GOVERNMENT OF 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:** Resolution and Order and Requirement of Information regarding *Motion to Submit Quarterly Report on Consumables, Spare Parts, and Capital Spare Parts for the Fourth Quarter for Fiscal Year 2026.*

RESOLUTION AND ORDER

I. Introduction and Procedural Background

On September 1, 2021, the Puerto Rico Energy Bureau of the Public Service Regulatory Board ("Energy Bureau") established this docket to monitor, and to receive filings related to, the maintenance and repair of the generation fleet of the Puerto Rico Electric Power Authority ("PREPA"). On June 16, 2023, the Energy Bureau issued a Resolution and Order ("June 16 Resolution") reiterating that the electric service companies subject to its jurisdiction must keep them informed of the operating state of the electric power system, and that this docket was established for the filing of material related to the maintenance and repair of PREPA's generation fleet. The Energy Bureau also took notice of the obligations of Genera PR LLC ("Genera"), as PREPA's agent and operator of the Legacy Generation Assets, under Section 4.2(j) of the Puerto Rico Thermal Generation Facilities Operation and Maintenance Agreement ("Genera OMA"), related to the inventory of Consumables, Spare Parts, and Capital Spare Parts for each Legacy Generation Asset, and ordered Genera to file in this docket its June 1, 2023 Recommendation Letter and any future recommendation submitted under that section.

On June 18 and June 19, 2023, Genera filed its June 1, 2023 and June 13, 2023 Recommendation Letters, respectively, containing its initial assessment of the inventory of Consumables, Spare Parts, and Capital Spare Parts at each Legacy Generation Asset. On June 30, 2023, the Energy Bureau conditionally approved that initial assessment, subject to Genera updating it to incorporate the revisions required in Attachment A to that Resolution and Order. Genera filed preliminary responses to those revisions on July 26, 2023 and, on November 29, 2023, the Energy Bureau determined that the responses were satisfactory, except for the identification of the specific quantities that Genera considers low stock for each critical and major part and ordered Genera to file the final version of its revised assessment within fifteen (15) days. Genera filed the revised assessment on December 12, 2023 ("December 12 Motion").

On February 26, 2024, the Energy Bureau approved the final version of the revised assessment of Consumables, Spare Parts, and Capital Spare Parts submitted in the December 12 Motion, subject to the quarterly reporting requirements included in Attachment A to that Resolution and Order ("February 26 Resolution"). Genera were ordered to submit the reports within forty-five (45) days after the end of each quarter, beginning with the third quarter of Fiscal Year 2024.

The reporting requirements in Section I of Attachment A are anchored to the Generation Fleet Outage Schedule of the Planned Maintenance and Critical Component Replacement Program that Genera filed on July 25, 2023 in Case No. NEPR-MI-2021-0004,[1] which projected, through the end of calendar year 2024, a reduction of the fleet forced outage factor from thirty-two percent (32%) to fifteen percent (15%) and an increase in availability of seventeen percent (17%), equivalent to 340 MW. In its April 18, 2024 response to the Energy

[1] See *Motion Submitting Information in Compliance with Resolutions and Orders Dated June 25, 2023 and July 14, 2023*, Annex F, *In re: Review of LUMA's Initial Budgets*, Case No. NEPR-MI-2021-0004, filed by Genera on July 25, 2023. *See also* February 26 Resolution, Attachment A, n. 1.

Bureau's Resolution and Order of April 11, 2024 in this docket,[2] Genera identified June 30, 2023 as the reference point for those targets, when the fleet had a forced outage factor of thirty-two percent (32%) and 1,833 MW of its 4,247 MW of installed capacity was available, and projected that its Critical Component Replacement Project would reduce forced outages to sixteen percent (16%) by December 2025.

On August 14, 2026, Genera filed a motion titled *Motion to Submit Quarterly Report on Consumables, Spare Parts, and Capital Spare Parts for the Fourth Quarter of Fiscal Year 2026* ("August 14 Motion"), together with its report for the fourth quarter of Fiscal Year 2026 ("Q4 Report"), which covers the period from April 1 through June 30, 2026 and carries forward the updates for the first three quarters of Fiscal Year 2026. Genera requested that the Energy Bureau accept the Q4 Report and deem Genera in compliance with the February 26 Resolution.

The Energy Bureau reviewed the August 14 Motion and the Q4 Report and **DETERMINES** that Genera submitted the required report, but the information provided does not permit full verification of substantive compliance with the monitoring, measurement, and explanation requirements established in the February 26 Resolution.

II. Evaluation and Determination

The Q4 Report describes fleet performance and various initiatives involving Consumables, Spare Parts, and critical components. The reported information reflects an improvement of approximately three percentage points (~3%) in the Equipment Availability Factor ("EAF") when comparing the cumulative 2025 and 2026 values, and a reduction of approximately three percentage points (~3%) in Forced Outages. On a fiscal-year basis, the cumulative values reported for Fiscal Year 2026 are an EAF of fifty-two percent (52%), a Forced Outage Factor ("FOF") of twenty-nine percent (29%), and an Equivalent Forced Outage Rate ("EFOR") of thirty-nine percent (39%). Nevertheless, those results remain substantially below the reported targets: increasing availability by seventeen percent (17%), equivalent to 340 MW, and reducing Forced Outages to fifteen percent (15%). Genera did not reconcile its reported results to the June 30, 2023, reference point that it identified in the April 18 Response, nor did it identify the additional initiatives, milestones, or schedule necessary to achieve those targets. The Energy Bureau notes that the calendar year 2024 horizon of the Planned Maintenance and Critical Component Replacement Program and the December 2025 date by which Genera projected a forced outage factor of sixteen percent (16%) have both passed. Measured against the thirty-two percent (32%) reference value, the fleet forced outage factor has declined by only three to four percentage points in three years, and the Q4 Report offers no revised date by which the targets will be met.

The presentation of the indicators also requires correction. The Q4 Report includes a fifth indicator labeled "EOF" in its calendar-year charts and "EFOR" in its fiscal-year charts, without defining either, and presents EFOR as a component of a 100% stacked bar together with EAF, POF, MOF, and FOF. EFOR is a rate computed from forced outage hours and service hours; it is not an additive share of period hours, and the values shown for the fiscal-year series add to well over 100% (for example, 52%, 13%, 2%, 29%, and 39% for the cumulative fiscal-year values). The Q4 Report does not define any of the indicators, does not state whether they follow IEEE Std 762 and NERC Generating Availability Data System ("GADS") conventions, and does not provide the period hours, service hours, planned, maintenance, and forced outage hours, and equivalent derated hours from which the indicators are calculated. Without those definitions and the underlying data, the Energy Bureau cannot verify the reported values or compare them with the targets on a consistent basis.

Genera presented several indicators on an aggregate fleet-wide basis. The absence of generating-unit-level data prevents the Energy Bureau from identifying the units driving the results, measuring individual trends, and evaluating the effectiveness of repairs and maintenance. Unit-level data is particularly necessary given the recurrence of failures of the

[2] See *Motion to Submit Response to Request for Information in Compliance with Resolution and Order Dated April 11, 2024*, Exhibit A, responses to GPR-PREB-NEPRMI20210014-20240411 #1(a) through #1(c), filed by Genera on April 18, 2024 ("April 18 Response").

same type on the same units during Fiscal Year 2026. The Q4 Report itself documents repeated boiler pressure-part failures at Aguirre Unit 2 (172 hours in December 2025 and two events totaling 196 hours in February 2026), two forced outages of Costa Sur Unit 5 totaling 440 hours in January 2026 due to a boiler failure and a feedwater system valve failure, and boiler-related outages of San Juan Unit 9 in January, February, and June 2026. Repeat failures of the same systems indicate that corrective work is returning units to service without resolving the underlying condition, and they bear directly on whether Genera's maintenance program is adequate to reach the availability and forced outage targets. Although the Q4 Report lists inventory-management initiatives, it does not include quantifiable indicators that would permit the Energy Bureau to determine their implementation or effectiveness.

The Q4 Report also identifies approximately $22.4 million as projected savings or a projected balance related to the acquisition of critical components, without adequately explaining the source of the balance, the acquisitions that were not made, the effect on reliability, or the proposed use of those funds. This omission is material given the need to ensure the timely availability of critical parts. The Energy Bureau further notes that the projected savings figure reported for the fourth quarter ($22,399,579.94) is identical, to the cent, to the figure reported for the third quarter, even though awards increased from approximately $69.2 million to approximately $80 million and the amount pending award decreased from approximately $35.7 million to approximately $24.4 million during the same period. The figure therefore does not appear to have been updated, and its characterization as savings is unsupported.

The capacity information corresponds to selected period-end dates and does not consistently present Genera's total available capacity during each period or data to evaluate available reserves. Attachments to GPR-PREB-NEPRMI20210014-20240226 #5 of the August 14 Motion ("Attachment 5") describes events, their duration, and corrective actions, but does not systematically identify the root cause, preventive measures, or completion dates. Several entries in Attachment 5 contain no corrective action at all, including a 331-hour outage of San Juan Unit 9 in June 2026, and none of the entries states whether the duration of the event was affected by the availability or unavailability of Consumables, Spare Parts, and Capital Spare Parts, which is the specific information required by Item 5 of Section I of Attachment A. Nor does the Q4 Report provide a verifiable plan for disposing of obsolete parts (the Q4 Report states that no disposition process has been initiated and that no approvals from PREPA, the Energy Bureau, or the Puerto Rico Public-Private Partnerships Authority ("P3A") are pending, which contradicts the second- and third-quarter updates in the same report stating that the materials were awaiting PREB and P3A authorization for final disposition) or an adequate explanation regarding LUMA Energy, LLC's ("LUMA") failure to approve the maintenance program. The Unit Maintenance Plan for Boilers and Turbo-Generators attached to the Q4 Report is labeled a draft, and Genera states that LUMA has not approved or finalized it and that its dates may change. A maintenance plan that the system operator has not approved cannot serve as a reliable basis for planning outages, staging Spare Parts and Capital Spare Parts, or committing the funds discussed above. The Q4 Report does not identify when the plan was first submitted to LUMA, what objections LUMA has raised, or what has been resolved in the monthly coordination meetings that Genera describes.

For these reasons, the Energy Bureau **DETERMINES** that Genera should not be deemed in full compliance at this stage. Genera must submit supplemental information, respond to the additional requirements of information set forth below regarding the adequacy of its maintenance program, and prospectively correct the format of its quarterly reports.

III. Order

The Energy Bureau hereby **TAKES NOTICE** of the August 14 Motion and the Q4 Report, and **DENIES** Genera's request to be deemed in full compliance with the February 26 Resolution. The Energy Bureau **ORDERS** Genera to file, within **twenty (20) calendar days** from notice of this Resolution and Order, a supplemental report that fully and traceably addresses the following:

1. A specific plan to achieve the target of reducing Forced Outages to fifteen percent (15%). The plan shall identify the principal causes of the outages, the units contributing most significantly to the indicator, corrective and preventive measures, the expected quantified effect, and an implementation schedule, including the revised date by which Genera expects to achieve the target and, for each unit whose Fiscal Year 2026 forced outage factor exceeded fifteen percent (15%), the specific measures and dates applicable to that unit.[3]

2. To show progress as required in Section I (2) of Attachment A,[4] Genera shall provide the baseline or starting point used to measure the target of increasing availability by seventeen percent (17%), equivalent to 340 MW, reconciled to the June 30, 2023 reference point identified in the April 18 Response (1,833 MW available of 4,247 MW installed), stated as dependable capacity rather than point-in-time output, and excluding temporary and emergency units that were not part of that reference point; the result achieved to date; and a plan to close the remaining gap. The plan shall identify the initiatives, affected units, expected MW increase for each initiative, cost or budget source, start date, milestones, and estimated completion date.

3. A monthly and quarterly breakdown, for each generating unit, of EAF, FOF, EOF, POF, MOF, and EFOR, each defined in accordance with IEEE Std 762 and NERC GADS conventions and accompanied by the period hours, service hours, planned, maintenance, and forced outage hours, and equivalent derated hours used to compute it, together with nameplate capacity, available capacity, and capacity limitations (including the cause, magnitude in MW, start date, and expected end date of each limitation). Genera shall explain every material variance and reconcile the unit-level totals with the fleet-wide aggregate indicators. The unit-level data shall include the peaking and temporary generation units operated by Genera, and EFOR shall not be presented as an additive component of period hours.

4. A reconciliation of approximately $22.4 million in projected savings or projected balance reported in Section GPR-PREB-NEPRMI20210014-20240226 #4. The reconciliation shall identify the approved budget, obligations, awards, disbursements, uncommitted balances, deferred or canceled acquisitions, reasons for the variances, effect on the availability of critical parts, and proposed use of the funds. Genera should not characterize the balance as savings without demonstrating that the contemplated needs were satisfied and that reliability was not adversely affected. Genera shall also explain why the projected savings figure has remained unchanged since the third-quarter report despite additional awards, and identify any conditions attached to the funding source that govern the use of an unexpended balance.

5. A revised version of Attachment 5 that, for every failure or outage event, identifies the root cause; the corrective action taken; preventive action; scheduled and actual completion dates; and whether the duration of the event was affected by the availability or unavailability of Consumables, Spare Parts, and Capital Spare Parts, as required by Item 5 of Section I of Attachment A. If the analysis has not been completed, Genera shall provide a date certain for its completion. For every unit with two or more events attributable to the same system or component during Fiscal Year 2026, Genera shall provide the root cause analysis and describe the changes made to its maintenance program as a result.

6. Regarding the management of obsolete parts under Section C3(a)(i)[5]: the status of the disposal documentation; required approvals; disposal method; safety or environmental risks; and a schedule plan, with milestones and dates, to complete the process. Genera shall also explain its statement that no approvals from PREPA, the Energy Bureau, or P3A are pending, considering its prior statements that final

[3] *Id.,* Attachment A section I(1).

[4] *Id.,* Attachment A section I(2).

[5] *Id.,* Attachment A section II C3(a)(i).

disposition was awaiting PREB and P3A authorization and identify each approval it understands to be required and the entity from which it is required.

7. Regarding Section C13:[6] Genera shall include contemporaneous documentation supporting its efforts for the approval of the Unit Maintenance Plan, including the date on which each version of the plan was submitted to LUMA, LUMA's written comments or objections, the records of the monthly coordination meetings, and the specific outages that remain unresolved, and, if it cannot identify a date, explain why and propose a mechanism and schedule for resolving the outstanding matters.

8. A description of the maintenance program applied to each of the main generating units (San Juan Units 5, 6, 7, and 9; Costa Sur Units 5 and 6; Aguirre Units 1 and 2 and the Aguirre Combined Cycle STAG 1 ; Palo Seco Units 3 and 4; and the Cambalache and Mayagüez units), showing for Fiscal Year 2026 the preventive maintenance work orders scheduled and completed, the preventive and corrective maintenance backlog expressed in work orders and labor hours, the ratio of corrective to preventive work, and the condition-monitoring findings (vibration, infrared thermography, ultrasound, and boiler tube surveys) that were converted into work orders. Genera shall explain how this information is used to adjust outage scopes, the Unit Maintenance Plan, and the inventory of Spare Parts and Capital Spare Parts.

9. In light of the repeated boiler pressure-part failures reported during Fiscal Year 2026, a boiler condition assessment for each steam unit, identifying the date and results of the most recent tube thickness survey and non-destructive examination of the waterwall, superheater, reheater, and economizer sections; the sections identified as at risk of failure; the replacements scheduled and the Spare Parts and Capital Spare Parts on hand or on order for that purpose; and the expected effect on the unit's forced outage factor.

10. For every unit that, as of the date of this Resolution and Order, has been out of service for more than thirty (30) days or is operating with a capacity limitation greater than ten percent (10%) of its nameplate capacity: the date on which the condition began; its cause; the scope of the repair; the contracts and critical components required and their status; the critical path; the estimated return-to-service or full-capacity date; and each previous estimate, with the reason it was not met. For Aguirre Unit 1, Genera shall include the date, scope, value, and schedule of the contract awarded to the original equipment manufacturer.

11. For each planned outage during Fiscal Year 2026 and each outage shown in the Unit Maintenance Plan attached to the Q4 Report, the originally scheduled start date, duration, and scope; the actual or currently projected start date, duration, and scope; the variance; the reason for the variance; and the availability lost, expressed in MW-days, as required by Items 3 and 4 of Section I of Attachment A.

12. A quarterly forecast of fleet-wide and unit-level EAF, FOF, and EFOR through the end of Fiscal Year 2027 that reflects the outages in the Unit Maintenance Plan, identifies the quarter in which Genera expects to reach the fifteen percent (15%) forced outage target and the 340 MW availability target, and states the assumptions on which the forecast depends.

Beginning with the next quarterly report, Genera shall permanently incorporate the requirements in Items 1 through 12, in addition to all requirements previously established by the Energy Bureau. Each report shall include a compliance matrix identifying, for each requirement, the section, page, and attachment containing the response. General references to other documents or information systems shall not be deemed responsive unless the required data and explanations are included in the record. The indicators required in Item 3

[6] *Id.*, Attachment A section II C13.

should be presented in the same format in every report so that trends can be followed from one report to the next.

The Energy Bureau further **ORDERS** LUMA to file, **within ten (10) calendar days** from notice of this Resolution and Order, its position regarding the Unit Maintenance Plan for Boilers and Turbo-Generators (Rev. August 4, 2026) attached to the Q4 Report, identifying each planned outage that it has not approved, the reason, the system conditions under which the outage could proceed, and the date by which it expects to approve a final plan.

In addition, until further notice, Genera shall notify the Energy Bureau in writing, within forty-eight (48) hours of the event of any forced outage or capacity limitation of a main generating unit that removes two hundred (200) MW or more from the system for more than twenty-four (24) hours. The notice shall state the preliminary cause, the repair scope, the parts and contracts required, and the estimated return-to-service date, and Genera shall update that estimate whenever it changes.

The Energy Bureau **WARNS** Genera that failure to comply with this Resolution and Order may result in the imposition of administrative fines and any other remedy available under Act 57-2014[7], as amended, and the applicable regulations.

Be it notified and published.

Edison Avilés Deliz
Chairman

Ferdinand A. Ramos Soegaard
Associate Commissioner

Sylvia B. Ugarte Araujo
Associate Commissioner

Antonio Torres Miranda
Associate Commissioner

Omar M. Rodríguez González
Associate Commissioner

CERTIFICATION

I certify that the majority of the members of the Puerto Rico Energy Bureau agreed on September 18, 2026. I also certify that on September 18, 2026, I have proceeded with the filing of this Resolution and Order and was notified by email to karenortiz@aes.com; elias.sostre@aes.com; carlos.reyes@ecoelectrica.com; alexis.rivera@prepa.pr.gov; mvalle@gmlex.net, nzayas@gmlex.net; rcruzfranqui@gmlex.net; katiuska.bolanos-lugo@us.dlapiper.com; margarita.mercado@us.dlapiper.com, jfernandez@ecija.com; jdiaz@ecija.com; eramos@ecija.com; legal@genera-pr.com; regulatory@genera-pr.com.

I sign this in San Juan, Puerto Rico, today September 18, 2026.

Sonia Seda Gaztambide
Clerk

[7] Known as *the Puerto Rico Energy Transformation and RELIEF Act*, as amended ("Act 57-2014").