

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

**IN RE:** THE DEPLOYMENT OF ELECTRIC  
VEHICLE CHARGING INFRASTRUCTURE

**CASE NO.:** NEPR-MI-2021-0013

**SUBJECT:** Supplementary Filing on  
Implementation of EV TOU Rates for NEM  
Customers.

**RESOLUTION AND ORDER**

**I. Introduction and Background**

On January 13, 2023, the Energy Bureau of the Puerto Rico Public Service Regulatory Board ("Energy Bureau") issued a Resolution and Order ("January 13 Resolution") regarding the Draft Phase I Electric Vehicle Plan ("Phase I EV Plan") filed by LUMA<sup>1</sup> on September 1, 2022<sup>2</sup> and the *Revised Draft for the Electric Vehicle Rate Design Proposal* ("EV Rate Design Proposal") filed by LUMA on July 21, 2022. Through the January 13 Resolution, the Energy Bureau approved the Interim Electric Vehicle Time of Use Rate ("Interim EV TOU Rate"), subject to certain modifications, and ordered LUMA to finish development of and launch the Interim EV TOU Rate by September 30, 2023.<sup>3</sup> The Energy Bureau also ordered LUMA to file a Final Phase I EV Plan by March 30, 2023 and to report every thirty (30) days on the process with the data collection and billing to integrate Interim EV TOU Rate ("Billing Integration Reports").<sup>4</sup>

On February 17, 2023, LUMA filed before the Energy Bureau a document titled *Motion Submitting Project Schedule in Compliance with Resolution and Order of January 13, 2023 and Requesting Modification of Certain Deadlines Thereunder* ("February 17 Motion") requesting the modification of certain deadlines and timeframes in the January 13 Resolution, including extending the deadline to begin the billing integrating the Interim EV TOU Rate to the end of November 2023 or sixty (60) days following the date when customer enrollment has reached a minimum threshold number of customers, whichever occurs later.<sup>5</sup>

On March 29, 2023, the Energy Bureau issued a Resolution and Order ("March 29 Resolution") approving LUMA's request to modify the deadline for beginning billing integrating the Interim EV TOU Rate until November 30, 2023, or sixty (60) days following the date when customer enrollment has reached a minimum threshold number of customers whichever occurs later.<sup>6</sup>

On May 1, 2023, LUMA filed before the Energy Bureau a document titled *Motion to Submit Final Phase I EV Plan in Compliance with Resolution and Order of January 23, 2023*, which contained the document titled *Puerto Rico's Electric Vehicle Adoption Plan* ("PR-EVAP").

<sup>1</sup> LUMA Energy, LLC. and LUMA Energy ServCo, LLC. (jointly referred as "LUMA").

<sup>2</sup> *In re: The Deployment of Electric Vehicle Charging Infrastructure*, case No.: NEPR-MI-2021-0013, LUMA's *Motion Submitting Draft Phase I EV Plan and Request to Postpone Compliance Technical Hearing No. 3 and Concomitant Deadline to Submit Revised Phase I EV Plan* filed by LUMA on September 1, 2022, and LUMA's *Motion Re-Submitting Exhibit 1 Filed on September 1, 2022 with Technical Repairs and Requesting Substitution of Original Exhibit* filed by LUMA on September 2, 2022.

<sup>3</sup> January 13 Resolution at pages 9.

<sup>4</sup> *Id.*, at pages 11 and 14.

<sup>5</sup> February 17 Motion at pages 5-9.

<sup>6</sup> March 29 Resolution at page 3.



After several procedural matters, on March 1, 2024, the Energy Bureau issued a Resolution and Order (“March 1 Resolution”) extending the deadline for the commencement of integrating the Interim EV TOU Rate until April 30, 2024.<sup>7</sup>

On March 28, 2024, LUMA filed before the Energy Bureau a document titled *Request for Approval to Incorporate the Electric Vehicle-Time of Use Rate into the Model Bill* (“March 28 Motion”) in Case No. NEPR-MI-2021-0008,<sup>8</sup> which included as Exhibit 1, a proposed revision of the Model Bill to include changes relating to the Interim EV TOU Rate. On April 8, 2024, the Energy Bureau issued a Resolution and Order (“April 8 Resolution”) approving LUMA’s request to implement in the Model Bill the Interim EV TOU Rate as filed in Exhibit 1 of the March 28 Motion, in that same case.<sup>9</sup>

On April 8, 2024, LUMA filed before the Energy Bureau a document titled *Motion to Submit April 2023 Billing Integration Report in Compliance with Orders of January 13 and February 14, 2023, and Inform on the Tariff Sheet for the Interim EV TOU Rate and Customer Outreach Progress* (“April 8 Motion”), whereby LUMA submitted as Exhibit 2, the tariff sheet for the Interim EV TOU Rate (“EV TOU Tariff Sheet”) as approved by the January 13 Resolution. Through the April 8 Motion, LUMA also informed the Energy Bureau that it developed an internal customer outreach and enrollment plan in alignment with the January 13 Resolution.<sup>10</sup>

On April 29, 2024, LUMA filed before the Energy Bureau a document titled *Motion Re-Submitting the Tariff Sheet for the Interim EV TOU Rate* (“April 29 Motion”), whereby LUMA submitted as Exhibit 1, an updated version of the EV TOU Tariff Sheet that contains a formula for calculating the EV TOU Rate, to replace the need for LUMA to change for customer to refer to a new tariff every quarter.<sup>11</sup>

On April 30, 2024, LUMA filed before the Energy Bureau a document titled *Information Motion Regarding Launch of EV TOU Rate and Request for Release from Requirement to File Billing Integration Reports* (“April 30 Motion”). Therein, LUMA informed the Energy Bureau that on April 30, 2024, it completed the development and launch of the Interim EV TOU Rate, including commencing billing integrating the EV TOU Rate, in compliance with the January 13 Resolution, as modified by the March 1 Resolution and requests the Energy Bureau deem LUMA in compliance with the aforementioned resolutions.<sup>12</sup> LUMA also requested that the Energy Bureau release LUMA from the requirement to submit further Billing Integration Reports after the Billing Integration Report scheduled for May 8, 2024.<sup>13</sup>

On May 22, 2024, the Energy Bureau issued a Resolution and Order (“May 22 Resolution”) taking notice of the EV TOU Tariff sheet, releasing LUMA from the requirement to submit further Billing Integration Reports after filing the report scheduled for May 8, 2024, and agreeing with LUMA on the use of a formula-based approach for calculating the EV TOU Rate to avoid the need for a new tariff every quarter.<sup>14</sup> Through the May 22 Resolution, the Energy Bureau also stated that it had learned of the potential impacts of LUMA’s Interim EV TOU Rate on net energy metering (“NEM”) customers depending on the amount of solar generated and the timing of EV charging consumption under the Interim EV TOU Rate and

<sup>7</sup> March 1 Resolution at page 2.

<sup>8</sup> *In re: Review of LUMA’s Model Bill*, Case No.: NEPR-MI-2021-0008, *Request for Approval to Incorporate the Electric Vehicle-Time of Use Rate into the Model Bill*, filed by LUMA on March 28, 2024.

<sup>9</sup> April 8 Resolution, at page 2.

<sup>10</sup> April 8 Motion at page 5.

<sup>11</sup> April 29 Motion at page 2.

<sup>12</sup> April 30 Motion at page 5.

<sup>13</sup> *Id.*, at pages 5-6.

<sup>14</sup> May 22 Resolution at page 6.



issued requests for information to LUMA related to the interaction of the Interim EV TOU Rate on net metering customers and associated customer outreach and education.<sup>15</sup>

On June 3, 2024, LUMA filed before the Energy Bureau a document titled *Motion to Submit Revised EV-TOU Tariff Sheet and Responses to Requests for Information in Compliance with Order of May 22, 2024, and Inform on Compliance with Requirement to Submit Model Bill* ("June 3 Motion") and refiled the Interim EV TOU Tariff Sheet as Exhibit 1.

On July 15, 2024, LUMA filed before the Energy Bureau a document titled *Motion Re-Submitting the Spanish EV-TOU Rate Tariff Sheet* ("July 15 Motion") that contained as Exhibit 1, corrections to the Spanish Interim EV TOU Rate Tariff Sheet to address an inconsistency between the language in the English and Spanish versions of a footnote.

On July 26, 2024, LUMA filed before the Energy Bureau a document titled *Notice of Barriers to Implementation of Interim EV-TOU Pilot Program Rate for NEM Customers* ("July 26 Motion") that notified the Energy Bureau of a billing configuration limitation within LUMA's Customer Care and Billing ("CC&B") system that prevents the simultaneous participation of General Residential Service ("GRS") customers in both the NEM program and the Interim Electric Vehicle Time of Use Pilot Program ("Interim EV TOU Pilot Program"). LUMA stated that it is unable to offer the Interim EV TOU Pilot Program to Net Energy Metering General Residential Service ("NGRS") customers due to the CC&B system limitations and that the Interim EV TOU Rate will not be reflected in the NGRS customers' upcoming bills.<sup>16</sup> Within the July 26 Motion, LUMA stated its intention to notify participating NGRS customers of the billing system limitation and the implications on their ability to participate in the Interim EV TOU Pilot Program before the close of the billing cycle on July 28, 2024.<sup>17</sup> Through the July 26 Motion, LUMA also stated that it would provide the Energy Bureau with a detailed assessment on the billing system limitations by August 2, 2024<sup>18</sup> and stated it will continue to explore alternatives to support NEM customers in the Interim EV TOU Pilot Program.<sup>19</sup>

On August 2, 2024, LUMA filed before the Energy Bureau a document titled *Supplementary Filing on Implementation of EV TOU Rate for NEM Customers* ("August 2 Motion") that contains as Exhibit 1, a document titled *Update on the Interim EV-TOU Pilot Program*. Through the August 2 Motion, LUMA provides further information on the limitations encountered in the implementation of the Interim EV TOU Pilot Program and proposals for addressing barriers to the participation of NEM customers in an EV TOU rate.

## II. Discussion and Analysis

The role of a pilot is to test the viability of a program and identify any unforeseen challenges and barriers to customer adoption and scalability. Within the *Update on the Interim EV-TOU Pilot Program*, LUMA summarizes the barriers it has identified in deploying the Interim EV TOU Rate to NEM customers. These barriers include (1) the ability of LUMA's system to account for solar energy during off-peak hours and (2) a billing configuration limitation within the CC&B system that prevents for simultaneous participation of GRS customers in both the NEM program and the Interim EV-TOU Pilot Program.<sup>20</sup> LUMA indicates that it has

<sup>15</sup> *Id.*, at pages 4-5.

<sup>16</sup> July 26 Motion at page 7.

<sup>17</sup> *Id.*.

<sup>18</sup> *Id.*, at page 8.

<sup>19</sup> *Id.*, at page 7.

<sup>20</sup> August 2 Motion, Exhibit 1 at page 7.



already notified affected customers via email about the barriers to continued participation in the Interim EV TOU Pilot Program.<sup>21</sup>

LUMA identifies short-term and long-term solutions to address these barriers. In the short term, which LUMA defines as one (1) year, the solution is to temporarily unenroll NEM customers currently participating in the Interim EV TOU Pilot Program and (2) invite those customers to participate in a research project to be conducted along-side the Interim EV TOU Pilot Program in order to learn more about EV charging behavior and to “develop a more suitable longer-term solution, tailored to the needs and constraints of NEM customers.”<sup>22</sup> LUMA plans to leverage the existing Interim EV-TOU Pilot Program assets including the registration and data collection platform and internal resources. LUMA indicates it will provide up to 250 qualifying NEM and EV customers with an incentive for twelve (12) months of participation in the research project.<sup>23</sup>

The long-term solutions include the need for LUMA to invest in system enhancements for updating multiple energy consumption measurements, develop functionalities to differentiate between energy generated and consumed during on- and off-peak time periods, updates to the CC&B system to integrate with a TOU Rate structure, and enhance data processing capabilities.<sup>24</sup> LUMA does not provide a time frame for the long term solutions.

Given the current barriers to the participation of NGRS customers in the Interim EV TOU Pilot Program, the Energy Bureau **APPROVES** LUMA’s proposal to unenroll NGRS customers to avoid those customers experiencing inaccurate billing or incurring charges related to the Interim EV TOU Rate.

The Energy Bureau understands that a significant percentage of EV owners in Puerto Rico may have solar photovoltaic systems and operate under a NEM arrangement, and it is therefore critical that LUMA develop a means for these customers to effectively participate in an EV TOU rate. While the Energy Bureau **RECOGNIZES** the value of the research project proposed by LUMA to find a long-term solution to this issue, LUMA has not provided the Energy Bureau with sufficient detail on the timeline, scope and cost of the research project. Therefore, the Energy Bureau **ORDERS** LUMA to provide detailed responses to the request of information (“ROI”) in Section III of this Resolution and Order.

### III. Request for Information

The Energy Bureau finds that LUMA has not provided sufficient information related to the current limitations of the CC&B system or the proposed research project as described in Exhibit 1 of the August 2 Motion. The Energy Bureau therefore **ORDERS** LUMA to provide responses to the following ROI within **ten (10) days** of the issuance date of this Resolution and Order:

1. Refer to Section 2.0 on page 3 of Exhibit 1 as included in LUMA’s August 2 Motion related to the billing integration tests.
  - a. Please describe each billing integration test conducted in connection with testing the implementation of the EV TOU Rate with NGRS customers. Include in your response a description of the methodology and results for each test.
  - b. What type of EV TOU rate was used in the billing integration tests? For example, did the billing integration tests examine a three-period TOU rate?

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

<sup>22</sup> *Id.*

<sup>23</sup> *Id.*, at pages 7-8.

<sup>24</sup> *Id.*, at page 8.



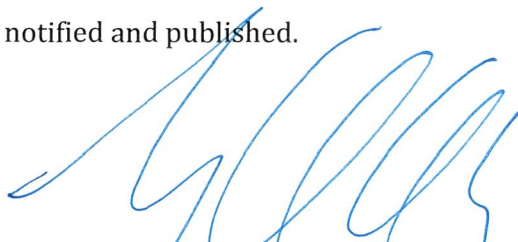
- c. Please explain why the issue of billing configuration limitations with the CC&B system was not identified during the billing integration tests.
2. Please provide a detailed explanation of the “billing configuration limitation.”
3. What upgrades or new investments will LUMA need to make to address the “billing configuration limitation”? Please provide a description of each upgrade or new investment.
4. How does LUMA plan to fund the upgrades or new investments identified in response to questions 3?
5. Does LUMA have an anticipated date by when it will make the necessary upgrades to the billing system to address the “billing configuration limitation”?
6. Refer to Exhibit 1 of the August 2 Motion at Section 4.0 related to the research project.
  - a. What is the anticipated start date and end date of the research project?
  - b. Please explain how LUMA plans to use the EV charging data from the research project to develop solutions to barriers preventing NEM customers from enrolling in an EV TOU rate.
  - c. What incentive level does LUMA plan to provide to customers enrolling in the research project?
  - d. Will the customer incentive be the cost associated with the research project? If not, please provide a budget table for each year of the research project.
  - e. How will LUMA fund the research project and the associated customer incentives?

#### IV. Conclusion

Based on the findings cited in Section II of this Resolution and Order:

1. The Energy Bureau **APPROVES** LUMA's proposal to unenroll NGRS customers in the Interim EV TOU Pilot Program.
2. The Energy Bureau **ORDERS** LUMA to comply with all requests for information contained in Section III of this Resolution and Order.


Be it notified and published.




\_\_\_\_\_  
Edison Avilés-Deliz  
Chairman



\_\_\_\_\_  
Sylvia B. Ugarte Araujo  
Associate Commissioner



\_\_\_\_\_  
Ferdinand A. Ramos Seegard  
Associate Commissioner



\_\_\_\_\_  
Antonio Torres Miranda  
Associate Commissioner



**CERTIFICATION**

I certify that the majority of the members of the Puerto Rico Energy Bureau agreed on August 26, 2024. Associate Commissioner Lillian Mateo Santos did not intervene. Also certify that on August 26, 2024, I have proceeded with the filing of this Resolution and Order and was notified by email to margarita.mercado@us.dlapiper.com; laura.rozas@us.dlapiper.com; julian.angladapagan@us.dlapiper.com.

I sign in San Juan, Puerto Rico, today, August 26, 2024.



Sonia Seda Gaztambide  
Clerk

