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

IN RE: AGUIRRE POWER COMPLEX PERSISTENT FAILURES

CASE NO.: NEPR-IN-2025-0002

SUBJECT: Commencement of Investigation into Aguirre Power Complex Persistent Failures and Requirement of Information.

RESOLUTION AND ORDER

The Energy Bureau of the Puerto Rico Public Service Regulatory Board ("Energy Bureau") is the electric utility regulator charged with overseeing the execution and implementation of the energy public policy in Puerto Rico.¹ According to the provisions of Act 57-2014, the Energy Bureau is in charge of, among other duties, establishing and implementing the necessary regulatory actions to guarantee the capabilities, reliability, security and efficiency of the electric system in Puerto Rico. In addition, the Energy Bureau has jurisdiction and ample authority to investigate any matter related to compliance with the laws that apply to the enforcement of the energy public policy.² The energy public policy establishes that every consumer has the right to a reliable, stable, and excellent electric power service.³

The Energy Bureau assigned for FY24 over \$38MM and for FY25 over \$23MM, sufficient funds, to maintain the Aguirre Power Plant,⁴ however, despite the assignment of sufficient funds, Units 1 and Unit 2, as well as CC1-1, CC STM-1, CC2-1, CC2-2, and CC2-4 remain unavailable due to forced outages. Over time this unavailability does not seem to improve, and these persistent failures maintain the electric system in a precarious condition and reliant on load shedding that continues to affect the electric customer. It is also unclear whether Blackstart capabilities were onsite during the BlueSky outage that occurred on December 31, 2024. The precise operational configuration of the Aguirre power complex will be established in the investigation currently being conducted by the Energy Bureau.⁵

For the reasons discussed above the Energy Bureau, in the discharge of its duties and oversight functions, **INITIATES** this investigation of Genera PR LLC ("Genera") maintenance and operation of the Aguirre Power Complex under Section 6.3 of Act 57-2014 and Section XV of Regulation 8543.⁶ The purpose of this investigation is to conduct a forensic analysis of the persistent failures of the generation units at Aguirre. The Electric Power Research Institute ("EPRI"), an Energy Bureau technical consultant, is taking the technical lead on behalf of the Energy Bureau.

The Energy Bureau **ORDERS** Genera, **on or before April 9, 2025**, to respond to the Requirement of Information included as **Attachment A** of this Resolution and Order.

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¹ See, Act 57-2014, as amended, known as Puerto Rico Energy Transformation and RELIEF Act (and Act 17-2019, known as Puerto Rico Energy Public Policy Act, as amended ("Act 17-2019").

² Section 6.24(e) of Act 57-2014.

³ Section 1.5 10(a) of Act 17-2019.

⁴ See, Attachment G in Determination on the FY24 Annual Budgets for the electric utility system – LUMA, Genera, and PREPA, Resolution and Order, June 25, 2023 (available: https://energia.pr.gov/wp-content/uploads/sites/7/2023/06/20230625-MI20210004-Resolution-and-Order.pdf), and Attachment F in Determination on the FY25 Annual Budgets for the electric utility, Resolution and Order, June 26, 2024 (available: https://energia.pr.gov/wp-content/uploads/sites/7/2024/06/20240626-MI20210004-Resolution-and-Order.pdf), In re: LUMA Initial Budgets Review, Case No.: NEPR-MI-2021-0004.

⁵ See, In re: Interrupción de Servicio Eléctrico de 31 de diciembre de 2024, Case No.: NEPR-IN-2025-0001.

⁶ Regulation on Adjudicative, Notice of Noncompliance, Rate Review and Investigation Procedures, Regulation 8543, December 18, 2014 ("Regulation 8543").

The Energy Bureau WARNS Genera that:

- noncompliance with this Resolution and Order, regulations and/or (i) applicable laws may carry the imposition of fines and administrative sanctions of up to \$125,000 per day; and
- (ii) for any recurrence of non-compliance or violation, the established penalty shall increase to a fine of not less than ten thousand dollars (\$15,000) nor greater than twenty thousand dollars (\$250,000), at the discretion of the Energy Bureau.

Be it notified and published.

Edison Avilés Deliz

Chairman

Lillian Mateo Santos

Associate Commissioner

Sylvia B. Ugarte Araujo Associate Commissioner Ferdinand A. Ramos Soegaard Associate Commissioner

Antonio Torres Miranda Associate Commissioner

CERTIFICATION

I certify that the majority of the members of the Puerto Rico Energy Bureau has so agreed on March 25/2025. I also certify that on March 25/2025 a copy of this Resolution and Order was notified by electronic mail to 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.

I sign this in San Juan, Puerto Rico, today March 25, 2025.

Sonia Seda Gaztambide Clerk

ATTACHMENT A - Requirement of Information

1. Plant description

Develop and technically describe the Aguirre Power Plant Complex (including the Thermoelectric plant, Combined Cycle, and the Black-start Units). Include a detailed overview of operational capacities, fuel sources utilized, primary equipment specifications, and the integration of each unit within the broader power generation infrastructure.

2. Operational Timelines

What operational conditions existed or occurred leading to the events that caused the Thermoelectric plant (Units 1 and 2) and the Combined Cycle units damage? Please provide supporting documentation, including but not limited to, the sequence of events.

3. Maintenance reports

Provide copies all maintenance reports for the damaged Aguirre Power Plant and Combined Cycle Units over the past five years, including those generated by the Original Equipment Manufacturer (OEM) and contracted companies responsible for repairing faulty equipment (such as turbogenerators, boilers, etc.).

4. Inspection and Condition report

Provide copies of all inspection and condition reports for the damaged Aguirre Power Plant and Combined Cycle units over the past five years, including those conducted by the Original Equipment Manufacturer (OEM) and contracted companies that performed inspections on the faulty equipment.

5. Failure investigation report

Provide copies of the failure investigation reports related to the conditions and events that led to faults in both units of the damaged Thermoelectric plant and Combined Cycle units over the past five years.

6. Root cause analysis report

Provide copies of all root cause analysis reports related to the conditions and events that led to faults in the damaged Thermoelectric plant and Combined Cycle units over the past five years.

7. Piping & Instruction Diagrams

Provide the piping and instrumentation diagrams (P&ID) related to the faulty equipment for both units of the Thermoelectric plant and the faulty equipment of the Combined Cycle units. (Include diagrams, blueprints, and screen drawings from the boilers and turbogenerators DCS control panels, as well as other relevant documentation).

8. Heat balance

Provide copies of the heat balance reports for the faulty units in the Thermoelectric plant and the Combined Cycle units over the past five years.

What were the primary conditions affecting the performance of the faulty units in the Thermoelectric plant and Combined Cycle units during the last two years 200 DE FA

9. Equipment data sheets

Provide the equipment specifications and data sheets for both OEM and non-OEM components, as well as associated auxiliary equipment related to the faulty units in the thermoelectric plant combined cycle units.

10. General arrangement drawings

Provide general arrangement drawings and station flow diagrams related to the faulty equipment for both units of the Thermoelectric plant and the faulty equipment of the Combined Cycle units. (Include diagrams, blueprints, and screen drawings from the boilers and turbo-generators control panels, as well as other relevant documents).

11. Detailed Sectional Drawings

Provide all detailed sectional drawings of the faulty equipment (including Combined Cycle units) of the Aguirre Power Complex's units.

12. Operation and Maintenance Manuals

Provide copies of all the operation and maintenance manuals for the faulty equipment (including Combined Cycle units) of the Aguirre Power Complex's units.

13. Fuel Analysis

Provide all fuel analysis conducted from June 2023 to present, including any assessment already done, of the fuel quality and any materials present in the fuel that could impact on the unit's maintenance schedule (e.g., filters, air heater baskets, etc.).

14. Generator Hydrogen Purging and Charging Procedure

Provide all generator cooling systems and the hydrogen purging and charging procedures (including Combined Cycle units) of the Aguirre Power Complex's units.

15. Hourly MW output

Please provide the hourly megawatt (MW) output of the faulty units of the Aguirre Power Complex for at least 24 hours before the failure event.

Provide the equivalent service hours for all turbogenerators at the Aguirre Thermoelectric plant, detailed by the following components for each unit:

- a. High Pressure Turbine
- b. Intermediate Pressure Turbine
- c. Low Pressure Turbine
- d. Generator Rotor; and
- e. Generator Stator

Provide the date of the most recent rewinding for each generator at the Aguirre Power Complex's units.

16. Summary of Actions from S&L Report

Provide a summary of the actions taken in response to the recommendations outlined in the Independent Engineering Report SL-015976.AG for the Aguirre Power Plant Complex, prepared by Sargent & Lundy, dated 09/24/2021 for PREPA⁷, and other OEM Maintenance and Inspections reports.

⁷ See, *In re: LUMA Initial Budget Review,* Case No. NEPR-MI-2021-0004, Motion Submitting Respor