

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

IN RE: MAINTENANCE AND REPAIR
MANAGEMENT OF THE GENERATION
UNITS OF THE PUERTO RICO ELECTRIC
POWER AUTHORITY

CASE NO.: NEPR-MI-2021-0014

SUBJECT: Status of GENERA's Generation
Maintenance and Repairs, Dispatch
Agreement of the Palo Seco Temporary
Generation, and the Palo Seco FT8®
MOBILEPAC® Dual Fuel Capabilities.

RESOLUTION AND ORDER

Pursuant to Act 57-2014,¹ the Energy Bureau of the Puerto Rico Public Service Regulatory Board ("Energy Bureau") has jurisdiction over the Puerto Rico Electric Power Authority ("PREPA") and other electric service companies. Act 57-2014, states the public policy that all consumers have the right to a reliable and stable electric service.² Act 17-2019³ broadened the Energy Bureau's authority and reinforced the foregoing public policy by declaring that "(t)he electric power system should be reliable and accessible, promote industrial, commercial, and community development, improve the quality of life at just and reasonable cost, and promote the economic development of the Island."

On June 25, 2023, with the goal of increasing the dependability of the baseload units and addressing current capacity limitations to reduce reliance on load shedding events, the Energy Bureau increased the Thermal Generation Facilities Maintenance/Repair FY 2024 budgets Necessary Maintenance Expense ("NME Budgets") of Genera PR, LLC ("GENERA") to \$134.075MM^{4,5}

The NME Budgets seek to make the repaired facilities secure and unlikely to change, fail, or decline and address immediate and mid-term repairs for the power plants considering the priority based on the needs, the faulty equipment, and the potential failure of major equipment.

On March 15, 2024, fourteen (14) of the available seventeen (17) temporary emergency generators, that are located and interconnected between the San Juan Power Plant and the Palo Seco Steam Plant, were acquired by PREPA, and allowed to operate through December 31, 2025.⁶ The three non-acquired units, TM2500 CT, Model: 8, 37 MW, 2017 Vintage are interconnected at Palo Seco and able to inject energy to the grid.

On March 30, 2024, failures at the San Juan Power Plant adjacent to the Puerto Nuevo Bay, and the Aguirre Power Plant Complex in Salinas caused the interruption of customers. Based

¹ Known as the *Puerto Rico Energy Transformation and RELIEF Act*, as amended ("Act 57-14").

² *Id.*

³ Known as the *Puerto Rico Energy Public Policy Act* ("Act 17-2019").

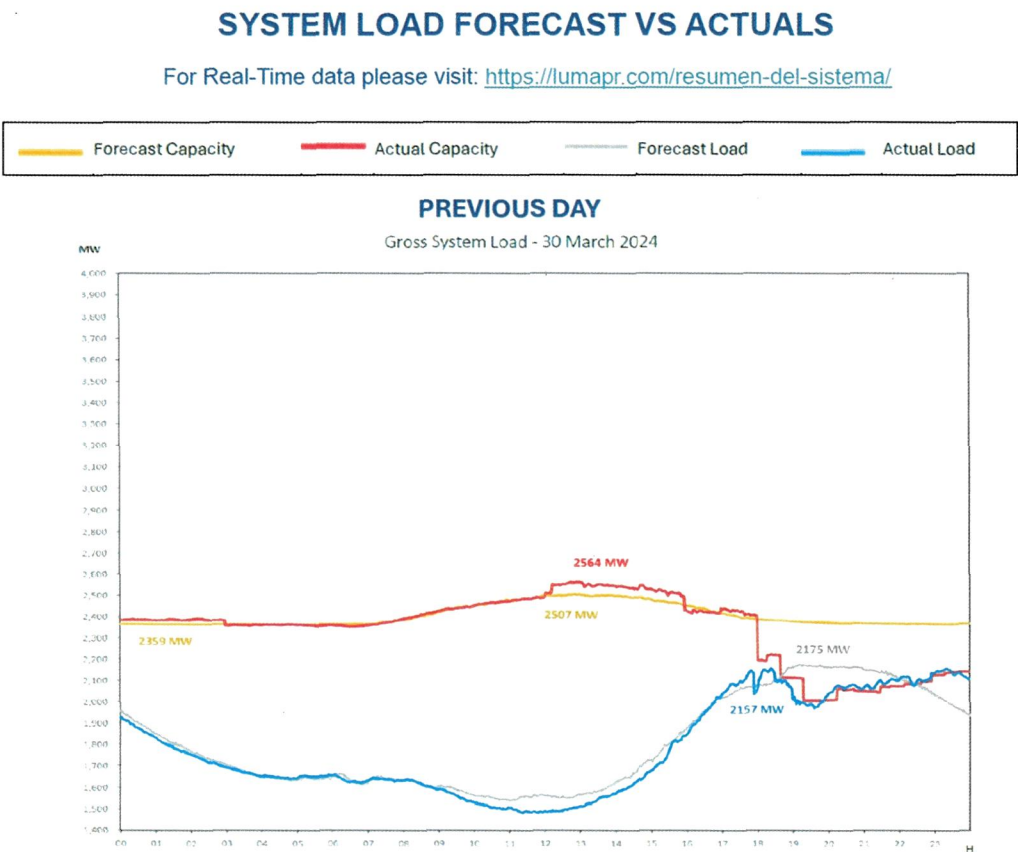
⁴ See, Resolution and Order, *In re: Review of LUMA's Initial Budgets*, Case No.: NEPR-MI-2021-0004, June 25, 2023 ("June 25 Resolution").

⁵ The Energy Bureau on December 8, 2023, noting that GENERA identified alternative project schedules for FY2025 and funding sources outside base rates, revised the FY2024 maintenance budgets to \$108.911MM. See, Resolution, *In re: Review of LUMA's Initial Budgets*, Case No.: NEPR-MI-2021-0004, December 8, 2023 ("December 8 Resolution").

⁶ See, Resolution, *In re: Request For Approval of the Asset Purchase Agreement Between NFE Power PR LLC and The Puerto Rico Electric Power Authority*, Case No.: NEPR-AP-2024-0001, March 15, 2024 ("March 15 Resolution").



on the information available⁷, the electric system experienced automatic and manual load sheds, depicted as follows:



The Energy Bureau is particularly concerned that reliance on load shedding has not reduced and will instead increase during the summer. ⁸This is worrisome since adequate NME funding has existed in FY2024 to repair/maintain the thermal facilities that GENERA operates and maintains.

GENERA has at its disposition approximately 400MW of dependable capacity from the acquisition of the temporary generation system at the San Juan Power Plant and Palo Seco Steam Plant and the availability of the FT8[®] MOBILEPAC[®] dual-fuel capable units⁹ installed at the Palo Seco Steam Plant in Toa Baja.

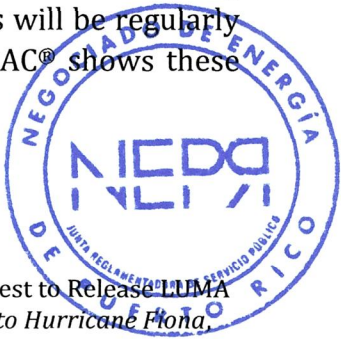
Noting that interconnected capacity exists from the three not yet acquired TM2500 CT Model 8 units that could be used to mitigate the need for rolling blackouts, the Energy Bureau is interested in learning what dispatch agreement exists for these units. The expectation is that all existing units able to inject are made available to the system operator when forecasts indicate that generation is insufficient to meet demand.

The three FT8[®] MOBILEPAC[®] generation units owned by PREPA, and operated and maintained by Genera, with an aggregated capacity of approximately 80MW, provide power during peak demand periods and emergencies. Noting that having to resort to rolling blackouts can be considered an emergency, it is expected that these units will be regularly dispatched. Specifications from the manufacturer of the FT8[®] MOBILEPAC[®] shows these

⁷ Available at: <https://lumapr.com/monitoreo-de-bps/> (Last verified April 11, 2024).

⁸ See, Motion Submitting Fourth Report on Demobilization of FEMA Generation and Request to Release LUMA from the Requirement to File Bi-Weekly Demobilization Reports, *In re: LUMA's Response to Hurricane Fiona*, Case No.: NEPR-MI-2022-0003, February 15, 2024 ("LUMA's February 15 Report").

⁹ Referred to as "MegaGen" in the 2020 Integrated Resource Plan proceeding, CEPR-AP-2018-0001.



units as being Dual Fuel capable (Gas/Oil).¹⁰ It is the understanding of the Energy Bureau that these units are currently fueled using diesel when other more cost-effective options may be available, especially noting that the construction permit issued by the Puerto Rico Department of Natural and Environmental Resources (“DNER”) that authorized the use of ultra-low sulfur diesel (“ULSD”)¹¹ for the three FT8® MOBILEPAC® generation units now makes allowances for the use of other fuels. The Energy Bureau highlights that the recently acquired temporary TM2500 CT generation at the Palo Seco Site is primarily fueled with natural gas rather than diesel. It appears that there are two primary fuels being employed to fire the peaking/emergency combustion turbines in Palo Seco, diesel, and natural gas, when a more streamlined approach of using a uniform cost-effective fuel for the turbines should be considered, especially if it will result in cost savings to the ratepayer.

As part of the Energy Bureau’s oversight functions, staff of the Energy Bureau’s Office of Engineering and Energy Bureau consultants are scheduled to visit the baseload generators operated and maintained by GENERA to gain additional understanding of the status of the FY 2024 Planned Maintenance and Critical Component Replacement Program and address concerns regarding its progress.

To ensure the most effective exchange of information and the productiveness of the field visits, the Energy Bureau **ORDERS** GENERA, LUMA and PREPA to, **on or before April 19, 2024**, provide the information required in **Attachment A** of this Resolution and Order.

The Energy Bureau **WARNS** GENERA, LUMA, and PREPA that:

- (i) noncompliance with this Resolution and Order, regulations and/or applicable laws may carry the imposition of fines and administrative sanctions of up to \$25,000 per day;
- (ii) any person who intentionally violates Act 57-2014, as amended, by omitting, disregarding, or refusing to obey, observe, and comply with any rule or decision of the Energy Bureau shall be punished by a fine of not less than five hundred dollars (\$500) nor over five thousand dollars (\$5,000) at the discretion of the Energy Bureau; and
- (iii) for any recurrence of non-compliance or violation, the established penalty shall increase to a fine of not less than ten thousand dollars (\$10,000) nor greater than twenty thousand dollars (\$20,000), at the discretion of the Energy Bureau.

Be it notified and published.

 Lillian Mateo Santos Associate Commissioner	 Edison Avilés Deliz Chairman	 Ferdinand A. Ramos Soegaard Associate Commissioner
 Sylvia B. Ugarte Araujo Associate Commissioner		 Antonio Torres Miranda Associate Commissioner

¹⁰ <https://power.mhi.com/products/aerogasturbines/lineup/ft8mp> (Last accessed April 9, 2024).

¹¹ See, DNER Construction Permit No. PFE-70-0120-0010-II-C.



CERTIFICATION

I hereby certify that the majority of the members of the Puerto Rico Energy Bureau has so agreed on April 11, 2024. I also certify that on April 11, 2024 a copy of this Resolution and Order was notified by electronic mail to lionel.santa@prepa.com, margarita.mercado@us.dlapiper.com, jfr@sbgblaw.com; alopez@sbgblaw.com; legal@genera-pr.com; regulatory@genera-pr.com, and I have proceeded with the filing of the Resolution and Order issued by the Puerto Rico Energy Bureau.

For the record, I sign this in San Juan, Puerto Rico, on April 11, 2024.



Sonia Seda Gaztambide
Clerk



ATTACHMENT A
Requirements of Information

GENERA

1. Generation Forced Outage Factor and Availability

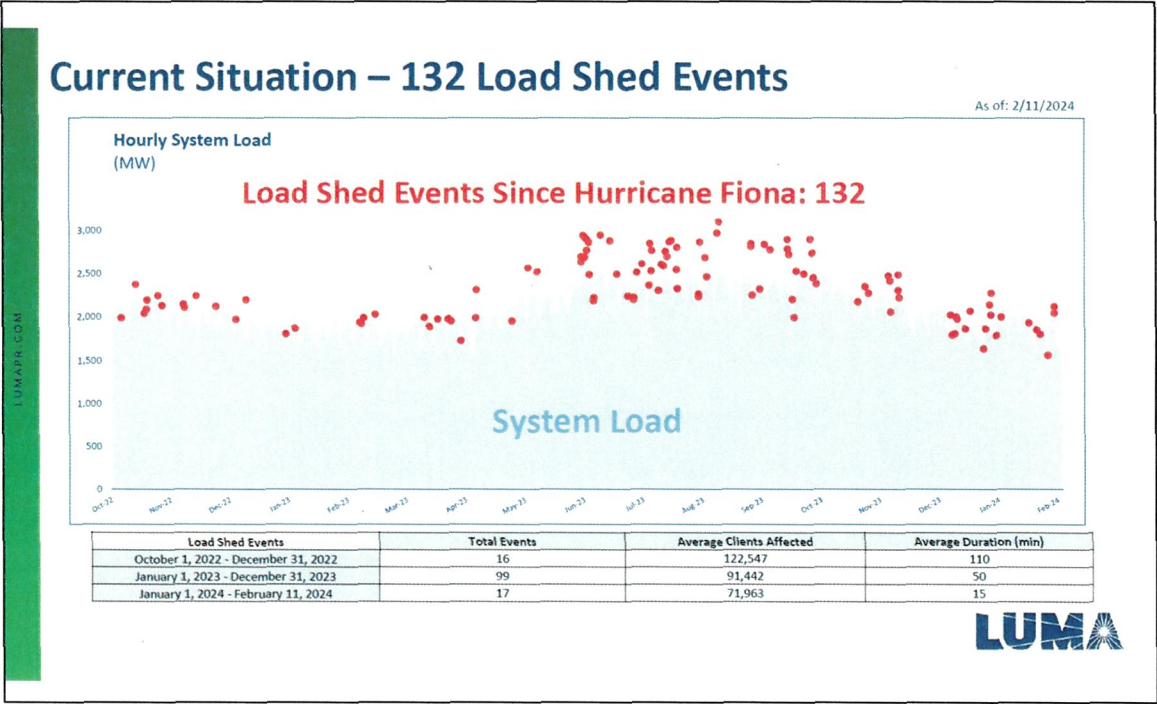
On July 25, 2023, in response to a Requirement of Information issued by the Energy Bureau, GENERA provided the Generation Fleet Outage Schedule of the Planned Maintenance and Critical Component Replacement Program through the end of calendar year 2024, that reduced the forced outages from 32% to 15% and increased the availability by 340MW.¹²

- a. Describe the progress attained in achieving the results sought in the Planned Maintenance and Critical Component Replacement Program.
- b. As of March 2024, what is the generation fleet forced outage factor? (%)
- c. What was the increase in dependable available capacity between June 2023 and March 2024? (MW)

2. Load Shed Events

On June 25, 2023, the Energy Bureau increased GENERA’s Thermal Generation Facilities Maintenance/Repair FY 2024 budgets (Necessary Maintenance Expense “NME Budgets”) to \$134.075MM with the goal of increasing the dependability of the baseload units and addressing current capacity limitations to reduce reliance on load shedding events.

- a. Refer to the curve below provided by LUMA to the Energy Bureau on February 15, 2024.¹³ Explain why there is no significant reduction on the number of load shed events over time, specifically during the time period since GENERA assumed the maintenance and operation of PREPA’s generation fleet.



¹² See, Motion Submitting Information in Compliance with Resolutions and Orders Dated June 25, 2023, and July 14, 2023, *In re: Review of LUMA’s Initial Budgets*, Case No.: NEPR-MI-2021-0004, July 25, 2023 (“Genera’s July 25 ROI Responses”).

¹³ See, Motion Submitting Fourth Report on Demobilization of FEMA Generation and Request to Release LUMA from the Requirement to File Bi-Weekly Demobilization Reports, *In re: LUMA’s Response to Hurricane Fiona*, Case No.: NEPR-MI-2022-0003, February 15, 2024 (“LUMA’s February 15 Report”).



3. Palo Seco FT8® MOBILEPAC® Dual Fuel Capabilities

- a. Describe any benefit associated with employing a single primary fuel for the peaking/emergency units that are currently located at the Palo Seco Steam Plant.
- b. If the FT8® MOBILEPAC® were to be fueled with natural gas, what permits will it be necessary for GENERA to secure?
- c. What suppliers of natural gas, besides NF Energía LLC, could sell fuel to serve the three FT8® MOBILEPAC® units that currently sit at the Palo Seco Steam Plant?

LUMA

1. Dispatch Agreement – Palo Seco Temporary Generation

- a. Describe the dispatch agreement of the three not-yet-acquired temporary generation units (TM2500 CT, Model: 8, 37 MW, 2017 Vintage), part of the seventeen units comprising the temporary generation system, that are currently interconnected at the Palo Seco Steam Plant.

PREPA

1. Acquisition Status – Remaining three (3) Units of the Temporary Emergency Generation System that currently sit and are interconnected at the Palo Seco Steam Plant.

- a. FEMA Project# 739681 P/W 11628, 4339DR-PR, obligated funds for the acquisition of all seventeen (17) TM2500 CT units that comprised the temporary emergency generation of the Fiona mission. All ten (10) TM2500 CT units that are interconnected at the San Juan Power Plant were acquired by PREPA, however, even though FEMA obligated funds for all seventeen (17) units, only four (4) of the seven (7) units that are currently interconnected at the Palo Seco Steam Plant were acquired.

Noting that the expectation is for PREPA to fully benefit from the FEMA obligation, provide the acquisition status of these already interconnected three (3) units (TM2500 CT, Model: 8, 37 MW, 2017 Vintage) in Palo Seco.

