

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

NEPR Received: Feb 29, 2024 9:37 PM
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**IN RE: ELECTRIC VEHICLE
CHARGING INFRASTRUCTURE
DEPLOYMENT**

CASE NO. NEPR-MI-2021-0013

**SUBJECT: Motion to Submit Semi-Annual Report in
Compliance with Order of January 13, 2023**

**MOTION TO SUBMIT SEMI-ANNUAL REPORT IN COMPLIANCE WITH ORDER
OF JANUARY 13, 2023**

TO THE HONORABLE PUERTO RICO ENERGY BUREAU:

COMES now LUMA Energy ServCo, LLC (“LUMA”), through the undersigned legal counsel, and respectfully states, submits and requests the following:

I. Relevant Procedural Background

1. On January 13, 2023, the Puerto Rico Energy Bureau of the Public Service Regulatory Board (“Energy Bureau”) issued a Resolution and Order (the “January 13th Order”) making several determinations regarding the Draft Phase I Electric Vehicle Plan (“Phase I EV Plan”) filed by LUMA on September 1, 2022¹ and the Revised Draft Electric Vehicle Rate Design Proposal (“Interim EV TOU Rate”) filed by LUMA on July 21, 2022².

2. In the January 13th Order, the Energy Bureau ordered LUMA to file by April 30, 2023, a Final Phase I EV Plan incorporating the guidance in the January 13th Order, including

¹ See 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 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 on September 2, 2022.

² See LUMA’s *Motion Submitting Revised EV Rate Design Proposal* filed July 21, 2022.

addressing various subjects and requirements. *See* January 13th Order on page 14. The Energy Bureau also ordered LUMA to take several actions associated with the Phase I EV Plan and the Interim EV TOU Rate by specified deadlines or timeframes, including, among others, to: submit by February 10, 2023, a Project Schedule for implementation of the Interim EV TOU Rate (the “Project Schedule”) (*see id.* at pages 11 and 14); complete the development and launch of the Interim EV TOU rate, incorporating the modifications specified in the January 13th Order, by September 30, 2023 (*see id.* at pages 9, 10 and 14); report every thirty (30) days on the progress with the data collection and billing to integrate the Interim EV TOU Rate (“Billing Integration Reports”); “[o]ver the next six months, review and propose improvements to its outreach and public access policies and practices [...] and submit a memorandum to the Energy Bureau setting out the actions it plans to adopt” (*id.* at pages 3 and 14) (the latter, the “Customer Outreach Memorandum”); and “[o]ver the next nine months, engage in outreach with low-income and disadvantaged communities to determine what they consider their transportation electrification priorities to be” (“Customer Outreach Implementation”) (*id.* at pages 4 and 14). The Energy Bureau also ordered LUMA to file Semi-Annual Reports in which it “should follow through and account for its proposed actions, and report on the specific outcomes of each action”. *See id.* at page 6. The Energy Bureau ordered LUMA to specifically incorporate in these reports information listed in the January 13th Order, covering subjects such as Customer Education, Customer Engagement, Planning for Grid Infrastructure and System Improvement, Support for EV Charging Infrastructure, Workforce Development and EV Rates and Charging. *See id.* at pages 6-8.

3. On February 14, 2023, the Energy Bureau issued a Resolution and Order (“February 14th Order”) extending the deadline for LUMA to file the Project Schedule until February 17, 2023. The Energy Bureau also ordered LUMA to present the Billing Integration

Report commencing on March 13, 2023 and “every 30 days thereafter with progress on data collection and billing to integrate the Interim EV Rate”. *See* February 14th Order on page 2.

4. After other procedural events³, on February 17, 2023, LUMA submitted the Project Schedule addressing the tasks to fulfill requirements relating to the Phase I EV Plan and the development and launch of the Interim EV TOU Rate. *See Motion Submitting Project Schedule in Compliance with Resolution and Order of January 13, 2023 and Requesting Modification of Certain Deadlines Thereunder* dated February 17th, 2023, (“February 17th motion”) and its Exhibit 1. In addition, LUMA requested the Energy Bureau to modify certain deadlines or timeframes established in the January 13th Order in accordance with the deadlines and timeframes included in the Project Schedule. Specifically, among other requests, LUMA asked the Energy Bureau to extend the timeframe to conduct the customer outreach research and analysis and submit the Customer Outreach Memorandum to the Energy Bureau in the next nine (9) months (instead of in the next six (6) months). Additionally, LUMA requested that the Customer Outreach Implementation commence by the end of September 2023. *See id.* at page 9.

5. On March 29, 2023, the Energy Bureau issued a Resolution and Order (the “March 29th Order”) determining, among others, the approval of the Project Schedule submitted by LUMA in its February 17th Motion. Additionally, the Energy Bureau granted LUMA’s request in the February 17th Motion to modify certain deadlines and timeframes subject to maintaining the deadlines for filing the Final Phase I EV Plan and Interim EV TOU Rate Launch. Moreover, the Energy Bureau granted LUMA an extension until December 31, 2023, to submit the Customer

³ On February 9, 2023, LUMA requested an extension to file the Project Schedule by February 17, 2023 (*see Motion Requesting Brief Extension to File Project Schedule Required by Resolution and Order of January 31, 2023 and Submitting Progress Report Due By February 13, 2022 and Information on Status of RFP Due by February 15, 2023 under Such Resolution and Order* of that date).

Outreach Memorandum, and until September 30, 2023, to commence Customer Outreach Implementation.

6. On May 1, 2023, LUMA submitted to the Energy Bureau the Final Phase I EV Plan in compliance with the January 13th Order in the form of the document titled Puerto Rico’s Electric Vehicle Adoption Plan (“PR-EVAP”). *See Motion to Submit Final Phase I EV Plan in Compliance with Resolution and Order of January 13, 2023*, filed on that date. In the PR-EVAP, LUMA included the requirements to file Semi-Annual Reports set forth in the January 13th Order and provided a reporting schedule establishing reporting deadlines of sixty (60) days “following the half end of the fiscal year”. *See id.* Exhibit 1, Section 6.0.

7. On June 6, 2023, the Energy Bureau issued a Resolution and Order (“June 6th Order”) taking notice of the filing of the PR-EVAP (*see* June 6th Order on page 3”) and making several findings, statements and issuing orders. The Energy Bureau ordered LUMA to:

1. Continue implementing the Interim EV TOU rate.
2. Review and propose improvements to its outreach and public access policies and practices, and file [the Customer Outreach Memorandum] setting out the actions LUMA plans to adopt based on that review by July 13, 2023 in accordance with the [January 13th Order].
3. Prepare for a Virtual Technical Conference which shall be scheduled by the Energy Bureau **within 30 days** of LUMA filing [the Customer Outreach Memorandum] to discuss the feedback LUMA collects from its low-income customers, and to articulate the next steps LUMA will take to address barriers to low-income EV adoption;
4. Consider targeting public transportation, school buses, and fleets as a means to provide low-income customers with access to the benefits created by transportation electrification.
5. File a report, within three (3) months of the notification of [the June 6th Order], that articulates the specific actions LUMA will take regarding each of the federal funding opportunities that LUMA identified in the PR-EVAP. [...]

6. Report on the semi-annual reports the specific actions that LUMA is taking to assist entities in procuring and implementing federal funds, as part of its semi-annual reports, including specific timelines.

See id. at pages 3-4 (footnote omitted).

8. On July 13, 2023, LUMA submitted a motion to the Energy Bureau requesting clarification of various aspects of the June 6th Order, including, among others, that the deadlines for the Customer Outreach Memorandum and the Customer Outreach Implementation are those set forth in the March 29th Resolution and Order. *See Motion to Request Clarification of Resolution and Order of June 6, 2023* filed by LUMA on that date (“July 13th Motion”).

9. On August 11, 2023, the Energy Bureau issued a Resolution and Order (“August 11th Order”) making various findings and determinations and issuing associated orders in attention to the July 13th Motion. The Energy Bureau clarified that the deadlines for the Customer Outreach Memorandum and the Customer Outreach Implementation are those set forth in the March 29th Resolution and Order. *See August 11th Order* on page 3. The Energy Bureau then ordered LUMA to begin Customer Outreach Implementation by September 30, 2023, submit the Customer Outreach Memorandum by December 31, 2023, prepare for a Virtual Technical Conference within thirty (30) days of filing the Customer Outreach Memorandum and “[c]onsider targeting public transportation, school buses, and fleets as a means to provide low-income customers with access to the benefits created by transportation electrification as part of its engagement with low-income and disadvantaged communities and provide a discussion of its findings related to this topic in [the Customer Outreach Memorandum]”. *See id.* at page 5.

10. In compliance with the January 13th Order, as modified by the March 29th Order, the June 6th Order and the August 11th Order, on January 2, 2024, LUMA submitted the Customer Outreach Memorandum. *See Motion to Submit Report on Customer Outreach Memorandum in*

Compliance with Resolutions and Orders of January 13, 2023, As Modified by Resolutions and Orders of March 29, 2023, June 6, 2023 and August 11, 2023 filed on January 2, 2024.

11. On January 12, 2024, the Energy Bureau issued a Resolution and Order taking notice of the Customer Outreach Memorandum and scheduling a Hybrid Technical Conference for February 1, 2024, “on the topic of LUMA's Customer Outreach Memorandum, its efforts to collect information from low-income customers related to electric transportation, and the steps LUMA will take to address barriers to low-income EV adoption”. *See* January 12th Resolution on page 1.

12. On February 1, 2024, the Hybrid Technical Conference was held and LUMA provided a presentation regarding the Customer Outreach Memorandum.

13. On February 1, 2024, LUMA filed a copy of the presentation it provided during the Hybrid Technical Conference (“February 1st Presentation”). *See Motion to Submit Presentation Offered During Hybrid Technical Conference of February 1, 2024, Regarding LUMA's Customer Outreach Memorandum* (“February 1 Motion”).

14. On February 6, 2024, in compliance with the January 13th Order and the February 14th Order, LUMA submitted the Billing Integration Report for February 2024, which is the twelfth Billing Integration Report filed to date.

15. On February 12, 2024, the Energy Bureau issued a Resolution and Order (“February 12th Order”) in which it accepted LUMA’s February 1st Presentation and ordered LUMA, among others, to “[p]rovide a description of how LUMA plans to further engage with the public transportation and fleet sectors, especially those located in or serving disadvantaged communities, within its forthcoming [PR-EVAP] Semi-Annual Report”. *See* February 12th Order on page 1.

II. Submittal of Semi-Annual Report

16. LUMA hereby submits its 2024 Fiscal Year Semi-Annual Report pursuant to the January 13th Order and in attention to the requirements in the June 6th and February 12th Orders.

See Exhibit 1

WHEREFORE, LUMA respectfully requests that the Energy Bureau **take notice** of the aforementioned and **accept Exhibit 1** in compliance with the Semi-Annual Reporting Requirements under the January 13th, June 6th and February 12th Orders.

RESPECTFULLY SUBMITTED

In San Juan, Puerto Rico, this 29th day of February 2024.

We hereby certify that we filed this motion using the electronic filing system of this Energy Bureau and that we will send an electronic courtesy copy of this motion to the attorney for PREPA, lionel.santa@prepa.pr.gov and to the Independent Office of Consumer Protection by submittal to Hannia Rivera, hriviera@jrsp.pr.gov. LUMA understands that other participants or stakeholders in this proceeding will be notified as a result of the publicity of the filings in this process. Notwithstanding, LUMA will send a courtesy copy of the filing to the following stakeholders: agalloza@aggpr.com; alberto.cortes@warrendelcaribe.com; aldo@skootel.com; angel.d.rodriguez@outlook.com; antonio@velocicharge.com; apietrantoni@pmalaw.com; azayas@azeng.net; bigwheelcorp@gmail.com; blazquezmalu@gmail.com; brightsunpr@gmail.com; carlosxcedeno@gmail.com; clrivera@caguasexpressway.com; flota@caguasexpressway.com; cnegrette@solrenew.com; CR.Tejera@ddec.pr.gov; dacosta@aggpr.com; daniel.perez@totalenergies.pr; dcordero@group-em.com; direxec@ciapr.org; divine.energy@hotmail.com; ecruz@pmalaw.com; eduardo.pinera@toyota.com; Edwin.Acevedo@ddec.pr.gov; emelyies.torres@toyota.com; epenerypr@gmail.com; erica.cosme@gsonnell.com; Fberrios@peritoselectricistas.org; francisco.berrios@hotmail.com; franciscojrullan@yahoo.com; gerard.berlinski@toyota.com; gerardo_cosme@solartekpr.net; gperez@solrenew.com; hamely@motorambar.net; ialsina@plazalasamericas.com; idiaz@glenninternational.com; info@carlosmatta.com; jack@pantekpartners.com; jameauxl@aim.com; jan.rodriguez@toyota.com; javrua@sesapr.org; jbouza@caguasexpressway.com; jcardona@aggpr.com; jmartinez@pmalaw.com; jorrodriguez@motorambar.net; jortiz@caguasexpressway.com; jose.maeso@crowley.com; jpibernus@motorambar.com; JSantana@motorambar.com; jtosado@motorambar.net; juan.diaz.galarza@guidehouse.com; jvazquez905@gmail.com; kenan.d.davila@sargentlundy.com; kkoch@tesla.com; l.marcano@aconer.org; lsundeen@tesla.com; luisgmoreno@gmail.com; Marangelly.Cruz@toyota.com; marilyn.maldonado@toyota.com; mlandron@plazaad.com; mpietrantoni@pmalaw.com; nannette.berrios@solpetroleum.com; nmontes@ccmpr.com; nrodriguez@senado.pr.gov; Ochavez@Padigm.com; odette@grupofernandezpr.com; omundo@plazalasamericas.com;

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Exhibit 1

Semi-Annual Report



LUMAPR.COM

Puerto Rico's Electric Vehicle Adoption Plan (PR-EVAP) Semi-Annual Report

NEPR-MI-2021-0013
February 29, 2024

Summary of Key Accomplishments and Progress

As part of LUMA's mission to establish a modern grid, LUMA continues to support the growth of solar and clean energy across Puerto Rico, ushering in an energy future that includes more solar, wind, and Electric Vehicles (EVs). LUMA's historic progress in advancing the implementation of renewables across the island includes:

- Developing Puerto Rico's Electric Vehicle Adoption Plan (PR-EVAP) to accelerate the growth and infrastructure deployment for EVs;
- Helping to connect more than 84,000 customers to rooftop solar, representing over 530 megawatts of renewable energy, and averaging over 4,500 monthly net energy metering connections, the fastest rate in Puerto Rico's history.

These multifaceted renewable energy initiatives serve not only to advance Puerto Rico's clean energy goals but also to improve the future reliability of the electric system for our customers.





Content

- Introduction
- Reporting Indicators
 - ✓ Customer Education
 - ✓ Customer Engagement
 - ✓ Grid Infrastructure Planning
 - ✓ EV Charging Infrastructure Support
 - ✓ Workforce Development
 - ✓ EV Rates and Charging
- Transportation Electrification Partnership
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- Public Transportation and Fleet Sector Outreach Next Steps
- Additional EV Educational and Stakeholders Outreach Initiatives
- Appendix

Introduction

LUMA is determined to build a cleaner energy future for all Puerto Ricans and embraces its role as a trusted advisor on the PR-EVAP to help ensure all customers and industry stakeholders have effective and equitable access to EVs.

This semi-annual report provides current information on a broad spectrum of actions, including customer education and engagement, planning for grid infrastructure and system improvement, support for electric vehicle charging infrastructure, workforce development, and EV rates and charging. LUMA tracks and reports on various indicators and progress, ensuring transparency and accountability in our endeavors to build a more sustainable and resilient energy ecosystem for the benefit of Puerto Rico's 1.5 million customers.



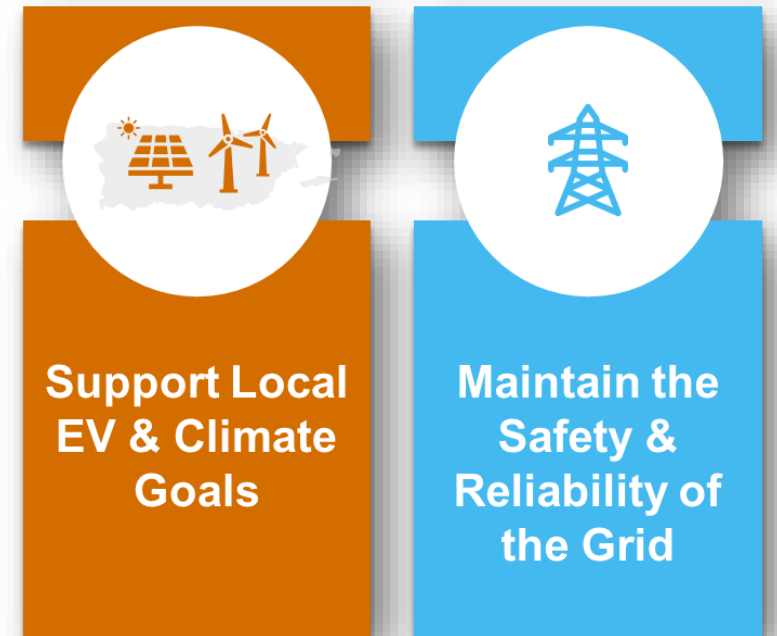
PR-EVAP Guiding Principles



Introduction

LUMA has made significant efforts to educate and engage with different stakeholders, including low-income community leaders, to share useful information about EVs and the Time of Use rate (TOU) to ensure equitable access is considered in the Adoption of EVs in Puerto Rico.

The successful adoption of EVs is critically dependent on other actors and industry stakeholders taking coordinated action under effective public policies implemented by the Government of Puerto Rico. Although there is much work to be done, the transition towards clean energy in Puerto Rico is already in progress, and LUMA reiterates its steadfast commitment to work in concert with various stakeholders to build a more reliable, more resilient, more customer-focused, and cleaner energy system for Puerto Rico.



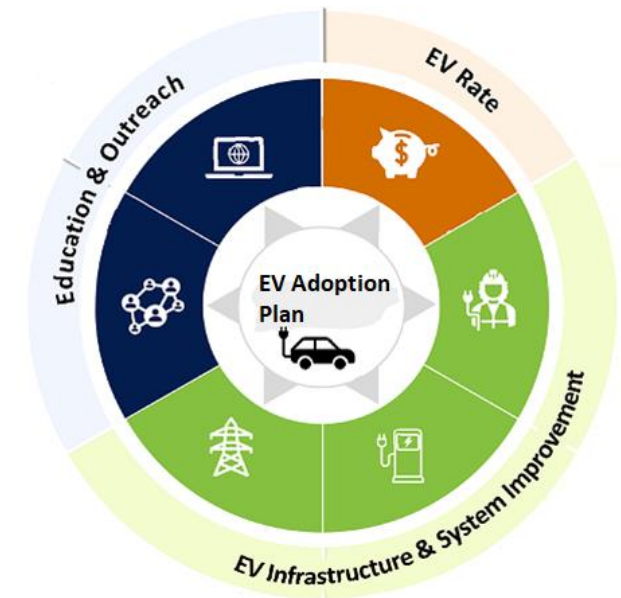
PR-EVAP Guiding Principles



Reporting Indicators

The outlined reporting indicators serve as tools for evaluating various aspects of LUMA's EV program. By tracking these indicators and data points, LUMA can assess the program's performance, identify areas for improvement, and comply with regulatory requirements outlined in the Energy Bureau January 13, 2023, Resolution and Order. Additionally, these indicators facilitate transparency, enable stakeholder engagement, and support informed decision-making regarding the EV program's implementation and progress.

1. **Customer Education**
2. **Customer Engagement**
3. **Planning for Grid Infrastructure and System Improvement**
4. **Support for EV Charging Infrastructure**
5. **Workforce Development**
6. **EV Rates and Charging**



Customer Education

- LUMA developed a suite of general and program-specific educational resources to provide information on EVs, including charging technology, the benefits of EVs, and EV program offerings such as the interim EV TOU rate currently in development.
- In October 2023, LUMA launched an EV-focused webpage that provides accessible and EV-specific educational information for customers.

Visits to LUMA's EV landing webpage

Month	Amount
October	67
November	100
December	89
Total	256



Customer Education – Face-to-Face Meetings

Sponsoring Entity	Event	Event description	Month
Puerto Rico Public Energy Policy Office (PPPE)	Electrificación de la Transportación en Puerto Rico	<ul style="list-style-type: none"> Met with key government representatives and industry stakeholders to discuss the status of transportation electrification and future efforts to accelerate EVs adoption. 	September 2023
Puerto Rico Highways & Transportation Authority (PRTHA)	National Infrastructure Vehicle Infrastructure Program (NEVI)	<ul style="list-style-type: none"> LUMA provided preliminary planning support related to infrastructure location for the installation of future EV charging stations. 	October 2023
Puerto Rico Association of Restaurants (ASORE)	ASORE Annual Convention	<ul style="list-style-type: none"> Engaged with convention participants and visitors at the LUMA booth discuss LUMA's efforts with the EVAP and the interim EV TOU rate. Distributed educational material about EVs. 	October 2023



Customer Education – Face-to-Face Meetings

Sponsoring Entity	Event	Event description	Month
Solar and Energy Storage Association (SESA)	SESA 2023 Summit	<ul style="list-style-type: none"> Engaged with visitors, participants, and stakeholders to discuss LUMA's efforts with the EVAP and the interim EV TOU rate. Distributed educational material about EVs 	November 2023
Solutions for the Energy Transformation for Puerto Rico (SETPR)	Integrated Resource Planning meetings across the island	<ul style="list-style-type: none"> Engaged with visitors, participants, and stakeholders to discuss LUMA's efforts with the EVAP and the interim EV TOU rate. Distributed educational material about EVs and the interim EV TOU rate. 	October & November 2023



Customer Engagement

Customer Engagements	Underserved Communities Represented
“Electrificación de la Transportación en Puerto Rico” Event (Sponsored by the Puerto Rico Energy Public Policy Office)	X
Solar and Energy Storage Association (SESA) 2023 Summit	X
Solutions for the Energy Transformation for Puerto Rico (SETPR) Meetings	X
Association of Restaurants of Puerto Rico (ASORE) 2023 Annual Convention	X
Interviews with Low Income Community Leaders	X
J.D. Power Survey	X
LUMA EV webpage online survey publication	X
LUMA Voice of the Customer	X



Grid Infrastructure Planning & System Improvement

Stakeholder engagement on Planning and System Improvement

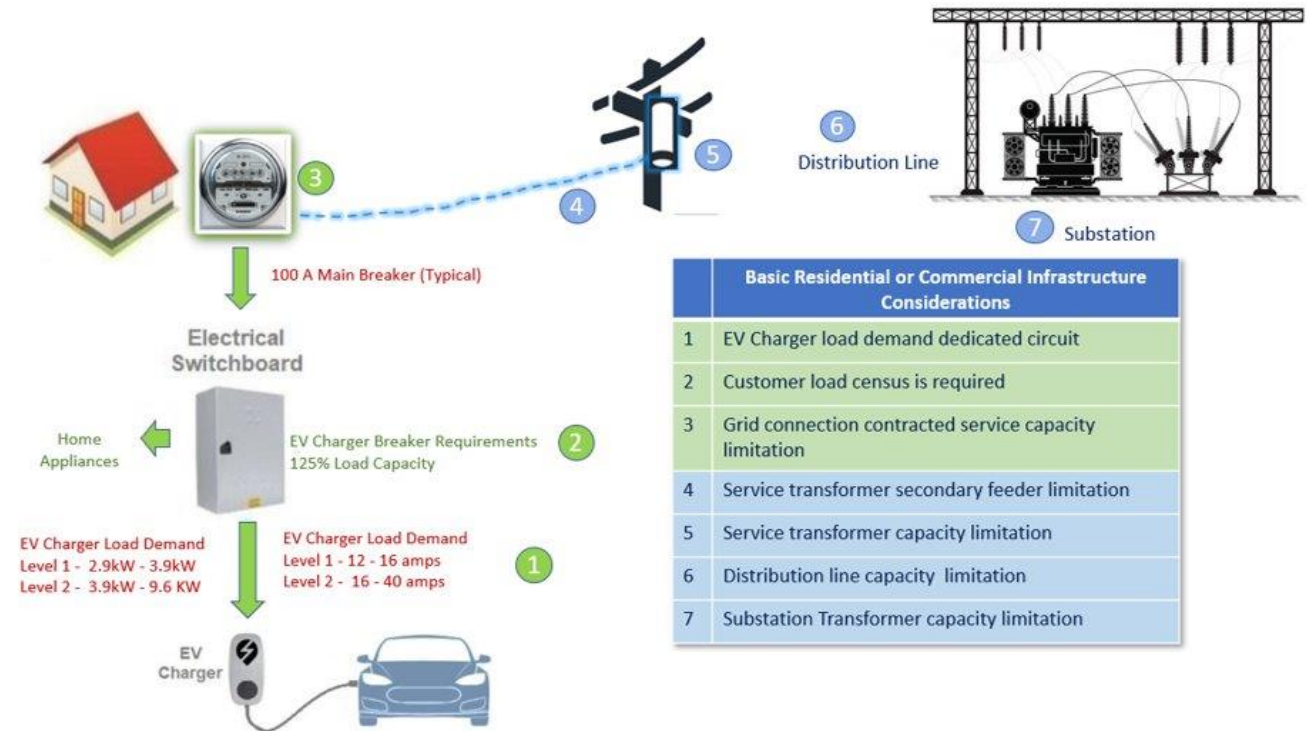
- Puerto Rico Highway and Transportation Authority (PRTHA)- LUMA provided preliminary planning support related to infrastructure location for the installation of future EV Charging stations sponsored by the National Electric Vehicle Infrastructure program (NEVI) in Puerto Rico. The U.S. Department of Transportation's (DOT) Federal Highway Administration (FHWA) NEVI Formula Program provides funding to states to strategically deploy electric vehicle (EV) charging stations and to establish an interconnected network to facilitate data collection, access, and reliability.
- *Grupo Unido de Importadores de Automóviles (GUIA)* - Meetings to discuss LUMA's support role within the EV market.
- *Department of Economic Development & Commerce (DEDC)* - meetings to discuss and develop the scope of an EV market study commissioned by the Puerto Rico Energy Policy Office.
- Sonnell Transportation-2023 Clean School Bus Rebates Program Electric Utility Partnership letter signed by LUMA to affirm the discussion of the future project plans for the fleet and charging infrastructure at Sonnell's Facilities. EPA's Clean School Bus (CSB) Program provides \$5 billion over five years (FY 2022-2026) to replace existing school buses with zero-emission and low-emission models. LUMA's support to Sonnell Transportation facilitates the grant request and federal funding access to install Sonnell's EV Infrastructure.
- Puerto Rico Department of Transportation and Public Works (DTOP) - LUMA obtained an updated inventory list of EVs in Puerto Rico which will provide useful data on LUMA's infrastructure planning efforts.

Grid Infrastructure Planning & System Improvement scenarios are being developed within the Integrated Resource Plan proceeding.



Support for EV Charging Infrastructure

- In the coming months, LUMA will develop additional content for the EV webpage including:
 - An Electric Vehicle Supply Equipment (EVSE) installation guidebook
 - An EV readiness checklist and
 - Manuals for Interconnection and Project connection
- Webpage visitors and customers will be able to download these documents.
- LUMA will track using currently available tools the number of page visits and downloads and leverage the different communications and proxy data.



Workforce Development

- LUMA is committed to developing and educating its workforce to meet the demands of the expanding EV industry. Understanding the importance of a comprehensive workforce development, LUMA aims to establish a solid foundation that will nurture a flourishing EV market in Puerto Rico.
- As part of our ongoing efforts to train our workforce on EVs, LUMA employees have completed several comprehensive EV trainings sponsored by the **Federal Energy Management Program (FEMP)**. LUMA will leverage this knowledge to develop a general training session for the rest of the workforce.



EV Rates and Charging

- LUMA provided educational information and updates about TOU programs and announced the future interim EV-TOU Rate on LUMA's webpage.
- EV Rates and Charging indicators will be reported once the interim EV TOU Rate is launched in April 2024 (expected).

Pricing Period	EV-TOU Formula
On-Peak Energy Charge	117.1% x FCA
Shoulder Energy Charge	100% x FCA
Off-Peak Energy Charge	58.5% x FCA

Electric Vehicle Webpage TOU section

Time of Use Rate (TOU)

LUMA is working to soon offer a Time of Use (TOU) residential rate, where energy charges vary based on the time of the day. By using this special rate, you may be able to save money by paying a less expensive rate for charging your vehicle.

■ Lowest cost time to charge an EV
 ■ Highest cost time to charge an EV

Time Period	Cost Level
9AM – 5PM (Off-peak)	Lowest cost (1 green bar, \$)
5PM – 11PM (Peak)	Highest cost (3 red bars, \$\$\$)
11PM – 9AM (Shoulder-peak)	Medium cost (2 yellow bars, \$\$)

If you own an electric vehicle and have an interest to enroll in this special tariff once launched, feel free to contact us at: EV@lumapr.com with your name and vehicle model and we will contact you once the program is ready for enrollment.

<https://lumapr.com/vehiculos-electricos/>



Monthly Billing Integration Reports

- LUMA files monthly Billing Integration Reports that inform the Energy Bureau and the public of new developments toward the integration of the EV TOU Rate.
- LUMA is committed to carrying out the required processes efficiently to enable seamless integration and a positive customer experience.
- As of February 2024, LUMA has filed **12** Billing Integration Reports.

EV Billing Integration Status Update

G On target **Y** Caution **R** Off plan **C** Complete

Key Activity Summary	
•	Billing system integration efforts continue with the Third-party telematics vendor. Functional design documents are finalized, and the buildout of actual configuration changes can begin.
•	Build and test Oracle CC&B process to receive EV Time of Use (TOU) Data. Third-party telematics vendor will send aggregated vehicle data to LUMA through established secure transmission protocols. The CC&B system will use the aggregated consumption data to generate the detail for charges on customer bills.
•	Continued work through IT/Cybersecurity protocols to ensure proper design and permissions to mitigate potential implementation challenges.
•	LUMA has developed an Updated Tariff Sheet for the Residential TOU Rate filed on July 2022. The terms and conditions were revised to inform customers of process and requirements. The Updated Tariff Sheet will be filed with the Energy Bureau and sent to interested EV owners to further advise them of the rate and invite them to enroll.
•	As part of LUMA's customer outreach efforts, met with OIPC to discuss the Updated Tariff Sheet.

Key Milestones	Date	Status
Functional design documents finalized	January	C
Landing page elements have been finalized, enhancing visibility for customers accessing the website.	February	C
Development and execution of customer facing materials.	Ongoing	G
Build and test Oracle CC&B process to receive EV Time of Use (TOU) data	March	G*
Launch production processes and monitor steps	April	G*

Risks / Issues:
• LUMA strives to adhere to the timeline, and it is crucial to acknowledge that achieving seamless customer experience may require additional time.
* On target based on the timeline provided by LUMA in previous billing integration reports and Motion to Update timeline to Commence Billing Integrating Interim EV TOU Rate filed on February 1, 2024.

February Billing Integration Report



Transportation Electrification Partnership

LUMA has signed a partnership letter regarding the Clean School Bus Program, to support **Sonnell Transportation** in seeking to incorporate electric buses and EV chargers in its facilities through a grant from the United States Environmental Protection Agency (EPA).

- The company will add 25 electric buses to its fleet.
- Their services will help to support transportation electrification serving low-income communities.
- Electric buses operate more quietly, producing less noise pollution, and have zero harmful tailpipe emissions, which will improve local air quality.



Public/Fleet Transportation Outreach – Next Steps

Based on the feedback received during the latest EV technical conference, LUMA will add the following initiatives to engage with the public transportation and fleet sector:

- Identify public transportation and school bus companies that provide services to low-income and disadvantaged communities.
- Create a survey directly targeted to fleets and school bus companies or entities to obtain their feedback and have a better understanding of the barriers related to the electrification of their fleets.
- Engage in sessions with public transportation companies and entities to share educational information about the benefits of fleet electrification.
- Highlight the benefits of fleet electrification through a new section on the EV webpage.

Summary of Customer Outreach Efforts

- LUMA conducted customer outreach efforts to gather insights into customers' knowledge, awareness, challenges and opinions regarding EVs and transportation electrification in Puerto Rico.
 - Interviews were conducted with community leaders representing approximately 20 low-income communities
 - J.D. Power Survey with 6,502 respondents
 - LUMA EV Webpage Online Survey available for all 1.5 million LUMA customers
- These efforts helped LUMA gather feedback from respondents and obtain a better understanding of their needs and desires regarding transportation electrification.
- For more details about these customer outreach efforts and results, please see the Appendix section.

Additional EV Education & Stakeholder Outreach Initiatives

- LUMA engaged with the GUIA group to inform and educate about LUMA's role in the EV sector which resulted in LUMA's participation in the GUIA EDUCA initiative.
- LUMA will continue meeting periodically with GUIA to exchange market and utility information to facilitate and support a faster transition to EVs and enhance the grid infrastructure.
- The existing online EV survey will be modified to gather data on family composition to better place respondent's family in the adequate income bracket and determine more precisely its income level. This will provide LUMA and stakeholders with greater visibility over market conditions that will inform utility decisions having greater impacts on the customers.
- As part of its continued engagement, LUMA will participate in the next GUIA EDUCA on March 5th, 2024, to engage with the GUIA membership and other attendants on LUMA's efforts to support the adoption of EVs in Puerto Rico.

Appendix

Community Outreach: Low-income Communities

- As part of LUMA's efforts to reach low-income customers and better understand their needs, LUMA met with community leaders who are in tune with low-income communities.
- LUMA developed a questionnaire specifically tailored to community leaders to gather their feedback regarding transportation electrification for their communities.
- Interviews were conducted with community leaders from:
 - San Juan
 - Corozal
 - Caguas
 - Naguabo
- Interviews focused on:
 - Perception of EVs
 - Obstacles
 - Possible solutions to accelerate the adoption of EVs

Low-Income Community Outreach Findings

Poor Awareness

- 5 out of 6 interviewees expressed poor awareness in their communities.

Limited Presence

- 2 interviewees reported seeing 1 to 3 EVs in their communities.

Mixed Support

- 1 interviewee noted general support, while others had not discussed it within their communities.

No Ongoing Initiatives

- Interviewees noted that they had no awareness of ongoing initiatives or programs promoting electric transportation in their communities.

Mass Education and Initiatives

- In general, interviewees consider that actions like mass education, lower EV costs, and incentives are effective.

Infrastructure Concerns

- Interviewees expressed concerns about the existing electrical system and the need for infrastructure improvements.

Support through Tariff Reduction

- Interviewees proposed LUMA's support for EV adoption through lower electricity tariffs.

Unified Call for Subsidies

- All interviewees agree on the need for subsidies or incentives, suggesting tax exemptions and financial support.

LUMA Online Survey

LUMA published an online survey on lumapr.com to gather insights into customers' knowledge, awareness, challenges and opinions regarding EVs.

- The key objectives of this survey include the following:
 - Evaluate customers' familiarity with EVs
 - Analyze responses regarding income levels to specifically identify feedback from low-income respondents
 - Capture customers' concerns on buying an EV
 - Understand the key factors influencing the likelihood of EV purchases
 - Identify transportation preferences
- An update of the survey will be included in the next reporting period.

LUMA Online Survey Findings as of December 31, 2023

- Seven (7) of the eight (8) respondents are knowledgeable about EVs.
- Six (6) of the respondents have an income over \$60,000.
- Five (5) of the respondents own an EV and three (3) have an internal combustion engine (ICE) vehicle.
- The most common way respondents get from one place to another is by driving their own car.
- Most of the respondents never use public transportation.
- Five (5) of the eight (8) respondents think that is very important to switch to electric transportation.
- The top three concerns in purchasing an EV are:
 - Lack of public charging infrastructure
 - Concerns about the availability of EV maintenance and repair services
 - Cost of electric rates
- The top three factors that influence the likelihood of switching to an EV are:
 - Offers for discounts on installing a charging station at their home
 - Offers for discounted electric rates for EV owners
 - Financial incentives or subsidies

J.D. Power Survey

LUMA collaborated with J.D. Power for the execution of EV customer surveys, identifying low-income customers and aiming to understand adoption barriers and market characteristics in Puerto Rico.

Customer Survey Timeline and Number of Respondents		
Time Frame	CY2022 (Q1 – Q4)	CY2023 (Q1 – Q3)
Total Number of Respondents	4,269	1,873

Key Objectives



Measure customers EV ownership and assess where to charge.



Evaluate customer familiarity with EVs to determine educational needs.



Capture customers thoughts and concerns on buying and leasing EVs.



Understand the key factors influencing the likelihood of EV purchase.



Utilize survey findings to support the development of the PR-EVAP initiatives.

J.D. Power Survey Results

EV Ownership

EV Ownership Type	Low-income		Non-Low-Income		Total	
	%	n	%	n	%	n
Hybrid	4.4	64	6.5	155	5.7	219
Plug-in hybrid	0.2	3	2.3	56	1.5	59
100% Electric	1.0	14	2.9	70	2.2	84
None	94.4	1,364	88.3	2,119	90.6	3,483
Total	100.0	1,445	100.0	2,400	100.0	3,845

Familiarity with EVs

Familiarity with EVs	Low-income		Non-Low-Income		Total	
	%	n	%	n	%	n
I've heard of electric vehicles but don't know much about them	73.9	1,021	51.0	1,140	59.8	2,161
I have heard of electric vehicles and know quite a bit about them	18.8	260	33.9	758	28.2	1,018
I know a lot about electric vehicles	7.2	100	15.1	337	12.1	437
Total	100.0	1,381	100.0	2,235	100.0	3,616

Interest in EVs

Interest in EVs	Low-income		Non-Low-Income		Total	
	%	n	%	n	%	n
I plan on getting an electric vehicle for my next vehicle	1.7	23	9.9	221	6.7	244
I would consider getting an electric vehicle as my next vehicle	8.0	110	22.1	493	16.7	603
I have interest in getting an electric vehicle in the future, but not for my next vehicle	11.4	158	20.4	457	17.0	615
I have no interest in getting an EV	38.2	528	25.9	579	30.6	1,107
Don't know/haven't considered it	40.7	562	21.7	485	29.0	1,047
Total	100.0	1,381	100.0	2,235	100.0	3,616



LUMA's Electric Vehicle Brochure

LUMAPR.COM

What is an Electric Vehicle?

Electric vehicles, often referred to as EVs, are automobiles powered by electricity instead of gasoline or diesel. They use electric motors to generate power, which comes from rechargeable batteries. These batteries are charged by plugging the vehicle into an electrical outlet or a charging station. There are two main types of EVs:

Battery Electric Vehicles (BEVs): are powered solely by electric energy stored in the battery. They don't have an internal combustion engine and produce zero tailpipe emissions.

Plug-in Hybrid Electric Vehicle (PHEV): are powered by a combination of battery power and gasoline engine that is typically used as a backup.

Charging Types

Electric vehicle chargers come in three types of levels: Level 1, Level 2, and Direct Current (DC) Fast Charging. Level 1 and Level 2 chargers are most common in homes, public places like shopping malls and workplaces. On the other hand, fast charging chargers are usually located along roads and highways and are more suitable for long trips.

	Level 1	Level 2	DC Fast Charge
Voltage	120 V AC	208 – 240 V AC	208 – 480 V AC
Range	2 – 5 miles per hour	10 – 20 miles per hour	180 – 240 miles per hour
Charging Time from Empty	40 - 50 hours	4 – 10 hours	20 minutes – 1 hour
Location	Home	Home, Workplace, and Public	Public

Source: <https://www.electrification.com/ev-charging-types/basics-of-ev-charging.aspx>

While LUMA does not build, operate, or maintain EV Charging stations, we will continue to improve the electrical grid to support the expansion of charging networks.

Benefits of Electric Vehicles

Save Money: EVs are more energy efficient and have a lower operating cost than traditional vehicles. Additionally, electric vehicles do not require oil changes, resulting in reduced maintenance costs.

No More Gas Stations: Charge your car at home overnight or at work if your employer offers workplace charging.

Performance: Electric motors provide instant torque, resulting in quick acceleration and responsive performance.

Benefits to the Environment: EVs produce zero tailpipe emissions, reducing air pollution and greenhouse gas emissions that contribute to climate change.

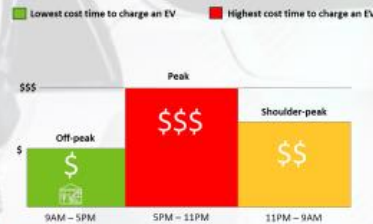
Quiet and Smooth Operation: EVs are quieter and offer smoother acceleration compared to traditional vehicles contributing to reducing noise pollution in urban areas.

Incentives: Customers may also receive incentives for owning an EV. Currently, the Puerto Rico Department of Treasury grants a refund on some taxes paid on electric or hybrid vehicles. Learn more at: <https://hacienda.pr.gov/publicaciones/determinacion-administrativa-num-11-08>



Time of Use Rate (TOU)

LUMA is working to soon offer a Time of Use (TOU) residential rate, where energy charges vary based on the time of the day. By using this special rate, you may be able to save money by paying a less expensive rate for charging your vehicle.



If you own an electric vehicle and have an interest to enroll in this special tariff once launched, feel free to contact us at: EV@lumapr.com with your name and vehicle model and we will contact you once the program is ready for enrollment.

Where Can I Charge on the Road?

In Puerto Rico there are charging stations around the Island where you can charge your vehicle. To locate the stations, you can use the [PlugShare.com](https://www.plugshare.com) app. This is a free online tool that will help you plan your trip and locate available charging stations in Puerto Rico.



Scan this code with your mobile phone to participate in the Electric Vehicle survey.

Contact Us
Email: ev@lumapr.com
www.lumapr.com



ELECTRIC VEHICLES

Driving the acceleration of clean energy in Puerto Rico.

