

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

IN RE: IMPLEMENTATION OF THE PUERTO RICO ELECTRIC POWER AUTHORITY INTEGRATED RESOURCE PLAN AND MODIFIED ACTION PLAN

CASE NO.: NEPR-MI-2020-0012

SUBJECT: Renewable Energy Generation and Energy Storage Resource Procurement Plan – First Tranche Projects for Phase III Contract Negotiation and Final Interconnection Plan Approvals

RESOLUTION AND ORDER

I. Introduction

On August 24, 2020, the Energy Bureau issued the IRP Order, regarding the Integrated Resource Plan (“IRP”) of PREPA. The IRP Order approved a Modified Preferred Resource Plan that included a plan for six (6) tranches of procurement of renewable energy and battery storage resources.¹

On December 16, 2021, PREPA filed a document titled *Motion Submitting 733 MW of PV Renewable Energy Draft Power Purchase and Operating Agreements Offered in Tranche 1 of PREPA’s Renewable Generation and Energy Storage Resources RFP for Energy Bureau Evaluation and Approval* (“December 16 Motion”). In that December 16 Motion, PREPA identified fifteen (15) solar PV projects totaling 732.7 MW and submitted draft bespoke power purchase and operating agreements (“PPOAs”) contracts for those projects, for evaluation and approval by the Energy Bureau. In the December 16 Motion, PREPA also identified three (3) battery energy storage resource projects (4-hour duration) totaling 220 MW, for which PREPA indicated planned submission of bespoke energy storage services agreements (ESSAs) was intended by or before December 23, 2021. PREPA included in its December 16 Motion submission as Attachment A, a memorandum from PREPA’s Tranche 1 Evaluation Committee describing the detailed evaluation approach taken to arrive at its selection of project offerings for approval.

On December 23, 2021, PREPA filed a document titled *Supplemental Motion Submitting PV Renewable Energy Draft Power Purchase and Operating Agreements (PPOAs) As Well As Energy Storage Service Agreements (ESSAs) As Part of PREPA’s Tranche 1 Renewable Generation and Energy Storage Resources RFP For Energy Bureau Evaluation and Approval* (“December 23 Motion”). PREPA submitted three bespoke ESSA contracts totaling 220 MW reflecting the projects stated in the December 16 Motion and submitted three solar PV bespoke contracts totaling 112.1 MW, additional to the 732.72 MW of solar PV projects submitted for authorization in the December 16 Motion. The combined solar PV resource procurements for which authorization was sought by PREPA was 844.82 MW.

On February 2, 2022, the Energy Bureau issued a Resolution and Order authorizing eighteen (18) solar PV PPOA’s resource projects for PREPA to finalize its negotiations with those proponents.

On February 2, 2022, PREPA filed a document titled *Motion in Compliance with the January 28 Order Submitting Energy Storage Resources Information, the Next Two Projects Totaling 50MW of Solar PV Resources and Memorandum of Law Requesting Confidential Treatment* (“February 2 Motion”). PREPA filed information regarding the six additional BESS projects and the two projects totaling 50 MW of solar PV resources.²

¹ IRP Order, pp. 266-268, ¶ 860.

² February 2 Motion, p. 5.



On March 1, 2022, PREPA filed a document titled *Memorandum of Law in Support of Request for Confidential Treatment of Attachment A* ("March 1 Memorandum"). The March 1 Memorandum included as Attachment A, filed under seal, a document titled *Informative Motion Regarding Status of VPP Contract Negotiations and Delays in Finalizing Form of Interconnection Agreement* ("March 1 Motion"). Through the March 1 Motion, PREPA provides an update on the status of PREPA's discussion regarding the VPP Proponents and with representatives of LUMA³ regarding a potential significant delay regarding the Interconnection Agreement. The March 1 Motion includes as Exhibit A, on a confidential basis, a Bespoke GSA as it stands with one of the VPP Proponents.⁴

On March 17, PREPA filed a document titled *Memorandum of Law in Support of Request for Confidential Treatment of Attachment A* ("March 17 Memorandum"). The March 17 Memorandum included as Attachment A, filed under seal, a document titled *Informative Motion Identifying Concerns Regarding Pricing and Certain Commercial Terms Offered by Tranche 1 VPP Project Proponents and Request for Confidential Meeting to Discuss Selection of Tranche 1 VPP Proposals* ("March 17 Motion"). The March 17 Motion provides an update on the status of the two VPP Proponents and the finalization of the GSA's.⁵

On April 11, 2022, the Energy Bureau issued a Resolution and Order ("April 11 Resolution") to obtain additional information from PREPA and LUMA concerning the status of Tranche 1 resource offerings and interconnection cost considerations. In the April 11 Resolution, the Energy Bureau issued questions 1-5 for PREPA to respond and issued questions 6-7 for LUMA to respond. Both PREPA and LUMA were to respond on or before April 19, 2022.

On April 19, 2022, LUMA filed a document titled *Motion Submitting Partial Response and Requesting Brief Extension to Submit LUMA's Full Answers to Questions 6 and 7 in the Energy Bureau's Resolution and Order of April 11, 2022* ("April 19 Motion"). In the April 19 Motion, LUMA addressed the lack of access to certain information that PREPA provided to LUMA on April 18, 2022. Due to the short period to respond, LUMA prepared partial responses to Questions 6 and 7 and requested an extension until April 29, 2022, to submit its complete answers.⁶

On the same day, PREPA filed a document titled *Motion for Extension of Time Until April 25, 2022, to Comply with Responses Required by the April 11, 2022, Resolution and Order* ("April 19 Request"), where PREPA requested an extension until April 25, 2022, to file its responses to the April 11 Resolution.

On April 22, 2022, the Energy Bureau issued a Resolution and Order granting both PREPA and LUMA to file their complete responses to the April 11 Resolution on or before April 28, 2022.

On April 27, 2022, the Energy Bureau issued a Resolution and Order ("April 27 Resolution") through which it ordered LUMA to file the results of the final Tranche 1 technical studies by May 30, 2022 and ordered PREPA to file the execution copies of the 18 authorized PPOAs by June 30, 2022.

On June 13, 2022, the Energy Bureau issued a Resolution and Order ("June 13 Resolution") authorizing PREPA to finalize negotiations on nine (9), 4-hour duration utility-scale battery energy storage projects totaling 490 MW of capacity and one 17 MW Virtual Power Plant ("VPP"), and authorizing PREPA to finalize its contract negotiations with those Tranche 1 proponent offerings.

³ LUMA Energy, LLC ("Management Co") and LUMA ServCo, LLC (collectively, "LUMA").

⁴ March 1 Motion, pp. 2-3, ¶ 2.

⁵ March 17 Motion, p. 3, ¶ 5,

⁶ April 19, Motion, p. 3, ¶¶ 6-7.



On June 30, 2022, PREPA filed a document titled *Motion to Submit Execution Copies of PPOAs in Compliance with the April 27 and June 13 Orders, Request for Additional Time to Submit Certain PPOAs and Memorandum of Law Requesting Confidential Treatment of PPOAs and Exhibits* ("June 30 Motion"). In its June 30 Motion PREPA described the status of the 18 PPOAs for solar PV energy approved by the Energy Bureau in its February 2, 2022 Resolution and Order.

On July 5, 2022, the Energy Bureau issued a Resolution and Order through which it granted confidential designation and treatment to Exhibits A, B, C, D, and E attached to the June 30 Motion. Additionally, the Energy Bureau ordered PREPA to show cause, on or before July 8, 2022, as to why the Energy Bureau should not issue an order requiring PREPA to file a redacted (public) version of the execution copies of PPOA's included in Exhibit A of the June 30 Motion.

On July 8, 2022, the Energy Bureau issued a Resolution and Order through which it approved nine (9) executed copies of PPOAs for nine (9) solar PV resource projects, totaling 430.1 MW, across Puerto Rico.

On August 4, 2022, PREPA filed a *Motion to Submit Additional PPOAs in Compliance with July 8 Resolution and Order* ("August 4 Motion"). PREPA submitted execution copies of PPOAs totaling 109.37 MW. PREPA also indicated that negotiations remain ongoing with two respondents and an associated five projects (totaling 305 MW) for which final executed copies of PPOAs are still under development. The August 4 Motion included submittal of Exhibit A (under seal), containing executed PPOA contracts for four of the original eighteen (18) approved PPOAs for solar PV resources from the Energy Bureau's February 2, 2022 Resolution and Order.

On August 13, 2022 PREPA filed a *Motion to Submit Additional PPOA in Compliance with July 8 Resolution and Order* ("August 13 Motion"). PREPA submitted an execution copy of an additional PPOA for 60 MW and indicated that negotiations remain ongoing with a respondent for four additional PPOAs for which final executed copies of PPOAs are still under development. The August 13 Motion included submittal of Exhibit A (under seal), containing an executed PPOA contract for one of the original eighteen (18) approved PPOAs for solar PV resources from the Energy Bureau's February 2, 2022 Resolution and Order.

II. Discussion and Findings

In the August 4 and August 13 Motions, PREPA includes as Exhibit A (filed under seal, requesting confidentiality)⁷ in each Motion executed PPOAs for five (5) solar PV resource projects totaling 169.37 MW. These projects are a subset of the eighteen (18) solar PV projects approved by the Energy Bureau in its February 2, 2022 Resolution and Order.

The Energy Bureau **DETERMINES** that the redacted information in Exhibit A of each of the August 4 and August 13 Motions is confidential for the same reasons provided in the Energy Bureau's July 5, 2022 Resolution and Order for the nine (9) execution copies of PPOAs submitted in PREPA's June 30 Motion, and will remain under seal until the final adjudication of Tranche 1 PPOAs.

The Energy Bureau's review of the Exhibit A contracts filed with the August 4 Motion and August 13 Motion indicates increased costs for the five (5) executed PPOAs based on a combination of base and interconnection costs after LUMA's completion of its interconnection studies for the cluster of projects including the eighteen solar PV projects and three energy storage projects, and after completion of supplemental interconnection

⁷ The Energy Bureau granted confidential designation and treatment on July 5, 2022 to Attachment A for the nine (9) PPOA executed contracts filed with PREPA's June 30 Motion and approved in the July 8, 2022 Energy Bureau Resolution and Order. The Energy Bureau also ordered PREPA to show cause on why a redacted (public) version of Attachment A should not be ordered.



studies for certain projects as noted in the July 8, 2022 Energy Bureau Resolution and Order.⁸ The average increase in first year energy cost for these five (5) projects is above the upper end of the range estimated by PREPA when it assessed the potential price variance following the completion of the initial interconnection cost assessment.⁹ The average of the increased first year cost for these specific five contracts is roughly \$6/MWh compared to the February 2, 2022 values, and it includes both base and interconnection cost adjustments following PREPA's continued negotiation with the proponents.¹⁰

For the now fourteen (14) approved execution copies of solar PV PPOAs (from the July 5, 2022 and today's Resolution and Order), for 599.5 MW in total, the average increased cost compared to February 2, 2022 Resolution and Order values including both base product and interconnection cost adjustments is \$4.5/MWh, or \$4.2/MWh on a capacity-weighted basis, less than a 5% increase compared to the February 2, 2022 values.

Based on a review of the Exhibit A contracts from the August 4 and August 13 Motions for five solar PV projects, and an Energy Bureau **DETERMINATION** that these projects continue to be aligned with the intent of the Modified Action Plan of the IRP Order, the Energy Bureau **ACCEPTS** PREPA's filing of these five (5) executed PPOA contracts and **FINDS** that PREPA is in compliance with the April 27, June 13 and July 8 Resolutions for this portion of the solar PV portfolio. Therefore, the Energy Bureau **APPROVES** the executed contracts included as Exhibit A.

The Energy Bureau **WARNS** PREPA that any proposed amendments or modifications to the PPOA's shall be timely submitted before the Energy Bureau for review and approval by the same.

PREPA notes continuing negotiation with the remaining respondent for four additional PPOAs for solar PV projects, totaling 245.3 MW.¹¹ PREPA's rationale for requesting an extension at the time of its June 30 Motion to potentially finalize contract terms for these four proposals was based primarily on the need for respondents to confirm certain details in the final PPOA's, including an understanding of the effect of interconnection costs, pricing and BESS project issues on the PPOA.¹² Based on the information in PREPA's August 4 and August 13 Motions, this need for confirmation continues.

The Energy Bureau is fully supportive of PREPA in its continuing negotiation with the proponent of the remaining four potential projects, which were included in the Energy Bureau's initial approvals in its February 2, 2022 Resolution and Order because of their alignment with the Modified Action Plan of the IRP Order. However, for the reasons provided in the February 2, April 27, June 13, and July 8 Resolution and Orders it is imperative that Puerto Rico continue to make sustained progress on procurement of renewable energy and battery storage resources in support of the Modified Action Plan of the IRP Order. Definitely, time is of the essence. Therefore, the Energy Bureau **ORDERS** PREPA to expedite these negotiations and file executed contracts or provide real and concrete justifications as to why the contracts cannot be executed, **on or before August 26, 2022**.

The Energy Bureau **WARNS** LUMA and PREPA that, noncompliance with any provision of this Resolution and Order, may result in the imposition fines under Act 57-2014 and the

⁸ Energy Bureau July 8 Resolution and Order at page 4.

⁹ PREPA, December 16 Motion, at page 16: "These proposals [15 of the 18] comprise a capacity of 732.72 MW. LCOE prices may vary approximately +/- 5/MWh after the required integration studies is concluded and the final interconnection cost estimates are determined by LUMA".

¹⁰ PREPA Motion, Paragraph 15, page 5.

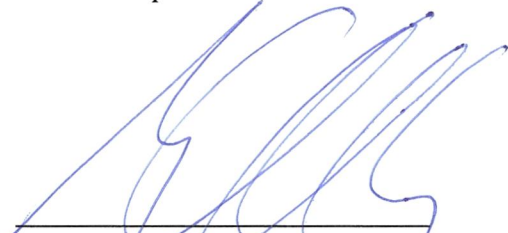
¹¹ PREPA Motion, page 2.

¹² PREPA June 30 Motion, at paragraphs 17 through 23, and information contained in the confidential attachments. We note that BESS issues are relevant to these solar PV PPOA proposals because of co-located solar PV and BESS resources at some sites.




applicable Energy Bureau’s regulations and/or any other appropriate administrative sanctions, as deemed appropriate by the Energy Bureau.

Be it notified and published.


Edison Avilés Deliz
Chairman


Lillian Mateo Santos
Associate Commissioner


Ferdinand A. Ramos Soegaard
Associate Commissioner


Sylvia B. Ugarte Araujo
Associate Commissioner

CERTIFICATION

I hereby certify that the majority of the members of the Puerto Rico Energy Bureau has so agreed on August 15, 2022. I also certify that on August 15, 2022 a copy of this Resolution was notified by electronic mail to the following: laura.rozas@us.dlapiper.com; margarita.mercado@us.dlapiper.com, kbolanos@diazvaz.law; mvazquez@diazvaz.law. I also certify that today, August 15, 2022, I have proceeded with the filing of the Resolution issued by the Puerto Rico Energy Bureau.

For the record, I sign this in San Juan, Puerto Rico, today August 15, 2022.


Sonia Seda Gaztambide
Clerk

