

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

IN RE:

REVIEW OF THE PUERTO RICO ELECTRIC
POWER AUTHORITY'S 10-YEAR
INFRASTRUCTURE PLAN-DECEMBER 2020

CASE NO.: NEPR-MI-2021-0002

SUBJECT: Resolution regarding Genera's
August 6, 2026, 7 MGD Reverse Osmosis
project.

RESOLUTION AND ORDER

I. Procedural Background

On August 6, 2026, Genera PR LLC ("Genera") filed a motion seeking approval to submit certain restoration and hazard mitigation of the power generation water supply function project to Federal Emergency Management Agency ("FEMA").¹ The Initial Scope of Work ("Initial SOW"), attached to the August 6 Motion as Exhibit A, proposes to restore a power generation water supply function through the construction of a reverse osmosis ("RO") water-treatment facility capable of producing a minimum of 7.0 million gallons per day ("MGD") of treated water at the San Juan or Palo Seco Power Plant (the "Proposed Project"). Genera requests expedited approval of the Initial SOW prior to its submission to COR3 and FEMA. Genera states that the project is intended to restore disaster-damaged RO and process-water treatment functions, provide a reliable and independent source of treated water for generation facilities, and reduce vulnerability to interruptions in external water supply, including drought conditions.²

The Initial SOW identifies a proposed net production capacity of 7.0 MGD, a preliminary gross installed capacity of approximately 7.7 to 8.4 MGD, and a preliminary Rough Order of Magnitude ("ROM") cost of \$135 million, with an initial ROM range of \$95 million to \$165 million. It contemplates San Juan and Palo Seco as potential locations, with the final location, configuration, and other material project parameters to be established through subsequent investigation, alternatives analysis, and preliminary engineering.³

II. Energy Bureau Evaluation

The Energy Bureau of the Puerto Rico Public Service Regulatory Board ("Energy Bureau") recognizes the importance of a reliable water supply to the operation and resilience of Puerto Rico's generation facilities and the potential value of reducing vulnerability to drought and interruptions in external water supply. The question presently before the Energy Bureau, however, is whether the Initial SOW, in its current state, provides an adequate basis to approve the Proposed Project for submission and further development as presently defined. The Energy Bureau determines that it does not. The deficiencies are not limited to FEMA funding classification. Rather, the present record does not yet establish the need for the proposed 7.0-MGD capacity, its consistency with the expected utilization and retirement of the generation fleet and the applicable resource-planning framework, the appropriate location and configuration, the relative merits of reasonable alternatives, the long-term operating and ratepayer consequences, or the limited funding capacity for the Section 428 and Section 406 components.

A. Project Definition, Pre-disaster Baseline, and Water Demand

The Initial SOW presents 7.0 MGD as the proposed project capacity before completing the analysis necessary to establish that requirement. The document provides that a subsequent water-demand analysis must confirm demand by generating unit, identify average, peak, and emergency

¹ See *Motion for Approval to Submit Restoration and Hazard Mitigation of the Power Generation Water Supply Function Project to FEMA* filed by Genera on August 6, 2026, in this proceeding ("August 6 Motion")

² August 6 Motion, pp. 2-4.

³ Initial Scope § 1, Project Information, p. 1; § 19, Preliminary Cost Estimate, pp. 28-29.



demand, identify continuous and intermittent uses, and ultimately "confirm the 7.0-MGD net requirement."⁴ Thus, a principal design parameter remains to be demonstrated rather than established by the present submission.⁵

The same issue exists with respect to the pre-disaster baseline. The Initial SOW states that the applicant will subsequently confirm the pre-disaster function, installed and operating capacity, equipment configuration, recovery rate, and product-water quality, and acknowledges that the confirmed pre-disaster capacity will establish the eligible Section 428 base-restoration scope. The Initial SOW also identifies current RO capacity, historical water production, and water demand by generating unit among the information still required to finalize the scope.⁶ These matters are fundamental to the evaluation of the Proposed Project and are not limited to matters of final engineering design. Without a validated pre-disaster baseline and demonstrated current and projected water requirements, the Energy Bureau cannot determine the appropriate restoration scope, whether 7.0 MGD is justified, or the extent to which the Proposed Project represents restoration, mitigation, expansion, or a combination thereof.

As discussed further below, this distinction is particularly important given the finite funding available under Section 428 and the funding framework established through the Consolidated Project List.⁷ That framework identifies the projects allocated to the Puerto Rico Electric Power Authority ("PREPA"), LUMA⁸, and Genera that are intended to proceed within the available Section 428 funding capacity; therefore, the extent to which the Proposed Project constitutes restoration, mitigation, expansion, or some combination thereof may directly affect whether and to what extent it can be accommodated within the existing funding allocation.

B. Long-Term Utilization, Resource Planning, and Generation-Fleet Retirement

The Proposed Project must also be evaluated against the expected useful life and future utilization of the generation facilities it is intended to serve. The Initial SOW contemplates a minimum thirty-year design life for major civil components.⁹ Yet it does not identify the generating units expected to remain in operation during that period, their anticipated retirement dates and utilization, or the effect of the evolving generation resource mix on future process-water demand. A project intended to support generation assets over a multi-decade period cannot be evaluated solely against historical or installed water demand without considering the resource-planning assumptions governing those assets.¹⁰

This consideration is particularly important for Palo Seco Units 3 and 4. In its March 6, 2026 Resolution and Order in Case No. NEPR-MI-2021-0002, addressing the proposed conversion of those units to dual-fuel capability using natural gas and No. 6 fuel oil, the Energy Bureau considered their anticipated operation in light of the generation mix reflected in the 2025 Proposed IRP.¹¹ The Energy Bureau noted the contemplated retirement of Palo Seco Unit 4 around 2030 and Unit 3 around 2032, with a potential latest retirement date of approximately 2034, as well as substantially declining utilization in the years preceding retirement.¹² The Energy Bureau

⁴ Initial Scope § 16, Phase 2 - Water-Demand Analysis, p. 23.

⁵ *Id.*

⁶ Initial Scope § 25, Information Required to Finalize the Scope, pp. 34-35; and Initial Scope § 6, Predisaster Function and Capacity, pp. 4-5.

⁷ See, in general, *In Re: Review of the Puerto Rico Electric Power Authority's 10 Year Infrastructure Plan-December 2020*, Case No: NEPR-MI-2021-0002.

⁸ LUMA Energy LLC and LUMA Energy ServCo LLC (jointly referred as "LUMA").

⁹ Initial Scope §18, Preliminary Design Criteria, p. 28.

¹⁰ Initial Scope § 18, Preliminary Design Criteria, pp. 27-28.

¹¹ See, *In re: Review of the Puerto Rico Electric Power Authority Integrated Resource Plan*, Case No.: NEPR-AP-2023-0004, *Memorandum of Law in Support of Request of Confidential Treatment of Revised 2025 IRP and Submission of Public Version and Confidential Version of Revised 2025 IRP*, filed by LUMA on October 29, 2025 ("2025 Proposed IRP")

¹² See *Resolution and Order, In Re: Review of the Puerto Rico Electric Power Authority's 10 Year Infrastructure Plan-December 2020*, Case No: NEPR-MI-2021-0002, March 6, 2026, p. 9-11.



further recognized that assumptions requiring near year-round operation of those units would be inconsistent with their likely operational role beginning around 2029 and thereafter.¹³ A similar consideration applies to the San Juan Power Plant. In its March 20, 2026 Resolution and Order approving the proposed conversion of San Juan Units 7 and 9 to operate with natural gas as the primary fuel, the Energy Bureau evaluated the continued operation of those units against the generation mix contemplated in the 2025 Proposed IRP. The Energy Bureau noted that the 2025 Proposed IRP projects the retirement of San Juan Unit 7 around 2030 and San Juan Unit 9 around 2031, with a potential latest retirement date of approximately 2034, while anticipating substantially reduced utilization of both units beginning around 2029.¹⁴

Accordingly, the water-demand analysis must be reconciled with the applicable resource-planning framework and must account for expected dispatch and retirement of existing thermal units, the water requirements of replacement generation, and any other demonstrated long-term uses. Without that analysis, there is a material risk that a facility designed for a thirty-year horizon could be materially oversized or underutilized for a substantial portion of its useful life.

C. Alternatives, Site Selection, and Supporting Infrastructure

The Initial SOW also presupposes RO and a 7.0-MGD capacity before completion of the alternatives analysis that is intended to evaluate repair and expansion, full replacement, relocation, water reuse, transmission requirements, capital and life-cycle costs, and selection of a preferred alternative. A reasoned alternatives analysis should inform, rather than merely validate, the selection of technology, capacity, configuration, and location.¹⁵

The submission reflects that material site and infrastructure requirements also remain unresolved. For Palo Seco, the Initial SOW identifies intake and outfall feasibility, electrical service, tanks and piping, transmission requirements, connections to generation systems, environmental impacts, and other matters requiring further evaluation, while recognizing the possible need for a new intake, new outfall, transmission infrastructure, easements, and increased pumping energy. The Initial SOW further states that the final scope must still identify the facilities that will receive the 7.0 MGD and the required flow to each facility.¹⁶

Until those matters are evaluated, the Energy Bureau cannot determine whether San Juan or Palo Seco is the appropriate location, whether a centralized 7.0-MGD facility is the preferred configuration, or whether a smaller, distributed, reuse-based, storage, interconnection, or other alternative would satisfy the demonstrated need more reasonably. At this stage, reserving up to \$165 million in Section 428 funding for a project that remains insufficiently defined will constrain the limited availability of those funds for other, more developed projects for which the need and scope may be more clearly established.

D. Life-Cycle Economics, Operating Costs, Rate Impacts, and Cost of Produced Water

The availability of FEMA funding for eligible capital expenditure does not eliminate the economic consequences of maintaining and operating the Proposed Project. The Initial SOW recognizes life-cycle cost, operation and maintenance cost, and energy consumption as site-selection criteria, but does not quantify those costs. The proposed facility would require recurring expenditures for electricity, intake and high-pressure pumping, membrane replacement and cleaning, pretreatment chemicals, filters, labor, maintenance, brine management, instrumentation, and related requirements.¹⁷

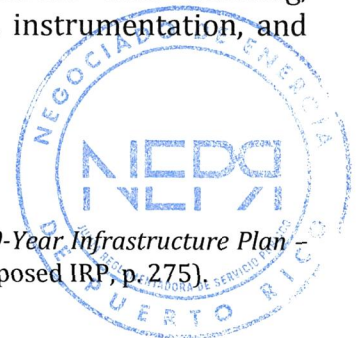
¹³ See Resolution and Order, *In re: Review of the Puerto Rico Electric Power Authority's 10-Year Infrastructure Plan* - December 202, Case No.: NEPR-MI-2021-0002, March 6, 2026, pp. 17-18 (citing 2025 Proposed IRP, p. 275).

¹⁴ *Id.*, March 20, 2026, pp. 9-10 (citing 2025 Proposed IRP, pp. 225, 275, 293).

¹⁵ Initial Scope § 16, Phase 4 - Alternatives Analysis, pp. 23-24.

¹⁶ Initial Scope § 15, Water Transmission, pp. 21-22 and Initial Scope § 12, Location Alternative B - Palo Seco Power Plant, pp. 19-20.

¹⁷ Initial Scope § 14, Site Selection Criteria, pp. 20-21; § 8, Proposed Project, pp. 6-7.



The present record therefore does not establish the expected annual operating cost, the entity responsible for those costs, or the resulting effect on the cost of electric service. Nor does it establish the expected cost per thousand gallons of desalinated water or compare that cost against the avoided cost of obtaining an equivalent quantity and quality of water from the Puerto Rico Aqueduct and Sewer Authority ("PRASA"), including treatment, pumping, storage, and other associated costs. That comparison remains relevant even if FEMA funds all eligible capital investment because a federally funded facility may nevertheless create material recurring costs.

The analysis must also reflect expected utilization rather than assume continuous full-capacity operation. Fixed staffing, maintenance, preservation, inspection, and readiness costs do not necessarily decline proportionately with water production. Accordingly, reduced utilization resulting from lower dispatch or retirement of generating units may materially increase the effective cost per thousand gallons of water.

AMN In addition, if production exceeds the amount reasonably required for electric generation, the record does not identify whether PRASA or another entity requires or would purchase the excess water, the price and terms of any such arrangement, the required interconnection or transmission infrastructure, or the allocation of recurring costs. Potential regional or resilience benefits may be relevant, but they must be demonstrated and evaluated against their costs and reasonable alternatives.

AMN *PR* The economic evaluation should also consider whether producing water through the Proposed Project would be cost-effective when compared with obtaining water from PRASA or other available sources. In particular, the analysis should determine the actual cost of producing water through the Proposed Project, including all recurring energy, operation, maintenance, replacement, treatment, and other costs, and compare that amount on a per-thousand-gallon basis with the cost of obtaining an equivalent quantity and quality of water from existing sources. This comparison is particularly important because the availability of federal funding for eligible capital expenditures does not establish that operation of the Proposed Project would result in a lower cost of water over its useful life. Accordingly, the relative cost of the available alternatives must be established on a project-specific basis before the economic reasonableness of the Proposed Project can be determined.

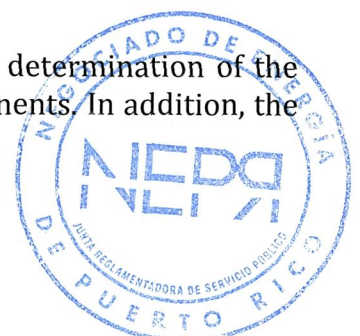
AMN The analysis must also address the disposition and economic implications of any water produced by the Proposed Project in excess of the requirements of the generation fleet. To the extent such excess water could be sold to PRASA or another third party, Genera should identify the anticipated purchaser, the basis for establishing the sales price, the entity that would receive the resulting revenues, and the treatment of those revenues for ratemaking purposes. In particular, if the operating costs associated with producing excess water are recovered from electric customers, any revenues derived from the sale of that water must be appropriately accounted for in determining the costs ultimately borne by those customers. Moreover, the potential sale of excess water cannot, by itself, be considered an economic benefit of the Proposed Project without comparing the incremental cost of producing that water with the revenues reasonably expected from its sale. Otherwise, production of water beyond the generation fleet's demonstrated needs could result in additional costs ultimately borne by electric customers rather than an economic benefit to the system.

E. FEMA Sections 428 and 406 and Consolidated Project List Funding Capacity

Separate from, and in addition to, the foregoing project-need, planning, and economic considerations, the Proposed Project must be evaluated within the funding framework established by the Energy Bureau for FEMA-funded permanent-work projects under the Consolidated Project List. The Initial SOW contemplates restoration of the confirmed pre-disaster function and capacity under Section 428 and incremental capacity, redundancy, hardening, and resilience measures under Section 406, but states that the detailed 428/406 allocation matrix will be developed subsequently.¹⁸

The absence of a confirmed pre-disaster baseline prevents a meaningful determination of the magnitude and cost of the respective Section 428 and Section 406 components. In addition, the

¹⁸ Initial Scope § 20, Section 428 and Section 406 Cost Separation, pp. 29-31.



information presently available does not permit the Energy Bureau to determine whether the anticipated costs can be accommodated within the applicable budgets and allocations of the Consolidated Project List. This is particularly important with respect to the Section 428 component, for which Genera must demonstrate that the proposed costs can be accommodated within the funding capacity available under its approved portfolio without increasing the amounts authorized by the Energy Bureau.

The Energy Bureau must therefore consider the Proposed Project together with the current projected costs of Genera's approved projects, including increases, savings, underruns, reconciliations, and potential reallocations of eligible costs between Sections 428 and 406. The Initial SOW itself reflects the preliminary nature of the cost estimate: it identifies \$135 million for preliminary FEMA programming, while the conceptual cost-component allocation totals \$155 million. Until the project scope, 428/406 allocation, portfolio reconciliation, and available funding capacity are sufficiently developed, the Energy Bureau cannot determine whether the Proposed Project can be accommodated within the existing funding framework.¹⁹

III. Determination

Based on the foregoing, the Energy Bureau **DETERMINES** that the present record is insufficient to approve the Initial SOW as support for the Proposed Project as presently defined. The deficiency is not limited to final engineering or the availability and classification of federal funds. The submission does not establish the validated pre-disaster baseline, actual and projected water demand, consistency of the proposed capacity with the applicable resource-planning framework and anticipated generation-fleet utilization and retirement, the preferred technology and location, reasonable alternatives, long-term operating economics and ratepayer impacts, or the availability and allocation of funding under Sections 428 and 406 and the Consolidated Project List.

The Energy Bureau recognizes that maintaining a reliable and resilient water supply for the generation fleet may be an important component of the transformation of Puerto Rico's electric system.²⁰ At the same time, given the limited resources available to that transformation, proposed investments must be sufficiently defined and supported to permit a determination that they are implementable, cost-effective, and reasonable when compared with available alternatives and competing uses of those resources. Although a project of this nature may ultimately provide resilience and operational benefits, the present record does not establish that those benefits justify the proposed investment. To the contrary, the preliminary information presently available raises material questions as to whether producing water through the Proposed Project would be more costly than obtaining water from existing sources, even if eligible capital costs are federally funded, and whether producing excess water for sale to PRASA could ultimately increase costs borne by electric customers and, depending on the terms and price of any such sale, PRASA's customers as well.

Accordingly, the Energy Bureau **DENIES WITHOUT PREJUDICE** Genera's request for approval of the Initial SOW. Should Genera elect to seek approval of the Proposed Project at a later date, it may submit a new request supported by a sufficiently developed record. In addition to the information and supporting documentation ordinarily required for a request of this nature, any such renewed request shall specifically address the matters identified below.

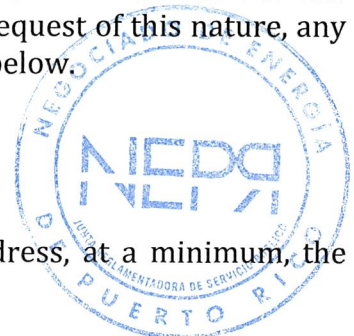
IV. Matters to Be Addressed in Any Renewed Request

Any renewed request for approval of the Proposed Project shall address, at a minimum, the following matters:

1. Predisaster and current water-treatment baseline. The validated pre-disaster installed and operating capacity, historical production, current capacity and

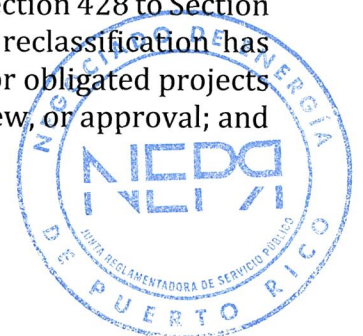
¹⁹ Initial Scope § 19, Preliminary Cost Estimate, pp. 28-29.

²⁰ The present record, however, does not identify an existing deficiency in the water supply available to PREPA's generation facilities, and neither Genera nor PREPA has asserted in this proceeding that the Proposed Project is necessary to remedy a current insufficiency in that supply.



production, equipment configuration, post-disaster repairs, and the basis for distinguishing disaster-related damage from deterioration, deferred maintenance, or unrelated deficiencies.

2. Historical, current, and projected water demand. Water demand by generating unit, including average, peak, emergency, continuous, and intermittent requirements, together with a transparent analysis establishing the appropriate net production requirement, including whether the proposed 7.0-MGD capacity remains justified.
3. Generation-fleet and long-term water-demand forecast. The expected water requirements over the anticipated useful life of the Proposed Project, expressly accounting for the applicable resource-planning framework, anticipated unit retirements, expected dispatch and utilization before retirement, and the water requirements of replacement resources.
4. Alternatives and site analysis. A comparison of reasonable alternatives, including repair or expansion of existing facilities, replacement, relocation, water reuse, existing-system interconnections, storage, smaller or modular RO capacity, distributed treatment, and other technically reasonable alternatives, together with site-specific evaluations of San Juan and Palo Seco.
5. Life-cycle economics and ratepayer impacts. The estimated annual electricity and non-energy O&M costs, expected utilization, cost per thousand gallons at expected and reduced utilization levels, and comparison with the cost of obtaining an equivalent quantity and quality of water from PRASA or other available sources, including relevant treatment, pumping, storage, and associated costs.
6. Disposition and economic treatment of excess water. The proposed disposition of any water produced in excess of generation requirements, including any anticipated purchaser or recipient, required infrastructure, proposed commercial arrangement, expected sales price and revenues, allocation of capital and recurring costs, and treatment of any resulting revenues for ratemaking purposes.
7. Section 428 and Section 406 cost allocation. A preliminary segregation of the estimated project cost between FEMA Section 428 base-restoration costs and FEMA Section 406 hazard-mitigation costs.
8. Global Project Worksheet Costs. The anticipated costs associated with design, architectural and engineering services, equipment and materials, and any other costs expected to be charged to applicable Global Project Worksheets, including whether such amounts are included within or are in addition to the project cost estimate.
9. Section 428 funding capacity. An explanation of how the anticipated Section 428 costs would be accommodated within the budgets and funding allocations established under the Consolidated Project List, including any savings, underruns, scope reductions, or other adjustments relied upon to provide the necessary funding capacity.
10. Status of Genera's approved project portfolio. The current projected costs of Genera's approved projects compared with the amounts reflected in the Consolidated Project List, including segregation of the A&E and E&M Global Project Worksheets, material increases or decreases, and the resulting impact on available funding capacity.
11. Section 428/Section 406 reconciliation. The status of Genera's reconciliation efforts, including amounts identified for reclassification from Section 428 to Section 406 hazard mitigation; amounts for which reconciliation or reclassification has been completed; amounts remaining pending; updated costs for obligated projects and projects under formulation, amendment, submission, review, or approval; and

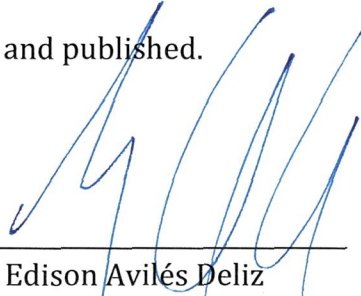


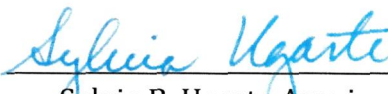
the resulting Section 428 funding capacity released or expected to be released through that process.

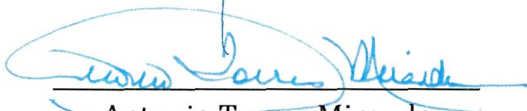
- 12. Project schedule. An updated preliminary schedule addressing project formulation, alternatives analysis, preliminary engineering, development of the Section 428/Section 406 cost allocation, FEMA and COR3 review, design, procurement, and construction.

The Energy Bureau's denial is without prejudice to Genera's submission of a new request once it has developed a record sufficient to address the matters identified in this Resolution and Order.

Be it notified and published.


Edison Avilés Deliz
Chairman


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 October 6, 2026. Associate Commissioner Ferdinand A. Ramos Soegaard did not intervene. I also certify that on October 6, 2026, I have proceeded with the filing of this Resolution and Order and was notified by email to regulatory@genera-pr.com, legal@genera-pr.com, jfernandez@ecija.com, eramos@ecija.com; jdiaz@ecija.com, sromero@ecija.com; alexis.rivera@prepa.pr.gov; nzayas@gmlex.net; mvalle@gmlex.net; rcruzfranqui@gmlex.net; Yahaira.delarosa@us.dlapiper.com; Emmanuel.porrogonzalez@us.dlapiper.com.

I sign this in San Juan, Puerto Rico, today October 6, 2026.


Sonia Seda Gaztambide
Clerk

