

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

NEPR

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IN RE: PUERTO RICO ELECTRIC POWER
AUTHORITY RATE REVIEW

CASE NO.: NEPR-AP-2023-0003

SUBJECT: PREPA's Rebuttal written
testimony to the Energy Bureau's Consultant
Justo González Expert Report on the matter of
Generation, dated October 17, 2025

**PREPA'S REBUTTAL WRITTEN TESTIMONY TO THE PUERTO RICO ENERGY
BUREAU'S CONSULTANT ENG. JUSTO GONZÁLEZ EXPERT REPORT ON THE
MATTER OF GENERATION, DATED OCTOBER 17, 2025**

Eng. Fernando Osorio and William Sullivan

Puerto Rico Electric Power Authority

I. BACKGROUND AND QUALIFICATIONS

Question No. 1: State your name, job title, and provide a copy of your *résumé* or *curriculum vitae*.

Eng. Fernando Osorio Answer to Question No. 1: Eng. Fernando Osorio, Director of Operations at the Puerto Rico Electric Power Authority ("PREPA"). My *résumé* is attached as **Exhibit 1** - Eng. Fernando Osorio *résumé*. There you can find my professional and educational background.

William Sullivan Answer to Question No. 1: William Sullivan, Project Manager for the Grant Formulation Team at Witt O'Brien. My *résumé* is attached as **Exhibit 2** – William Sullivan *résumé*. There you can find my professional and educational background.

Question No. 2: On whose behalf are you providing this testimony?

Eng. Fernando Osorio Answer to Question No. 2: PREPA.

William Sullivan Answer to Question No. 2: PREPA.

Question No. 3: Are you familiar with Justo González Expert Report on the matter of Generation, dated October 17, 2025 (hereinafter, the "Report")?

Eng. Fernando Osorio Answer to Question No. 3: Yes. Specifically, I reviewed his opinions regarding hydroelectric generation.

William Sullivan Answer to Question No. 3: Yes. I also specifically reviewed his opinions regarding hydroelectric generation.

Question No. 4: In the Report, Eng. González, citing Anthony Hurley's (expert witness for the PREPA Bondholders), states that "hydroelectric restoration ... would contribute only about 0.15% of effective capacity." Is that the effective capacity of hydroelectric generation?

Eng. Fernando Osorio Answer to Question No. 4: No. The actual number is 25 MW of renewable energy base load.

Question No. 5: The Report states that there are “\$1.3 billion in requested federal funding [that] is allocated primarily to dam rehabilitation and dredging”. What is the purpose of these projects?

Eng. Fernando Osorio Answer to Question No. 5: The dam and water irrigations systems projects are intended for the rehabilitation of high hazard dams ant to improve and correct damages to water irrigation channels used for agriculture and water supply for human consumption.

Question No. 6: In page 13 of the Report, Eng. González states the following:

C.7 Hydroelectric Generation: A Misallocation of Critical Recovery Funds

I concur with Mr. Hurley’s assessment of the proposed hydroelectric generation expenditures. As shown in Figure 3, Puerto Rico’s hydroelectric fleet provides only limited capacity. The proposed consolidated project plan prepared by PREPA misdirects critical funds that should be allocated to electric system recovery. Nearly \$1.3 billion in requested federal funding is allocated primarily to dam rehabilitation and dredging, activities that will have a negligible impact on increasing the electric system’s dependable generation capacity. While dam and reservoir maintenance is important for flood control and water management, such work should not displace funds urgently needed to resolve the electric system’s core reliability deficiencies. Prioritizing these projects for FAAST funding displaces capital from the primary and intended purpose of the federal grant, which is to restore and improve the reliability of the electric supply. The costs for such non-electric supply projects, however necessary, should not be borne by the electric ratepayer, either directly through rates or indirectly through the misapplication of funds designated for grid reconstruction.

Additionally, in page 15 of the Report, Eng. González makes the following recommendation:

I recommend rejecting PREPA’s proposed \$1.3 billion federally funded hydroelectric rehabilitation initiative—not as a challenge to the technical justification or the need for reservoir and dam improvements— but because this type of work should be financed through means other than the electric ratepayer. Directing federal recovery funds to these projects would divert resources toward

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1 **efforts that yield only limited increases in generation capacity relative to their**
2 **cost.**

3
4 **Do you agree with Eng. González's recommendation that PREPA's proposed \$1.3 billion**
5 **federally funded hydroelectric rehabilitation initiative be rejected by the Energy Bureau?**
6 **Please explain your response.**

7 **William Sullivan Answer to Question No. 6:** No. In making his recommendation, Eng.
8 González's concurs with Mr. Hurley's assessment of the proposed hydroelectric generation
9 expenditures. Mr. Hurley's analysis substantively underscores that ratepayers should not bear
10 increased financial burdens for capital investments while large balances of federal recovery
11 funding remain both available and underspent by PREPA and its operator partners. His testimony
12 expressly provides the opinion that a rate increase for capital improvements would not be
13 necessary "if existing stakeholders were to accelerate the spending of federal funding," a position
14 grounded in the principle of maximizing federal support before burdening the people of Puerto
15 Rico with additional costs. However, in critically evaluating the prudence of current FEMA
16 Accelerated Award Strategy ("FAASt") allocations, Mr. Hurley limits his criteria to grid
17 stabilization and resilience—effectively framing all FAASt expenditures from a single
18 infrastructure perspective. This narrow approach does not fully consider the comprehensive
19 portfolio of projects (including dams, irrigation canals, reservoirs, and allied water assets) that
20 were central in PREPA's development and federal negotiation of the original FAASt award.
21 Further, González's assessment does not fully consider that dam and hydroelectric infrastructure
22 projects were foundational components in PREPA's securing of the original FAASt federal award.
23 The 10-year Infrastructure Plan, publicly adopted by all vested stakeholders and submitted to the
24 Central Office for Recovery, Reconstruction and Resiliency ("COR3"), the Federal Emergency

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1 Management Agency (“FEMA”), the U.S. Department of Housing and Urban Devel (“HUD”) and
2 Congress, transparently included significant investment in dams, hydroelectric plants, reservoirs,
3 and water conveyance systems, acknowledging their dual importance for grid stabilization, disaster
4 risk reduction, water security, and community safety. These projects were part of a comprehensive
5 scope covering more than 19 dams and 10 hydroelectric plants, allocated as “Water Assets”
6 (\$860M+), with further anticipated investments through FEMA’s mitigation programs, HUD
7 Community Development Block Grant for Mitigation (“CDBG-MIT”), and the National Resource
8 Conservation Service (“NRCS”) Watershed Protection and Flood Prevention Operations. Further,
9 dam and hydroelectric projects do not only derive their federal funding from FAASSt allocations;
10 they benefit from substantial co-investment from several federal programs, including:

- 11 • HUD CDBG-DR and MIT grants totaling over \$550M contingent on matched FAASSt
12 expenditures.
- 13 • FEMA Hazard Mitigation Grant Program (HMGP) and Section 406 funds for
14 infrastructure hardening, seismic risk reduction, and flood prevention.
- 15 • NRCS WFPO for watershed restoration.

16 The crucial point missing from both Mr. Hurley’s and Eng. González opinions and/or
17 recommendations is that any effort to reallocate FAASSt funds away from these projects would not
18 only undermine their completion, but would in cases, lead to immediate loss of companion federal
19 co-investments, thus reducing Puerto Rico’s overall disaster recovery resources. The foregoing
20 would leave critical community lifeline systems vulnerable, and would still burden ratepayers in
21 the future as the works are needed. By advocating the reallocation of previously apportioned funds
22 from PREPA dam projects to utility grid upgrades, Mr. Hurley and Eng. González are effectively
23 endorsing two critical—and problematic—outcomes:

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1) Net Reduction in Federal Disaster Investment: More than \$700 million in federal co-investment (specifically from HUD CDBG-MIT, FEMA HMGP, and other aligned sources), which is contractually and structurally tied to these water asset projects, would be subject to de-obligation if FAASt funds were diverted. This would result in a net loss of recovery resources to Puerto Rico at a critical time for public safety and economic resurgence.

2) Prioritizing Private Partner Financial Performance Over Public Good: Such a strategy ultimately places the financial performance goals of a private grid operator over the broader welfare of the island's residents, who require not only reliable electricity but also higher standards of dam safety, clean drinking water, and continued agricultural viability. This contradicts the original intent and multi-agency design of Puerto Rico's 10-year infrastructure recovery framework, which prioritized community lifelines and public health as central to disaster recovery.

The narrow grid-centric framework supported by Eng. González is incomplete. The prudent path is not to reduce Puerto Rico's comprehensive federal investment, nor to disadvantage those who rely on flood safety, clean water, and robust food systems, especially in a region consistently threatened by major disasters.

Question No. 7: What is the risk to PREPA, ratepayers, and the people of Puerto Rico should water asset projects not be completed?

William Sullivan Answer to Question No. 7: Failure to complete the required water-asset projects exposes PREPA, its ratepayers, and the people of Puerto Rico to significant operational, legal, and financial risks. As the public entity entrusted with the administration of hydroelectric assets, reservoirs, and irrigation channels, PREPA has statutory responsibilities under Section 5 of

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1 the Puerto Rico Electric Power Authority Act to safeguard persons and property, regulate the use
2 and enjoyment of its assets, and ensure that facilities under its administration are maintained in a
3 safe condition. If the Authority leaves known water-infrastructure deficiencies unaddressed, it
4 risks falling out of compliance with these legal duties. In practical terms, deteriorated or unsafe
5 assets --such as embankments, spillways, access structures, or water-control systems, could expose
6 PREPA to liability and regulatory enforcement actions, while also undermining the safe operation
7 of essential infrastructure.

8 The risks extend well beyond legal compliance. PREPA's failure to perform the necessary water-
9 asset projects would also jeopardize the availability of future FEMA Public Assistance
10 ("PA") funding for these facilities. Under the Public Assistance Program and Policy Guide
11 ("PAPPG") §VII.G(6), applicants must either repair, replace, secure, sell, or demolish damaged
12 facilities when accepting capped funding for alternate or alternative procedures projects. If PREPA
13 does not undertake the required repairs or mitigation, PREPA must still ensure that unsafe facilities
14 are rendered safe—either through demolition or significant security and stabilization measures, all
15 of which require funding. Should PREPA decline to use PA funds and fail to complete this work
16 by redirecting these funds to other projects, as recommended by Eng. González, the burden would
17 shift to another funding source, which would almost certainly be the ratepayer. Furthermore,
18 under PAPPG §VII.G(6)(d), a damaged facility can only remain eligible for public assistance in
19 future disasters if it has been repaired in accordance with current codes, standards, and FEMA-
20 mandated mitigation. If PREPA does not complete the required reconstruction or mitigation work
21 now, PREPA risks losing eligibility for federal support in a future emergency—forcing the
22 ratepayer to finance the repairs through rates to restore eligibility. In other words, a failure to

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1 execute these projects now will result in significantly higher long-term costs for the same work,
2 with the burden shifting directly to rate payers.

3 From a broader societal perspective, leaving critical water assets in a deteriorated state increases
4 physical risks to surrounding communities. Many of these facilities are tied to flood-control,
5 irrigation, or hydroelectric operations. Unaddressed deficiencies can heighten the risk of structural
6 failures, operational disruptions, or environmental impacts—all of which can endanger life,
7 property, and the stability of local economies. These risks ultimately fall on the population of
8 Puerto Rico, who depend on these water systems for public safety, and reliable energy production.

9 In sum, the non-completion of water-asset projects places PREPA in potential violation of its legal
10 obligations, jeopardizes future federal funding, exposes the ratepayer to avoidable financial
11 burdens, and increases safety risks for communities across Puerto Rico. Completing these projects
12 is therefore essential—not only for statutory and financial compliance, but to protect the wellbeing
13 and security of the population PREPA serves.

14 **Question No. 8: In page 15 of the Report, Eng. González asserts that “[t]he necessity of this**
15 **investment is further undermined by the fact that hydroelectric power was not included in**
16 **the Priority Stabilization Plan (PSP) approved by the Energy Bureau.” Did PREPA include**
17 **hydro electric power in the PSP? Please explain your response.**

18 **Eng. Fernando Osorio Answer to Question No. 8:** No. PREPA did not include hydro electric
19 power in the PSP because the majority of PREPA improvements are not directly in response to
20 hydro generation. Most funds are to address risks noted above.

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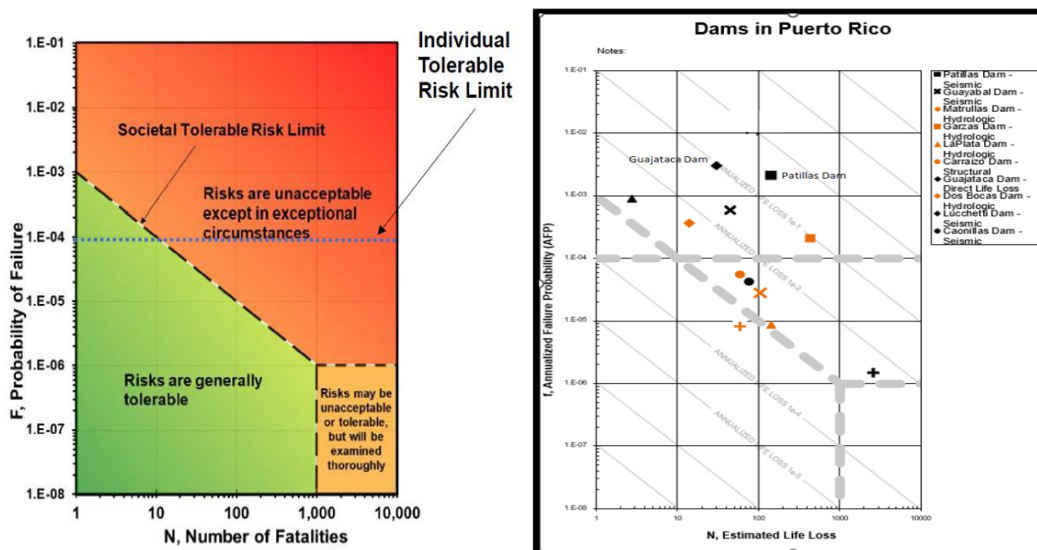
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Question No. 9: What would be the consequences of redirecting federal funds away from PREPA's water-infrastructure assets, particularly with respect to the risks, impacts, and deficiencies associated with each project?

Eng. Fernando Osorio Answer to Question No. 9:

- **Guajataca Dam:** it involves a single point of failure for 350,000 people and hundreds of millions in federal investment. The Guajataca Dam represents the largest federal investment in PREPA's water portfolio, with costs exceeding \$550 million. It remains in poor condition. Withdrawing the federal funds assigned to the Guajataca Dam project would have catastrophic consequences for public safety, water security, agriculture, and fiscal stability. The dam's prior structural failure placed 70,000 people in immediate danger, and updated modeling confirms that roughly 1,000 residents downstream remain at risk of rapid inundation in the event of a catastrophic breach. Beyond the life-safety threat, Guajataca is the primary source of potable water for nearly 350,000 Puerto Ricans who lack a reliable alternative supply, meaning any disruption would directly compromise the region's drinking-water security. To put this in perspective, FEMA requires, in accordance with EO 11988, Floodplain Management, that a flood risk (not loss of life risk) above .2% (we are at .3%) is too high for any critical facility (hospitals, fire stations, police stations, storage of critical records). *Please see below the illustrative tables titled Individual Tolerable Risk Level and Dams in Puerto Rico.* The dam also delivers an average of 215 acre-feet of water each month to farmers in Isabela, Hatillo, Aguadilla, and San Sebastián—an essential input for local food production and agricultural livelihoods. Losing this project would expose these municipalities to crop losses, reduced local food

output, and long-term economic harm. Finally, withdrawing funding would strand more than \$500 million in federal investment already committed to the facility. Without completing the stabilization work, emergency repairs could exceed available budgets, full replacement could become exponentially costlier, and the substantial federal investment made to date could be devalued or rendered unusable.



- Guayabal Dam:** The Guayabal Dam faces quantifiable and rising failure probabilities, placing it among PREPA's highest-risk assets in an active seismic and hydrologic zone. Since sediment levels have increased by at least four feet beyond the assumptions used in those models, the true risk is significantly higher. Compounding this concern, the dam is located directly atop the Great Southern Puerto Rico Fault Zone. Without the federally funded rehabilitation projects, PREPA would be knowingly neglecting a high-risk structure with escalating failure probabilities, exposing both Puerto Rico and the federal government to substantial financial consequences in the event of a breach. In addition, PREPA could

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1 face serious legal exposure for failing to address these well-documented structural and
2 seismic vulnerabilities.

- 3 • **Rio Blanco Hydroelectric Plant:** The rehabilitation of the Rio Blanco Hydroelectric Plant
4 would restore up to 5 MW of renewable generation capacity for an investment of \$23
5 million, making it a relatively low-cost opportunity to preserve valuable baseload
6 renewable energy. However, if PREPA does not complete the required work, FERC
7 relicensing will not be possible, and PREPA would be legally obligated to decommission
8 and fully remove the hydroelectric system. Such decommissioning and removal would cost
9 approximately \$178,488,770, more than the planned rehabilitation, converting a
10 manageable restoration project into a major financial liability that could impose tens of
11 millions of dollars in additional avoidable expenses.

- 12 • **Yauco System and Lajas Agricultural Reserve:** The Yauco System plays a critical role
13 in Puerto Rico's energy, water, and agricultural stability, supplying up to 8 MW of
14 renewable baseload energy through its hydroelectric plants while delivering approximately
15 1,200 acre-feet of water each month to the Puerto Rico Aqueduct Sewage Authority
16 ("PRASA") for the municipalities of Yauco, Sabana Grande, Guánica, Lajas, San Germán,
17 and Cabo Rojo. It also provides essential irrigation to the Lajas Valley Agricultural
18 Reserve, one of the island's most important and legally protected farming regions spanning
19 30,000 Spanish acres (cuerdas). Redirecting or losing the federal funding needed for this
20 system would jeopardize both renewable energy production and vital agricultural activity,
21 threaten municipal water supplies, and inflict economic losses on farmers, food
22 distributors, and local businesses. Ultimately, the absence of funding could even force the

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1 permanent closure of these hydroelectric assets, eliminating a key component of Puerto
2 Rico's renewable generation portfolio.

- 3 • **South Coast Irrigation District:** The South Coast Irrigation District is a critical
4 component of Puerto Rico's water and energy infrastructure, supplying essential water to
5 multiple municipalities, agricultural operations, and—most importantly—the AES Plant,
6 which provides 510 MW of baseload generation, or roughly 15% of the Island's total
7 capacity. Failure to rehabilitate this system would jeopardize the operational stability of
8 one of Puerto Rico's largest and lowest-cost generators, leading to higher systemwide
9 energy costs, reduced grid reliability, and the potential for load shedding or curtailments.
10 These disruptions would have cascading effects on economic activity throughout the South
11 Coast region. Redirecting federal funds away from this project would therefore directly
12 undermine PREPA's core objectives of ensuring energy reliability and maintaining
13 affordable electricity rates for Puerto Rico's residents and businesses.

- 14 • **Dos Bocas / Caonillas System:** The Dos Bocas–Caonillas System is a vital component of
15 Puerto Rico's water and energy infrastructure, supplying 18 MW of renewable baseload
16 generation through the Dos Bocas Hydroelectric Plant and feeding the Super aqueduct,
17 which delivers potable water to large portions of the Island. Sedimentation in the reservoirs
18 has already compromised storage capacity, threatening both energy production and water
19 supply. Without the planned dredging, the system's generation output will continue to
20 decline, peak-demand water levels cannot be reliably maintained, and the island's drought
21 resilience will weaken. These conditions would force PREPA to operate under higher costs
22 and rely more frequently on emergency response measures. Thus, maintaining federal

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1 funding is essential to preserving both renewable energy production and critical water
2 delivery capacity.

- 3 • **Yauco System Dredging:** Dredging within the Yauco System, including the Loco dam, is
4 essential to sustaining hydroelectric generation, agricultural irrigation, municipal water
5 supply, and safe flood-control operations. The Loco Dam supplies water to the South West
6 part of the island and to the Lajas Valley Agricultural Reserve. This reserve provides the
7 biggest supply of hay for cattle/livestock; it also produces many agricultural products, and
8 seeds for rice and soy, which are exported to the United States and other parts of the world.
9 As sediment continues to accumulate, reservoir capacity diminishes, reducing the system's
10 ability to support these interconnected functions. Each year of delay allows sediment
11 buildup to worsen, significantly increasing the cost and technical complexity of future
12 dredging efforts. Maintaining funding for this work is therefore critical to preserving the
13 system's operational integrity and avoiding far greater expenses and risks in the future.

14 Redirecting or withdrawing federal funding from PREPA's dam, hydroelectric, irrigation, and
15 dredging projects would create significant financial, legal, and operational liabilities for Puerto
16 Rico. Deferred maintenance would dramatically increase future repair costs, as the projects
17 currently covered by federal funds would later require emergency interventions at many times the
18 expense. PREPA would also risk regulatory non-compliance, potentially violating FERC licensing
19 requirements, territorial and federal dam-safety standards, and key environmental permitting
20 obligations. The stakes are even higher for life-safety: abandoning repairs on known high-hazard
21 structures could expose the Commonwealth to federal enforcement actions, civil litigation, and
22 wrongful-death or mass-damage claims if a failure occurs. The loss of renewable generation

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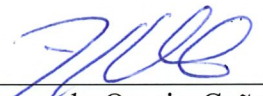
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1 capacity would further erode PREPA's energy portfolio, increasing reliance on fossil fuels and
2 driving up customer rates. At the same time, failures in irrigation and water-supply systems would
3 lead to crop losses, diminished agricultural employment, heightened food insecurity, damage to
4 municipal water infrastructure, and major operational impacts on industrial users such as AES. In
5 sum, these federal investments are not discretionary enhancements—they are essential, time-
6 sensitive interventions needed to stabilize high-hazard assets, safeguard hundreds of thousands of
7 residents, protect billions in dependent infrastructure, and preserve Puerto Rico's long-term water
8 and energy security.

ATTESTATION

Affiant, Fernando Osorio-Caño, of legal age, married, Director of Operations of the Puerto Rico Electric Power Authority, and resident of Caguas, Puerto Rico, being first duly sworn, states the following:

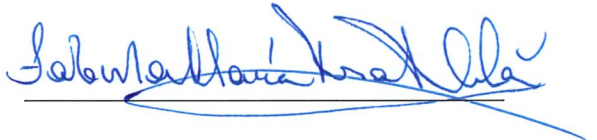
The prepared Rebuttal Written Testimony to the Energy's Bureau's Consultant, Justo González Expert Report on the Matter of Generation,, along with the exhibits and other documents referenced therein, constitute my written testimony in Case No. NEPR-AP-2023-0003. I would provide the same answers set forth in the Written Testimony if asked the questions propounded therein at the time of filing. I further state that the facts and statements provided herein are, to the best of my knowledge, true and correct.


Fernando Osorio-Caño

Affidavit No. 1068

Acknowledged and subscribed before me by Fernando Osorio-Caño, of the personal circumstances above mentioned, in his capacity as Director of Operations who is personally known to me, in San Juan, Puerto Rico, this 13th of November 2025.



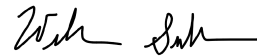


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ATTESTATION

Affiant, William Sullivan, of legal age, married, Project Manager for Grant Formulation Team at Witt OBrien's PR, LLC, and resident of Philadelphia, Pennsylvania, being first duly sworn, states the following:

The prepared Rebuttal Written Testimony to the Energy's Bureau's Consultant, Justo González Expert Report on the Matter of Generation, along with the exhibits and other documents referenced therein, constitute my written testimony in Case No. NEPR-AP-2023-0003. I would provide the same answers set forth in the Written Testimony if asked the questions propounded therein at the time of filing. I further state that the facts and statements provided herein are, to the best of my knowledge, true and correct.



William Sullivan

Affidavit No. _____

Acknowledged and subscribed before me by William Sullivan, of the personal circumstances above mentioned, in his capacity as Deputy Project Manager of Grant Formulation Team at Witt O'Briens PR, LLC, who is personally known to me, in San Juan, Puerto Rico, this 13th of November 2025.