

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

<b>NEPR</b>
<b>Received:</b>
<b>Jun 28, 2023</b>
<b>12:19 PM</b>

**IN RE:**  
IN RE: PUERTO RICO ELECTRIC POWER  
AUTHORITY PERMANENT RATE

**CASE NO. NEPR-MI-2020-0001**

**Motion in Compliance with Resolution and  
Order of June 23, 2023**

**MOTION IN COMPLIANCE WITH RESOLUTION AND ORDER OF JUNE 23, 2023**

**TO THE HONORABLE PUERTO RICO ENERGY BUREAU:**

COME NOW LUMA Energy, LLC (“ManagementCo”), and LUMA Energy Servco, LLC (“ServCo”) (jointly referred to as the “Operator” or “LUMA”), through the undersigned counsel, and respectfully state and request the following:

1. On May 31, 2023, LUMA filed before the Energy Bureau a *Motion Submitting CILTA, SUBA-HH, and SUBA-NHH Reconciliations and Proposed Factors, and Request for Confidential Treatment of Excel Spreadsheets* (“May 31<sup>st</sup> Motion”). Therein, LUMA submitted the annual reconciliation of the contributions in lieu of taxes cost adjustment (“CILTA”), help to human subsidies (“SUBA-HH”), and non-help to human subsidies (“SUBA-NHH”) riders for May 2022 to April 2023 and the proposed factors to be applied during the Fiscal Year 2024. LUMA also submitted various Excel files that contained the supporting files with all the data used for the reconciliations and the cost forecast.

2. On June 20, 2023, LUMA filed before the Puerto Rico Energy Bureau (“Energy Bureau”) a *Submission of Reconciliations for May 2023, and FCA, PPCA and FOS Calculated Factors and Request for Confidential Treatment* (“June 20<sup>th</sup> Submission”). LUMA submitted the quarterly reconciliations for the Fuel Charge Adjustment (“FCA”) and Purchased Power Charge

Adjustment (“PPCA”) riders for May 2023, and the proposed factors for the FCA, PPCA, and Fuel Oil Subsidy (“FOS”) riders for the period from July 1 until September 30, 2023. As part of the filing, LUMA included Excel spreadsheets filed publicly and confidential Excel spreadsheets with formulae intact.

3. On June 23, 2023, the Energy Bureau entered a Resolution and Order (“June 23<sup>rd</sup> Order”) directing LUMA to provide, on or before June 28, 2023, at noon, the information requested in Attachment A of the June 23<sup>rd</sup> Order.

4. In compliance with the June 23<sup>rd</sup> Order, LUMA hereby submits as *Exhibit 1* to this Motion its responses to the requests for information issued by the Energy Bureau.

**WHEREFORE**, LUMA respectfully requests that the Energy Bureau **take notice** of the aforementioned, and **deem** LUMA complied with the June 23<sup>rd</sup> Order.

**RESPECTFULLY SUBMITTED.**

In San Juan, Puerto Rico, this 28<sup>th</sup> day of June 2023.

We hereby certify that we filed this Motion using the electronic filing system of this Energy Bureau and that we will send an electronic copy of this Motion to counsel for PREPA Joannely Marrero, [jmarrero@diazvaz.law](mailto:jmarrero@diazvaz.law) and to the Independent Consumer Protection Office, through Director Hannia Rivera, [hrivera@jrsp.pr.gov](mailto:hrivera@jrsp.pr.gov).



**DLA Piper (Puerto Rico) LLC**  
500 Calle de la Tanca, Suite 401  
San Juan, PR 00901-1969  
Tel. 787-945-9107  
Fax 939-697-6147

*/s/ Margarita Mercado Echegaray*  
Margarita Mercado Echegaray  
RUA NÚM. 16, 266  
[margarita.mercado@us.dlapiper.com](mailto:margarita.mercado@us.dlapiper.com)

*/s/ Yahaira De la Rosa Algarín*  
Yahaira De la Rosa Algarín  
RUA NÚM. 18,061  
[yahaira.delarosa@us.dlapiper.com](mailto:yahaira.delarosa@us.dlapiper.com)

Exhibit 1

## Permanent Rate

# Responses in Compliance with June 23, 2023, Resolution and Order

## NEPR-MI-2020-0001

### Response: RFI-LUMA-MI-2020-0001-20230626-PREB-#001

---

#### SUBJECT

Attachment 6 (July-September 2023 Proposed Factors.xlsx)

#### REQUEST

- a. Address what the Puerto Rico Electric Power Authority and LUMA have done to improve the load forecasting process and accuracy.
- b. Explain what the "Dmax" factor on Excel row 24 represents.
- c. How is the "Dmax" factor determined? (are all typed in numbers)
- d. What does the "Gen" factor on Excel row 23 represent?
- e. How is the "Gen" factor determined? (are all typed in numbers)
- f. The forecast for July 2023 through June 2024 shows peak monthly kwh sales in July 2023 but peak generation in August 2023. How come generation is forecast to peak in August 2023 but sales (load forecast) peaks in July 2023?
- g. Does the difference between Total Consumption (Excel line 10) and Gross Generation (Excel line 12) represent line losses and internal use? If not, what do those differences represent?
- h. Is any of the internal use metered? Is data maintained on monthly or annual internal use/consumption of electricity? What data is maintained for that?
- i. Why are the line losses so high? (Refer to question the table in Attachment A of June 23<sup>rd</sup>)
- j. Are improvements being made to the transmission and distribution system that will reduce line losses and improve system reliability? Explain.

# Permanent Rate

## RESPONSE

- a. In compliance with the Puerto Rico Energy Bureau's (PREB and/or Energy Bureau) mandated "improvements to load forecasting" and consistent with LUMA's "Regulatory Long-Term Forecast Review"<sup>1</sup> and "Submission of Load Forecasting Data Needs"<sup>2</sup> filings, LUMA has been diligently enhancing its forecast processes.

A notable improvement in the load forecasting process has been the re-estimation of the regression model parameters that are used to predict consumption by class, which are further detailed below. Previously, the models used only data up to Fiscal Year (FY) 2017, while the parameter values used for the current FY 2024 forecast were derived from consumption data spanning FY 2011 through November 2022 (FY 2023). In addition to the re-estimation of the previous econometric model, LUMA is actively working on improvements that aim to refine load forecasting accuracy and ensure the utilization of up-to-date information for improved projections.

### Model Specifications

#### Residential Model

$$y_t = \sum_{m=1}^{M=12} \beta_{m,1} month_{m,t} + \beta_2 CDD_t + \beta_3 Pop_t + \beta_4 COVIDREStrans_t + \varepsilon_t$$

#### Commercial Model

$$y_t = \sum_{m=1}^{M=12} \beta_{m,1} month_{m,t} + \sum_{m=1}^{M=12} \beta_{m,2} month_{m,t} \cdot CDD_t + \beta_3 CDD_t + \beta_4 GNP_t + \beta_5 COVIDCOMtrans_t + \varepsilon_t$$

#### Industrial Model

$$y_t = \sum_{m=1}^{M=12} \beta_{m,1} month_{m,t} + \beta_2 GNP_t + \varepsilon_t$$

<sup>1</sup> See, LUMA's Motion of June 30, 2022, Docket No. NEPR-MI-2021-0001.

<sup>2</sup> See, LUMA's Motion of December 21, 2022, Docket No. NEPR-MI-2021-0001.

# Permanent Rate

## Variable Definitions

$Y_t$	Class-level billed consumption (GWh) of residential customers in month of sample $t$ .
$month_{m,t}$	A set of twelve binary variables capturing monthly seasonality. This variable is equal to 1 when month of sample $t$ is the $m$ -th month of the calendar year and zero otherwise. For example, variable $month_{1,t}$ is equal to one when month of sample $t$ is January, and zero otherwise.
$CDD_t$	Monthly cooling degree days observed in month of sample $t$ . These are drawn from the National Weather Service as a monthly series for the San Juan Area.
$GNP_t$	A 12-month moving sum of the gross national product. This monthly series is derived from an annual series provided by the Junta de Planificación de Puerto Rico, supplemented (as necessary) by the FOMB. The annual series is converted to monthly by dividing year-over-year (fiscal years) change in GNP by 12 and apply this increment in each month of the year. These values were used as provided by LUMA in the file "Monthly macros distribution.xlsx" provided by LUMA on 2022-04-27.
$Pop_t$	Estimated total population by month, derived from annual values obtained by LUMA from the U.S. Census.
$COVIDREStrans_t$	A binary variable equal to one in the months starting 2020-05-01 and decreasing by 0.2 every 12 months, until it becomes equal to 0 in May of CY2025
$COVIDCOMtrans_t$	A binary variable equal to one in March, April, and May of calendar year 2020, and zero otherwise
$\beta_{m,1}$ $\beta_2$	Regression-estimated parameters (coefficients).

- b. The "Dmax" factor in Row 24 of Attachment 6 measures the monthly seasonal trends of the Peak Demand.
- c. "Dmax" factors are seasonal adjustments obtained from E-Views program -X12 Census algorithm. E-views is a program used to develop statistical analysis that includes X-12-ARIMA, which is a set of statistical methods to obtain seasonal adjustments and other descriptive analysis of time series data implemented by the United States (U.S.) Census Bureau's software package.
- d. The "Gen" factor in Row 23 of Attachment 6 measures the monthly seasonal trends of the generation.
- e. Gen Factors are seasonal adjustments obtained from E-Views program -X12 Census algorithm, as detailed in response 1(c).
- f. Historically, there has been no consistent alignment between the maximum consumption, generation, and peak demand. The table below shows the historical maximum gigawatt hour (GWh) amount for each of the three (3) variables and the months when it occurred over the five (5) fiscal years.

	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023
Generation (GWh)	1,659.8	1,735.0	1,794.9	1,829.7	1,747.5
Generation	Aug-18	Aug-19	Aug-20	Sep-21	Aug-22
Consumption (GWh)	1,469.4	1,488.7	1,592.8	1,544.4	1,514.6
Consumption	Aug-18	Oct-19	Jul-20	Sep-21	Jul-22
Peak Demand (MW)	2,771	2,911	2,945	2,960	2,877
Peak Demand	Jun-19	Jun-20	Aug-20	Aug-21	Sep-22

Generation and Peak demand are distributed across the months in accordance with their seasonal trends using the X-12 programs from the U.S. Census and actual data up to June 2022. Every

## Permanent Rate

customer class has its respective seasonal adjuster, and the total consumption reflects the outcome after the seasonal factors were applied to all the consumption classes.

Peak demand is when consumer demand for electricity is at its highest in a specific timeframe, one hour during the month, and is a “point in time” measure. The generation is the total electricity demand for the month. Demand differs from generation, a higher demand peak can occur in a month different from the generation peak. One measures total output (MW) and the other measures the total consumed over a month (kWh).

The consumption is the energy delivered to the customer and is measured in billing cycles. The increasing adoption of Distributed Generation (DG) (Net Metering Customers) is a recent factor that may impact energy sales and generation but not necessarily peak demand.

- g. The difference between “Total Consumption” in Line 10, and “Gross Generation”, in Line 12 represents the technical and non-technical losses (Commercial losses), and the self-consumption of the Puerto Rico Energy Power Authority’s (PREPA) facilities. The monthly energy consumed by PREPA and LUMA’s facilities is provided by LUMA’s Customer Experience Department through the “*CM\_CONS005\_Authority Use Report*”.
- h. If by “internal use metered”, the Energy Bureau means PREPA facilities self-consumption, then yes, the internal use is measured monthly as detailed in the response above.
- i. The difference between Total Consumption and Gross Generation is due to several factors, including:
  - The difference between consumption billing cycles and generation, which is measured and reported by calendar month.
  - Technical and non-technical losses
  - Service interruptions due to unexpected system issues and climate events including hurricanes, earthquakes, etc.
  - Historically, February and March, present outlier losses due to misalignment of the measurement and reporting periods for consumption and generation. The consumption is measured according to the days in the billing cycles, an average of 30 days (20 billing cycles), while generation is measured by calendar month.
- j. LUMA has actively been making investments and repairs and applying modern design and planning practices to improve reliability, overall system performance and grid services. New and repaired equipment in the transmission and distribution systems will tend to have better performance, including lower energy losses.



## Permanent Rate

# Responses in Compliance with June 23, 2023, Resolution and Order

## NEPR-MI-2020-0001

### Response: RFI-LUMA-MI-2020-0001-20230626-PREB-#002

---

#### SUBJECT

Load Forecast

#### REQUEST

Have PREPA or LUMA reviewed how accurate the sales forecast for July 2022 through June 2023 has been, versus actual consumption?

- a. What analysis has PREPA or LUMA done with respect to evaluating sales and generation forecast accuracy for the fiscal year ending June 2023?
- b. Were any "lessons learned" from reviewing evaluating sales and generation forecast accuracy for the fiscal year ending June 2023 that resulted in changes or improvements to the sales and generation forecast for the fiscal year July 2023 through June 2024? If so, explain.

#### RESPONSE

LUMA conducts monthly evaluations to assess its forecast accuracy in comparison to the actual consumption. As of May 2023, the actual consumption for FY 2023 was lower than what was forecasted by 7.25%. Most notably, residential, and industrial customer classes have experienced the most significant reductions in consumption.

The decrease in Residential consumption could be due to two (2) primary factors: (1) the impact to system from Hurricane Fiona, and (2) the significant rise in the adoption of behind-the-meter generation. In FY2023, there was a notable increase in the enrollment of over 25,000 customers in the net metering program, with approximately 97% of them being residential clients. This number exceeded the forecasted expectations for FY2023 by more than 15,000 customers.

The decline in Industrial consumption for the fiscal year 2023 can be attributed to factors such as the lack of correlation between positive macroeconomic indicators and energy usage, along with a significant decrease in energy consumption by Combined Heat and Power (CHP) clients, amounting to a 20% reduction compared to the previous year.

- a. LUMA has undertaken several analyses to assess the sales forecast for the fiscal year ending in June 2023. These analyses include evaluating the actual consumption across different classes (Residential, Commercial, and Industrial) in relation to the forecast, as well as considering the influence of macroeconomic and weather variables.

## Permanent Rate

- b. Upon reviewing and evaluating the sales and generation forecast accuracy for the fiscal year ending in June 2023, LUMA identified valuable insights that led to improvements in the sales and generation forecast for the subsequent fiscal year (July 2023 through June 2024). Notably, we are evaluating the incorporation of two (2) new drivers, namely Distributed Generation and Combined Heat and Power, as they have demonstrated impact and growing significance over time. These adjustments aim to enhance the accuracy and comprehensiveness of our future forecasts.

## Permanent Rate

# Responses in Compliance with June 23, 2023, Resolution and Order

## NEPR-MI-2020-0001

### Response: RFI-LUMA-MI-2020-0001-20230626-PREB-#003

---

#### SUBJECT

Attachment 1 (July-September 2023 Proposed Factors.xlsx)

#### REQUEST

Attachment 1, line 10 in the Quarterly Factors Excel file, shows the Reimbursement of FEMA Fuel Costs - Hurricane Fiona of \$(61,379,713.00). Is that a final amount?

- a. Are any further reimbursements from either FEMA or from Insurance expected related to Hurricane Fiona?
- b. Have any other reimbursements been applied for either to FEMA or from Insurance for other extreme weather events? If so, please explain for which events and how much has been requested for other reimbursements.

#### RESPONSE

- a. On April 4, 2023, the Puerto Rico Energy Power Authority (PREPA) filed a motion<sup>3</sup> notifying that it had received from the Federal Emergency Management Agency (FEMA) the full \$62,743,771.00 it had requested pertaining to damages and fuel costs from Hurricane Fiona. PREPA further informed that \$61,379,713.00 pertained to fuel costs and \$1,364,058.00 pertained to operation and maintenance of the units. LUMA is not aware of any other FEMA reimbursements for fuel costs related to Hurricane Fiona. LUMA is not responsible for FEMA reimbursements to PREPA for fuel costs and depends on information received from PREPA.
- b. Please refer to PREPA Motion of June 12, 2023, Docket No. NEPR-MI-2020-0001 on FEMA & Insurance Monthly Claims Update<sup>4</sup>.

---

<sup>3</sup> See, PREPA's Motion of April 4, 2023, Docket No. NEPR-MI-2020-0001.

<sup>4</sup> See, PREPA's Motion of June 12, 2023, Docket No. NEPR-MI-2020-0001.

## Permanent Rate

# Responses in Compliance with June 23, 2023, Resolution and Order

## NEPR-MI-2020-0001

### Response: RFI-LUMA-MI-2020-0001-20230626-PREB-#004

---

#### SUBJECT

Attachment 3 (July-September 2023 Proposed Factors.xlsx)

#### REQUEST

- a. Do any generating units have planned maintenance outages for the July 2023 through September 2023 period? Which ones, when and why?
- b. Are there any anticipated issues with fuel deliveries (such as not receiving the full quantities of fuel purchased or anticipated to be purchased, or with shipping delays, etc.) that are impacting the forecasted amount for the July 2023 through September 2023 period? If so, explain.
- c. Why does the solar purchased power cost so much (about \$186 per MWH), which is one of PREPA's highest cost per MWH sources of power?
- d. Does PREPA/LUMA use all source requests for proposal as the basis for buying renewable purchased power?
- e. How does PREPA/LUMA negotiate or determine the prices that will be paid for the solar and wind purchased power contracts?
- f. In terms of dispatching generating and purchased power resources, does PREPA/LUMA have to dispatch all renewable generation first? Please explain.
- g. In terms of other purchased power, it appears that EcoEléctrica power is now at a lower per MWH cost than power purchased from the AES coal - fueled generating plant. What has caused the cost of power from the AES coal-fueled generating plant to now be above \$80 per MWH?
- h. Has PREPA or LUMA done any investigation into why the cost of the power from the AES coal-fueled generating plant is now above \$80 per MWH? What analysis was done?
- i. Does PREPA continue to have the ability or right to examine fuel or power costs that it is being charged by AES under that purchased power agreement?
- j. Have there been revisions to the AES purchased power agreement in fiscal year 2023? What revisions were made?

## Permanent Rate

- k. Is PREPA/LUMA dispatching the EcoEléctrica power (which is now at a lower projected cost per MWH than the AES provided power)?
- l. Is PREPA obligated to take a minimum amount of power from the AES coal-fueled generating facility on a monthly or annual basis? If so, explain what the monthly and annual minimum takes are and what is the basis for those.
- m. When does PREPA's purchased power agreement with AES for the power from the AES coal-fueled plant expire?
- n. Is there a mandatory retirement date for the AES coal-fueled plant? When?
- o. Does PREPA/LUMA have a plan for replacement capacity once the AES coal-fueled plant is retired? Is that plan part of PREPA/LUMA's integrated resource plan?
- p. The prices per MWH that PREPA is paying for solar, and wind purchased power (PPAs) on a per MWH basis is even higher than the per MWH cost for LFG (landfill gas?) and are higher than the per MWH cost for fossil fuel based generation from residual and diesel fuel. What is the explanation for why the prices per MWH from the solar and wind generation are so high?

### RESPONSE

- a. Based on the maintenance schedule provided by the Puerto Rico Electric Power Authority (PREPA), which was used for the fiscal plan simulation, only Costa Sur unit 5 is scheduled to be out during the first month of the first quarter of FY2024.
- b. LUMA does not work with fuel matters, however based on PREPA's reports, LUMA does not anticipate any issues that could affect the forecasted amount for July- September 2023. LUMA modeled a limitation of the Naturgy natural gas supply of 112,000 MMBtu/day for the EcoElectrica & Costa Sur generation plants as reported by PREPA.
- c. Solar Purchase Power Operating Agreements (PPOAs) were negotiated and amended by PREPA prior to LUMA's commencement on June 1, 2021. The costs for the individual solar generation facilities are as follows:

Solar Generation Facility, Cost:

- i. AES Ilumina, \$196/MWH
- ii. Cantera Martino, \$221/MWH
- iii. San Fermin Solar Farm, \$186/MWH
- iv. Horizon Energy, \$179/MWH
- v. Oriana Energy, \$179/MWH
- vi. Coto Laurel, \$193/MWH

## Permanent Rate

vii. Humacao Solar Farm, \$171/MWH

- d. Accion Group handles all the renewable procurement program for the Puerto Rico Energy Bureau (PREB).
- e. LUMA does not negotiate or determine the prices that will be paid for the solar and wind purchased power contracts.
- f. LUMA, determines the dispatch criteria according to a system security-constrained, economic merit order dispatch principle. The merit order is determined daily with lowest marginal cost units, (i.e., the Renewable generation) dispatched first, considering system stability and security constraints. During the day system reliability or security factors could cause these to be curtailed.
- g. The purchased energy section for EcoElectrica shows only the fixed cost payment. The fuel cost portion of EcoElectrica is considered in the fuel cost section of the table. The total cost for EcoElectrica is calculated by adding up the fixed cost plus the fuel cost of that generation unit.

The generation cost for the AES could vary from month to month for multiple variables like fuel cost, planned outages, forced outages, and unit limitations.

- h. LUMA cannot respond to a question addressed to PREPA. As established in response to question 4(g) there are several factors that could affect generation costs in generation units. The average generation costs for AES for this previous year is \$89.97/MWh. If the outlier from Hurricane Fiona (September 2022) is removed from the average value, then the average generation costs for AES in 2022 was \$87.51.
- i. Yes, PREPA continues to have the same rights under the PPA to review the fuel and power costs charged by AES.
- j. LUMA is not aware of any amendments in FY2023.
- k. LUMA as System Operator dispatches all the generation plants in the portfolio.
- l. The Purchase Power Agreement (PPA) does not consider minimums for this contract.
- m. The PPA is set to conclude on November 28, 2027.
- n. According to Act 17-2019, one of the initial objectives of the public energy policy is "*To eliminate the use of coal as an energy source not later than January 1, 2028*"<sup>5</sup>.
- o. The Integrated Resource Plan<sup>6</sup> (IRP) Modified Action Plan was issued by the Puerto Rico Energy Board. The plan includes generation retirements and additions.

---

<sup>5</sup> See, Section 1.6(3) of Act 17-2019, known as the "Puerto Rico Energy Public Policy Act" as amended.

<sup>6</sup> See, Docket No. NEPR-MI-2020-0012, In Re: Implementation of the Puerto Rico Electric Power Authority Integrated Resource Plan and Modifies Action Plan.

## Permanent Rate

- p. Prices per MWH were determined in PPOAs contracts negotiated and executed by PREPA and approved by the Puerto Rico Energy Bureau.

## Permanent Rate

# Responses in Compliance with June 23, 2023, Resolution and Order

## NEPR-MI-2020-0001

### Response: RFI-LUMA-MI-2020-0001-20230626-PREB-#005

---

#### SUBJECT

Attachment 4 (July-September 2023 Proposed Factors.xlsx)

#### REQUEST

Attachment 4 has a line item for Authority Use costs, and Excel column M shows quantities.

- a. Is the "Authority Use Costs" item on Excel line 15 for PREPA's use of natural gas? How is the "Authority Use" quantity measured?
- b. Why are there "Authority Use" adjustments for AES and Ecoeléctrica (Excel column M, lines 9 and 10)?
- c. How does PREPA recover the cost that is associated with "Authority Use"?

#### RESPONSE

Attachment 4 from the file "*July-September 2023 Proposed Factors.xlsx*" is a hard-coded copy of tab "*MAY-2023 RECONCILIATION*" from the master reconciliation spreadsheet titled "*FAC-PPAC Reconciliation May 2023.xlsx*", which LUMA also provided in its June 20, 2023, Proposed FCA and PPCA Factors Filing (June 20<sup>th</sup> Filing)<sup>7</sup>. The master reconciliation spreadsheet, as filed in LUMA's June 20<sup>th</sup> Filing, includes links to all numbers and calculations provided.

- a. Column M, in Attachment 4 from file "*July-September 2023 Proposed Factors.xlsx*", refers to the Authority Use Cost distributed to purchase power energy providers as part of the reconciliation process.<sup>8</sup> Authority Use is not related to natural gas, it refers to the cost of electricity used by the facilities of the Puerto Rico Energy Power Authority (PREPA) and LUMA, such as buildings, offices, etc. The monthly energy consumed by PREPA and LUMA's facilities is provided by LUMA's Customer Experience Department through the "*CM\_CONS005\_Authority Use Report*". The total kWh consumption is then multiplied by the Fuel Cost Adjustment (FCA) and Purchase Power Cost Adjustment (PPCA) factors current to that month, as approved by the Puerto Rico Energy Bureau (PREB and/or Energy Bureau).

---

<sup>7</sup> See, LUMA's Motion of June 20, 2023, Docket No. NEPR-MI-2020-0001.

<sup>8</sup> *Id.*



## Permanent Rate

FCA:  $2,423,762 * 0.146236^9 = \$354,441.26$  (as depicted in cell F15 of Attachment 4).

PPCA:  $2,423,762 * 0.35997^{10} = \$87,248.16$  (as depicted in cell M23 of Attachment 4).

- b. The “Authority Use” amounts reflected in Column M of Attachment 4, pertaining to AES (line 9), Ecoeléctrica (line 10), and renewable energy provider represents a weighted average distribution by kWh, as depicted in column I, of the total PPCA “Authority Use”, which amounted to  $(\$87,248.16)^{11}$ . As explained above, Column M, refers to the Authority Use Cost distributed to purchase power energy providers as part of the reconciliation process, and it is not related to natural gas. “Authority Use”, refers to the cost of electricity used by PREPA’s and LUMA’s facilities. For more detail pertaining to how this is calculated refer to the answer provided in question 5(a).
- c. The amounts under “Authority Use” are operation and maintenance (O&M) expenses, which are recovered through the base rate.

---

<sup>9</sup> PREB approved FCA Factor for the month of May 2023, per Resolution and Order dated March 31, 2023, in Docket NEPR-MI-2020-0001.

<sup>10</sup> PREB approved PPCA Factor for the month of May 2023, per Resolution and Order dated March 31, 2023, in Docket NEPR-MI-2020-0001.

<sup>11</sup> See Attachment 4, Column M, Line 23 of file “July-September 2023 Proposed Factors.xlsx” from the LUMA’s Motion of June 20, 2023, Docket No. NEPR-MI-2020-0001.

## Permanent Rate

# Responses in Compliance with June 23, 2023, Resolution and Order

NEPR-MI-2020-0001

**Response: RFI-LUMA-MI-2020-0001-20230626-PREB-#006**

---

### SUBJECT

Attachment 4 (July-September 2023 Proposed Factors.xlsx)

### REQUEST

What are the "C.E.R'S AND APX" in Excel column K?

### RESPONSE

The term "CER's" is the acronym for the Spanish term "Creditos Energia Renovable", which in English translates to "Renewable Energy Credits" (RECs). CER's/RECs are a market-based instrument that certifies the bearer owns one megawatt-hour (MWh) of electricity generated from a renewable energy resource. Once the power provider has fed the energy into the grid, the REC received can then be sold on the open market as an energy commodity. The Puerto Rico Energy Power Authority (PREPA) receives these credits on behalf of the Independent Power Producers (IPPs) and then transfers them to the IPPs. Thus, it is a disbursement related to purchased power that must be recovered from customers.

## Permanent Rate

# Responses in Compliance with June 23, 2023, Resolution and Order

## NEPR-MI-2020-0001

### Response: RFI-LUMA-MI-2020-0001-20230626-PREB-#007

---

#### SUBJECT

Attachment 4 (July-September 2023 Proposed Factors.xlsx)

#### REQUEST

There are no amounts for "Invoice Adjustments" in Excel column L, but there is a downward adjustment of about \$12.5 million for Naturgy seller shortfall credits on line 28 as an "Other Adjustments (Naturgy Seller Shortfall Credits, QI)"

- a. What is the difference between "Invoice Adjustments" and that "Other Adjustments" item?
- b. Was the Naturgy "Other Adjustments" item adjusted on revised invoices that were submitted by Naturgy and/or to resolve the dispute that PREPA had with Naturgy? What documentation does PREPA/LUMA have concerning that Naturgy "Other Adjustments" item?

#### RESPONSE

Column L of Attachment 4 refers to any adjustments to the costs of Purchased Power because of billing disputes with Independent Power Producers (IPPs).<sup>12</sup> Since LUMA's Commencement Date on June 1, 2021, no billing issues have been reported with any IPPs.

Line 28 of Attachment 4 refers to any adjustments to the costs of fuel purchases, pertaining to the Fuel Cost Adjustment (FCA) Rider. This can be Seller Shortfalls, Credits, Excess Nominations, etc., which as indicated in Line 28, has been modified. In May 2023, LUMA included a credit from Naturgy totaling \$12,542,537.28 pertaining to Seller Shortfalls, as provided by the Puerto Rico Electric Power Authority (PREPA) in their April 2023 Fuel Purchases Report. This amount, as reported by PREPA, was then inputted on cell E27 of tab "FUELREP-APR23-Busqueda" from spreadsheet "FAC-PPAC Reconciliation May 2023.xlsx", which then in turn linked to cell 27 of Attachment 4.<sup>13</sup>

- a. The term "Invoice Adjustments" refers to any difference between the amounts billed by the IPPs, while the term "Other Adjustments" refers to any adjustments made to Fuel Costs, such as prior period consumption adjustments reported by PREPA, credits from fuel providers, penalties to PREPA, and/or additional costs which cannot be classified under the categories disclosed from cell

---

<sup>12</sup> See, LUMA's Motion of June 20, 2023, Docket No. NEPR-MI-2020-0001.

<sup>13</sup> *Id.*

## Permanent Rate

B9 to B25 of Attachment 4.<sup>14</sup> LUMA reports these adjustments, and they are then evaluated by the Puerto Rico Energy Bureau for reasonableness and correctness.

- b. This item pertains to specific contractual arrangements between PREPA and Naturgy. LUMA does not administer any fuel supply contracts.

---

<sup>14</sup> *Id.*

## Permanent Rate

# Responses in Compliance with June 23, 2023, Resolution and Order

NEPR-MI-2020-0001

**Response: RFI-LUMA-MI-2020-0001-20230626-PREB-#008**

---

### SUBJECT

Attachment 4 (July-September 2023 Proposed Factors.xlsx)

### REQUEST

Attachment 4, Excel line 28, has a downward adjustment of about \$12.5 million for Naturgy seller shortfall credits.

- a. Are there any current disputes with Naturgy concerning LNG deliveries or LNG BTU content? If so, explain and provide an estimate of the magnitude of the disputed items.
- b. Are there any current disputes with fuel suppliers other than Naturgy concerning LNG deliveries or LNG BTU content? If so, explain and provide an estimate of the magnitude of the disputed items.

### RESPONSE

Question #4 pertains to specific contractual arrangements between PREPA and Naturgy. LUMA does not administer any fuel supply contracts.

## Permanent Rate

# Responses in Compliance with June 23, 2023, Resolution and Order

## NEPR-MI-2020-0001

### Response: RFI-LUMA-MI-2020-0001-20230626-PREB-#009

#### SUBJECT

Attachment 5 (July-September 2023 Proposed Factors.xlsx)

#### REQUEST

Please describe the primary causes of the reconciliation items that are affecting each of the Subsidies Riders (i.e., how much of each of those reconciliation items relates to (1) sales forecasts being different than actual kWh sales and (2) how much is for cost differences, i.e., actual costs being different than forecasted costs):

- a. CILT prior period reconciliation: \$11.43 million
- b. SUBA-HH prior period reconciliation: \$19.664 million
- c. SUBA-NHH prior period reconciliation: \$3.63 million

#### RESPONSE

The main driver of the Contribution in Lieu of Taxes (CILT) and Subsidy reconciliation outcome was the decline in consumption and thus the revenues. Forecast consumption and revenues compared with the actual exhibited a reduction of 5.67% and 5.19%, respectively. The reduction in revenues impacted the ability to recover the subsidy costs. Unsubsidized customers cover the insufficient revenues from the subsidies through the riders. The following tables show the revenues by rider type:

#### Subsidies and CILT Revenues (M\$)

	SUB HH	SUB NHH	CILT	Total
Actual	205.6	10.8	101.4	317.8
Forecast	217.1	13.0	106.9	337.0
Variance Abs	(11.49)	(2.19)	(5.51)	(19.18)
Variance %	(5.29)	(16.85)	(5.15)	(5.69)

## Permanent Rate

The forecast subsidies and CILT costs were close to the actual, which together exhibit a variance of 1.56%. The table below shows the actual and forecast subsidies and CILT costs:

### Subsidies and CILT Costs (M\$)

	SUB HH	SUB NHH	CILT	Total
Actual	223.5	15.0	110.9	349.4
Forecast	221.5	13.1	109.4	344.0
Variance Abs	1.98	1.90	1.49	5.37
Variance %	0.89	14.53	1.36	1.56

## Permanent Rate

# Responses in Compliance with June 23, 2023, Resolution and Order

## NEPR-MI-2020-0001

### Response: RFI-LUMA-MI-2020-0001-20230626-PREB-#010

---

#### SUBJECT

Attachment 5 (July-September 2023 Proposed Factors.xlsx)

#### REQUEST

- a. Is the implementation of the EE program expected to have an impact on kWh sales for the Fiscal Year beginning July 1, 2023?
- b. Was the impact of the EE program considered/factored into the development of the sales forecast for the Fiscal Year beginning July 1, 2023, that is shown on Attachment 6? If not, why not? What is the expected impact from EE on the sales forecast for the Fiscal Year beginning July 1, 2023?

#### RESPONSE

- a. Yes, the implementation of the Energy Efficiency (EE) program is expected to impact kWh sales for the Fiscal Year beginning July 1, 2023.
- b. The FY 2024 total sales forecast considered EE reductions of 39.5 GWh.



## Permanent Rate

# Responses in Compliance with June 23, 2023, Resolution and Order

NEPR-MI-2020-0001

**Response: RFI-LUMA-MI-2020-0001-20230626-PREB-#011**

---

### SUBJECT

Attachment 8 (July-September 2023 Proposed Factors.xlsx)

### REQUEST

Any of the "Energy Consumption(kWh)" figures used to compute estimated bill impacts on Attachment 8 expected to be impacted by Energy Efficiency programs? If not, why not? If so, how is the EE impact being considered on the Attachment 8 Energy Consumption figures?

### RESPONSE

For the determination of all the proposed riders, including the Energy Efficiency (EE) rider, FY 2024 total retail sales considered a reduction from the proposed EE program.

## Permanent Rate

# Responses in Compliance with June 23, 2023, Resolution and Order

## NEPR-MI-2020-0001

### Response: RFI-LUMA-MI-2020-0001-20230626-PREB-#012

---

#### SUBJECT

Attachment 8 (July-September 2023 Proposed Factors.xlsx)

#### REQUEST

Please refer to the table in question 12 of Attachment A from the June 23rd R&O, which shows a breakdown of the current and proposed Prior Period Reconciliations for each of the three annual factors. As shown below, the cost for all three factors, CILT, SUBA-HH, and SUBA-NHH increased between May 2021-April 2022 and May 2022-April 2023.

- a. As shown on line 1 in the table above, the CILT cost for May 2021-April 2022 was \$85,482,457.16 and the CILT cost for May 2022-April 2023 was \$110,866,861.48. Please explain why the Company's estimated total cost of CILT is \$97,583,355.03, as shown on Attachment 5, when the cost of CILT increased in the last two years.
- b. As shown on line 8 in the table above, the SUBA-HH cost for May 2021-April 2022 was \$180,739,402.19 and the SUBA-HH cost for May 2022-April 2023 was \$223,524,052.01. Please explain why the Company's estimated total cost of SUBA-HH is \$192,485,728.98, as shown on Attachment 5, when the cost of SUBA-HH increased in the last two years.
- c. As shown on line 14 in the table above, the SUBA-NHH cost for May 2021-April 2022 was \$12,378,853.02 and the SUBA-NHH cost for May 2022-April 2023 was \$14,966,094.18. Please explain why the Company's estimated total cost of SUBA-NHH is \$12,486,437.16, as shown on Attachment 5, when the cost of SUBA-NHH increased in the last two years.

#### RESPONSE

- a. The first factor of this behavior is the assumption used for the forecast that is different from the actual outcome in the previous fiscal years. CILT cost estimation for FY 2024 was done according to the maximum (cap) consumption of every municipality, as informed by the Public Energy Policy Program (PEPP). The actual costs for FY 2023 and FY 2024 are based on the actual consumption of the municipalities. In FY 2023 and FY 2022, the CILT consumption of 61 and 62 municipalities, respectively, were below their cap before the end of the reconciliation. That means that the total consumption was below the cap in both fiscal years.

## Permanent Rate

The second factor that should be taken into consideration regarding the FY23 outcome is the total FCA and PPCA cost. These costs for FY 2023 were higher than FY 2024 forecast exhibiting an 18.37% variance.

	CILT	FCA ¢/kWh	PPCA ¢/kWh	Total FCA+PPCA
Forecast 2024	97.8	12.42	3.73	16.14
Actual 2023	110.9	16.61	3.17	19.78
Actual 2022	85.5	13.00	3.19	16.19
Forecast - FY 23 Variance Abs	(13.06)	(4.19)	0.56	(3.63)
Forecast - FY 23 Variance%	(11.78)	(25.24)	17.64	(18.37)
Forecast - FY 22 Variance Abs	12.32	(0.59)	0.54	(0.04)
Forecast - FY 22 Variance%	14.41	(4.51)	16.99	(0.27)

- b. The primary factors influencing the SUBA-HH costs are consumption and the FCA and PPCA. As mentioned earlier, the FCA and PPCA for FY 2024 are forecasted to be lower than the actual figures observed for FY 2023 and 2022, while the consumption forecast is also projected to be lower.
- c. The key drivers of the SUBA-NHH costs are consumption and the FCA and PPCA. As explained, the forecast consumption was significantly lower than FY 2022 and FY 2023 actual. The FCA and PPCA for FY 2024 are significantly lower than FY 2023, and slightly than FY 2022 than FY 2022.