

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

NEPR
Received:
Jun 3, 2024
11:59 PM

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

CASE NO. NEPR-MI-2021-0013

SUBJECT: 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

**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 REVISED
MODEL BILL**

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. Introduction

LUMA herein submits this motion to the Puerto Rico Energy Bureau to address directives related to the implementation and refinement of the Interim Electric Vehicle (EV) Time of Use (TOU) Rate in the Energy Bureau’s Resolution and Order of May 22, 2024. LUMA is committed to supporting these programs and our customers by providing incentives, and continuously learning and innovating as part of the pilot program. LUMA’s commitment extends to ensuring that the programs are not only compliant with regulatory requirements but also beneficial and accessible to our customers, thereby promoting the adoption of electric vehicles and contributing to a more sustainable energy future.

This motion includes several key components to ensure compliance with the Energy Bureau's requirements. First, LUMA has updated the EV TOU Tariff Sheet to align with the Energy Bureau’s directives, specifically clarifying the terms and conditions of consumption under

the Interim EV TOU Rate. Second, adjustments were made to the Model Bill to accurately reflect the tiered pricing system, ensuring that the total consumption and charges are correctly represented. Lastly, LUMA provides detailed responses to the Energy Bureau’s requests for information (RFIs) relating to the interaction between the Interim EV TOU Rate and net energy metering.

II. Relevant Procedural History

1. On July 21, 2022, LUMA submitted to this Puerto Rico Energy Bureau of the Public Service Regulatory Board (“Energy Bureau”) an Electric Vehicle Rate Design Proposal (“EV Rate Design Proposal”) in compliance with the Energy Bureau’s Resolution and Order of November 18, 2021 (“November 18th Order”),¹ as modified by the Energy Bureau’s Resolution and Order of May 19, 2022 (“May 19th Order”).² *See Motion Submitting Revised EV Rate Design Proposal* filed on July 21, 2022 (“July 21st Motion”). In the EV Rate Design Proposal, LUMA proposed an Interim Electric Vehicle Time of Use Rate (“Interim EV TOU Rate”) and included a proposed tariff sheet for this interim rate (the “Proposed Tariff Sheet”).

2. On September 1, 2022, in compliance with the November 18th Order, LUMA filed a draft Phase I EV Plan (“Draft Phase I EV Plan”). *See Motion Submitting Draft Phase I EV Plan*

¹ In the November 18th Order, the Energy Bureau ordered LUMA to file on or before September 1, 2022, a First Phase of an Electric Vehicle Charging Infrastructure Deployment Plan (“Phase I EV Plan”) in accordance with the specified requirements set forth in the November 18th Order (*see* November 18th Order on page 4) and file on or before May 31, 2022, a proposal for one or more rate designs targeting certain customer segments and addressing the requirements in the November 18th Order (*see id.* at pages 5-9).

² In the May 19th Order, the Energy Bureau amended the deadlines for filing the draft of the rate design proposal to May 31, 2022, and for filing a draft Phase I EV Plan for September 30, 2022, as well as established a deadline to file a final Rate Design Proposal of June 30, 2022, among others. *See* May 19th Order on page 1. LUMA filed the first draft Rate Design Proposal on May 31, 2022. *See Motion Submitting Draft of EV Rate Design Proposal* filed on May 31, 2022.

and Request to Postpone Compliance Technical Hearing No. 3 and Concomitant Deadline to Submit Revised Phase I EV Plan filed on September 1, 2022.³

3. On January 13, 2023, the Energy Bureau issued a Resolution and Order (the “January 13th Resolution and Order”) approving the Interim EV TOU Rate in the EV Rate Design Proposal, subject to modifications in the same order, and directing LUMA to file, by March 30, 2023, a Final Phase I EV Plan and complete, by September 30, 2023, the development and launch of the Interim EV TOU Rate. *See* January 13th Resolution and Order on pages 9, 10 and 14. The Energy Bureau also ordered LUMA to submit a report every thirty (30) days on the progress with the data collection and billing to integrate the Interim EV TOU Rate (“Billing Integration Report”). *See id.* at page 11.

4. In addition to other requirements and as pertinent to this Motion, in the January 13th Resolution and Order, the Energy Bureau required LUMA to “develop a customer outreach plan that details the timeline and approach for enrolling customers in the EV Time of Use (TOU) Rate”, “describe the market barriers to customer enrollment in the TOU rates and how LUMA’s outreach plan will address each barrier”, provide “estimates of the number planned customer enrollments by year, and what percent of known registered EVs this represents, and demonstrate how [the] planned enrollment matches the revised adoption forecast as described in “Estimating adoption rates” in [...] the Phase I EV Plan”. *See id.* at page 11. The Energy Bureau also required LUMA to develop customer information about the Interim EV TOU Rate, including the complete tariff

³ On September 2, 2022, LUMA resubmitted the Draft Phase I EV Plan document with certain technical repairs and requested this Energy Bureau to accept this corrected version in substitution of the version submitted on September 1, 2022 (*see* LUMA’s *Motion Re-Submitting Exhibit 1 Filed on September 1, 2022 with Technical Repairs and Requesting Substitution of Original Exhibit* of that date) which substitution was accepted by this Energy Bureau by Resolution and Order of September 7, 2022. The term “Phase I EV Plan” as used in this Motion refers to this corrected version.

sheet (meeting specified requirements), and send it to EV owners before implementing the tariff, to advise them of the rate and invite them to enroll in it. *See id.*

5. On February 14, 2023, the Energy Bureau issued a Resolution and Order ordering LUMA to present the Billing Integration Report commencing on March 13, 2023, and every thirty (30) days thereafter with progress on data collection and billing to integrate the Interim EV TOU Rate.

6. On March 29, 2023, the Energy Bureau issued a Resolution and Order modifying, among others, the deadline to commence billing integrating the Interim EV TOU Rate to November 30, 2023, or sixty (60) days following the date when customer enrollment has reached a minimum threshold number of customers, whichever occurs later.

7. On May 1, 2023, LUMA submitted to the Energy Bureau the Final Phase I EV Plan in compliance with the January 13th Resolution and Order in the form of a 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.

8. After other related procedural events,⁴ on March 1, 2024, the Energy Bureau issued a Resolution and Order in which it extended the deadline for commencement of the billing integrating the Interim EV TOU Rate until April 30, 2024.

9. On March 28, 2024, LUMA filed with the Energy Bureau in Case No. NEPR-MI-2021-0008, *In re: Review of LUMA's Model Bill* ("Model Bill Docket"), a request for approval of

⁴ On November 30, 2023, LUMA requested the Energy Bureau to extend the deadline for commencement of the billing integrating the interim TOU Rate until April 2024. *See Motion Informing Status of Billing Integrating Interim EV TOU Rate and Request for Extension of Time to Complete Such Milestone* filed on November 30, 2023, on page 8. On December 20, 2023, the Energy Bureau issued a Resolution and Order extending this deadline until February 1, 2024. On February 1, 2024, LUMA requested this Energy Bureau to modify this deadline until April 30, 2024. *See Motion to Update Timeline to Commence Billing Integrating Interim EV TOU Rate* filed on February 1, 2024, on page 8.

a revised version of the Model Bill, submitted as an Exhibit 1, to include changes to incorporate the Interim EV TOU Rate in the bill. *See Request for Approval to Incorporate the Electric Vehicle Time of Use Rate into the Model Bill* filed on March 28, 2024 (“March 28th Motion”).

10. On April 8, 2024, the Energy Bureau issued a Resolution and Order in the Model Bill Docket approving LUMA’s request to incorporate in the Model Bill the Interim EV TOU Rate as filed in Exhibit 1 of the March 28th Motion.

11. On April 8, 2024, LUMA submitted to the Energy Bureau the tariff sheet for the Interim EV TOU Rate (the “EV TOU Tariff Sheet”), in Spanish and English, and informed that it would provide copy of the Tariff Sheet to all customers showing interest in enrolling in the Interim EV TOU Rate via email through its webpage. *See 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 8th Motion”) on pages 4 and 5 and Exhibit 2. LUMA also informed that it had developed an internal customer outreach and enrollment plan in alignment with the January 13th Resolution and Order and had been implementing it; that LUMA’s communication efforts had been successful with a significant increase in customer awareness of the program and interest in participation in the rate; and that LUMA planned to continue to implement communication strategies that had proven effective and leverage strategic partnerships to increase awareness and adoption of the Interim EV TOU Rate. *See id.* at page 5

12. On April 29, 2024, LUMA filed, as an Exhibit 1, an updated version of the EV TOU Tariff Sheet informing that it had revised it to include the formula for the Interim EV TOU Rate, instead of the currently calculated rate as filed on April 8th, 2024, which is subject to quarterly

changes. *See Motion Re-Submitting the Tariff Sheet for the Interim EV TOU Rate* filed on April 29, 2024 on page 2.

13. On April 30, 2024, LUMA informed the Energy Bureau that it had completed the development and launch of the Interim EV TOU Rate, including beginning billing integrating the Interim EV TOU Rate, and requested the Energy Bureau to release LUMA from the requirement to submit further Billing Integration Reports after the filing of the Billing Integration Report scheduled for May 8, 2024. *See Informative Motion Regarding Launch of EV TOU Rate and Request for Release from Requirement to File Billing Integration Reports* (“April 30th Motion”) filed on April 30, 2024.

14. On May 22, 2024, the Energy Bureau issued a Resolution and Order (“May 22nd Resolution and Order”) taking notice of the EV TOU Tariff Sheet and releasing LUMA from the requirement to submit further Billing Integration Reports after filing the report scheduled for May 8, 2024. *See May 22nd Resolution and Order* on pages 4-6. In addition, the Energy Bureau indicates that it agrees with LUMA on using a formula-based approach in the EV TOU Rate Tariff Sheet as proposed by LUMA in the April 29th Motion. *See id.* at page 3.

15. The Energy Bureau also states that item number four (4) of the Interim EV TOU Tariff Sheet’s Terms and Conditions “does not align” with the EV Rate Design Proposal because the former provides that “consumption under this rate will be subtracted from the main meter for purposes of billing the customer’s energy charges for non-EV charging usage” while the latter provides that there will be no change to the Base Rate and “tiered pricing will be applied based on total consumption (non-EV + EV charging consumption)”. *See id.*

16. The Energy Bureau also finds that the March 28th Model Bill “is not congruent” with the EV Rate Design Proposal noting that Figure 1 of the March 28th Motion (“March 28th

Exhibit 1”) submitted in the Model Bill Docket shows a customer with an energy consumption equaling 625.00 kWh for a month, but the customer “is only charged for a total of 525.00 kWh of consumption for the Consumption Charge” and that it therefore “appears that LUMA has subtracted the customer’s EV consumption from the Consumption Charge”. *See id.* The Energy Bureau further indicates that reducing the EV charging consumption from the Consumption Charge conflicts with the “revenue neutral approach to the Interim EV TOU Rate” set forth in the July 21st Motion. *See id.* at page 4. To address these issues, the Energy Bureau orders LUMA to, within ten (10) days from the notice of the May 22nd Resolution and Order: (a) “clarify Item number four (4) in the Terms And Conditions [of the EV TOU Rate Tariff Sheet] to reflect LUMA's [July 21st Motion] and [...] refile the EV TOU Tariff Sheet” and (b) “refile the Model Bill in [the Model Bill Docket] to correct the incongruency with LUMA's [July 21st Motion], related to the treatment of the Consumption Charge”. *See id.* at pages 4 and 6.

17. Furthermore, the Energy Bureau states that it “has recently learn[ed] of the potential impacts of LUMA’s Interim EV TOU Rate on net metering customers depending on the amount of solar [energy] generated and the timing of EV Charging consumption under the Interim EV TOU Rate” and that “customers are concerned about the impact on net metering credits should they begin to charge an EV 100% Off-Peak, which corresponds to the time of day their solar system is generating the most energy (9:00a.m. -5:00p.m.)”. *See id.* at page 4. The Energy Bureau also mentions that the EV Rate Design Proposal identified net metering customers as “in need of special consideration” and had an indication in Table 5-3 that the credit will be based on what the participating customer would otherwise pay for their total consumption (non-EV and EV consumption)” and that in the April 8th Motion LUMA informed of its internal customer outreach and enrollment plan but did not discuss the “outreach to specific net metering customers”. *See id.*

The Energy Bureau then finds that LUMA “has not provided enough information related to its customer outreach and enrollment specific to net metering or how the Interim EV TOU Rate may affect this set of customers” and orders LUMA to, within ten (10) days of the May 22nd Resolution and Order, provide responses to the following requests for information in Part III of the May 22nd Resolution and Order (“RFIs”):

1. Has LUMA analyzed the interaction between the Interim EV TOU Rate and net metering? If yes, please provide a copy of that analysis and all supporting workpapers and workbooks in Microsoft Excel, unlocked, with all formulae intact. If not, please explain why not.
2. Did LUMA consider creating a different EV TOU Rate specific to net metering customers? If yes, please describe the EV TOU Rate and how it would differ from the current proposed Interim EV TOU Rate. If not, please explain why not.
3. Provide an illustrative model bill for one hypothetical residential customer with an EV and a net metered solar system for each of the following four (4) scenarios. Please provide each model bill scenario in Microsoft Excel, unlocked, with all formulae intact.
 - i. The customer has net-metered solar PV and charges an EV at home. The customer is not enrolled in the Interim EV TOU Rate and does not produce excess solar generation in the month.
 - ii. The customer has net-metered solar PV and is enrolled in the Interim EV TOU Rate and charges the EV 100% Off-Peak. The customer does not produce excess solar generation in the month.
 - iii. The customer has net-metered solar PV and is enrolled in the Interim EV TOU Rate and charges 100% On-Peak. The customer does not produce excess solar generation during the month.
 - iv. The customer has net-metered solar PV and is enrolled in the Interim EV TOU Rate and charges the EV 100% Off-Peak. The customer produces excess solar generation in the month (i.e., exports more solar than consumes energy).
4. Does LUMA have customer outreach and education materials for the Interim EV TOU Rate specific to net metering customers? If yes, please provide a copy of those materials. If not, please explain why not.

See id. at pages 4-5.

III. Submittal of Revised EV TOU Tariff Sheet

18. In Compliance with the May 22nd Resolution and Order, LUMA herein submits a revised Interim EV TOU Tariff Sheet, in Spanish and English, in which item number four (4) of the Terms and Conditions has been revised to provide as follows: “EV charging service shall be served through wiring connected to the customer’s single meter provided for General Residential Service. *See Exhibit 1.* There will be no change to the base rate and tiered pricing will be applied based on total consumption.” This last sentence contains a footnote clarifying that “[t]otal consumption includes both non-electric vehicle consumption and EV charging consumption”. LUMA will be submitting the revised Interim EV TOU Tariff Sheet to customers currently enrolled in the Interim EV TOU Tariff and will also submit it to new customers at the time of enrollment.

IV. Information on Submittal of Revised Model Bill

19. LUMA herein informs that, in compliance with the May 22nd Resolution and Order, LUMA filed with the Energy Bureau in the Model Bill Docket a revised Model Bill with a revision to reflect that the Consumption Charges apply to the entire consumption of the customer- that is, in the revised Model Bill the total consumption is shown as 625kWh and the regular Consumption Charge is applied to 425kWh while the Additional Consumption Charge is applied to 200 kWh, thereby reflecting the tiered pricing as indicated in the EV Rate Design Proposal. *See Request for Approval of Revision to Model Bill to Clarify Electric Vehicle Time of Use Charges, as Ordered by the Energy Bureau* filed in the Model Bill Docket on June 3, 2024.

IV. Responses to RFIs

20. LUMA hereby submits the responses to the RFIs in the May 22nd Resolution and Order. *See* Exhibit 2. As explained in Exhibit 1, LUMA conducted an analysis with a consulting firm of the interaction between the Interim EV TOU Rate and net energy metering which is set forth in Attachment 1 to the Exhibit. The analysis did not include any additional workpapers and Excel workbooks and therefore these documents were not included in the responses. However, LUMA has not yet determined how best to incorporate the potential scenarios outlined on the Attachment 1 to the Exhibit in the current billing system and does not foresee implementing these mechanisms as part of its pilot program.

WHEREFORE, LUMA respectfully requests that the Energy Bureau **take notice** of the aforementioned, **accept** the revised EV TOU Tariff Sheet in *Exhibit 1* herein and the Responses to the RFIs in *Exhibit 2* herein, including the Analysis LUMA's consultant provided, **and** deem LUMA in compliance with the requirements in the May 22nd Resolution and Order.

RESPECTFULLY SUBMITTED

In San Juan, Puerto Rico, this 3rd day of June 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 PREPA's General Counsel, Lionel Santa, lionel.santa@prepa.com, and to the Independent Office of Consumer Protection by submittal to Hannia Rivera, hrivera@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; apietrantonio@pmaalaw.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@pmaalaw.com; eduardo.pinera@toyota.com; Edwin.Acevedo@ddec.pr.gov; emelyies.torres@toyota.com; epenenergypr@gmail.com; erica.cosme@gsonnell.com; Fberrios@peritoselectricistas.org; francisco.berrios@hotmail.com; franciscojrullan@yahoo.com; gerard.berlinski@toyota.com;

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Exhibit 1

Revised EV TOU Tariff Sheet



RESIDENTIAL ELECTRIC VEHICLE TIME-OF-USE RATE

DESIGNATION:

EV-TOU

AVAILABLE:

Everywhere in Puerto Rico.

APPLICABLE:

This rate shall apply to residential customers taking service under the General Residential Service (GRS) tariff for domestic use who purchase or lease an on-road plug-in electric vehicle (EV) and charge the vehicle through a connection to the Puerto Rico Electric Power Authority (PREPA) distribution system at their primary residence¹. Customers who participate in this rate shall have installed at their residence an eligible EV charger or have an eligible vehicle. Service under this rate shall commence when the eligible EV charger is installed by the customer, or the eligible vehicle registered.

CHARACTER OF SERVICE:

Alternating current, 60 Hertz, 2 or 3 wires, single or three-phase; 120, 208, or 240 volts, at PREPA's option.

CHARGES:

These rates will be charged for all consumption recorded through the customer's EV charger or eligible vehicle.

Time of Use	Time of Day	Tariff Multipliers
On-Peak	5:00 p.m. – 11:00 p.m.	117.088114% X FCA*
Shoulder-Peak	11:00 p.m. – 9:00 a.m.	100.000000% X FCA*
Off-Peak	9:00 a.m. – 5:00 p.m.	58.544057% X FCA*

Customers shall also be charged all applicable riders to the GRS tariff, except for the Fuel Cost Adjustment (FCA) rider.

PRICING PERIODS:

On-Peak: 5:00 p.m. to 11:00 p.m., all days.

¹This rate was established as part of a pilot program in compliance with the Puerto Rico Energy Bureau's Resolution and Order issued on January 13, 2023, in docket NEPR-MI-2021-0013, In RE: Electric Vehicle Charging Infrastructure Deployment, and other orders and directives in that docket.



Shoulder: 11:00 p.m. to 9:00 a.m., all days.

Off-Peak: 9:00 a.m. to 5:00 p.m., all days.

TERMS AND CONDITIONS:

1. Customers taking service under this rate must demonstrate eligibility by the following requirements:
 - a. Eligible EV charger or eligible vehicle
 - b. Valid PREPA electric service account in CC&B with active residential metered agreement
 - c. Wireless internet service at the site
2. Customers who are renting their dwelling must have a separately metered service under their name for their dwelling.
3. The meter for the EV charging equipment must be connected to and have the same address as the customer's main meter.
4. EV charging service shall be served through wiring connected to the customer's single meter provided for General Residential Service. There will be no change to the base rate and tiered pricing will be applied based on total consumption.²
5. Should the charging equipment or the vehicle telematics fail to record consumption at any time, the customer will be billed the charges under the GRS tariff for any consumption during those times.
6. EV charging service shall be subject to interruption and curtailment when there is insufficient generation to meet a projected peak demand period.
7. If PREPA finds that the availability criteria of this rate are being violated, it may remove the customer from this rate.

RECONCILIATION CLAUSES AND RIDERS:

TOU Rate is available to customers enrolled in the GRS tariff, which is subject to the following Riders:

1. Rider PPCA – Purchased Power Charge Adjustment
2. Rider FOS – Fuel Oil Subsidy
3. Rider CILT – Contributions in Lieu of Taxes (CILT) – Municipalities
4. Rider SUBA - HH – Help to Humans Subsidies
5. Rider SUBA - NHH – Non-Help to Humans Subsidies
6. Rider EE – Energy Efficiency Charge
7. Rider NM – Net Metering Charge

² Total consumption consists of both, non-EV consumption and EV charging consumption.



8. Rider SC – Securitization Charge
9. Rider QF – Purchases from Qualifying Facilities (Parallel Generation)
10. Rider LP – Life Preserving Discount Rider
11. Rider DD – Direct Debit Rider
12. Rider TUP – True of Provisional Rate Increase

**TARIFA POR TIEMPO DE USO PARA VEHÍCULOS ELÉCTRICOS RESIDENCIALES****DESIGNACIÓN:**

EV-TOU

DISPONIBILIDAD:

En todo Puerto Rico.

APLICABILIDAD:

Esta tarifa aplicará a clientes residenciales que utilicen el servicio bajo la tarifa de Servicio Residencial General (GRS por sus siglas en inglés) para uso doméstico y que compren o arrienden un vehículo eléctrico (EV por sus siglas en inglés) enchufable y apto para uso vial, cargándolo a través de una conexión al sistema de distribución de la Autoridad de Energía Eléctrica de Puerto Rico (PREPA) en su residencia principal¹. Los clientes que participen de esta tarifa deberán tener instalado en su residencia un cargador de EV elegible o poseer un vehículo elegible. El servicio bajo esta tarifa comenzará cuando el cargador de EV elegible sea instalado por el cliente o el vehículo elegible sea registrado.

CARÁCTER DEL SERVICIO:

Corriente alterna, 60 Hertz, 2 o 3 cables, monofásico o trifásico; 120, 208 o 240 voltios, a opción de PREPA.

COBROS:

Estas tarifas se aplicarán a todo el consumo registrado a través del cargador de EV del cliente o del vehículo elegible.

Tiempo de Uso	Hora del Día	Multiplicadores de Tarifa
Pico	5:00 p.m. – 11:00 p.m.	117.088114% X FCA*
Intermedio	11:00 p.m. – 9:00 a.m.	100.000000% X FCA*
Fuera de Pico	9:00 a.m. – 5:00 p.m.	58.544057% X FCA*

Además, se aplicarán todas las cláusulas correspondientes a la tarifa GRS, excepto la de Ajuste de Costos de Combustible (FCA, por sus siglas en inglés).

PERIODOS DE PRECIOS:

Horario Pico: 5:00 p.m. a 11:00 p.m., todos los días.

Horario Intermedio: 11:00 p.m. a 9:00 a.m., todos los días.

¹ Esta tarifa fue establecida como parte de un programa piloto en cumplimiento con la Resolución y Orden de la Oficina de Energía de Puerto Rico emitida el 13 de enero de 2023, en el expediente NEPR-MI-2021-0013, In RE: La Implementación de Infraestructura de Carga de Vehículos Eléctricos, y otras órdenes y directivas en ese expediente.



Horario Fuera de Pico: 9:00 a.m. a 5:00 p.m., todos los días.

TERMINOS Y CONDICIONES:

1. Los clientes que reciban servicio bajo esta tarifa deben demostrar elegibilidad proporcionando lo siguiente:
 - a. Cargador de EV elegible o vehículo elegible.
 - b. Cuenta válida de servicio eléctrico de PREPA en CC&B con acuerdo de medición residencial.
 - c. Servicio de internet inalámbrico en el sitio.
2. Para los clientes que alquilan su vivienda, se requiere que cuenten con un servicio medido de forma independiente a su nombre para la misma.
3. El medidor del equipo de carga de EV debe estar conectado y tener la misma dirección que el medidor principal del cliente.
4. El servicio de carga de EV se proporcionará a través del cableado conectado al medidor único del cliente destinado al GRS. No habrá cambios en la tarifa base y se aplicarán precios por niveles en función del consumo total².
5. En caso de que el equipo de carga o la telemetría del vehículo no registren el consumo en algún momento, al cliente se le facturarán los cargos según la tarifa GRS por cualquier consumo durante esos momentos.
6. El servicio de carga de EV estará sujeto a interrupciones y recortes cuando no haya suficiente generación para cubrir un período de demanda pico proyectado.
7. Si PREPA determina que se están violando los criterios de disponibilidad de esta tarifa, podrá excluir al cliente de esta.

CLÁUSULAS DE RECONCILIACIÓN Y *RIDERS*:

La Tarifa TOU está disponible para los clientes inscritos en la tarifa GRS, la cual está sujeta a las siguientes *Riders*:

1. *Riders* PPCA - Ajuste de Carga por Compra de Energía
2. *Riders* FOS - Subsidio de Combustible
3. *Riders* CILTA - Contribuciones en Lugar de Impuestos (CELI) - Municipios
4. *Riders* SUBA - HH - Subsidios de Ayuda para Humanos
5. *Riders* SUBA -NHH - Subsidios de No Ayuda para Humanos
6. *Riders* EE - Cargo Eficiencia Energética
7. *Riders* NM - Crédito Medición Neta
8. *Riders* SC - Cargo Titulización

² El consumo total incluye el consumo de vehículos no eléctricos como el consumo de carga de EV.



9. *Riders* QF - Compras a Instalaciones Calificadas (*Qualifying Facilities*) (Generación Paralela)
10. *Riders* LP - Descuento Preservar Vida
11. *Riders* DD - Débito Directo
12. *Riders* TUP – Reconciliación Tarifa Provisional

Exhibit 2

Responses to RFIs

[Attachment consisting of Excel Spreadsheet submitted via email]



Response to RFI Regarding the
Interim EV TOU Rate in Resolution
and Order of May 22, 2024

Responses to May 22nd ROI

NEPR-MI-2021-0013

JUNE 3, 2024

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Response to the May 22nd ROI (Request of Information)

NEPR-MI-2021-0013

Response: RFI-LUMA-MI-2021-0013-20240522-PREB-0001

INTRODUCTION

All of us at LUMA are committed to supporting new technologies and providing helpful resources for our customers. On April 30th, 2024, LUMA launched the Electric Vehicles Time of Use Rate Pilot Program (EV TOU). This program provides customers with different rates depending on the time of day to promote charging during off-peak hours which promotes savings and reduces stress on the grid during hours of higher energy consumption.

Time-of-use programs are common in other jurisdictions and are often accompanied by Advanced Metering Infrastructure, like LUMA's Smart Meter Initiative, or other technologies that allow for real-time energy monitoring. These are intended to provide customers with options that could help customers save on their energy bills. TOU rates where a customer aligns their consumption with the signals could potentially result in a lower bill or equal bill if behavior one way or the other nets out all the same.

LUMA is proud to continue working with its customers, the Energy Bureau, and other collaborators on this pilot program and is excited to continue opening a path for Electric Vehicles in Puerto Rico. We encourage our customers to visit LUMAPR.com to learn more about our customer programs and special rates.

EV TOU RATE DESIGN OVERVIEW

LUMA is committed to accelerating the clean energy transformation in Puerto Rico, ushering in an energy future that includes more solar, more wind, and more electric vehicles (EVs). As part of this effort, the Interim EV Time of Use (EV TOU) Rate program launched on April 30, 2024, and is a key component to empowering the growth of vehicle electrification in Puerto Rico. This program provides customers different rates depending on the time of day to promote charging during off peak hours which promotes savings and reduces stress on the grid during hours of higher energy consumption.

On July 21, 2022, LUMA submitted the "EV Rate Design Proposal," recognizing that some EV owners would likely have solar photovoltaic (PV) systems and participate in the Net Energy Metering (NEM) Program. Consequently, LUMA is in the process of exploring options to understand the interaction between the NEM program and the EV TOU Interim Rate. Subsequently, LUMA identified specific billing limitations for these customers due to its billing system design and capabilities.

Due to limited information at the time and pursuant to the Energy Bureau's order to "first use vehicle telematics or usage data [...] instead of installing a separate interval meter to collect data on EV charging activity," and LUMA developed an interim rate aligned with the EV Rate Design as submitted on July 21, 2022 and the Energy Bureau's orders. As a pilot program, the Interim EV TOU Rate will provide LUMA

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with insights into determining which rate designs are more sustainable for EV drivers in Puerto Rico going forward and incentivize charging during off-peak hours.

LUMA notes that other utilities in North America have different rules which in some cases do not allow at all the participation of NEM customers in EV TOU programs, and LUMA decided to allow NEM customer's registrations to gather more data to assess the pilot program's assumptions and results. For that, LUMA needs to gauge the NEM customer's interest in participating and evaluate further needs and consumption behavior. However, given the novelty of this approach.

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1. ANALYSIS OF INTERIM EV TOU RATE AND NET ENERGY METERING INTERACTION

REQUEST

Has LUMA analyzed the interaction between the Interim EV TOU Rate and net energy metering? If yes, please provide a copy of that analysis and all supporting work papers and workbooks in Microsoft Excel, unlocked, with all formulae intact. If not, please explain why not.

RESPONSE

LUMA is aware of the limitations posed by the interaction of the NEM program and the EV TOU Rate. Specifically, it has identified specific billing limitations for these customers due to its billing system design and capabilities. The limitations in PREPA's legacy CC&B system, which requires modifications and updates, include the inability to account for solar energy usage during off-peak hours. This results in LUMA potentially charging the client for energy that would otherwise be free. The corresponding funding source for these necessary updates has not been currently identified.

Accordingly, LUMA has analyzed the interaction between the Interim EV TOU Rate and Net Energy Metering with a consulting firm, discussing potential approaches to this issue. The analysis is included as Attachment 1 to the Exhibit. This analysis identified potential approaches for billing combination Net Energy Metering / Interim EV TOU Rate, aiming to maintain the essential incentives of both programs.

Note that no supporting workpapers or Excel workbooks are available because neither LUMA and/or the consultant utilized these tools. The analysis includes the required examples and calculations to answer this question.

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2. CONSIDERATION OF EV TOU RATE FOR NET ENERGY METERING CUSTOMERS

REQUEST

Did LUMA consider creating a different EV TOU Rate specific to net energy metering customers? If yes, please describe the EV TOU Rate and how it would differ from the current proposed Interim EV TOU Rate. If not, please explain why not.

RESPONSE

LUMA conducted an analysis to evaluate the interaction between Net Energy Metering and the Interim EV TOU rate for customers that participated in both programs. However, LUMA did not explore creating a different EV TOU rate for Net Energy Metering customers because:

- 1) LUMA identified potential approaches for combination Net Energy Metering / EV TOU Rate customers that could preserve the key incentives of both programs. The meters currently used by LUMA do not have the technological capability to track both the time that power is being used (off-peak vs. on-peak) and where the power comes from (grid vs. solar panels and/or battery).
- 2) It was unclear how many net energy metering customers would seek participation in the Interim EV TOU Rate, and given both the time period provided to launch a pilot program as well as the intent to learn about the impacts of rate-based signals on charging behavior – the current design was maintained as a starting point for the pilot; and

LUMA is exploring alternatives for supporting Net Energy Metering customers who wish to participate in rates such as Interim EV TOU as it also proceeds with other initiatives like LUMA's forthcoming Smart Meter Initiative.

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3. ILLUSTRATIVE MODEL BILLS FOR VARIOUS SCENARIOS

REQUEST

Provide an illustrative model bill for one hypothetical residential customer with an EV and a net metered solar system for each of the following four (4) scenarios. Please provide each model bill scenario in Microsoft Excel, unlocked, with all formulae intact.

- i. The customer has net-metered solar PV and charges an EV at home. The customer is not enrolled in the Interim EV TOU Rate and does not produce excess solar generation in the month.
- ii. The customer has net-metered solar PV and is enrolled in the Interim EV TOU Rate and charges the EV 100% Off-Peak. The customer does not produce excess solar generation in the month.
- iii. The customer has net-metered solar PV and is enrolled in the Interim EV TOU Rate and charges 100% On-Peak. The customer does not produce excess solar generation during the month.
- iv. The customer has net-metered solar PV and is enrolled in the Interim EV TOU Rate and charges the EV 100% Off-Peak. The customer produces excess solar generation in the month (i.e., exports more solar than consumes energy)."

RESPONSE

The Interim EV TOU Pilot Program launched on April 30, 2024, and LUMA continues to gain insights on how to improve the program to reach the objectives of providing economic benefits to customers while mitigating the load on the grid. LUMA has not yet developed model bills for customers with such combinations. However, LUMA prepared a summary of the requested scenarios for a given NEM customer that consumed 100 kWh for EV charging. The full analysis in Microsoft Excel, unlocked, with all formulae intact is provided in Attachment 2 to the Exhibit. Table 1 shows the results of this analysis.

Table 1: Hypothetical Scenarios for NEM + EV TOU Customers

Charges	Scenario 1 Without EV TOU	Scenario 2 Off-peak	Scenario 3 On-Peak	Scenario 4 Off-peak + Net positive
Household Consumption Charges ¹	\$36.14	\$36.14	\$36.14	\$36.14
EV TOU Consumption Charges		\$6.49	\$12.69	\$6.49
FCA	\$71.62	\$60.16	\$60.16	\$60.16
Other riders	\$34.55	\$34.55	\$34.55	\$34.55
Net Energy Metering balance				(\$30.00)
Total	\$142.30	\$137.34	\$143.53	\$107.34

¹ Metered consumption, which includes EV consumption.

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4.CUSTOMER OUTREACH AND EDUCATION MATERIALS FOR EV TOU RATE

REQUEST

Does LUMA have customer outreach and education materials for the Interim EV TOU Rate specific to Net Energy Metering customers? If yes, please provide a copy of those materials. If not, please explain why not.

RESPONSE

LUMA uses multiple channels of communication with its customers. As part of LUMA's proactive outreach effort to inform NEM customers of the interaction with the Interim EV TOU rate, LUMA included the following text in the EV section of the LUMA webpage related to the method for energy accounting provided by the solar system of the owner, see Figure 1.

Figure 1: LUMA's EV Webpage ²Instructions for Net Metering Customers

Net metering customers

Customers who own or plan to own a solar photovoltaic system with or without a battery storage system will be allowed to enroll in the EV Time of Use Rate. However, since LUMA cannot at this moment discern whether the enrolled EV is being charged by the PREPA electrical system or the Participating Customer onsite generation source, LUMA will bill such Participating Customers based on the main assumption that all energy used for charging the enrolled EV is being always provided by the PREPA electrical system.

To those registered NEM customers that expressed interest in participating in the EV TOU rate program, LUMA sent an email to confirm their interest in the pilot after disclosing existing technological program barriers, see Figure 2. The goal of this outreach effort is to inform customers about the existing limitations in terms of measuring whether the vehicle was being charged by their solar system or by the grid.

Since the available technology is unable to determine how a customer leverages NEM behind the meter relative to grid energy, and LUMA does not wish to limit participation, LUMA chose to be proactive in helping customers understand how the program will be administered. This way, customers can make an informed decision about their unique renewable system and participation in the program.

Figure 2: Email to NEM and EV TOU Customer Regarding the Interaction Limitations Between EV TOU Rate and NEM Program

² LUMA's Electric Vehicle Page, <https://lumapr.com/electric-vehicles/?lang=en>

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From: Electric Vehicles <EV@lumapr.com>
 Sent: Friday, May 10, 2024 11:49 AM
 To: [REDACTED]
 Cc: Electric Vehicles <EV@lumapr.com>
 Subject: Información importante para clientes de Medición Neta de LUMA sobre el Programa Piloto de Tarifa por Tiempo de Uso para Vehículos Eléctricos (EV TOU)

Estimado cliente,

Nuestro equipo ha identificado en nuestros registros que es posible que también seas cliente de Medición Neta de LUMA.

Nos gustaría asegurarnos de que cuentas con la información necesaria para tomar una decisión bien informada sobre participar en el Programa Piloto de Tarifa por Tiempo de Uso (TOU) para Vehículos Eléctricos de LUMA, siendo también cliente de Medición Neta. Para eso, **revisa atentamente las limitaciones detalladas en los Términos y condiciones, punto 7.5.**

Entendemos que esta limitación del programa piloto de Tarifa por Tiempo de Uso para Vehículos Eléctricos puede resultar frustrante. No obstante, estamos comprometidos a encontrar soluciones que maximicen la participación y los beneficios del programa para todos los clientes de medición neta.

Le solicitamos que responda a este correo electrónico indicando si desea **proceder** con su inscripción o prefiere **retirar** su registro.

Es importante que recibamos su respuesta dentro de los próximos **5 días hábiles** para mantener su registro activo. **No avanzaremos con su inscripción** completa hasta que recibamos su respuesta.

Atentamente,

Equipo de Vehículos Eléctricos de LUMA



Figure 3: Clause 7.5 of the Terms and Conditions of the Pilot Program of the EV TOU Rate

7.5. Los clientes que posean o planeen poseer un sistema fotovoltaico solar con o sin un sistema de almacenamiento de batería podrán inscribirse en la Tarifa EV-TOU. Sin embargo, dado que en este momento LUMA no puede discernir si el EV inscrito está siendo cargado por el sistema eléctrico de PREPA o por la fuente de generación en la residencia del Cliente Participante, LUMA facturará a dichos Clientes Participantes en función del supuesto principal de que toda la energía utilizada para cargar el EV inscrito siempre es proporcionada por el sistema eléctrico de PREPA.

The customer response is tracked and swiftly addressed in the system. Table 2 is a summary of the communication logs with Net Energy metering customers.

Table 2: Customer Engagement with NEM Program: Email Response Statistics

Net Energy Metering Customers	
Contacted customers	50
Customer response	32
<i>Proceed</i>	24
<i>Withdraw</i>	8
Proceed rate	75%
Response rate	64%

As of May 24, 2024, the EV customer support team sent 50 emails to NEM customers, and 75% of the customers who responded to the email have decided to be part the program.³

LUMA's Electric Vehicles Customer Support Team continues to monitor and provide responses to its customers who seek more information about the interaction of both programs. The customer support team is trained to respond to or refer to the appropriate resource who can aid customers in reaching an

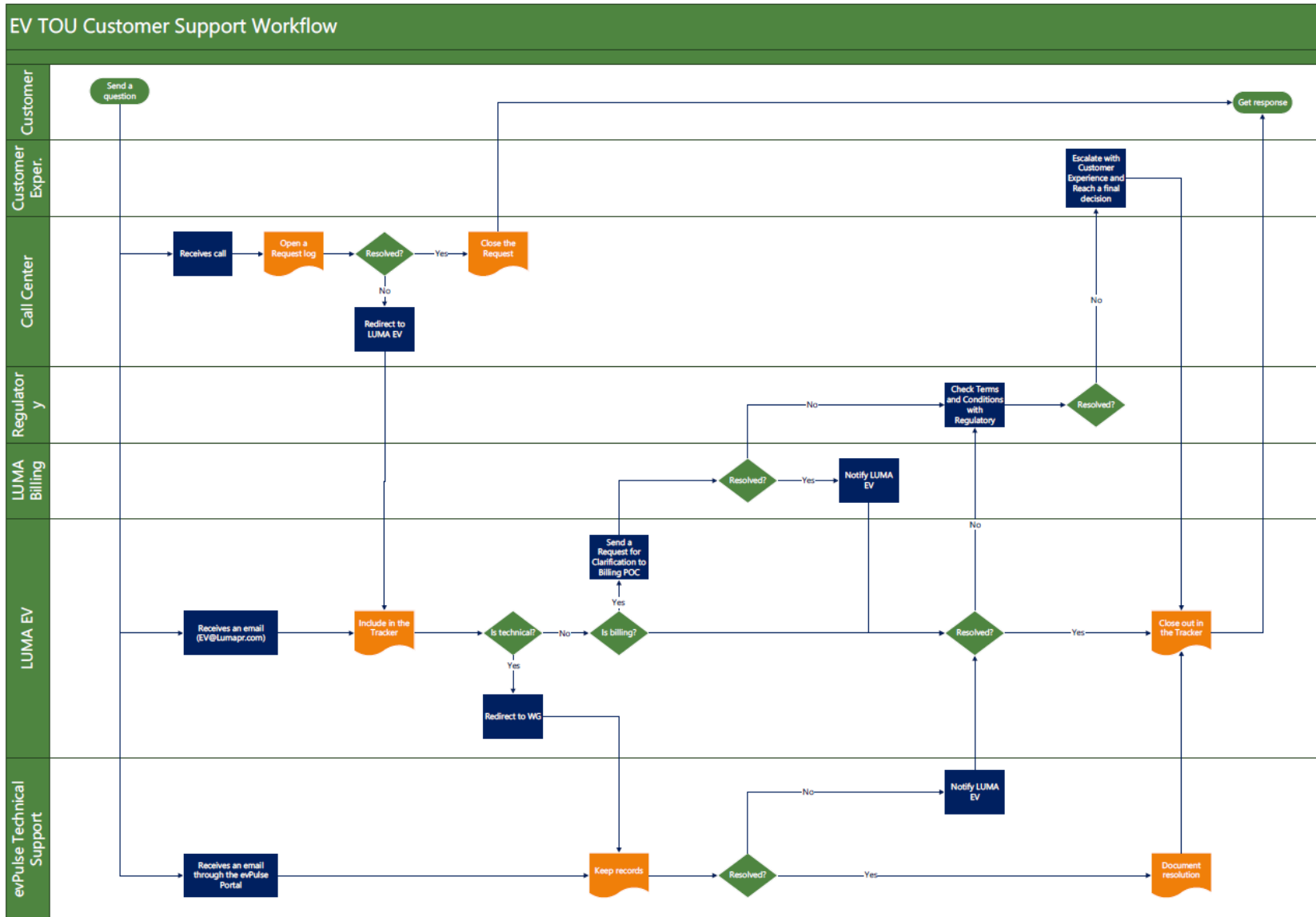
³ The Customers that LUMA communicated with had the opportunity to keep their enrollment active or unenroll from the program after being informed by LUMA of the interaction with the EV TOU Pilot Program.

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educated decision. Below is the customer support cross-functional workflow used to guide LUMA's teams on how to address customers' inquiries.

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Figure 3: EV TOU Customer Support Workflow



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Bill Determination for Combination NEM / EV TOU Rate Customers

The purpose of this document is to outline potential approaches for billing customers who participate in both the Net Energy Metering (NEM) program and the EV TOU (Electric Vehicle Time-of-Use) rate.

First, it provides an overview of the current billing procedures under the NEM program. Next, it describes how billing is intended to function under the EV TOU Rate. Finally, it presents a potential method for applying the EV TOU Rate to NEM customers who also participate in the EV TOU Rate.

The paper also acknowledges that LUMA will implement the Interim EV TOU rate pilot and collect data and results before developing a suitable method for integrating the EV TOU Rate with NEM participation. LUMA recognizes the complexity of this undertaking and is committed to thoroughly evaluating the potential impacts and benefits before making changes to the Interim EV TOU rate. Therefore, while this paper offers a potential framework, it is essential to recognize that further refinement and decision-making are necessary before any changes to billing practices are implemented.

1. How NEM works

For the purpose of determining their monthly bills, NEM customers' metered consumption is offset by their PV production that is exported to the grid and the resultant net energy amount (metered energy minus exported energy) is used for billing purposes. Their metered consumption is also reduced by their PV production that is self-consumed and not exported to the grid. Any excess production (beyond the amount needed to reduce their net energy amount to zero) in any month is carried forward to the next month. This "excess energy" is then added to the measured exports in the next month for the purposes of the determining the monthly net energy amount and the resultant energy bill, and so on from month to month. At the end of the fiscal year, any accumulated excess energy is converted to a credit on future electricity bills at a rate of \$0.075 / kWh for the customer's benefit, and LUMA also provides a credit to the Department of Education at a rate of \$0.025 / kWh.

The implicit "agreement" with NEM customers can be stated as follows: ***"you will get a credit equal to the full retail rate for monthly production from your renewable energy system up to and equal to your monthly consumption"***. The key point being that NEM customers are charged the full retail rate for all their metered consumption and get a credit at the same full retail rate for all energy produced by their renewable energy system (up to their metered consumption).

Essentially, billing under the NEM program focusses on energy produced versus energy used by the NEM customer (hence, the term "net metering"). While the NEM program adjusts the customer's energy used for billing determination, the rate they pay for energy consumed is unchanged.

For NEM customers who have an EV, but that are not participating in the EV TOU Rate, their consumption costs (excluding the benefits of renewable generation) can be broken down into four components, as shown in Figure 1.



Figure 1 Billing Components for EV owners under NEM Program

		Consumption	
		Non-EV kWh	EV kWh
Rate Components	FCA	1	4
	Base Rate & other Rate Components	2	3

Going counter-clockwise from the top left corner of the matrix in Figure 1, the four billing components for NEM customers with an EV are:

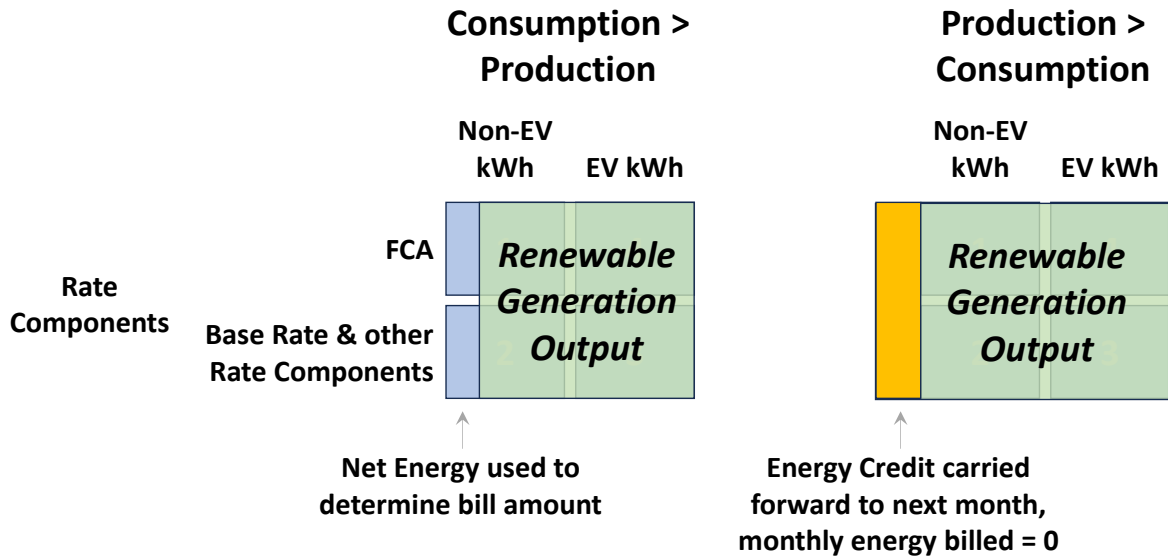
1. FCA for their non-EV kWh
2. Base Rate and other rate components for their non-EV kWh
3. Base Rate and other rate components for their EV kWh
4. FCA for their EV kWh

Based on this diagram, the “full retail rate” would simply be the FCA plus the Base Rate and other rate components, and this “full retail rate” would apply to their net energy kWh consumption.

As NEM customers produce electricity from their renewable generation, this reduces their net energy usage as shown below, but the “full retail rate” is applied to their Net Energy in any given month. This is shown on the left side of Figure 2. For the example on the right, generation exceeds consumption, so the customer’s monthly net energy is zero, their monthly billed energy would be zero¹, and there is an energy credit energy carried over to the next month.

¹ Note that the customer would continue to pay the fixed Customer Charge of \$4.

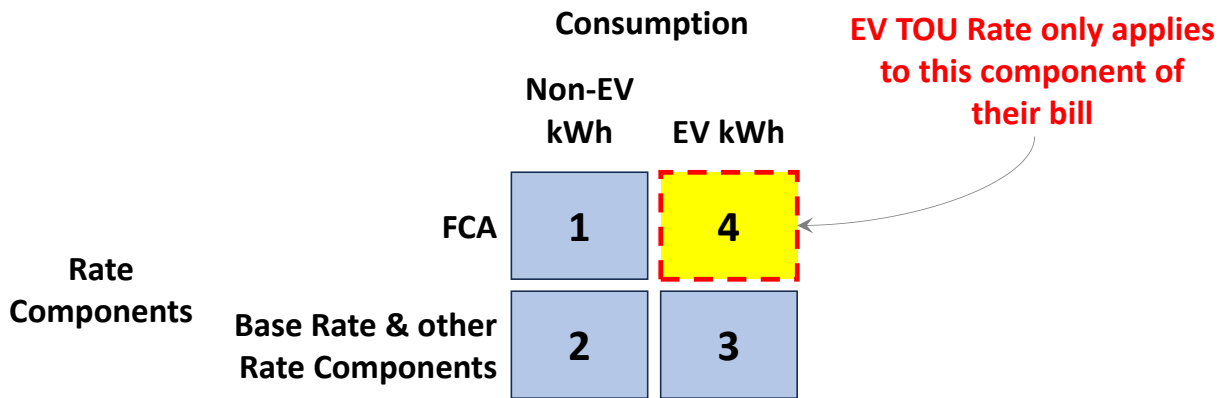
Figure 2: NEM Billing with different energy production



2. How the EV TOU Rate works

The EV TOU Rate applies only to the FCA rate component for the customer’s EV consumption, highlighted as Component 4 (in yellow) in Figure 3 below. The other three rate components (1, 2 and 3) of the customer’s bill are unchanged:

Figure 3: Billing Components under EV TOU Rate



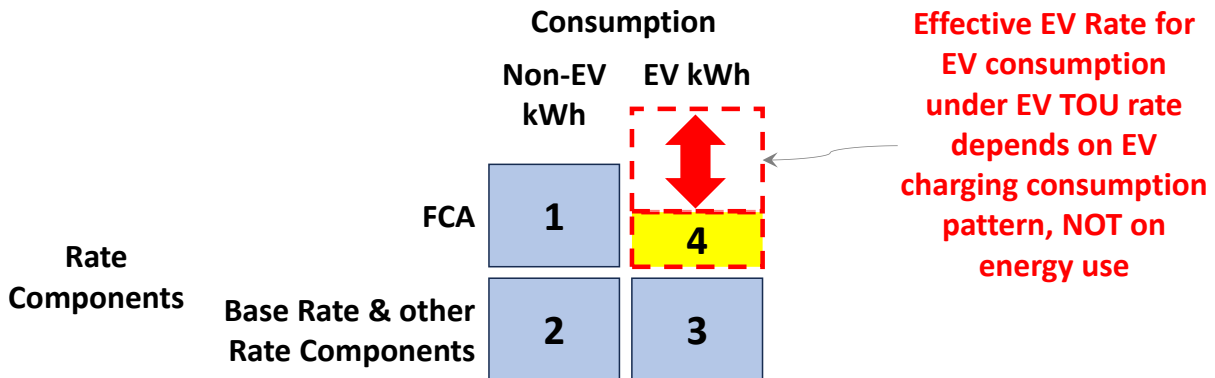
The EV TOU Rate enables customers to control their EV charging costs by adjusting when they charge their vehicles. Charging during Off-peak hours² results in lower costs compared to the Fuel Cost Adjustment (FCA) that would apply without the EV TOU Rate, while charging during On-peak hours³ results in higher costs than the FCA. This allows customers to pay more or less than the FCA based on their charging habits, as shown in Figure 4. The average cost paid for Component 4 of their bill,

² Off-peak hours are periods when electricity demand is typically lower, resulting in lower energy costs.

³ On-peak hours, on the other hand, are periods of higher electricity demand and correspondingly higher energy costs.

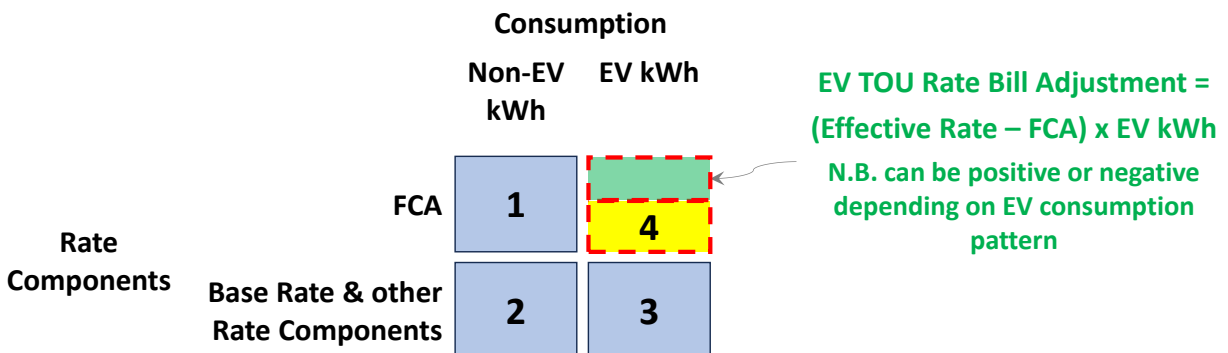
influenced by their charging schedule, is called the Effective EV Rate. As illustrated in Figure 4, the Effective EV Rate replaces the FCA in calculating Component 4 of the bill for EV TOU Rate participants. It is important to note that the other components of the bill (Components 1, 2, and 3) are not impacted by the EV TOU Rate.

Figure 4: Effective EV Rate varies depending on EV charging pattern



The difference between their monthly bill under the EV TOU Rate and what they would otherwise pay if they were not participating in the EV TOU Rate is simply the difference between their Effective EV Rate and the FCA multiplied by their EV kWh. Let's call this the EV TOU Rate Bill Adjustment, which is represented as the green box in Figure 5. The example shown in Figure 5 assumes that the customer makes a favorable change in their EV charging consumption pattern— such as by doing all of their EV charging during the Off-peak period – that lowers their Effective EV Rate (representing the yellow box 4 in the figure) to less than what they would otherwise pay (FCA). This will result in a negative value for the EV TOU Rate Bill Adjustment and a decrease in their monthly bill. However, if the EV TOU Rate participant does all their EV charging during the On-peak period, the Effective EV Rate will be higher than the FCA and the EV TOU Rate Bill Adjustment will be positive (resulting in an increase in their monthly bill).

Figure 5: EV TOU Rate Bill Adjustment



3. How the EV Rate could work with the NEM

For NEM customers seeking to also participate in the EV TOU Rate, it is important to maintain the key features of the two programs and to preserve – to the maximum extent possible – the incentives that each program provides to customers.

In simple terms, the customer incentive for each the two programs can be summarized as follows:

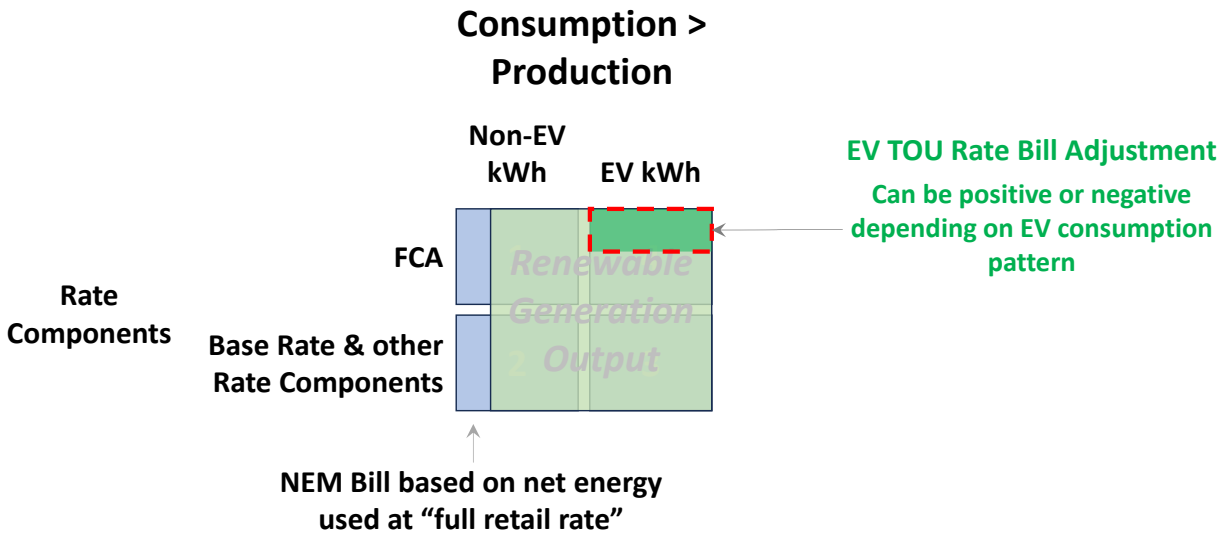
1. The NEM program provides customers with a credit based on the “full retail rate” (reflecting all rate components) for the energy produced by their renewable energy system (up to the amount of energy consumed within a month), and
2. The EV TOU Rate offers customers an opportunity to reduce the FCA rate component for their EV charging consumption through changes in their EV charging pattern. The difference in their monthly bill under the EV TOU Rate will be entirely due to the difference between their Effective EV Rate (reflecting the different EV TOU tariffs and their EV charging consumption in each of the EV TOU periods) and the FCA multiplied by their EV charging consumption (this difference is the EV TOU Rate Bill Adjustment).

As stated, these two key incentives should be preserved – to the maximum extent possible – for combination NEM / EV TOU Rate customers. Thus, combination NEM / EV Rate customers should still receive the EV TOU Rate Bill Adjustment regardless of their renewable generation output and regardless of their Net Metering Bill. Essentially, the two rate offers – NEM and the EV TOU Rate – should be applied independently to the customer’s bill.

For example, for a combination NEM / EV Rate customer whose renewable generation output is less than their total consumption, their bill could reflect the following components as shown in Figure 6 below:

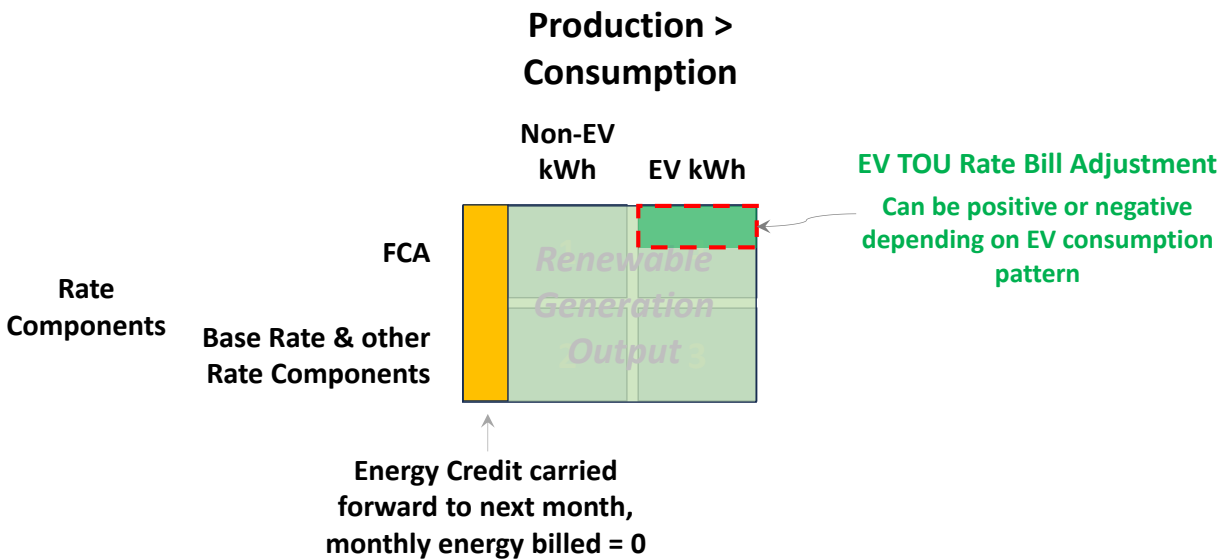
1. The NEM Bill amount reflecting their net energy multiplied by the “full retail rate” (blue boxes to the left side of the cluster in Figure 6), and
2. The EV TOU Rate Bill Adjustment (shown as the bright green box with red dashed border in Figure 6) which could be positive or negative depending on their EV consumption pattern.

Figure 6: Combination NEM / EV TOU Rate Customer with net monthly consumption



For a combination NEM / EV TOU Rate customer whose renewable generation output is greater than their total consumption, their monthly billed consumption would be zero⁴ and they would only pay the fixed Customer Charge of \$4, but the EV TOU Rate Bill Adjustment could also be applied to their bill. This is shown in Figure 7.

Figure 7: Combination NEM / EV TOU Rate Customer with net monthly credits



⁴ As per the NEM rules, any excess energy generated beyond their total consumption would carry forward to the next month.

Here are three potential approaches to billing the EV TOU (Electric Vehicle Time-of-Use) Rate Bill Adjustment for customers with a combination of NEM (Net Energy Metering) and EV TOU Rate plans, explained in paragraph form:

1. The first approach involves applying the EV TOU Rate Bill Adjustment to the customer's bill each month. If the adjustment is positive, it is added to the bill; if negative, it is subtracted. For months with a negative adjustment, only the amount necessary to bring the bill to zero is applied, with any excess accumulated over the year. At the end of the year, the accumulated excess is provided to the customer as a credit for future electricity bills, along with any credit due to excess energy per NEM rules. For example, if in January the customer's bill is \$50 and the EV TOU Rate Bill Adjustment is -\$70, only \$50 is used to zero out the bill, and the remaining -\$20 is carried over to subsequent months. This process continues monthly, and all excess adjustments are summed up and credited at the end of the year.
2. The second approach is similar but involves carrying forward excess negative adjustments to offset future monthly bills. Each month, the EV TOU Rate Bill Adjustment is applied, and any negative adjustment beyond what is needed to bring the monthly bill to zero is carried forward to future months. This ensures that monthly bills are minimized as much as possible throughout the year. At the end of the year, any remaining unutilized negative adjustments are summed up and provided as a credit for future bills, along with any credits due to excess energy from NEM. For instance, if the January bill is \$50 with a -\$70 adjustment, the bill is zeroed out and the remaining -\$20 is carried forward. In February, if the bill is \$30, the carried-forward -\$20 reduces it to \$10. This carry-forward process continues, ensuring monthly bills benefit from previous excess adjustments.
3. The third approach tracks the EV TOU Rate Bill Adjustment cumulatively over the year without reflecting it in monthly bills. Instead of applying adjustments monthly, they are recorded and summed up over the year. At the end of the year, the total cumulative EV TOU Rate Bill Adjustments are calculated and provided as a lump sum credit for future electricity bills. This year-end credit is combined with any NEM-related credits, offering a consolidated benefit for future billing periods. For example, each month the EV TOU Rate Bill Adjustments are tracked but not applied to the bill. At year-end, if the total adjustment is -\$200, the customer receives a \$200 credit to use in the following year's bills, alongside any credits from excess energy under NEM rules. This approach ensures customers receive a credit at the end of the year, maximizing the benefit from both EV TOU and NEM adjustments.

The first two approaches are very complex from a monthly bill calculation and settlement perspective, whereas the third approach simply tracks the cumulative EV TOU Rate Bill Adjustment over the year, with settlement at year-end.

Regardless of the settlement and tracking approach used, a "running tab" of the adjustment to the customer's bill due to their participation in the EV TOU Rate could also be recorded and presented on the monthly bill.

With any of the potential approaches described above, the combination NEM / EV TOU Rate customer would end up:



1. Paying the NEM bills that they would otherwise have paid even if they hadn't signed up for the EV TOU Rate
2. Receiving the benefit (or dis-benefit) of their monthly EV TOU Rate Bill Adjustments over the year based on their EV charging pattern.

Most importantly, the potential approaches ensure that the key incentives of the two programs would be preserved to encourage favorable customer behavior.

