

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

IN RE: 10 YEAR PLAN FEDERALLY
FUNDED COMPETITIVE PROCESS

CASE NO.: NEPR-MI-2022-0005

SUBJECT: Motion to Submit the Grid Support Units Update Evaluation – Requests of Information (ROI).

RESOLUTION AND ORDER

On June 5, 2024, Genera PR LLC (“Genera”) submitted a *Motion to Submit the Grid Support Units Update Evaluation for the Emergency Generation and Black Start Generation Procurement in Compliance with Resolution and Order Dated January 23, 2023* (“June 5 Motion”). The June 5 Motion contains a 4-page Exhibit A submitted under seal of confidentiality, which is listed as a “Grid Support Units Project Update”.

Through the June 5 Motion, Genera requests that the Energy Bureau take notice of information in the June 5 Motion and seeks approval from the Energy Bureau to continue with the proposed equipment configuration and purchase of the grid support units as set forth in Exhibit A to the June 5 Motion.

The Energy Bureau is evaluating the submitted information and has identified the need for further clarification and additional details. Consequently, the Energy Bureau hereby **ORDERS** Genera to submit a response to the following *Second Request for Information*,¹ as outlined in **Attachment A** to this Resolution and Order, **no later than ten (10) business days after the notification of this Resolution and Order**.

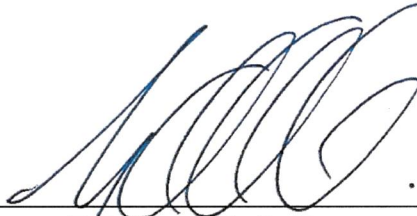
The Energy Bureau **WARNS** Genera that:

- (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.



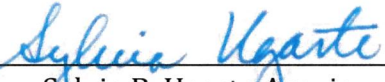
¹ A first request of information was embedded within in the January 5, 2023 Resolution and Order issued by the Energy Bureau in this case.



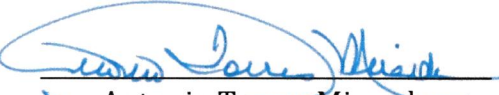
Edison Avilés Deliz
Chairman



Ferdinand A. Ramos Soegaard
Associate Commissioner



Sylvia B. Ugarte Araujo
Associate Commissioner



Antonio Torres Miranda
Associate Commissioner

CERTIFICATION

I certify that the majority of the members of the Puerto Rico Energy Bureau agreed on June 21, 2024. Associate Commissioner Lillian Mateo Santos did not intervene. Also certify that on June 21, 2024, I have proceeded with the filing of this Resolution and Order and was notified by email to arivera@gmlex.net; mvalle@gmlex.net; jfr@sbglaw.com; alopez@sbglaw.com; legal@genera-pr.com; regulatory@genera-pr.com.

I sign in San Juan, Puerto Rico, today, June 21, 2024.

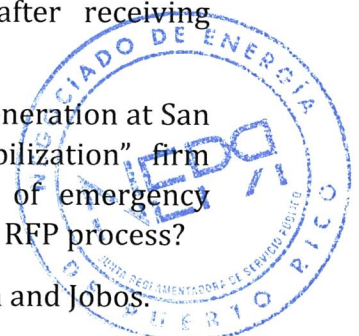


Sonia Seda Gaztambide
Clerk



ATTACHMENT A

1. Exhibit A to Genera's June 5 Motion contains a Grid Support Units Project Update.
 - a. Provide all analyses, workpapers, quantitative evaluation support and related information that underlies the results of the evaluation – that is, the total number, size, and technology type of proposed units for procurement – as presented in the Table "Summary of Grid Support Units Site Configurations".
2. In addition to providing all analyses, workpapers, quantitative evaluation support, and related information in response to ROI No. 1, please also address the following in connection with the assertions included in Exhibit A to the June 5 Motion:
 - a. Identity and describe the specific units associated with the "fleet" considered as part of Genera's "fleet replacement strategy"?
 - b. Explain in detail on what basis did Genera develop a "fleet replacement strategy"?
 - c. Provide all quantitative analyses that underlies Genera's "engineering analyses to support the optimal use of FEMA funding for these projects". In particular, describe exactly how such optimization was conducted.
 - d. Did the "evaluation of the electrical point of interconnection" include an assessment of the alternative uses of electrical point of interconnection capacity, such as for interconnection of battery energy storage options at any or all of the sites considered? If so, provide that assessment. If not, explain why such an assessment was not conducted.
 - e. What aspects of the Grid Support Unit Study were "revisited" based on the proposals received, how did the information in the "proposals received" inform the revisitation of the Study?
3. Genera, with the support and approval of both the Energy Bureau and FEMA, is proposing the installation of up to 430 MW of battery energy storage system (BESS) capacity at various sites, including San Juan, Jobos, Daguao, and Yabucoa. [See Energy Bureau Resolution and Order in NEPR-MI-2021-0002, April 23, 2024 and Genera Motion of October 27, 2023, outlining 430 MW of BESS].
 - a. In what specific ways did Genera analyze, as part of the Grid Support Unit Study, the potential operational interaction between the RICE and GT units considered in the June 5 Motion and the battery storage projects indicated in the October 27, 2023 Genera Motion and approved by the Energy Bureau on the Resolution and Order dated April 23, 2024 in case: NEPR-MI-2021-0002?
 - b. In what specific ways did Genera evaluate or analyze the "optimum" use of existing interconnection capacity - for new or replacement generation or battery storage - at the San Juan, Daguao, Jobos, Yabucoa and Costa Sur sites?
4. New emergency generation (from FEMA-funded stabilization following Hurricane Fiona) of 150 MW at Palo Seco, including black start capability, and 200 MW at San Juan is now in place.
 - a. In what way did Genera analyze the effect of this new generation when revisiting the Grid Support Unit procurement process after receiving proposals in response to the RFP?
 - b. Why is Genera continuing to support additional emergency generation at San Juan now, given the presence of the FEMA-funded "stabilization" firm generation there that is equal to the maximum amount of emergency generation originally authorized for procurement through the RFP process?
5. New battery energy storage is planned by Genera at Daguao, Yabucoa and Jobos.

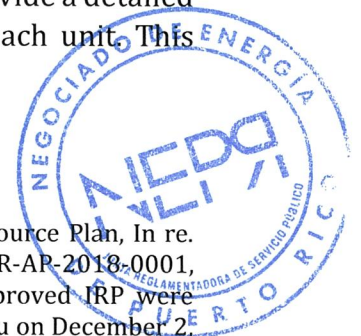


- a. In what way did Genera analyze the potential for a combination of new small fossil generation at Daguao, Yabucoa and Jobos with the planned battery energy storage installations at those sites?
 - b. Provide all such analysis if conducted. If no such analysis was conducted, why not?
6. Provide any additional information available to Genera regarding the comparative benefits of using smaller-sized RICE units versus larger-sized GT units, and whether it might be preferable to standardize one or both technology types (RICE and GT) for new small fossil generation moving forward. Additionally, explain the reasons behind this preference.
 7. In connection with the assertions included in Exhibit A to the June 5 Motion², please provide the following documents along with all analyses and workpapers used in their preparation: (i) the project feasibility evaluation report, (ii) the fleet replacement strategy report, (iii) the report on the optimization of equipment configuration for each project site, and (iv) all engineering analyses supporting the optimal use of FEMA funding for the proposed projects.
 8. Please confirm if the proposed gas turbines (GTs) at San Juan and Costa Sur are dual-fuel. If they are not, explain why they are not and how the proposed new single-fuel generation units comply with the requirements of Act 17-2019.
 9. In the June 5 motion, Genera states that if the nameplate capacity proposed in the Summary of Grid Support Units Site Configuration exceeds the capacity approved by the Energy Bureau, they propose to continue with the purchase of the units based on the nameplate capacity proposed in the Grid Support Units Site Configuration. However, they request an order to limit the dispatch of the units to the capacity established by PREB³
 - a. Explain how Genera's proposal aligns with the Approved IRP and other orders issued by the Energy Bureau concerning the installation and/or replacement of peaking generation units.⁴ If it does not, describe the mechanism proposed for the justification and approval of any excess peaking generation capacity based on applicable law and prevailing circumstances.
 - b. For each type of unit and proposed capacity, if the dispatch of the units is limited as proposed by Genera, explain how the efficiency and performance of the units will be affected when operated at lower capacities.
 - c. Considering that peaking units are designed to operate most efficiently at or near their maximum capacity, explain how operating them at lower capacities would not result in decreased fuel efficiency, leading to higher fuel consumption per unit of electricity generated.
 - d. Considering that peaking units are designed to operate most efficiently at or near their maximum capacity, explain how operating them at lower capacities would not result in an increase in operating costs. If the operating costs are indeed higher due to Genera's proposed dispatch limitation, provide a detailed explanation of the potential increase in operating costs for each unit. This

² See Exhibit A to the June 5 Motion, p. 1.

³ See Exhibit A to the June 5 Motion, p. 4.

⁴ Final Resolution and Order on the Puerto Rico Electric Power Authority's Integrated Resource Plan, In re. Review of the Puerto Rico Electric Power Authority Integrated Resource Plan, Case No. CEPR-AP-2018-0001, August 24, 2020 ("Approved IRP"). Minor modifications and/or clarifications to the Approved IRP were introduced through a Resolution and Order on Reconsiderations issued by the Energy Bureau on December 2, 2020, in case: In re. Review of the Puerto Rico Electric Power Authority Integrated Resource Plan, Case No. CEPR-AP-2018-0001.



- explanation should include, but not be limited to, the magnitude of the potential increase in operating costs for each unit.
- e. Considering that peaking units are designed to operate most efficiently at or near their maximum capacity, explain how operating them at lower capacities would not result in an increase in maintenance costs. If the maintenance costs are indeed higher due to Genera's proposed dispatch limitation, provide a detailed explanation of the potential increase in maintenance costs for each unit. This explanation should include, but not be limited to, the magnitude of the potential increase in maintenance costs for each unit.
 - f. Explain the cost-benefit analysis (cost-effectiveness) performed by Genera (if any) for proposing the purchase of higher-capacity units, which typically involve higher capital and potential maintenance and operating costs, when these units will be operated at limited dispatch.
 - g. For each unit, provide a proposed dispatch limitation that aligns with the Approved IRP, and explain (i) how this limitation would not result in higher emissions per unit of electricity generated, and (ii) whether it complies with the applicable environmental standards.
10. For each unit described in the Summary of Grid Support Units Site Configuration, provide a proposed timeline of key development milestones necessary for the implementation of the project. This should include a detailed schedule for the following activities: (i) request for proposals process, (ii) engineering design, (iii) permitting, (iv) construction/installation start and expected completion dates, (v) expected operational dates, and (vi) identification of any significant challenges or risks that may be encountered during the project development, along with the strategies to address them.

