as the *Puerto Rico Energy Public Policy Act*.

<sup>4</sup> *Id.*, Statement of Motives, p.2.



## II. Energy Bureau Statutory Authority

### A. Performance Incentive Mechanisms

Act 17-2019 created a deadline of December 31, 2019 for the Energy Bureau to develop regulations for the establishment of incentives and penalties based on performance that consider electric power companies' performance and compliance with the performance metrics set forth in the energy public policy.<sup>5</sup> Act 17-2019 provides the Energy Bureau with the authority to use alternative mechanisms to cost-based regulation for compliance and implementation of the objectives established in the law, including mechanisms for incentives and penalties based on performance metrics for electric service companies and strict compliance with the Energy Bureau orders.<sup>6</sup>

Pursuant to Act 17-2019, in developing such performance-based incentives and penalties, the Energy Bureau must consider these criteria, among others:

- 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 in consumers' properties;
- f. compliance with metrics to achieve the energy efficiency standards established in Act 17-2019;
- g. infrastructure maintenance.<sup>7</sup>

Regarding the mechanisms to be used, Act 17-2019 states that the Energy Bureau may consider using, but it is not limited to, the following:

- i. Decoupling mechanisms;
- ii. Performance-Based Regulation or PBR;

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<sup>5</sup> *Id.*, Section 1.5(3)(c) and (d).

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

<sup>7</sup> *Id.*, Section 5.21, amending Section 6.25(B) of Act 57-2014.



- iii. Time of Use Rates;
- iv. Prepaid Rates.
- v. Unbundled Rates;
- vi. Formula Ratemaking and rate review mechanism;
- vii. Reconciliation Mechanisms.<sup>8</sup>

In compliance with Act 17-2019 mandates regarding performance-based incentives and penalties, the Energy Bureau created Regulation 9137<sup>9</sup> which set forth the process for the reporting requirements and establishment of performance incentive metrics. The Energy Bureau is now completing the first phase of proceedings in which the baseline lines and measurements of metrics are being established. A subsequent proceeding addressing incentives on selected metrics will follow in which the proposed metrics and incentive proposed by LUMA Energy, LLC as ManagementCo, LUMA Energy ServCo, LLC as ServCo (collectively, "LUMA") will be considered along with the positions of participating stakeholders.<sup>10</sup>

*B. Performance Reporting Requirements*

The Energy Bureau is granted the authority in Act 17-2019 to take the steps to carry out its duties and responsibilities to regulate PREPA and its successors. Relevant to this Resolution and Order are the provisions of Act 17-2019 which require PREPA to comply with all rules, regulations, orders, mandates, requests, and penalties.<sup>11</sup> The

<sup>8</sup> *Id.* Note that, as per the provisions of Act 17-2019, electric power service companies, as determined by the Energy Bureau through regulations, including those organized as energy cooperatives or those other entities determined by the Energy Bureau shall be exempt from this provision.

<sup>9</sup> *Regulation for Performance Incentive Mechanisms*. Regulation 9137. December 13, 2019.

<sup>10</sup> On June 22, PREPA and the Puerto Rico Public-Private Partnerships Authority, entered into an Operation and Maintenance Agreement ("OMA") under which LUMA will manage PREPA's transmission and distribution system ("T&D System"). LUMA is the entity that shall be responsible for the operation and maintenance of PREPA's transmission and distribution system in accordance with an agreement between PREPA and LUMA, for which the Energy Bureau granted a Certificate of Compliance on June 17, 2020. See Resolution and Order Energy Compliance Certificate, Case No. NEPR-AP-2020-0002, June 17, 2020. As part of the Agreement, LUMA has the right to incentive payments based on its performance. The OMA includes in Annex IX a proposal for performance metrics targets.

<sup>11</sup> Act 17-2019. Section 2.8, amending Section 6 of Act 83 of 1941.



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Energy Bureau may require the production and inspection of records, inventories, documents, and physical facilities.<sup>12</sup>

Given the Energy Bureau's authority and mandate to develop performance incentive mechanisms, on May 14, 2019, the Energy Bureau issued a Resolution and Order ("May 14 Resolution") in which it determined that it would be in the public interest to commence as soon as possible PREPA's data gathering process that would not only help the Energy Bureau and the stakeholders in developing measures, metrics and targets, but provide useful information on developing incentive and penalty mechanisms.<sup>13</sup> This effort provided the Energy Bureau with relevant data it needed to establish a baseline and a uniform understanding of the current level of PREPA's performance on every aspect of PREPA's decision-making process and operations. As established by the Energy Bureau, this data is critical for measuring PREPA's reliability and stability.<sup>14</sup> It will also help identify those areas of lower performance within the PREPA system that may need more attention.

The May 14 Resolution included an attachment, identified as *Attachment 1*, which contained a list of the key performance metrics/indicators published on April 27, 2017.<sup>15</sup> The Energy Bureau ordered PREPA to use the referenced Attachment 1 to prepare the required quarterly reports, beginning September 15, 2019. In the May 14 Resolution, the Energy Bureau noted that in its proposed Fiscal Plans to the Federal Oversight and Management Board, PREPA has included recommended "potential metrics".<sup>16</sup> Many metrics included in the Attachment 1 were derived from PREPA's own recommended key performance indicators.

On December 23, 2020, the Energy Bureau issued a Resolution and Order establishing the procedural schedule for this proceeding. In a separate Resolution and Order under Case No. NEPR-AP-2020-0025 also issued on December 23, 2020, the

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<sup>12</sup> *Id.* Section 5.19, amending Section 6.24(b) of Act 57-2014. The Energy Bureau may also examine under oath, by means of a report or formal summons, all officials and employees of the energy companies certified to operate in Puerto Rico and the Corporation for the Revitalization of the Puerto Rico Electric Power Authority, and require the production of copies of those records, documents, information or data. *See also*, Section 5.10, amending Section 6.3 (pp)(7) of Act 57-2014.

<sup>13</sup> *See* Resolution and Order, Case No. NEPR-MI-2019-0007, In Re: The Performance of the Puerto Rico Electric Power Authority, May 14, 2019 ("May 14 Resolution").

<sup>14</sup> *Id.*, p. 4.

<sup>15</sup> *See* Resolution, Case No. CEPR-IN-2016-0002, In Re: The Performance of the Puerto Rico Electric Power Authority, April 27, 2017.

<sup>16</sup> *See* Puerto Rico Electric Power Authority, Fiscal Plan - August 1, 2018.



Energy Bureau initiated a proceeding to determine and establish performance-based incentive mechanism targets that address LUMA's performance.<sup>17</sup>

On January 19, 2021, the Energy Bureau held a Technical Conference<sup>18</sup> to present a summary of the metrics filed by PREPA and industry standards for illustrative purposes.

On January 29 and 30, 2021, the Energy Bureau received comments from PREPA, LUMA, the Solar and Energy Storage Association of Puerto Rico ("SESA-PR") and the Independent Consumer Protection Office ("ICPO").

In order to allow further opportunity for comments from stakeholders and the general public, on February 1, 2021, the Energy Bureau issued a Resolution and Order extending the commenting period to February 5, 2021.

On February 5, 2021, the Energy Bureau received comments from LUMA, PREPA, and Rocky Mountain Institute ("RMI") while on February 12, 2021, the Energy Bureau received reply comments from LUMA, PREPA, and ICPO. As established in the instant case procedural calendar, on February 22, 2021, the Energy Bureau held a Technical Conference<sup>19</sup> to receive input from stakeholders on filed comments.

Finally, on March 1, 2021, the Energy Bureau received comments from LUMA, PREPA, and SESA-PR.

### III. Stakeholder Comments

#### A. Overarching Comments

Comments from stakeholders discussing overarching performance metrics matters are summarized below.

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<sup>17</sup> See Resolution and Order, Case No. NEPR-AP-2020-0025, In Re: Performance Targets for LUMA Energy Servco LLC, December 23, 2020.

<sup>18</sup> The Technical Conference was streamed live via the Energy Bureau's YouTube Channel: [https://www.youtube.com/watch?v=zi5ALBxCN\\_I](https://www.youtube.com/watch?v=zi5ALBxCN_I).

<sup>19</sup> The Technical Conference was streamed live via the Energy Bureau's YouTube Channel: <https://www.youtube.com/watch?v=jzRbJR3XGi0>.



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LUMA provided several comments.<sup>20</sup> LUMA commented that some performance metrics cannot be properly baselined due to nonexistent or inadequate data. LUMA identified significant gaps between PREPA's data collection processes and the calculations provided by PREPA.<sup>21</sup> LUMA provided additional performance metrics referenced to applicable industry standards.<sup>22</sup> Finally, LUMA noted that PREPA's current performance is well below industry standards and continues to deteriorate with respect to several performance metrics most notably in Reliability.<sup>23</sup>

PREPA's initial comments noted the introduction of the idea of "emergent" metrics that go beyond traditional utility metrics, for which PREPA briefly described.<sup>24</sup> PREPA has concerns that Hawaiian Electric Companies ("HECO") is a fourth quartile performer (bottom 25 percent of utilities) and states that the Energy Bureau should aim for better performance.<sup>25</sup> On the other hand, PREPA recommends using Florida Power and Light (FP&L) as a bookend since the utility is first quartile (top 25 percent of utilities). PREPA recommends that any rewards or penalties should be proportional to the value that accrues to customers or costs that customers incur due to failure or omission by the Electric Service Company.<sup>26</sup> Also, PREPA recommends that the Energy Bureau require LUMA to engage with the Energy Bureau on long-range planning on a regular basis.<sup>27</sup>

PREPA as owner, claims it still has a fiduciary responsibility for FEMA funding,<sup>28</sup> and noted that it bears responsibilities for LUMA's actions.<sup>29</sup> PREPA then recommends

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<sup>20</sup> See *Motion Resubmitting LUMA's Comments on Performance Baselines and Metrics Based on Data Presented on January 19<sup>th</sup>, 2020 by the Energy Bureau, and Resubmitting Proposed Performance Metrics and Baselines*, filed by LUMA Energy, LLC, February 5, 2021 ("LUMA Resubmittal").

<sup>21</sup> *Id.*, page 5.

<sup>22</sup> *Id.*, p. 5.

<sup>23</sup> *Id.*, p. 6.

<sup>24</sup> See *Comments of the Puerto Rico Electric Power Authority on the Establishment of Performance Baseline and Compliance Benchmarks for Electric Service Companies*, January 30, 2021 ("PREPA's January 30 Comments") p. 28.

<sup>25</sup> *Id.*, p.19.

<sup>26</sup> *Id.*, p.23.

<sup>27</sup> *Id.*, p.14.

<sup>28</sup> *Id.*, p.24.

<sup>29</sup> *Id.*



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metrics for transparency of FEMA funding.<sup>30</sup> PREPA also commented that in its capacity of asset owner it will retain a role in monitoring metrics.<sup>31</sup>

ICPO offered to supplement metrics on customer service complaints.<sup>32</sup> Also, ICPO recommended obtaining information from other sources. ICPO also noted the role of the lack of maintenance of PREPA infrastructure that has contributed to PREPA's reliability performance.<sup>33</sup> Finally, ICPO commented that HECO is not a comparable utility to PREPA.<sup>34</sup>

RMI stated that the goals of the proceeding should include clear vision; collaborative stakeholder process; enable data sharing; and a process to assess current regulatory incentives.<sup>35</sup>

SESA also noted the importance of a stakeholder process and is supportive of the Energy Bureau's process.<sup>36</sup> SESA also commented that performance-based regulation may reform how utilities earn revenues at all levels of performance.<sup>37</sup> SESA recommends that the Energy Bureau adopt farthest reaching possible view of what PBR reforms could look like.<sup>38</sup>

*B. Occupational Safety and Health Administration ("OSHA") Metrics Comments*

LUMA notes there are significant discrepancies in PREPA's 2020 data and recommends that only data from 2019 be considered in developing a baseline.<sup>39</sup>

<sup>30</sup> *Id.*, p. 25.

<sup>31</sup> *Id.*, p. 10.

<sup>32</sup> See *Comentarios a Métricas de Desempeño de la Autoridad de Energía Eléctrica Bajo el Caso Número NEPR-MI-2019-0007/ the Performance of the Puerto Rico Electric Power Authority*, filed by the ICPO, January 29, 2021 ("ICPO's January 29 Comments").

<sup>33</sup> *Id.*, p. 2.

<sup>34</sup> *Id.*

<sup>35</sup> See *Comments Filed by Rocky Mountain Institute Related to Performance-Based Incentive Mechanism Targets*, filed by Rocky Mountain Institute, February 5, 2021.

<sup>36</sup> See *In the Performance of PREPA, NEPR-MI-2019-0007; Performance Targets for LUMA Energy ServCo, LLC NEPR-AP-2020-0025*, filed by SESA, January 29, 2021, p 2. ("SESA Comments").

<sup>37</sup> *Id.*, p. 5.

<sup>38</sup> *Id.*, p. 8.

<sup>39</sup> LUMA Resubmittal, Exhibit 2, p. 12.



Specifically, LUMA noted that PREPA created a new category for near misses or incidences adverted in 2020 that in LUMA's opinion is inconsistent with industry standards.<sup>40</sup> LUMA also noted an error in the calculation of the number of lost work days experienced per 100 workers known as the OSHA "Severity Rate" that PREPA provided.<sup>41</sup> Finally, LUMA noted discrepancies between OSHA log and detailed incident reports.<sup>42</sup> PREPA does not appear to object to the analysis provided by other stakeholders.

LUMA proposes additional OSHA metrics: Recordable Incident Rate, Fatalities, Severity Rate, OSHA Days Away, Restricted or Transferred ("DART") Rate. LUMA also recommends that the comparisons to industry standards only include transmission and distribution utilities.<sup>43</sup>

*C. Reliability Metrics Comments*

In its initial filings LUMA noted that PREPA does not have the process or capability to track partial restoration to the number of customers affected and the duration of outage events.<sup>44</sup> In addition, LUMA noted that PREPA has not been calculating its reliability metrics so it meets the definition of the Institute of Electrical and Electronics Engineers (IEEE) 1366 standards for System Average Interruption Duration Index ("SAIDI") and System Average Interruption Frequency Index ("SAIFI").<sup>45</sup> Specifically, LUMA noted that PREPA has not tracked transmission related outages and excludes 25 outage codes for the distribution system.<sup>46</sup> PREPA's reply comments did not dispute LUMA's findings.<sup>47</sup> PREPA does acknowledge that the transmission and substation codes were not included in its calculations.<sup>48</sup>

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<sup>40</sup> *Id.*

<sup>41</sup> *Id.*

<sup>42</sup> *Id.*

<sup>43</sup> *Id.*, Exhibit 3, p. 2

<sup>44</sup> *Id.*, Exhibit 2, p. 14.

<sup>45</sup> *Id.*, Exhibit 2, p. 11.

<sup>46</sup> *Id.*, Exhibit 2, p. 14.

<sup>47</sup> See Reply comments of the Puerto Rico Power Authority Regarding the Establishment of Performance Baseline and Compliance Benchmarks for Electric Service Companies, filed by PREPA, February 19, 2021, pp. 9-10. ("PREPA Reply Comments").

<sup>48</sup> *Id.*





LUMA also notes that data before May 2018 is faulty or not relevant as a result of the destruction and reconstruction following Hurricanes Irma and Maria.<sup>49</sup>

In its initial comments, LUMA also noted that PREPA's calculation of T<sub>MED</sub> (threshold major event day) cutoff is not consistent with the IEEE 1366 guidance. T<sub>MED</sub> is the threshold value that excludes data that would be considered major events and that would skew reliability metrics. IEEE recommends that the T<sub>MED</sub> should include five years of historical data and the calculation be updated each year. LUMA notes that PREPA has not updated the T<sub>MED</sub> calculation since 2017 and it contains only four years of data.<sup>50</sup>

LUMA undertook a process to restate PREPA's reliability metrics to include excluded outage codes and to recalculate T<sub>MED</sub> with recent data (May 2018-December 2019).<sup>51</sup> LUMA also proposes to track T<sub>MED</sub> calculations during the first three years so five years of historical data is eventually incorporated into the T<sub>MED</sub> calculations.<sup>52</sup>

LUMA's recalculation of SAIDI and SAIFI results in values of:<sup>53</sup>

- 9.8 occurrences for SAIFI for the 12-months ending August 2020 vs. 5.4 occurrences based on PREPA's reporting; and
- 1,307 minutes for SAIDI for the 12-months ending August 2020 vs. 798 minutes based on PREPA's reporting.

LUMA also recommends the elimination of customer average interruption duration index ("CAIDI") as a metric for consideration.<sup>54</sup> Mathematically, CAIDI is SAIDI divided by SAIFI.

#### D. Major Events Metric Comments

The Energy Bureau does not currently have a specific definition for major events. LUMA provided a proposed definition for major events that consisted of:<sup>55</sup>

<sup>49</sup> LUMA Resubmittal, Exhibit 2, p. 16

<sup>50</sup> *Id.*, Exhibit 2, p. 14.

<sup>51</sup> *Id.*, Exhibit 2, p. 17.

<sup>52</sup> *Id.*

<sup>53</sup> *Id.*, Exhibit 2, p. 26.

<sup>54</sup> *Id.*, Exhibit 1, p. 2.

<sup>55</sup> *Id.*, Exhibit 2, p. 6.



- An outage event affecting 205,000 or more T&D customers for over 15 minutes; or
- An event that has over 1,500 active outages tracked in the outage management system.

LUMA proposed that the event would end when the cumulative number of customers interrupted falls below 10,000 for more than eight continuous hours.

*E. Customer Service Metrics Comments*

In PREPA’s Reply Comments, PREPA noted that its three call centers utilize three different information technologies.<sup>56</sup> During the February 22, 2021 Technical Conference, PREPA noted that it processes customer complaint data from the three centers to make them comparable. PREPA did not elaborate how each call center reports data, and what specific steps are required for the data alignment.

PREPA also indicated that it has not requested data on call overflows from the three call centers.<sup>57</sup> PREPA also noted that it only records the number of complaints received each day and does not track calls that get resolved at first contact, and that PREPA only tracks calls that escalate to a supervisor level.<sup>58</sup> In the February 22, 2021 Technical Conference, PREPA stated that it does not report calls based on categories, such as calls about outages, billing disputes, ability to pay, etc.

As a proposed metric, LUMA proposes to participate in JD Power Customer Satisfaction Surveys in the future.<sup>59</sup> LUMA has indicated that it has executed a contract with JD Power and that a first round of customer satisfaction surveys have been completed.<sup>60</sup> Currently, PREPA does not participate in the survey. LUMA also stated that it intends to have an operational in-house contact center to implement a cloud-based contact center platform.

The *Average Speed of Answer (“ASA”) (minutes) Metric* is the average wait time from the moment the customer enters the Automated Call Distribution (“ACD”) queue to the time the call is answered by an agent. LUMA has evaluated industry data from the American Productivity and Quality Center (“APQC”) for benchmarking purposes. LUMA

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<sup>56</sup> PREPA Reply Comments, p. 10

<sup>57</sup> *Id.* p. 11.

<sup>58</sup> *Id.*, p. 10

<sup>59</sup> LUMA Resubmittal, Exhibit 1, p. 6.

<sup>60</sup> *Id.*



found that the data currently available does not support a reliable baseline calculation. Current data is only available for six months and the reported ASA varies significantly from month to month due to COVID and onboarding new outsource vendors. The lack of visibility into three separate call routing systems and overflow rules prevents accurately calculating baseline ASA. As a result, based on past PREPA performance and experience from industry subject matter experts, LUMA recommends that the initial baseline should be set at ten (10) minutes.

The *Customer Complaint Rate Metric* is the total monthly complaints registered with PREB divided by the total of customers and then multiplied by 10,000. Upon preliminary review, LUMA noted that it could not determine a comparable benchmark. LUMA used the total number of complaints received by the PREB from May 2019 to March 2020 as the baseline as it is the most normal period of operations for PREPA in the last 4 years, resulting in a baseline of 5.25%.

The *First Call Resolution ("FCR") Metric* is the percentage of customer calls the utility is able to resolve without need for additional action. PREPA does not have the ability to track and report FCR. LUMA proposes deferring the calculation and reporting of this metric until a new cloud-based Contact Center platform is implemented and FCR performance tracking can be established.

The *Abandonment Rate Metric* is the percentage of callers who hang up (abandon) while the call is still in the Automated Call Distribution ("ACD") queue. LUMA claims that the data currently available from the PREPA Contact Center platform does not support a reliable baseline. Current data is only available for six months and the reported abandonment rate varies significantly from month to month due to COVID and onboarding new outsource vendors. Lack of visibility into three separate call routing systems and overflow rules prevents accurately calculating baseline abandonment rate. As a result, based on past PREPA performance and industry subject matter expert experience, LUMA recommends an initial baseline should be set at 50% abandonment rate.

ICPO notes it could provide the Energy Bureau with information regarding the number of complaints filed before the ICPO by consumers, related to PREPA's billing processes on such issues as: Overbilling, Billing Objections, Consumption Estimates, Bill Corrections, and Net Metering. In addition, ICPO offered to provide complaint information regarding: Public lighting, Service connection requests, Suspensions of electric service, Interruptions of electric service, Meters, and Interconnection of distributed generation systems.

#### F. Finance Metrics Comments

LUMA recommends that for the *Operational Budget Metric*; *Capital Budget (Federally Funded) Metric*; and *Capital Budget (non-Federally Funded) Metric* be measured by the ability of staying withing budget. LUMA suggests that the baseline for these metrics be set at 100% of Approved Budget.



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Regarding *Days of Sales Outstanding (“DSO”) Metric*, LUMA recommends for this to be bifurcated and measured calculating separate DSO metrics for *General Customers* (Residential, Commercial, & Wholesale), and *Government Accounts* to improve the transparency of collections efforts and better track improvements. LUMA found that the DSO measurements for general clients and government are vastly different. Over the last 36 months, Government sales have ranged between 16% and 22% of total revenue, with an average of 18%. Using a weighted value performance metric reflects actual revenue performance data. LUMA proposes to set DSO Baselines based on analysis of historical data.<sup>61</sup>

Regarding *Reduction in Network Line Losses Metric*, LUMA ascertained that PREPA does not currently allocate losses to the components of the system. Such allocation requires the development of an appropriate model, as well as additional metering and other measures.<sup>62</sup> Last, for the *Overtime Metric* which measures the ability to manage overtime costs under normal operations (excluding emergency events), LUMA suggests that Baseline to be +23% of Average Labor Dollars.

PREPA recommends two additional metrics that relate to FEMA compliance:<sup>63</sup> *FEMA Compliance Failures (#) Metric* and *FEMA reimbursements denied (\$) Metric*. Moreover, PREPA recommends that as an improvement to the Value to Customer and Affordability of energy to add the *Average monthly electric bill as % of median disposable income Metric*.

#### G. Planning and Environmental Metrics Comments

LUMA states that the generation from Renewable Portfolio Standards (RPS) eligible Power Purchase Agreements (PPAs) are from multiple parties that are not the sole responsibility of LUMA.<sup>64</sup> SESA provided examples of performance mechanisms that could be used for Interconnection Process Efficiency and Early Compliance to Improve Customer Affordability based on the RPS and IRP goals; and early attainment of the Act 17-2019 energy efficiency standards.<sup>65</sup>

<sup>61</sup> *Id.*, Exhibit 2, p. 28.

<sup>62</sup> *Id.*, Exhibit 2, p. 29.

<sup>63</sup> See *Supplemental Comments of the Puerto Rico Electric Power Authority on the Establishment of Performance Baseline and Compliance Benchmarks for Electric Service Companies*, filed by PREPA, February 5, 2021, p. 2. (“PREPA Supplemental Comments”).

<sup>64</sup> LUMA Resubmittal, Exhibit 1, p. 3.

<sup>65</sup> SESA Comments. p. 8.



#### H. Proposed New Metrics Comments

During the proceeding numerous parties identified additional metrics to be reported. PREPA proposed these new metrics:

- *Interconnection queue for Distributed Energy Resources ("DER"), particularly distributed photovoltaic interconnection.* This is defined as the number of days from submission to approval, as well as the number of applicants in the queue.
- *Interconnection queue for microgrid energy resources.* PREPA noted that a definition for this proposed metrics would be required, but that DER metrics may be a model for a microgrid metric. PREPA notes this would be beneficial to establish in this proceeding.
- *Non-wires alternatives adopted in MW.* PREPA believes that agreement on the definition of this metric would benefit the provision of non-wires alternatives in the future development of Puerto Rico's grid. PREPA notes there would be no available Puerto Rican data for this metric, since it is new to industry.
- *Percent curtailment of grid connected renewable power in total and by type of asset* is important to establish transparency regarding renewable integration and greater alignment on resource adequacy. This metric is widely used by the utility industry, and data would be available for Puerto Rico.
- *Interconnection experience* would be measured DER and microgrid interconnection queues.
- *Customer program engagement for Energy Efficiency and Demand Response* would be number of participants compared to program capacity and/or milestones.
- *Restoration of service* (major event) would be repair times for downed wires, time to restore 90 percent of load, and time to restore 90 percent of customers.
- DER integration
- Digitalization
- GHG Reduction/ RPS

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- Resilience
- Asset Stewardship
- Resource Adequacy
- Transparency

The ICPO's proposed the following new metric:

- Customer Service Complaints

SESA proposed these new metrics:

- Interconnection; and
- Compliance to improve customer affordability

In its filed reply comments discussing Major Events filed on February 19, 2021, LUMA identified the following 16 major event categories with 27 associated metrics.<sup>66</sup>

- Preparation Phase
- Downed Wires response time
- Damage Assessment
- Crewing
- Estimated time of restoration
- Estimated time of restoration accuracy
- Municipality Coordination
- EOC coordination
- Utility coordination
- Safety
- Mutual Assistance
- Call answer rates
- Web availability
- PREB and P3 reporting
- Customer Communications




<sup>66</sup> See Motion Submitting LUMA's Reply to Comments Filed by the Puerto Rico Electric Power Authority and Stakeholders on Performance Baselines, Performance Metrics, and Compliance Benchmarks, February 19, 2021, Appendix C: Major Outage Events Performance Metrics. ("LUMA Reply Comments").

- Outgoing messages on telephone lines

LUMA also offered the following consolidated list of existing and new metrics which LUMA intends to introduce as part of the Energy Bureau's Performance Metric Proceeding under Case No. NEPR-AP-2020-0025:

- J.D. Powers Customer Satisfaction (Residential)
- J.D. Powers Customer Satisfaction (Business)
- Average Speed to Answer
- Customer Complaint Rate
- First Call Resolution (deferred)
- Call Abandonment Rate
- OSHA Recordable Incident Rate
- OSHA Fatalities
- OSHA Severity Rate
- OSHA DART Rate
- SAIFI
- SAIDI
- Customer Experiencing Multiple Interruptions ("CEMI") (deferred)
- Momentary Average Interruption Frequency Index ("MAIFI") (deferred)
- Distribution line inspections
- Transmission line inspections
- T&D substation inspections
- Operating Budget
- Capital Budget - Federal funds
- Capital Budget - Non Federal funds
- Days Sales Outstanding
- Reduction in Network Line Losses (deferred)
- Overtime

#### IV. Analysis, Discussion and Findings

The Energy Bureau appreciates the input and valuable and constructive comments received from stakeholders. The Energy Bureau recognizes the importance of a stakeholder engagement process in this proceeding and when the Energy Bureau re-evaluates metrics going forward. While the Energy Bureau has not specifically addressed each comment herein, the Energy Bureau has considered each comment as well as the information received during the Technical Conferences in this proceeding.

The Energy Bureau notes that no party specifically commented on the use of the fiscal-year or 18-month baselines that the Energy Bureau provided. The difference between the 18-month and fiscal-year data is minimal for most categories. As a result,



the Energy Bureau is inclined to use the fiscal-year data as the baseline for metrics subject to recommendations for specific metrics described herein.

The Energy Bureau finds value in LUMA's analysis of PREPA's data which indicates gaps and inconsistencies in that data. This raise concerns that metrics and baselines set in this proceeding may be erroneous. This highlights the need to revisit the metrics in subsequent years as set forth Regulation 9137.

Regarding OSHA safety standards, currently, PREPA has provided data on OSHA safety recordables as part of the quarterly metrics provided to the Energy Bureau. More granular information regarding PREPA's safety performance would provide more transparency to the Energy Bureau and stakeholders. On the issue of near-misses, OSHA encourages employers to investigate near-misses.<sup>67</sup> LUMA's proposal to include only 2019 data that includes near-misses, would result in an increase in OSHA baseline compared to PREPA's reported 2020 values. The 2020 OSHA values treat near-misses as a separate category and appear to be appropriately calculated.

Regarding reliability, the Energy Bureau recognizes the particular importance of high-quality data, and that PREPA has not been including required codes in its reliability data is troubling. PREPA has an obligation to provide data to the Energy Bureau based on calculations for SAIDI and SAIFI consistent with IEEE 1366 methodology. While LUMA recommended eliminating CAIDI, the Energy Bureau recognizes that should SAIFI decrease faster than SAIDI, then the apparent CAIDI will increase. CAIDI does provide useful information on customer experience with outage durations and should remain reported as a metric by PREPA.

The Energy Bureau is interested in keeping the transmission related outage information separate from distribution related outages. This information may be useful in the Energy Bureau's Optimization proceeding to identify vulnerable transmission equipment that should be prioritized.

The Energy Bureau is also interested in generation related outage information collected by PREPA. This information may be useful in proceedings affecting PREPA's current generation units and future Integrated Resource Plan ("IRP") proceedings.

Regarding LUMA's proposed major event metrics, many are actions that should already be part of PREPA's responsibilities to restore service to customers following a major event. Some utilities on the mainland provide their commissions with reports following major events to document the utility's response. These reports often include in narrative format many elements identified by LUMA.

<sup>67</sup> OSHA. "Incident Investigation" Available at: <https://www.osha.gov/incident-investigation#:~:text=OSHA%20strongly%20encourages%20employers%20to,circumstances%20had%20been%20slightly%20different.>





The Energy Bureau notes that one area that LUMA's major event metrics do not address is the number of customers affected by a major event. The Energy Bureau also notes that some metrics are unclear since they reference policies not clearly defined. For example, LUMA proposes to report on Mutual Assistance. While the Puerto Rico Transmission and Distribution system could benefit from mutual aid agreements, LUMA has not provided information about the logistics of transporting crews and equipment to assist in recovery and restoration efforts or what logistics would be required for LUMA personnel to assist other utilities.

LUMA's proposed web availability for major events is also not clear. The web availability will not be useful to customers without power. LUMA has not indicated how other forms of communication may supplement web availability.

Regarding customer service, the Energy Bureau recognizes the importance of customer service for customers across the Commonwealth of Puerto Rico. The Energy Bureau is concerned with data in this area as well. The Energy Bureau is particularly concerned that PREPA's average speed to answer may not adequately capture all calls being made to PREPA's call centers.

The Energy Bureau appreciates LUMA's proposed participation in the JD Power Customer Satisfaction surveys. However, 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.

The Energy Bureau recognizes that some customer satisfaction metrics such as abandonment rate and first call resolution have not been historically measured by PREPA. The expansion of customer service metrics as data collection and transparency improves will be revisited.

Regarding financial metrics, the Energy Bureau currently requires PREPA to provide DSO from both Government and General customers as part of the Customer Service category. PREPA has left this metric unfilled in its reporting to the Energy Bureau regarding Government DSO data. PREPA shall provide this information as established in Part V.A of this Resolution and Order.

Regarding proposed new metrics, the Energy Bureau recognizes that some financial metrics such as Reduction in Network Line Losses and Overtime are newly proposed metrics. The expansion of financial metrics as data collection and transparency improves will be revisited. The Energy Bureau also recognizes that emergent metrics will help to document the implementation of PREPA's IRP Action Plan. The Energy Bureau already requires PREPA to provide information regarding DERs and energy storage. The proposed new metrics may be useful upon agreement of the metric definition and reporting requirements.



*[Handwritten signatures in blue ink, including 'Jmr', 'A', 'SMB', and 'THA']*

Regarding LUMA's proposed consolidated metrics list, to the extent that PREPA is already tracking many of these metrics, the Energy Bureau agrees with LUMA these should continue to be tracked and reported as metrics. The Energy Bureau also recognizes that some metrics require data collection systems currently not in place.

Regarding PREPA's proposed metrics, conceptually PREPA has identified several emergent topic areas. However, PREPA has not forwarded specific metrics for these categories. The Energy Bureau will not include the PREPA emergent metrics at this time but may consider them at a future date.

The Energy Bureau notes that PREPA and LUMA will need to work together to standardize customer complaints to incorporate ICPO's recommendation.

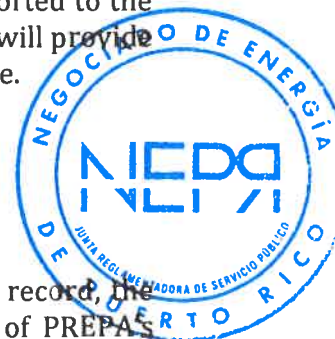
The Energy Bureau notes that SESA's proposed Interconnection metric could be incorporated with PREPA's proposed interconnection experience metric. The Energy Bureau also notes that SESA's proposed Compliance to Improve Customer Affordability metric could involve both rate and bill impact analysis conducted by PREPA and LUMA that could be part of future rate adjustment proceedings. The Energy Bureau will not include the SESA and PREPA Interconnection and Customer Affordability metrics at this time but may consider them at a future date.

In this proceeding, to provide context for performance metrics under consideration in Case No. NEPR AP-2020-0025, the Energy Bureau has referenced various benchmarks. At times, some parties have argued that the Energy Bureau's benchmark of Hawaiian Electric Company is not truly comparable or that industry standards from investor-owned utilities may not be directly comparable for PREPA. The current transmission and distribution system faces challenges similar to other island utilities; the transition to a private operator has similarities to other investor-owned utility benchmarks for similarly sized utilities; and this historical context of PREPA as a public power authority means that benchmarks from other similarly sized public power authorities may be considered. The Energy Bureau will continue to consider benchmarks for the information they provide but they have not been used to establish baselines in this matter. The Energy Bureau may consider some combination of HECO, an island utility with some similar challenges as PREPA; investor-owned utility benchmarks for similarly sized utilities; and public power authorities for similarly sized utilities as well. Further, the Energy Bureau is also considering PREPA's current performance as reported to the Energy Bureau. No one benchmark will provide any definitive standard but will provide additional context, so the Energy Bureau should cast as wide a net as possible.

**V. Conclusion**

*A. Establishment of PREPA's Performance Baseline*

Based on the analysis of the information and documentation on the record, the Energy Bureau **DETERMINES** the following regarding the establishment of PREPA's performance baseline:



1. Consistent with the discussion included above, the Energy Bureau **ORDERS** PREPA to provide the DSO from both Government and General customers metric as part of the Customer Service category.
2. Recognizing the deficiencies in existing data, the Energy Bureau **ORDERS** PREPA to restate the reliability metrics provided to the Energy Bureau that accounts for the revised methodology. Specifically, the Energy Bureau **ORDERS** PREPA to restate its reliability metrics to be consistent with the IEEE 1366 methodology for calculating SAIFI and SAIDI. The Energy Bureau **ORDERS** that PREPA's correction shall include transmission and substations related outages and outage codes that PREPA has excluded. Further, said correccions shall include a revised and updated calculation for the T<sub>MED</sub> threshold. PREPA shall submit all analysis and calculations performed to determine the T<sub>MED</sub>.
3. The Energy Bureau has identified additional metrics that shall be reported by PREPA. Therefore, the Energy Bureau **ORDERS** PREPA to report on the following metrics:
  - i. OSHA Recordable Incident Rate;
  - ii. OSHA Fatalities;
  - iii. OSHA Severity Rate; and
  - iv. OSHA Days Away, Restricted or Transferred (DART) Rate.
4. The Energy Bureau hereby **ADOPTS** the most recent Fiscal Year ending June 30, 2020 as the baseline period for metrics. The metrics considered for PREPA's performance baseline include the metrics already reported by PREPA, included in Appendices A-N of the December 23 Order, and the metrics specified in subparagraphs (1), (2), and (3) above. The baseline for each of the individual metrics will be the annual average for that year.
5. The Energy Bureau **ORDERS** PREPA to submit metrics and baselines consistent with Part V.A of this Resolution and Order **on or before April 19, 2021, at 12:00 pm.**


*B. Prospective Metrics to be Reported by PREPA<sup>68</sup>*

Based on the information contained in the instant case and the comments received, the Energy Bureau **DETERMINES** the following:

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<sup>68</sup> It is important to note that these directives are applicable to LUMA to the extent it will be in charge of the reporting under the instant case upon the commencement of operations.



1. The Energy Bureau **ORDERS** PREPA to track Generation-related outages not included in IEEE 1366 and report those outages separately. The Generation outage information provides useful information regarding the reliability of PREPA's generation units and this information may be useful in other proceedings.
2. The Energy Bureau recognizes that PREPA's reporting of monthly reliability metrics is not common among utilities, since most utilities report annual reliability metrics. However, given the extent and history of PREPA's reliability issues, the Energy Bureau **ORDERS** PREPA to continue providing monthly reliability metrics to provide visibility of the transmission and distribution system.
3. The Energy Bureau **ORDERS** PREPA to provide transmission-related outage information separately. The Energy Bureau recognizes this information may be useful in the Energy Bureau's Optimization proceeding to identify vulnerable transmission equipment that should be prioritized. This information is additional to the metrics required on Part V.A.2 of this Resolution and Order.
4. The Energy Bureau **ORDERS** PREPA to report to the Energy Bureau on the following additional metrics:
  - i. Call Abandonment Rate;
  - ii. Distribution line inspections;
  - iii. Transmission line inspections;
  - iv. T&D substation inspections; and
  - v. Overtime.
5. The Energy Bureau **ORDERS** PREPA to standardize customer complaints to include the recommendations presented by ICPO.
6. The Energy Bureau **ORDERS** PREPA to include the metrics listed in Part V.B of this Resolution an Order prospectively as part of the quarterly reports on metrics to be submitted to the Energy Bureau.
7. The Energy Bureau **ORDERS** PREPA to submit the information required in Part V.A and Part V.B of this Resolution and Order as part of the Excel template currently being used by PREPA to submit the quarterly reports.

Be it notified and published.



  
Edison Avilés Deliz  
Chairman

  
Ángel R. Rivera de la Cruz  
Associate Commissioner

  
Lillian Mateo Santos  
Associate Commissioner

  
Ferdinand A. Ramos Soegaard  
Associate Commissioner

  
Sylvia B. Ugarte Araujo  
Associate Commissioner

#### CERTIFICATION

I certify that the majority of the members of the Puerto Rico Energy Bureau has so agreed on April 8, 2021. I also certify that on this date a copy of this Resolution and Order was notified by electronic mail to: jmarrero@diazvaz.law, kbolanos@diazvaz.law, astrid.rodriguez@prepa.com, jorge.ruiz@prepa.com, mmercado@mercado-echagaray-law.com, margarita.mercado@us.dlapiper.com, carlos.reyes@ecoelectrica.com, Legal@lumamc.com, wayne.stensby@lumamc.com, mario.hurtado@lumamc.com, Ashley.engbloom@lumamc.com, Elias.sostre@aes.com; jesus.bolinaga@aes.com; cfl@mcvpr.com; ivc@mcvpr.com; notices@sonnedix.com; leslie@sonnedix.com; victorluisgonzalez@yahoo.com; tax@sunnova.com; jcmendez@reichardescalera.com; r.martinez@fonroche.fr; gonzalo.rodriguez@gestampren.com; kevin.devlin@patternenergy.com; fortiz@reichardescalera.com; jeff.lewis@terraform.com; mperez@prrenewables.com; coterol@landfillpr.com; geoff.biddick@radiangen.com; hjcruz@urielrenewables.com; carlos.reyes@ecoelectrica.com; brent.miller@longroadenergy.com; tracy.deguise@everstreamcapital.com; agraitfe@agraitlawpr.com; h.bobea@fonrochepr.com; ramonluisnieves@rlnlegal.com; hriviera@oipc.pr.gov; info@sesapr.org; yan.oquendo@ddec.pr.gov; acarbo@edf.org; pjcleanenergy@gmail.com; Jmadej@veic.org; nicolas@dexgrid.io; javrua@gmail.com; JavRua@sesapr.org; lmartinez@nrdc.org; thomas.quasius@aptim.com; rtorbert@rmi.org; tjtortes@amscm.com; lionel.orama@upr.edu; noloseus@gmail.com; aconer.pr@gmail.com; dortiz@elpuente.us; wilma.lopez@ddec.pr.gov; gary.holtzer@weil.com; ingridmvila@gmail.com; rstgo2@gmail.com; agc@agcpr.com; presidente@ciapr.org; cpsmith@unidosporutuado.org; jmenen6666@gmail.com; cpares@maximosolar.com;



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mildred@liga.coop; rodrigomasses@gmail.com; presidencia-  
secretarias@seguros multiples.com. I also certify that today, April 8, 2021, I have filed the  
Resolution and Order issued by the Puerto Rico Energy Bureau.

I sign this in San Juan, Puerto Rico, today April 8, 2021.

  
Sonia Seda Gaztambide  
Client

