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

IN RE: PLAN PRIORITARIO PARA LA ESTABILIZACIÓN DE LA RED ELÉCTRICA **CASE NO.:** NEPR-MI-2024-0005

SUBJECT: Requirement of Information ("ROI").

RESOLUTION AND ORDER

In compliance with the orders of the Energy Bureau of the Puerto Rico Public Service Board ("Energy Bureau"), LUMA¹ as the operator of the transmission and distribution system, Genera² as the operator of the legacy generation fleet and PREPA³ as the operator of the hydroelectric generation submitted proposed stabilization plans. Upon review of the filings, the Energy Bureau has determined that additional information is required to conduct a thorough evaluation of the stabilization plans submitted.

The Energy Bureau **ORDERS** LUMA, Genera, and PREPA to, **on or before December 23**, **2024**, file a response to the pertinent portion of the Requirement of Information ("ROI") set forth in **Attachment A** to this Resolution and Order.

The Energy Bureau **WARNS** LUMA, Genera, and PREPA that, in accordance Art. 6.36 of Act 57-2014:⁴

- (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.

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¹ LUMA Energy LLC and LUMA Energy ServCo LLC (jointly referred as, "LUMA").

² Genera PR LLC.

³ Puerto Rico Electric Power Authority ("PREPA").

⁴ Known as Puerto Rico Energy Transformation and RELIEF Act, as amended ("Act 57-2014").

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

CERTIFICATION

I certify that the majority of the members of the Puerto Rico Energy Bureau agreed on December <u>5</u>, 2024. Also certify that on December <u>5</u>, 2024, I have proceeded with the filing of this Resolution and Order and was notified by email to arivera@gmlex.net; mvalle@gmlex.net; lrn@roman-negron.com; legal@genera-pr.com; regulatory@genera-pr.com; laura.rozas@us.dlapiper.com; margarita.mercado@us.dlapiper.com.

I sign this in San Juan, Puerto Rico, today December <u>5</u>, 2024.

Sonia Seda Gaztambide Clerk



ATTACHMENT A

Respondent: LUMA

Maintenance and Testing Practice

- 1. Is it LUMA's professional opinion that their existing circuit breaker maintenance and testing and training practices are fully in line with industry best practice? Which specific changes, if any, will be applied to their CB maintenance and test and training practices will be adopted as a consequence of the Santa Isabel event?
- 2. Are LUMA's test plans and procedures (e.g. testing compliant with IEEE 57-152) selfcertified as being compliant or approved by asset manufacturers or other entities?
- 3. Are LUMA test plans created in compliance with asset manufacturer recommendations? For example, are manufacturer-specific recommendations for normal/abnormal measurement thresholds stated in the test plans and recommended actions adhered to.
- 4. Do the test plans have clear criteria to distinguish when an asset should not be returned to service or permitted to returned to service under caution (e.g. a specific moisture level above which the CB is not considered fit for service)?
- 5. If a test has measurement results (e.g. moisture levels) exceeding manufacturer recommendations, but the asset is returned to service anyway, is a risk-assessment performed to consider the elevated risk of failure on system operations, nearby asset protection, and substation safety?
- 6. When were the CB and transformer test plans last reviewed and updated prior to Santa Isabel event?
- 7. For each item of test equipment used to test the transformer and circuit breakers, please confirm the date when the manufacturer last provided a certificate to show that the device was successfully serviced and calibrated. Please confirm if any of the test devices used to test the Santa Isabel transformers or circuit breakers are overdue a scheduled service or recalibration.
- 8. Were all of the test equipment serviced and calibrated periodically in compliance with manufacturer recommendations?
- 9. Are test equipment service, test and calibration histories centrally recorded by LUMA?
- 10. Do test personnel receive periodic training from test equipment suppliers or other certified entities?
- 11. Are personnel training logs maintained to ensure all personnel receive periodic training on best practices?

Grid Reliability

- 12. How many substations have single-points of failure such as a single transformer 115/38 kV transformers?
- 13. How many 38 kV distribution feeders with large customer counts (e.g., >10,000 customers) have no alternative route to supply customers should a single critical component fail? By critical component, we specifically mean assets with repair or replacement times exceeding 24-48 hours such as transformers, circuit breakers, current transformers and so on.
- 14. How many distribution substations serving large numbers of customers (e.g., >10,000) have 115/38 kV transformers which are outside of their scheduled maintenance periods? If not known, is a plan or project in place to compile such a list to help prioritize maintenance?
- 15. How many distribution substations and distribution feeders serving large numbers of customers (e.g., >10,000) have 115 or 38 kV circuit breakers which are outside of

their scheduled maintenance periods? If not known, is a plan or project in place to compile such a list to help prioritize maintenance?

- 16. Describe the status of the 38 kV line that connect the Garzas 2-1 hydroelectric unit to the grid.
- 17. Describe the status of the lighting surge protectors and any associated system that may help identify where lighting strikes occur and associated amperage characteristics.

Protection Coordination and Testing

- 18. How many distribution feeders with large customer counts (e.g. >10,000 customers) have protection devices (CTs, CBs, or protection relays) which are outside of their scheduled maintenance periods? If not known, is a plan or project in place to compile such a list to help prioritize maintenance?
- 19. In LUMA's protection and control standard or policy, at what interval are distribution protection relay and recloser coordination studies required to be performed?
- 20. Do LUMA have a plan in place to collect up to date distribution protection relay settings for all devices into a central repository?
- 21. Have LUMA reviewed distribution protection relay coordination for today's grid considering that historical protection relay settings may be outdated due to long-term asset outages and grid re-configurations? If no, is there a specific plan in place to perform such a review?

<u>Ride-Through Requirements</u>

- 22. Describe the ride-through requirement for the EcoEléctrica and AES power plants. Are these ride-through requirements adequate to ensure the stability of the bulk power system? Explain
- 23. Is the line protection coordination associated with the EcoEléctrica and AES power plants adequate? Explain if these plants trip before the T&D can initiate its protection sequence.

Budgets

24. Describe how the approved budgets for FY 2025 will be affected by the inclusion of the initiatives described in the Priority Stabilization Plan and how the budgets for FY 2026 and FY 2027 are projected to accommodate these expenses.

Integrated Resource Plan

25. Document *Exhibit 1, System Improvements Preliminary Plan, July 19, 2024* at page 5 ("Improving reliability during generation shortfalls: by launching the Customer Battery Energy Sharing (CBES) initiative" and Section 8, ASAP (accelerated battery energy storage program at existing generation customer sites).

Figure 4 (page 39) shows the significant impact of ASAP on mitigating load shed events. LUMA states that ASAP resources "could be commercial in less than 12 months" (page 38) and that "timing is uncertain" but Phase 1 of the battery program could be deployed by January 1, 2026 (page 39). Figure 5 (page 40) shows continuing high levels of loss of load events possible for the summer of 2025. Section 6.3 describes potential timelines for implementation/ deployment of the ASAP resources. No information is provided concerning the CBES initiative in the Preliminary Plan,

though the Energy Bureau notes that LUMA provided information on the CBES in its June 28, 2024 filing in NEPR-MI-2022-0001.

- a. What specific steps can LUMA take to maximally accelerate the deployment of all ASAP program resources, 360 MW?
- b. What is required to ensure deployment of at least some of the initial Phase 1 ASAP resources prior to the summer of 2025?
- c. What barriers exist to the quickest possible deployment of ASAP resources, and what steps can be taken to remove those barriers?
- d. Is LUMA currently exploring any means to better and more fully exploit the potential availability of existing small-scale battery resources (via the CBES initiative), only a small fraction of which are currently enrolled in the CBES program? If so, please explain such exploration and if LUMA has received any feedback that indicates how increases in program participation could be obtained.
- e. What is LUMA's recommendation for actions to take between now, and spring of 2025, to incent greater participation by small scale battery resources in the CBES program for deployment by no later than summer 2025?
- f. If a larger fraction of the currently installed small-scale battery resources were available to LUMA in the summer of 2025 through third-party dispatch on a daily or at least regular basis, is there any reason LUMA would *not* expect to see a reduction in likely loss-of-load events for the Puerto Rico system next summer through lowering of evening peak demands?
- g. Does LUMA foresee any technical or institutional barriers to utilizing a larger fraction of small-scale battery resources through the CBES initiative (as is, or refined), to lower evening net peak loads? If so, please describe those barriers and provide recommendations for how LUMA or the Energy Bureau could lower them, including any required refinements to the CBES initiative that may be necessary.
- 26. Document *Exhibit 1, System Improvements Preliminary Plan, July 19, 2024* at Section 4.1 lists specific transmission line rebuild improvements. The narrative section describes "numerous 230 kV, 115 kV, and 38 kV projects to harden and upgrade the transmission system. The upgrade process also involves undergrounding targeted lines, with a design for accommodating future circuits for reliability and redundancy (e.g., undergrounding) on select transmission lines. In addition to the overhead transmission line upgrade work, this program includes the 115 kV underground cable repair in the San Juan area" (page 17). Section 4.1.2 contains a table with two 38 kV projects, and one entry labeled "Preliminary Network Upgrades".
 - a. Describe the current plans for "undergrounding targeted lines", including which "select" lines are under consideration for undergrounding.
 - b. Describe in detail the current status of the "115 kV underground cable repair in the San Juan area" (page 17) and the expected timeline for completion of all segments of the repair project.
 - c. Describe in detail the specific "Preliminary Network Upgrades" included in Section 4.1.2.
 - d. Besides the "Preliminary Network Upgrades", and the two 38 kV projects listed in Section 4.1.2, are there any other transmission line rebuilds under consideration with an estimated start date by or prior to the commencement of FY2026?



- e. Explain how the process of considering transmission line rebuilds aligns with the specific projects LUMA has provided to the Energy Bureau in its 10-Year Infrastructure Plan filings.
- f. Explain how the process of considering transmission line rebuilds noted in Section 4.1.2 "Project Execution" aligns with the Energy Bureau approval of PREPA's plans to spend up to \$2 billion for transmission hardening of existing elements and aging infrastructure, as directed in the Energy Bureau IRP Order (August 2020) at paragraph 746. Paragraph 746 references the planned infrastructure improvements listed in Exhibit 10-11 in PREPA's main IRP filing of June 2019 and Exhibits 2-97 and 2-98 of Appendix 1 to PREPA's main IRP filing in June of 2019.
- 27. Document *Exhibit 1, System Improvements Preliminary Plan, July 19, 2024* at Section 4.2 lists specific transmission line segment reliability improvements, in Table 1-5. LUMA states "To help mitigate future outages and improve overall system reliability, LUMA is inspecting all 51 line segments during FY2025 and performing repairs on all critical components on the 1,000+ structures on the segments listed below" (page 18).
 - a. Confirm or explain otherwise that no existing 230 kV line segments are included in the Table 1-5 Transmission Segments listing.
 - b. Does the exclusion of 230 kV line segments in Table 1-5 indicate that LUMA's assessment is that the 230 kV portion of the transmission grid is in reasonably good operating condition?
 - c. Provide LUMA's overall assessment of the condition of the 230 kV lines portion of the transmission grid.
 - d. Provide information if any 230 kV lines contributed to the remaining 25% of transmission related customer minute interruptions not included in the lines listed in Table 1-5.
 - e. LUMA states that is "inspecting" and "performing repairs" on all critical components on the segments listed in Table 1-5. Provide a specific timeline for when those repairs will take place and describe in more detail how and when such repairs will be completed.
 - f. Explain how the process of considering transmission line reliability improvements aligns with the specific projects LUMA has provided to the Energy Bureau in its 10-Year Infrastructure Plan filings.
 - g. Explain how the process of considering transmission reliability improvements such as inspection and repair as needed of components on line segments listed in Table 1-5 aligns with the Energy Bureau approval of PREPA's plans to spend up to \$2 billion for transmission hardening of existing elements and aging infrastructure, as directed in the Energy Bureau IRP Order (August 2020) at paragraph 746, which references the planned infrastructure improvements listed in Exhibit 10-11 in PREPA's main IRP filing of June 2019, and Exhibits 2-97 and 2-98 of Appendix 1 to PREPA's main IRP filing in June of 2019.
- 28. Document Exhibit 1, System Improvements Preliminary Plan, July 19, 2024 at Section 1, Introduction. LUMA states "LUMA also continues to complete the interconnection of 729 MW of utility-scale solar and 350 MW of utility-scale battery energy storage..." The Energy Bureau notes that those resources are from the first tranche of procurement following the 2020 IRP Order.



- a. Confirm, or explain otherwise, that LUMA expects the noted battery energy storage resources to support the ability to provide frequency response service and contribute to reducing loss-of-load events due to insufficient resource adequacy.
- b. Provide LUMA's current understanding of the status of the interconnection agreements for those battery energy storage resources.
- c. When does LUMA expect those battery energy storage resources to be online? Provide a specific timeline differentiating across projects as necessary.
- d. What barriers remain to expediting the installation and deployment of those battery energy storage resources, and what remedies are required to remove those barriers?
- e. How is LUMA supporting the expediting of deployment of both the noted battery energy storage resources, and the ASAP resources described in Section 6 of the Preliminary Plan?
- f. Provide any further information LUMA has, or recommendations LUMA suggests, to maximally accelerate the eventual deployment of the noted battery energy storage resources.

Federal Funding

- 29. The plan presented prioritized Transmission Substation Transformers. Eleven (11) were described, some to be completed before Q4 2026, others in 2027, one yet to be determined. All to be presented for approvals through FEMA funds. In the 3.4 *Section Prioritized Transmission Lines*, they listed Three "Out of Service Lines", with limited information. In Section 4.0 Systems Improvements Preliminary Plan, listed in 4.2 Transmission Reliability Improvement Plan, 51 Line Segments were identified. These segments/ lines will be inspected and repaired during 2025 and might have associated FEMA approved funding under several SOWs. The same occurred with the Section 4.3 *Substation Rebuilds Overview* where 24 Substations were listed for Inspection and repair, as they were identified as critical. These are initiatives that should be completed in less than two years.
 - a. Describe the approved FEMA funds for these Line Segments, and for the Substations rebuild plan. There are many approved SOWs associated to Line segments and Substations. The approved SOWs are for groups or for general repairs in lines and substations.
 - b. Describe the completion timeline for the above initiatives.
 - c. Are the Three Out of Service Lines included in the listed line segments?
 - d. Describe if/how acquiring substation facilities that may be preassembled could help expedite needed repairs/upgrades and how these facilities are included in the Priority Stabilization Plan.



Respondent: Genera

Near Term Maintenance

- 1. Given the known problems of Costa Sur's Units 5 and 6, regarding the Air Heaters Baskets conditions that need replacement and impose unit limitations, why were Costa Sur's Units 5 and 6 projects not included in Phase I or II of Short-Term repairs that could increase by over 300 MW the generation capacity?
- 2. Why Aguirre's Outfall 001 Final Basin (jacuzzi) Repairment Project was not included in Phase I or II of Short-Term repairs? This project needs immediate attention to repair the concrete structure of the Discharge 001 final basin (jacuzzi). Despite the temporary steel bracing already installed to avoid a collapse of the concrete walls as a temporary mitigation measure taken, its current condition represents an imminent risk of NPDES permit violations that also would result in catastrophic damage against the Jobos Bay shoreline and the sudden shutdown of the generating complex units.
- 3. Considering the current state of the LGA fleet, the peaking units' construction and operation permit applications should consider the maximum operating hours per year for compliance with state and federal environmental agencies' requirements (emissions control equipment). Describe if this approach is being pursued.
- 4. What is the purpose of the proposed blackstart system for Jobos? What is the proposed capacity of Jobos's blackstart system?
- 5. What is the blackstart option for the Aguirre Power Plant that can directly start the larger boiler units in an independent and isolated mode?
- 6. Genera is considering the repair of Gas Turbine 2-2 as part of the blackstart system for Aguirre Power Plant's boiler units. What additional option(s) could Genera consider for the blackstart for Aguirre Power Plant's boiler units?
- 7. Why is Genera considering blackstart capability for the San Juan Power Plant? Can the temporary generation units (TM2500 units) provide blackstart capability for the San Juan Power Plant?

Status of New Resources

- 8. What is the status of the acquisition of an additional 560MW of flexible generation, similar to the 350MW of temporary generation approved for the Palo Seco and San Juan sites?
 - a. How long would it take to complete this acquisition and have the units injecting into the grid?
 - b. How does the above timeline compare to the USACE experience with the 350MW of temporary generation installed between Palo Seco and San Juan?
 - c. Is there an existing USACE contract that could be activated to facilitate this acquisition? Explain.
- 9. What is the status of the federal funding requested for the peaking units and energy storage (BESS) projects?

Budgets

- 10. Describe how the approved budgets for FY 2025 will be affected by the inclusion of the initiatives described in the Priority Stabilization Plan and how the budgets for FY 2026 and FY 2027 are projected to accommodate these expenses.
- 11. Provide the Generation Fleet Outage Schedule for Planned Maintenance and Critical Component Replacement Program that takes into consideration the initiatives proposed in the Priority Stabilization Plan.
- 12. Describe how Genera plans to cover the expenses associated with the operation and maintenance of the proposed 560MW of flexible generation discussed in question 8.

Integrated Resource Plan

- 13. Document *Attachment 1, Electric System Stabilization Plan, Version July 8, 2024.* Section VIII. Generation System Status, subsection B. Post-Genera Generation System Metrics and Performance, including Figures 4 and 5 (pages 32-33).
 - a. Provide the underlying data in Excel file format with formulas intact and including any unit-specific detail for the two Figure 4 graphs of "Capacity (MW) On June 30, 2023" and "Actual Capacity (MW) 2024".
 - b. Provide the underlying data in Excel file format with formulas intact and including any unit-specific detail for the Figure 5 graph of "Generation System Data as of June 30, 2023 Performance Indicators (%)".
- 14. Document *Attachment 1, Electric System Stabilization Plan, Version July 8, 2024.* Section IX. Electric System Stabilization Plan states "In the short term, the plan focuses on key repairs to existing facilities", and "Also, the plan includes projects to replace components that are the most common cause of forced outages. These projects aim to not only add generation capacity, but to reduce forced outages with reliable generation..." (page 35).

Figure 7 is a "Workplan to Increase Reliability 2023-2025 Increase Capacity Goals" and shows a June 2023 capacity of 3,100 MW, a "Phase I" value of 4,057 MW, a "Phase II" value of 4,300 MW and a "Phase III" value of 4,500 MW. Page 38.

Figure 8 is a "Workplan to Increase Reliability". It shows an "Increase Capacity from 46 to 60%" by July 2024, under the Strategic Priority of "Short-Term Repairs". It also shows a Goal: Reduce Forced Outages in 50%" by Q4-2025, under the Strategic Priority of "Replace Critical Components". Page 39.

Genera states "...Genera has had considerable success increasing baseload unit capacity from 46% to over 62% since July 2023" (page 41). Table 4 lists Phase I, Phase II and Phase II Short-Term Repairs (page 45).

Appendix A, "Status of Thermal Generation Fleet", contains a list of legacy units with associated nameplate capacity (MW), commercial operation date, status and refurbishment and retirement plans (pages 94-98).

- a. Provide an updated Appendix A "Status of Thermal Generation Fleet" availability projection in Excel file format with the following specific information *for each unit listed, for each month* from September 2024 through December 2026:
 - i. Available capacity in MW, accounting for any current deration of nameplate capacity for the given month, and accounting for any further deration due to full or partial planned maintenance.
 - ii. Indicator if planned maintenance outage is anticipated for that month.
 - iii. Nature of the specific work anticipated for any month with full or partial maintenance outage.
 - iv. Expected duration (days) of planned full or partial maintenance for that month for the given unit.

Since this request is for a projection of available capacity from legacy units, the Energy Bureau expects this updated Status list to exclude any effect that would arise from forced outages.

- b. Confirm or explain otherwise that the "short-term repairs" noted above at page 35 are those listed in Table 4 at pages 45-46.
- c. For the repairs listed in Table 4, Phase I, II and III, describe with specificity the repairs underway for each unit and the estimated month in which they will be complete.
- d. The total of 516 MW in the Phase II and Phase III short-term repairs table is not equal to the sum of the individual plant values (which total 566 MW). Reconcile this difference and explain what actual increases in availability will be achieved when the repairs are completed.
- e. What are the specific components that "are the most common cause of forced outages" at each unit or station?
- 15. Document *Attachment 1, Electric System Stabilization Plan, Version July 8, 2024.* Section X. Challenges and Contingencies. Genera states "In June 2024, the electric system experienced 6 load shed events due to generation shortfall and 11 generation events that caused underfrequency load shed to prevent frequency decay" (page 89).
 - a. Provide monthly Genera data on load shed events beginning July 2023 through the end of July 2024.
 - b. List the specific causes of load shed events due to generation shortfall or other generation events at Genera operated plants for each month from July 2023 through July 2024.

Federal Funding

16. The plan starts with the presentation of the same Capital Projects presented in the 10 Year Plan Federally Funded Competitive Process (NEPR-MI-2022-0005). These projects are discussed in many subjects related to the Long-Term configuration of the Electric System for Puerto Rico, and most are already approved FEMA projects. These would be implemented in over 3 to 5 years. For priority stabilization other actions are required.

The plan includes the *Replacement of Critical Components* as a second element. The status of this Plan was briefly described with 60% of RFPs published and 10% to be published in the coming weeks. The other 30% are under development. It is stated that the objective of this Critical Components Program was developed by taking in consideration the historical trends of maintenance repairs in all the units and their supporting equipment. The replacement of critical components can be viewed as a proactive initiative aligned with the purpose of system stabilization in a period of less than two years.

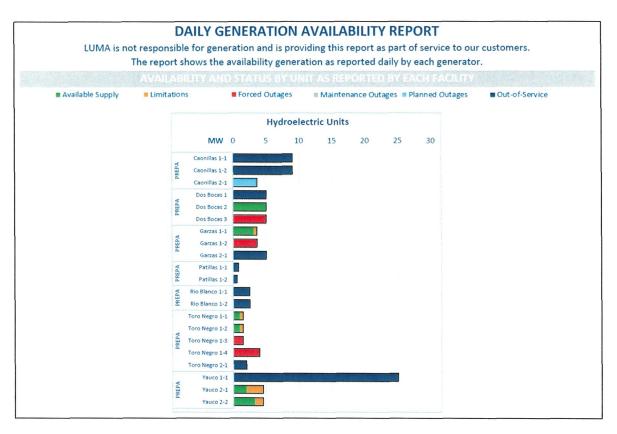
a. Provide the complete list of the Critical Components with their associated unit or equipment, the timeline for them to be available, and the criteria used to classify them as Critical.



Respondent: PREPA

System Status and Planned Hazard Mitigation Activities

1. On July 17, 2024 the Daily System Status received by the Energy Bureau depicted the status of the hydroelectric units as follows:



The Toro Negro 1-3 unit is depicted as unavailable due to a forced outage, however PREPA states in the plan it submitted to the Energy Bureau on July 19, 2024 that this unit is available.⁵ Explain this discrepancy.

- 2. For each year, between 2020-2024, what was the forced outage rate of the available hydroelectric units?
- 3. Should LUMA include the available hydroelectric units in its Resource Adequacy analysis presented to the Energy Bureau? Explain why.
- 4. Describe if the Garzas 2-1 unit is operational but unable to supply the grid due to the unavailability of a 38kV line.
- 5. Describe what efforts are planned and/or underway to have the Yauco 1-1 hydroelectric unit operational? Describe the funding required and specify funding source, e.g., federal, non-federal. Describe the expected capacity that will result from these efforts. Describe when this capacity should be expected to be available to the system operator.
- 6. Describe how the availability of water can impair the ability of a hydroelectric unit to supply electricity. Describe how this availability has affected the generation output of the available hydroelectric units during the past 5 years.

Planned Hazard Mitigation Activities

7. Describe the status of the appeal presented by COR3 to FEMA on June 10, 2024 where it seeks reconsideration of the 120MW of hydroelectric generation hazard mitigation proposal under FEMA-4671-DR-PR. Describe to what extent would this 120MW of hydroelectric capacity help mitigate the automatic load sheds triggered by system underfrequency conditions.



⁵ See, Moción en Cumplimiento de Orden, July 19, 2024, p. 5.

- 8. The plan states that PREPA is contemplating the construction of new hydroelectric plants employing FEMA mitigation funds in the areas of Patillas and Guajataca.⁶
 - a. Is the siting of these facilities guided by a need determination made by the system operator and justified by power flow characterization and modeling? Explain.
 - b. Has this proposal secured approval from the Energy Bureau?

Integrated Resource Plan

- 9. Document Motion to Submit PREPA's June 2024 Update to the PREPA-LUMA 90-Day Plan to the Puerto Rico Energy Bureau, in case NEPR-MI-2021-0002, June 21, 2024. PREPA submits information concerning the status of various hydroelectric system improvement projects that influence grid resiliency. It includes Table 1-1 – PREPA 2024 Q3 Project Submittal Milestone, with various FEMA FAASt Projects at different hydroelectric facilities (pages 11-12). The document also notes that "Grant formulation was completed for the Battery Energy Storage System (BESS) Project. This project has been submitted for Vivienda approval" (page 7).
 - a. Are any of the planned hydroelectric system improvements associated with the FEMA FAASt projects (included in Table 1.1) likely to result in an improvement in hydroelectric power plant capability (capacity or energy delivery) prior to December 2026?
 - b. Provide the timeline associated with expected changes to the hydroelectric system power plants after completion of work funded primarily through Federal Grant Management processes.
 - c. Is PREPA aware of the potential timeline for completion of any BESS Project installations associated with the Energy Grid Rehabilitation and Reconstruction (ER-1) model projects (page 7)? If so, provide that information.



⁶ See, Moción en Cumplimiento de Orden, July 19, 2024, p. 5.