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

IN RE: THE IMPLEMENTATION OF THE PUERTO RICO ELECTRIC POWER AUTHORITY INTEGRATED RESOURCE PLAN AND MODIFIED ACTION PLAN	**CASE NO.**: NEPR-MI-2020-0012 **SUBJECT**: Joint Motion to Submit Revised Updated Procurement Plan

JOINT MOTION TO SUBMIT REVISED UPDATED PROCUREMENT PLAN

TO THE HONORABLE PUERTO RICO ENERGY BUREAU:

COME NOW the Puerto Rico Electric Power Authority, and **LUMA ENERGY SERVCO, LLC**, through their respective counsel of record and respectfully submits and prays follows:

1. On June 24, 2021, the Honorable Energy Bureau of the Public Service Regulatory Board (the "Energy Bureau" or "Bureau") entered a Resolution and Order (the "June 24 Order") through which it ordered the Puerto Rico Electric Power Authority (PREPA) to attend a Technical Conference on July 6, 2021, at 1:30 pm. During the Technical Conference, PREPA presented the revised and Updated Procurement Plan that had been submitted to the Energy Bureau on June 15, 2021. *See Motion to Submit Updated Procurement Plan Addressing Plans for the Second Renewable Generation and Energy Storage Procurement Tranche*. Also, during the Technical Conference LUMA (LUMA, and together with PREPA, the "Parties") informed the Energy Bureau that it would send proposed revisions and comments to the Updated Procurement Plan to PREPA and that a revised version of the Updated Procurement Plan would be submitted for the consideration and approval of the Energy Bureau within the next two (2) weeks. The two (2) weeks term expired on July 20, 2021.

2. On July 20, 2021, PREPA submitted to the Energy Bureau a *Motion to Inform and Request for Extension of Time* (the "Motion"). In the Motion, PREPA informed the Energy Bureau that, on that same day, it had received comments to the revised Updated Procurement Plan from LUMA. Motion at ¶ 2. Further, PREPA informed that it was still in the process of reviewing the comments submitted by LUMA and that it understood that any outstanding proposed changes and/or comments could be addressed by the Parties within the next two (2) business days. *Id.* at ¶ 3. To date, the Energy Bureau has not entered any resolution or order addressing the two-day extension.

3. In compliance with the commitments made during the Technical Conference, the Parties hereby submit to the Energy Bureau the attached draft Updated Procurement Plan. *See* Exhibit A. To aid the Energy Bureau and the public in the review of the revised Updated Procurement Plan, the Parties hereby includes with this filing a mark-up version of the Updated Procurement Plan which reflects the modifications made. *See* Exhibit B.

WHEREFORE, PREPA and LUMA herein request the Energy Bureau to note the filing of the revised Updated Procurement Plan and to determine that PREPA and LUMA complied with the Order.

RESPECTFULLY SUBMITTED.

In San Juan, Puerto Rico, this 23rd day of July 2021.

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Exhibit A

RENEWABLE ENERGY GENERATION AND ENERGY STORAGE RESOURCE PROCUREMENT PLAN – UPDATE NO. 2

Submission to the Puerto Rico Energy Bureau

Date Issued: July 23, 2021

Puerto Rico Electric Power Authority

CONTENTS

APPENDICES

I. INTRODUCTION

This version of the Renewable Energy and Energy Storage Resource Procurement Plan updates the version which the Puerto Rico Electric Power Authority ("**PREPA**") submitted to the Puerto Rico Energy Bureau ("**Energy Bureau**") on June 15, 2021 (as updated, the "**Procurement Plan**"), as required by the Energy Bureau's May 11, 2021 Resolution and Order in Case No. NEPR-MI-2020-0012, *In Re: The Implementation of the Puerto Rico Electric Power Authority Integrated Resource Plan and Modified Action Plan*. The Procurement Plan seeks proposals from Proponents interested in designing, constructing, installing, operating and maintaining all forms of renewable generation as defined by Act 82 (defined below), energy storage and/or virtual power plant projects at one or more sites across Puerto Rico. This version of the Procurement Plan incorporates (i) the lessons PREPA learned in administering Request for Proposals No. 112648, Renewable Energy Generation and Energy Storage Resources, Tranche 1 of 6 (the "**Tranche 1 RFP**"), (ii) updates to roles and responsibilities reflecting the transition of LUMA Energy, LLC and LUMA Energy ServCo (collectively, the "**T&D Operator**" or "**LUMA**") into their role as the T&D Operator of PREPA's transmission and distribution system (the "**T&D System**"), and (iii) those requirements that originated from the planned Optimization Proceeding and other Energy Bureau Resolutions and Orders issued after the publication of the Tranche 1 RFP. For the Tranche 1 RFP, PREPA has administered, and will continue to administer, the Tranche 1 RFP process through the award of all Contracts. However, it is possible that for any of Tranches 2-6 of the RFP, the Puerto Rico Public-Private Partnerships Authority ("**P3A**") may administer such process for, on behalf of, and working in collaboration with, PREPA.

II. EXECUTIVE SUMMARY

1. Background & Context

As background and context for the preparation of this Procurement Plan:

a. on March 15, 2018, the Energy Bureau issued a Resolution and Order which directed PREPA to file an updated Integrated Resource Plan ("**IRP**"), as required under Puerto Rico Act 57 of May 27, 2014 (Act 57-2014). PREPA prepared an IRP intended to consider all reasonable resources to satisfy the demand for electrical services over a twenty (20) year planning horizon. On February 13, 2019, PREPA filed its IRP along with supporting workpapers and other documentation with the Energy Bureau. PREPA subsequently amended and refiled this IRP on June 7, 2019;

b. on August 24, 2020, the Energy Bureau issued a "*Final Resolution and Order on the Puerto Rico Electric Power Authority's Integrated Resource Plan*" (the "**Final Order**") that approved, in part, and rejected, in part, PREPA's proposed IRP. The Final Order modified PREPA's Action Plan and ordered that PREPA adopt and implement this modified Action Plan (the "**Modified Action Plan**"). In the Final Order, the Energy Bureau found that:

i. *increased deployment of solar photovoltaic (PV) and battery resources should be pursued if the results of procurement processes produce costs that reflect the parameters associated with Scenario S3S2 (for all loading levels under that scenario) and if those resources are available for faster installation than was assumed for PREPA's ESM Plan; and*

ii. *a Modified Preferred Resource Plan for the purpose of initial procurement planning includes the solar PV and battery energy storage quantities contained in Scenario S3S2B for the first five years of the Action Plan period;*

c. the Final Order's Modified Action Plan contains specific directives and requirements, which included the formulation of the Procurement Plan. As summarized in Section A3 of the Final Order, the Energy Bureau ordered:

i. *PREPA to develop, with the Energy Bureau's guidance and approval, a detailed procurement plan for renewable resources and battery energy storage to achieve compliance with the renewable portfolio standard ("**RPS**");*

ii. *PREPA to issue a series of RFPs for the provision of (a) renewable energy in support of Act 82's RPS goals, and (b) battery energy storage in support of (i) capacity requirements needed to meet PREPA's peak load requirements and (ii) requirements for integration of renewable energy generation;*

iii. *that competitive procurements to obtain Power Purchase and Operating Agreements (PPOA) for these resources must be open to all forms of renewable energy, including, but not limited to wind, hydro, solar PV, Virtual Power Plant (VPP), and storage … that PREPA should not unnecessarily limit the level of overall procurement to 250 MW blocks, but rather needs to pursue a strategy that attempts to procure the amount of resources required under S3S2B; and*

iv. *PREPA to submit to the Energy Bureau a draft renewable resource and battery energy storage resource procurement plan (Procurement Plan) on or before sixty (60) days from the notification date of the Final Resolution and Order.*

PREPA filed a status report on the development of its draft Procurement Plan with the Energy Bureau on September 23, 2020. The Energy Bureau opened a new docket for the consideration of PREPA's Procurement Plan on October 6, 2020, designating the new docket as Case No. NEPR-MI-2020-0012. On October 9, 2020, at PREPA's request, the Energy Bureau convened a Technical Conference to address PREPA's Procurement Plan status report. PREPA submitted its draft Procurement Plan by Motion dated October 23, 2020. PREPA subsequently sought a further Technical Conference and reiterated this request on three occasions in November and December; and

d. on December 8, 2020, in Case No. NEPR-MI-2020-0012, the Energy Bureau issued a Resolution and Order (the "**Procurement Plan Resolution**") which specified changes to PREPA's draft Procurement Plan and directed PREPA to make corresponding changes to the draft Request for Proposals ("**RFP**") document that accompanied that draft Procurement Plan. Finding that these changes will align the Final Procurement Plan and associated RFPs with its Final Order and applicable regulations and laws, the Energy Bureau approved some of the core elements of PREPA's draft Procurement Plan, modified others and directed certain questions relating to technical issues to PREPA. The Energy Bureau ordered PREPA to carry out the terms of the Procurement Plan as modified by the Procurement Plan Resolution and as specified in the included Technical Appendices.

2. Content of Procurement Plan

This Procurement Plan (i) positions PREPA to satisfy the requirements of the Final Order and the Procurement Plan Resolution, and (ii) provides a thoughtful approach to building out future renewable energy and energy storage resources in accordance with the requirements of Act 82, informed by the lessons learned in the administration of the Tranche 1 RFP to date. Ultimately, the Procurement Plan aims to:

a. increase the availability of renewable energy and energy storage resources as part of PREPA's generation system;

b. reduce energy prices to levels consistent with PREPA's 2020 Certified Fiscal Plan projections; and

c. increase the resiliency of the T&D System as required by the IRP.

As set out in Article III, the Procurement Plan follows the format indirectly specified in Section IV, Subsection D(4)(b) of the Final Order, as follows:

a. (**Procurement Plan Description**) Section 1 provides a detailed overview of the current iteration of the Procurement Plan.

b. (**Counter-Party Risk**) Section 2 discusses how this Procurement Plan has been structured to minimize PREPA counter-party risk and thus potentially incentivize bidders to offer lower prices, given PREPA's current financial status and prospects for its improvement over time.

c. (**Request for Proposals Template**) Section 3 discusses the template which PREPA developed for the Tranche 1 RFP, as updated to reflect lessons learned in the administration of that RFP Tranche (as defined below) and the specifics of this iteration of the Procurement Plan.

d. (**Proposal/Contract Terms & Conditions**) Section 4 describes key contract terms and conditions under which respondents proposing each type of energy resource (each, a "**Proponent**") will develop, finance and install renewable generation and energy storage resources, and make such resources available for dispatch by the T&D Operator (as defined below) (each, a "**Contract**").

e. (**Procurement Scale / Type**) Section 5 discusses the scale and type of energy resources which PREPA intends to procure in accordance with this Procurement Plan.

f. (**Planned Implementation Timeline**) Section 6 presents a planned timeline for the selection and development of energy resources through the achievement of commercial operation.

g. (**RFP Schedule**) Section 7 describes the current schedule for the issuance and administration of RFPs for Tranches 2-6.

h. (**Adjustments for Distributed Generation**) Section 8 describes how resource quantities requested in individual RFP Tranches subsequent to the first two (2) Tranches may be adjusted to account for installations of distributed generation ("**DG**") resources that contribute to the resource quantities targeted in the Modified Preferred Resource Plan, and for resources in excess of the minimum amounts required in each of the earlier RFPs that may be selected and developed.

i. (**Evaluation Parameters**) Section 9 sets forth the parameters to be applied in evaluating energy resource proposals as discussed in the Final Order and the Procurement Plan Resolution.

j. (**Other Considerations**) Section 10 (i) discusses considerations specific to combined or individual proposals for renewable generation, energy storage or combinations of renewable generation and energy storage resources, and proposals which aggregate energy storage and other energy resources for connection to the distribution system (each, a "**Virtual Power Plant**" or "**VPP**"), and (ii) discusses the renewable generation integration study that has been performed to assess the current capability of the T&D System to accommodate increased levels of renewable generation capacity.

3. Lessons Learned from Tranche 1 RFP Process

While PREPA has not completed its evaluation of Proponent proposals submitted through the Tranche 1 RFP process as of the date of this Procurement Plan, PREPA and the T&D Operator have identified the following five (5) lessons learned from the Tranche 1 RFP process to date:

a. (**Interconnection Study Fees**) The Tranche 1 RFP did not clearly define the requirement or process for Proponents to pay for the interconnection studies, as anticipated by the Procurement Plan.[1] For Tranches 2-6, the RFP will include provisions to address this issue. For Tranche 1, PREPA issued Communication No. 2 on June 23, 2021, describing the payment requirement for proposals selected for Phase III evaluation and permitting Proponents that object to paying for Tranche 1 interconnection studies to withdraw from the RFP process.

[1] See Section 4.4 ("The Proponent shall bear the interconnection and system upgrade study costs. Additionally, the Proponent will be responsible for the design, procurement, installation, commissioning, and acceptance testing of all equipment shown by these studies to be necessary to interconnect the Proponent's proposed facility to the T&D System.")

b. (**VPP MTRs**) PREPA has noted in the procurement plan that the Puerto Rico and US energy sector have little experience with VPP MTRs and that technical issues with integrating storage and VPP resources are significant. For the Tranche 1 RFP, PREPA requested that proponents submit draft MTRs with their proposals, delivered those to LUMA, and solicited draft MTRs from LUMA that would serve as the basis to finalize VPP MTRs for Tranche 1 and future RFPs. LUMA delivered MTRs for VPPs for use in Tranche 1, and PREPA made those available to VPP proponents.

To provide a uniform opportunity for feedback on the VPP MTRs for Tranche 1, PREPA issued Communication No. 2 on June 23, 2021, which (i) requested VPP Proponents to submit any MTR comments to PREPA through the "Messaging" tab of event No. 112658 on PowerAdvocate® by no later than 8:00 pm Atlantic Standard Time on July 30, 2021, and (ii) committed PREPA to assess timely comments submitted by Proponents, update the same and distribute a final version of the VPP MTRs to VPP Proponents for Tranche 1.

For Tranches 2-6, PREPA will include draft MTRs at the outset of the RFP process and allow RFCs and comments the MTRs through the formal RFP process. Through this process, PREPA and LUMA will engage all proponents and request feedback on the MTRs for VPPs in a structured, transparent manner.

c. (**Proponent Queue**) Puerto Rico has not had an overall policy set with respect to upgrade costs and interconnection capacity allocation. Thus, Proponents participating in Tranche 1, and in prior procurement processes, did not receive a queue number or queue position, or participate in any other organization methodology, to guide evaluation priorities versus competing Proponents.

This results in difficulties in administration of network upgrades, a cumbersome allocation of shared cost responsibility based the project impact on the grid and other problems. After cost allocation to the individual Proponents is determined, if any proponent decides to withdraw from the process, a re-study and re-assignment of network upgrade costs to a new pool of Proponents is required. This will impact the timeline and the cost of the study to customers and there might be numerous re-study requests due to the withdrawals. Additionally, since a single Proponent might submit several configurations of a project and might be interested in different Point of Interconnection (POI) locations across the grid, the process becomes even more complicated when determining which of these projects impact the grid and how costs are allocated to these projects. Future communication with the proponents on any of the next steps such as the generation interconnection agreement, cost estimates, and power flow study reports also become complicated with no queue position given to the proponents at the time of application submission.

Utilities in the U.S. typically use a queue of Proponents to address the issues described above. PREPA and LUMA recommend the implementation of a queue system for Tranches 2-6.

d. (**Timing Between Tranches**) LUMA and PREPA have determined that the current RFP schedule does not provide enough time between Tranches to integrate lessons learned (including those that may be learned following evaluation of proposals) and to make adjustments that address curtailment risk and other issues arising in the interconnection study and integration analyses. The compressed timeline reduces PREPA's ability to present to Proponents a clear picture upfront of the expected environment for their proposed projects, increasing their risk. The clearer the picture that PREPA can give to Proponents, the better, more responsive proposals it can expect to receive.

e. (**Source Code Access**) To dispatch resources, VPP Proponents will utilize a Grid Services Delivery System (the "**GSDS**"), which depends upon multiple bespoke and proprietary computer source code for its operation (the "**Source Code**"). The owner of the Source Code incorporated in each GSDS will typically grant the VPP aggregator a non-exclusive license to use the Source Code for purposes of operating the GSDS. Due to the proprietary nature of Source Code, a third party such as PREPA cannot take over the operation of a VPP without first obtaining license rights to use the relevant Source Code. Source Code access could become essential to the operation of the VPP in the event that either (i) the VPP aggregator enters into bankruptcy or otherwise fails to perform under the Grid Services Agreement with PREPA, or (ii) a Source Code owner enters into bankruptcy or otherwise fails to update and maintain the Source Code For this reason, a State-owned utility in at least one other US electricity market requires (A) VPP aggregators to place a human readable version of the Source Code into escrow, and (B) each Source Code owner to grant such utility a non-exclusive license to use the escrowed Source Code upon the occurrence of either of the foregoing events (collectively, the "**Escrow & Licensing Requirements**"). With each GSDS utilizing up to thirty (30) or more separate assemblies of Source Code, compliance with the Escrow & Licensing Requirements involves a highly complex, time-consuming, and cost intensive process with as many as thirty (30) or more Source Code owners.

For the Tranche 1 RFP, PREPA initially prepared a template Grid Service Agreement which, among other things, obligated a VPP aggregator to comply with specific Escrow & Licensing Requirements. Two (2) VPP Proponents, however, vigorously pushed back on the Escrow & Licensing Requirements and in the end, PREPA withdrew these requirements from the Proposal form of Grid Service Agreement. Thus, the terms of the current Grid Service Agreement expose PREPA to the risk of the permanent loss of access to VPP resources arising out of PREPA's inability to utilize the Source Code incorporated into a GSDS.

This risk will not become material until the aggregate size of VPP Resources becomes so large that the T&D Operator will be unable to source replacement capacity from other resources connected to the T&D System to compensate for the loss of VPP resources as to which PREPA or its successor lacks the necessary rights to step in and use the required Source Code. PREPA can protect itself from this risk by (i) imposing Escrow & Licensing Requirements and/or (ii) maintaining sufficient excess available capacity in the T&D System to offset the loss of the VPP capacity. To safeguard the secure and resilient operation of the T&D System, PREPA recommends that, for Tranches 2-6, the Escrow & Licensing Requirements should apply when

VPPs connected to the distribution system achieve an aggregate resource capacity of at least 100 MW.

4. Role of T&D Operator During the Procurement Program

On June 22, 2020, PREPA, LUMA Energy, and the P3A entered into the Puerto Rico Transmission and Distribution System Operation and Maintenance Agreement ("**T&D OMA**"). Under the conditions outlined in the OMA, LUMA Energy serves as Operator and provides O&M Services for the T&D System in Puerto Rico.

On June 1, 2021, LUMA began operation of the T&D System. As Operator, LUMA plays an active role in the integration of generation procured as a part of this Procurement Plan. LUMA's T&D System planning activities as defined in the T&D OMA, include, but are not limited to, Section 5.13 (d), Procurement of Generation Projects and Generation Supply Contracts. In addition to system planning, LUMA will be responsible for generation resource integration, T&D System improvements, as well as T&D System operation and maintenance.

In this procurement, LUMA will have the primary responsibility to carry out different types of technical studies required for the PPOA counterparty to connect to the grid and enter commercial operation. The studies may include analysis of load flows, voltage fluctuations, short circuits, protection and coordination of relays, verification of the grounding design, power quality and stability, among others, which are collected during feasibility, system impact and facilities studies.

The point of interconnection of a utility scale resource with a new PPOA will require construction projects to upgrade and expand the existing infrastructure in the utility electrical system localities (substations, transmission centers, etc.) where the resource will connect to the T&D System. In relation to these types of projects, LUMA will have active participation in areas such as approval of design for construction, inspection, safety, testing, commissioning, approval for energization and commercial operation, among others.

Once PREPA, the Energy Bureau, P3A, and the Financial Oversight and Management Board for Puerto Rico ("**FOMB**") approve a project, the PPOA project will proceed through the interconnection design, construction, including required system upgrades, testing and commissioning stages defined by LUMA before entering commercial operation.

III. PROCUREMENT PLAN

1. Procurement Plan Description

The Energy Bureau has endorsed PREPA's plan to (i) use RFPs for the solicitation of new renewable generation and energy storage resources on a competitive basis, based on terms and conditions set forth in template Contracts, and (ii) engage selected Proponents through the finalization and execution of Contracts covering these resources. The Procurement Plan envisions the issuance of six (6) RFPs

(each, a "**Tranche**" and collectively, the "**Tranches**"), spaced over a three-year timeline in accordance with the guidance provided by the Final Order on minimum energy resource quantities and timing, as set out in Table 1-4 of Section 1.4 (*Procurement Schedule*) below.

With this approach, PREPA aims to secure the following benefits:

a. the T&D Operator will have an opportunity to model the renewable integration and the T&D System to determine any needed system upgrades and the preferred interconnection locations to which projects can be connected (minimizing system impacts). These locations will likely evolve over time, as the T&D System improves and the T&D Operator allocates preferred interconnection locations to selected Proponents in earlier RFP Tranches.

b. This approach allows the T&D Operator jointly acting in their capacity as the "*Operator*" under the Operation & Maintenance Agreement, dated June 22, 2020, to plan for system improvements that support large-scale renewable energy and energy storage integration.

c. PREPA can spread procurement commitments associated with each Contract over time and take advantage of future technological gains as well as reduced capacity and energy pricing.

d. This approach buys additional time for PREPA to improve its credit position as it navigates the Title III process. PREPA expects that renewable resource capacity and energy pricing will improve as its credit position improves.

The T&D Operator has engaged the services of a consultant to evaluate system impacts associated with the addition of new renewable energy resources, identify needed system upgrades, determine an approximate capacity value that results in minimal system impacts, and provide an initial screening for preferred interconnection locations. Through the work this consultant continues to perform, the T&D Operator will identify the scale and scope of the system improvements required to accommodate the addition of both renewable generation and energy storage resources procured under the RFP. PREPA will lead the procurement of complementary energy storage installations based on T&D System needs as determined through studies and plans performed by the T&D System Operator. The T&D Operator will develop necessary T&D System improvements that will support both near-term and longer-term increases in the interconnection of new renewable energy resources.

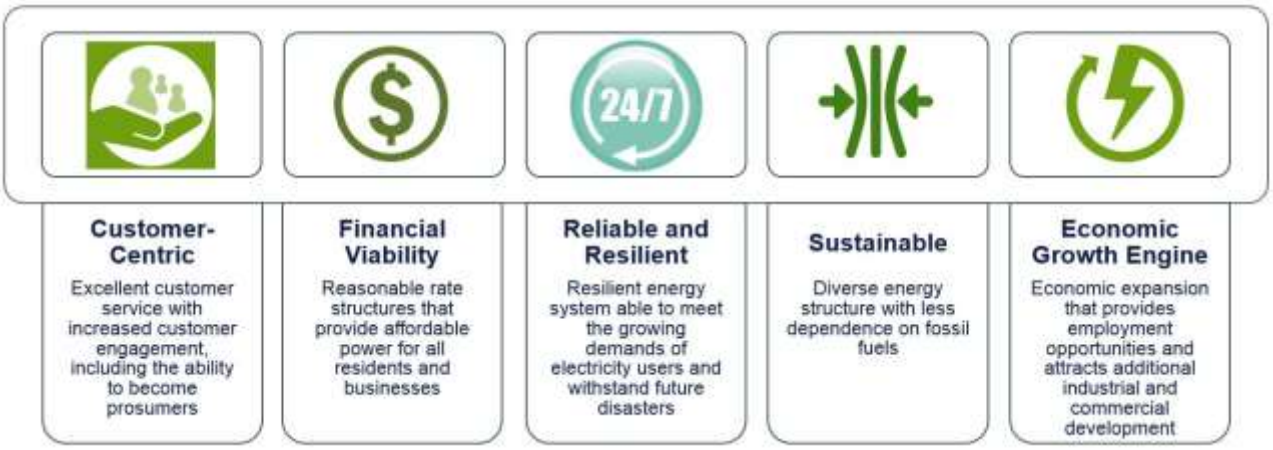
The Procurement Plan Resolution requires PREPA to develop, maintain, update and file with the Energy Bureau every six (6) months a timeline for anticipated installation of energy storage and renewable energy resources. The first of these timelines will be submitted on or before July 30, 2021, in accordance with the Energy Bureau's June 3, 2021 Resolution and Order granting extensions of time in Case No. NEPR-MI-2020-0012. In addition, the T&D Operator will attempt to streamline its interconnection analyses and allow for installations of the required renewable and storage resources and T&D System improvements as rapidly as possible.

The following provides a discussion of PREPA's Vision Statement, key regulatory drivers, the procurement process, acceptable renewable energy resources, the status of the development of an RFP and the Contracts and uncertainties and unknowns.

1.1 PREPA Vision Statement

Noting the need for an efficient and resilient system, on February 1, 2018, the PREPA Governing Board released its vision statement to guide the future of the utility.

Figure 1-1 – PREPA's Five Pillars



The Governing Board's vision addresses the reliability and resilience of the system, the transition to a system that is sustainable both financially and environmentally, and its importance in acting as an economic growth engine for Puerto Rico. These elements were noted and factored into the structuring of the IRP submissions. The resulting Procurement Plan takes a positive step towards realizing this vision through the procurement of renewable energy and storage resources, designed for reliability and resilience, which will reduce PREPA's dependence upon fossil fuel resources. The following table presents the Vision Statement:

Table 1-1 – 2018 Governing Board Vision Statement

Pillar	Summary
System is Customer-Centric	The system serves the customer with affordable, reliable power, with transparent metrics for quality of service and with equitable consideration across all customers. Quality/Reliability can be differentiated for customers in a manner that serves their total cost and risk objectives. Customers are engaged by innovative products and value-added services that provide choice among rate plan and risk management options and provide access to wholesale contracting options for large customers. Customers are empowered with behind-the-meter alternatives for energy efficiency, demand management, and distributed generation, with the ability to become prosumers if they so choose.

Pillar	Summary
System Promotes Financial Viability	The system is premised on positive economics on both sides of the meter. Rates are reasonable and create value for the customer, while pricing is sufficient to cover costs. Rate and market design create incentives to purchase, consume or produce energy in a manner that benefits the entire system. Subsidies are minimized, and those that remain have a non-distortionary impact. Operational excellence and sound long-term planning reduce the cost to serve. Rates are affordable within a model that allows the utility to earn a reasonable rate of return and service its debt. The business model is robust to changes such as outmigration and reduction in energy demand and does not create disincentives for adoption of cheaper energy resources, either at the grid level or at the customer premises.
System is Reliable and Resilient	The grid is thoughtfully planned, well maintained, and safely operated to achieve defined reliability and resiliency goals. There is visibility into the system at all levels, and control where appropriate. Standards for recoverability create a measure for resilience. The choice of architecture (distributed vs. regionalized vs. centralized) is intentionally made to balance reliability/resilience and cost objectives while also taking advantage of advancements in technology and innovation.
System is a Model of Sustainability	There is a progressive focus on diversifying energy resources and reducing the carbon intensity of the power sector, in both primary generation and backup generation. Power generation is efficient and minimizes emissions. Customers have incentives to use energy wisely and to generate their own clean energy. The grid and grid systems are designed to take maximum advantage of increasingly cost-effective renewable power generation alternatives and to integrate emerging technologies.
System serves as an Economic Growth Engine for Puerto Rico	The quality, reliability, and cost of power attracts new commercial and industrial development to Puerto Rico and encourages existing commercial and industrial customers to expand their operations. Transformation and reinvestment in the power system creates new jobs. Innovation in the generation and delivery of power creates a local ecosystem of businesses that provide for evolving needs for equipment, technology, and services in Puerto Rico and beyond.

1.2 Key Regulatory Drivers

The Final Order provided a summary of Puerto Rico's laws and regulations as they apply to the IRP and the Modified Action Plan. This Section 1.2 restates these "regulatory drivers," in part to reinforce the importance of these legislative initiatives. The Energy Bureau structured the Modified Action Plan

to support compliance with these laws and regulations, and PREPA has developed this Procurement Plan in accordance with the Modified Action Plan.

a. **Act 82-2010:** Act 82-2010, as amended ("**Act 82**"), known as the Puerto Rico Energy Diversification Policy through Sustainable and Alternative Renewable Energy Act, established the first renewable energy portfolio standard in Puerto Rico and required that a retail energy provider procure twelve percent (12%) of its power needs through renewable energy by 2015, fifteen percent (15%) by 2020 with a goal of reaching twenty percent (20%) by 2035. Act 82 was amended in 2019 to, among other things, establish new RPS milestones: twenty percent (20%) by 2022, forty percent (40%) by 2025, sixty percent (60%) by 2040 and one hundred percent (100%) by 2050. Act 82 created Renewable Energy Certificates (RECs) that encompassed all the environmental and social attributes of one megawatt-hour (MWh) of electricity and that could be traded beyond the borders of Puerto Rico.

b. **Act 83-2010:** Act 83-2010, as amended ("**Act 83**"), known as the Puerto Rico Green Energy Incentives Act, was established to, among other things: achieve the diversification of energy sources; reduce the dependency on fossil fuels; reduce and stabilize energy costs; reduce the flight of capital caused by the import of fossil fuels; and preserve and improve the environment. Act 83 also created a Green Energy Fund to fund the development of sustainable energy systems that further energy use savings and efficiency. The legislation also contained Green Energy Initiatives and tax benefits to encourage consumers and businesses to use renewable energy.

c. **Act 120-2018:** Act 120-2018, as amended ("**Act 120**"), known as the Puerto Rico Electric Power System Transformation Act, created the legal framework required for the sale, disposition, and/or transfer of the assets, operations, functions, and services of PREPA. Under Act 120, any contract related to a PREPA Transaction must have an Energy Compliance Certificate from the Energy Bureau. Moreover, the legislation grants PREPA and P3A the authority to sell PREPA assets related to electric power generation and transfer or delegate any of PREPA's operations, functions, or services. The legislation also notes, however, that the regulatory framework must be consistent with the new realities in Puerto Rico and the energy industry; it must, therefore, among other things, allow for the use of DG, microgrids and more renewable energy. The Legislature also notes that the electric system must be resilient to weather events and the effects of climate change on the island. Act 120-2018 also points out "…the importance of regulating the energy industry and the need to have an independent regulatory entity that carries out its duties firmly and resolutely."

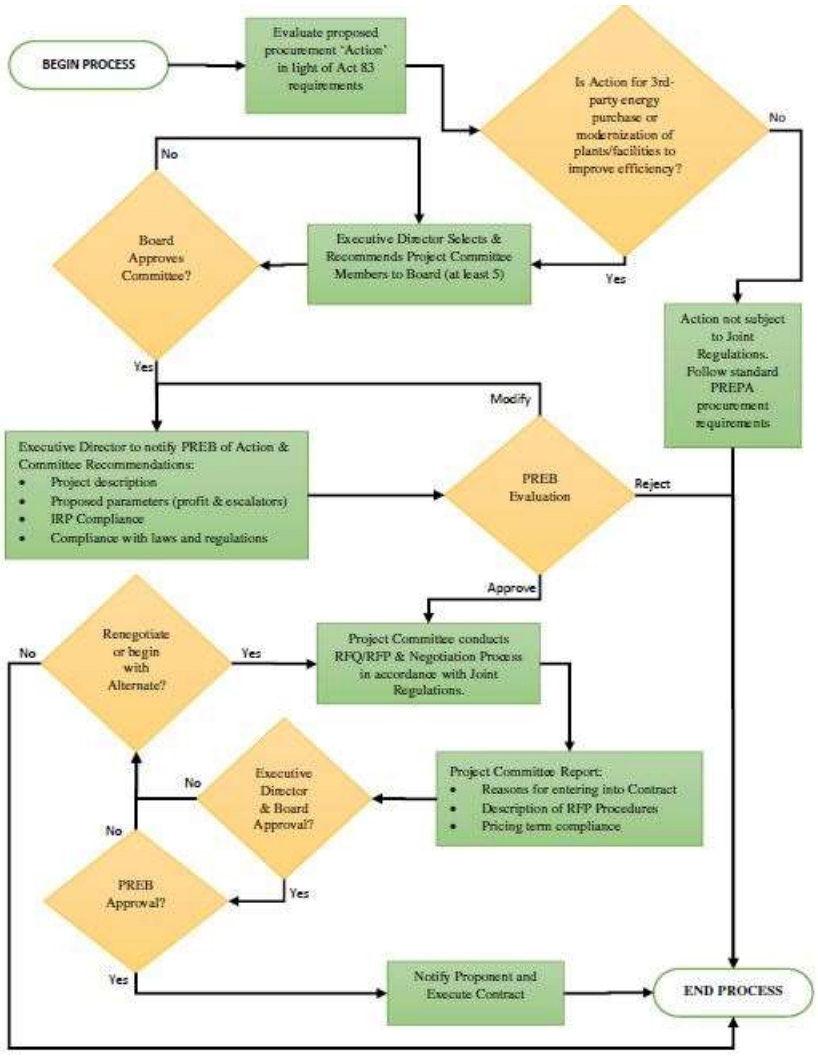
d. **Act 17-2019:** Act 17-2019 ("**Act 17**"), known as the Puerto Rico Energy Public Policy Act, built upon the foundation created for integrated resource planning in Act 57 and sharpened the focus on accelerated renewable energy provision, energy conservation and efficiency, DR and DG. In so doing, Act 17 increased the renewable portfolio to a minimum of twenty percent (20%) by 2022, forty percent (40%) by 2025, sixty percent (60%) by 2040 and one hundred percent (100%) by 2050 and created an energy efficiency target of thirty percent (30%) by 2040. Act 17 also emphasizes the role of "prosumer" generation and envisions an enhanced role for microgrids. Further, Act 17 reinforces the authority of the Energy Bureau to conduct

IRP proceedings. Act 17 also states that the IRP will be prepared by the electric power company responsible for the operations of the electrical system and shall be approved by the Energy Bureau. Allowance for preparation by an entity other than PREPA acknowledges the changes contemplated under future IRPs as a result of the implementation of Act 120. The legislation also set forth more detail than that contained within Act 57 on the content of the IRP, but the content requirements are consistent with the Energy Bureau's IRP requirements contained in Regulation 9021. A central point throughout the legislation is that actions taken regarding generation and related matters must conform to the approved IRP, thereby highlighting the importance of the IRP as a central planning tool. Any changes or amendments to the IRP shall be approved by the Energy Bureau.

1.3 Procurement Process

The Final Order addressed the Procurement Process by referencing Regulation 8815, attached to this document for ease of reference as Appendix 1 (the "**Joint Regulation 8815**"). As stated in the Final Order, "*PREPA or the T&D Operator, with oversight by the Energy Bureau under the processes of Regulation 8815, shall run all competitive auctions in accordance with this Modified Action Plan*." Joint Regulation 8815, also known as the *Joint Regulation for the Procurement, Evaluation, Selection, Negotiation, and Award of Contracts for the Purchase of Energy and for the Procurement, Evaluation, Selection, Negotiation, and Award Process for the Modernization of the Generation Fleet*, governs the processes for contracting with third parties for the purchase of energy. The following flowchart represents a high-level summary of the procurement process required by Joint Regulation 8815.

Figure 1-1 – Summary Procurement Process - Joint Regulation 8815



PREPA and the Puerto Rico Energy Commission (the Energy Bureau's predecessor) developed and promulgated Joint Regulation 8815 in 2016. This regulation addresses the formation of an evaluation committee, the Process to Issue RFQs/RFPs, the Evaluation and Selection Process, Selection of Proponents, Contract Award, and Reconsideration and Review.

A high-level summary of the key components of Joint Regulation 8815 as it applies to this Procurement Plan follows.

a. (**Evaluation Committees**) A committee (the "**Evaluation Committee**") with at least five (5) members, appointed by the Executive Director and approved by PREPA's Governing Board, will manage the administration of, and evaluate all proposals submitted by Proponents relating to, the RFP(s) in accordance with this Procurement Plan.

b. (**RFP Issuance**) The Procurement Plan Resolution directs PREPA to consolidate the RFQ and the RFP process to expedite the procurement process. Thus, the consideration of each Proponent's qualifications will be incorporated into the evaluation of individual resource proposals in determining the winning Proponents. For the issuance of an RFP, the Evaluation Committee shall advertise the RFP by means of a public notice in one newspaper of general circulation, the internet sites for PREPA and the Energy Bureau, and, at the discretion of the Evaluation Committee, in one or more national or international journals. The RFP shall include the following provisions:

i. a description of the Project and its importance based on the IRP;

ii. a description of the proposed schedule for the procurement process;

iii. a due date, time, and method for submission of requests for clarification(s) and proposals (and the place for submission of proposals);

iv. instructions as to the format of proposals and the information required for a proposal to be considered complete;

v. any options or alternative proposals allowed;

vi. applicable proponent eligibility requirements, scoring criteria, and minimum resource size;

vii. applicable proposal evaluation criteria that will be used to evaluate proposals and proponents;

viii. applicable proposal security;

ix. a statement regarding funding contingencies or other conditions, contingencies, approvals, authorizations, or certifications which are required to award a Contract;

x. a draft of the proposed Contract or summaries of key terms and conditions;

xi. parameters approved by the Energy Bureau in connection with profit margins and pricing escalators;

xii. PREPA's authorized representative for RFP communications;

xiii. policy statements encouraging local participation; and

xiv. other applicable terms and conditions as determined by PREPA's Governing Board.

Proposals received on or before the due date set forth in the RFP will be stamped (date and time of receipt) and will be kept in the custody of PREPA. PREPA will not disclose the proposals publicly and only members of the Evaluation Committee, the Energy Bureau and

other members designated by the Governing Board or Executive Director of PREPA shall have access to the proposals during the selection and evaluation period.

c. (**Evaluation and Selection Process**) Joint Regulation 8815 establishes a three-phase selection process: (i) quality control review ("**Phase I**"), (ii) evaluation committee review and recommendation ("**Phase II**"), and (iii) contract negotiation ("**Phase III**"). Phase I allows PREPA to determine which proposals satisfy the minimum requirements outlined in the RFP. PREPA will notify each Proponent whether such Proponent's proposal passed Phase I evaluation and advance to Phase II. During Phase II, the Evaluation Committee will review and evaluate each proposal in accordance with the selection criteria. The Evaluation Committee may select one or more proposals to advance to Phase III evaluation. To comply with the Procurement Plan, PREPA will require more than one Proponent. Therefore, the Evaluation Committee will likely make recommendations to PREPA's Executive Director and the Governing Board to carry out discussions and negotiations with more than one Proponent at the same time for proposals that fall within a competitive range as defined in the regulation. Assuming negotiations will proceed with more than one Proponent during Phase III, each Proponent will receive written notification containing the details and describing the following procedures:

   i. No statement or action shall bind PREPA other than a Contract with a Proponent, duly executed and delivered by PREPA, which has become effective in accordance with its terms.

   ii. The Evaluation Committee may invite each Proponent to one or more meetings to discuss and answer questions.

   iii. The Evaluation Committee shall determine the content and scope of each meeting.

   iv. If the Evaluation Committee convenes any meetings with a Proponent of energy resources that fall within the competitive price range, then the Evaluation Committee will give all Proponents that propose a similar energy resource and a price that falls within such competitive price range, an opportunity to discuss and review their proposals with an authorized representative of the Evaluation Committee.

   v. The Evaluation Committee shall establish procedures and schedules to control meetings, advise Proponents on deficiencies and allow an opportunity to cure, resolve uncertainties or otherwise clarify the terms and conditions of the proposal, address any suspected mistakes, provide an opportunity to modify economic terms, technical aspects, or other aspects which may result from the discussions, and keep a record of the date, time, place, and attendees of the meetings.

   vi. The Evaluation Committee may require Proponents to submit, in writing, confirmation of any clarification of a proposal.

vii. Authorized Representatives of the Evaluation Committee may carry out negotiations in whole or in part through written or telephone communications, at the discretion of the Evaluation Committee.

viii. The Evaluation Committee may request "Best and Final Offers" or proceed to negotiations with one (or more) proponents within the competitive range.

ix. Additional negotiations may follow receipt of Best and Final Offers.

Subject to PREPA's right to reject any or all proposals, PREPA shall select the proposal(s) considered most advantageous to PREPA, PREPA's ratepayers and Puerto Rico. Proposals judged to be "most advantageous" will meet minimum requirements, demonstrate economic benefits, reliability, and resiliency, and fit with the overall needs of the T&D System. In accordance with the Energy Bureau's directive, the RFP evaluation process during Phase I and II shall not exceed seventy-five (75) days unless circumstances require that the Evaluation Committee extend such process. The Evaluation Committee will evaluate proposals, based on price/cost and relevant estimated system upgrade costs as well as non-price terms such as construction and operational experience, risks and risk mitigation measures, and other pertinent criteria. The RFP will clearly define the scoring system and all evaluation criteria.

d. (**Selection of Proponents**) Joint Regulation 8815 prohibits the selection of Proponents that have been convicted of any of the offenses set forth in Act 458-2000. Other grounds for disqualification include when a Proponent:

i. enters into insolvency or bankruptcy;

ii. makes a formal, public announcement that it is unable, or does not intend, to pay its debts and obligations;

iii. has been convicted of any of the criminal offenses set forth in Act 428-2004;

iv. has not fulfilled its obligations relating to the payment of taxes under the laws of the Commonwealth or the relevant jurisdiction in which it maintains its principal operations;

v. has engaged in collusive acts or is guilty of serious misrepresentations;

vi. has experienced material changes to its business;

vii. fails to comply with substantive requirements of the RFP; or

viii. is otherwise in material breach of Joint Regulation 8815.

When assessing the financial condition of a Proponent, PREPA may consider bank statements, financial statements (last three (3) fiscal years), or other information that would allow it to assess the financial condition of the Proponent. The Evaluation Committee shall specify in the

RFP the financial information which the Proponent must provide to comply with the applicable minimum standards of financial condition.

e. (**Approval of Contract(s)**) Upon completion of the negotiation of the Contract(s) with a Proponent, the Evaluation Committee shall prepare a report which shall include the reasons for entering into such Contract(s), the reasons for selecting the Proponent(s), a description of the procedures followed, and other information pertinent to the procedures followed and the evaluations conducted. The Evaluation Committee shall provide the report and proposed Contract(s) to the Executive Director and the Governing Board of PREPA within thirty (30) days for approval. The Governing Board shall have the right to reject, accept, or return the proposed Contract for renegotiation. If the Governing Board of PREPA approves the report and Contract(s), PREPA shall provide a copy of the report and the Contract(s) to the Energy Bureau for its evaluation and approval. If the Energy Bureau approves the Contract(s), the Evaluation Committee will notify Proponents of the RFP results. Once the Energy Bureau approves a Contract, PREPA shall have no right to modify the Contract or the scope of the Project in any material way without the approval of the Energy Bureau. Subject to (i) the completion of the required Feasibility, System Impact and Facilities Studies, (ii) the approval by the Governing Board and the Energy Bureau, and (iii) the review and approval by the FOMB, PREPA and the Proponent may execute the Contract(s).

f. (**Reconsideration and Review**) Proponents may request reconsideration of the final awarding of a Contract in accordance with applicable administrative law. These reconsideration and judicial review rights will be described in the notifications sent to Proponents.

1.4 Procurement Schedule

As specified in the Final Order, the Procurement Plan communicates the expected timeline for the release of subsequent RFPs in sequence (i.e., every six (6) months, over the next three (3) years for a total of six (6) tranches of RFP releases). These RFP Tranches contemplate the procurement of renewable energy resources in quantities and within timelines conforming with Act 82's RPS goals, and the procurement of energy storage resources in support of capacity needed to meet PREPA's peak load requirements and in support of renewable energy generation integration requirements.

The schedule of minimum RFP quantities, in conformance with quantities targeted in the Modified Preferred Resource Plan, follows:

a. **1st Tranche**: at least 1,000 MW solar PV (or energy-equivalent other renewable), at least 500 MW (2,000 MWh or equivalent) battery energy storage;

b. **2nd Tranche**: at least 500 MW solar PV (or energy-equivalent other renewable), at least 250 MW (1,000 MWh or equivalent) battery energy storage;

c. **3rd Tranche**: at least 500 MW solar PV (or energy-equivalent other renewable), 250 MW (1,000 MWh or equivalent) battery energy storage;

d. **4th Tranche**: at least 500 MW solar PV (or energy-equivalent other renewable), 250 MW (1,000 MWh or equivalent) battery energy storage;

e. **5th Tranche**: 500 MW solar PV (or energy-equivalent other renewable), 125 MW (500 MWh or equivalent) battery energy storage; and

f. **6th Tranche**: 750 MW solar PV (or energy-equivalent other renewable), 125 MW (500 MWh or equivalent) battery energy storage.

Table 1-4 - Guidance for Renewables, and Battery Energy Storage RFP Tranches

		Renewables, MW		4-hr. Battery Storage equivalent, MW[1]	
RFP Target Release Date	**Procurement Tranche**	**Minimum**	**Cumulative**	**Minimum**	**Cumulative**
Dec-20 (released Feb-22)	1	1000	1000	500	500
Aug-21	2	500	1500	250	750
Dec-21	3	500	2000	250	1000
Jun-22	4	500	2500	250	1250
Dec-22	5	500	3000	125	1375
Jun-23	6	750	3750	125	1500

1) Other storage durations (i.e., 2-hour and 6-hour) will be considered.

PREPA issued the Tranche 1 RFP on February 22, 2021 and expects the RFP for Tranche 2 RFP to be issued by the end of June 2021. The target release dates for subsequent RFPs occur every six (6) months, over the next three (3) years, for a total of six (6) tranches of RFP releases. The procurement of resources may be front-loaded within the five-year period to allow time for construction, interconnections, and commissioning within the five-year Action Plan.

1.5 Uncertainties and Unknowns

As part of a competitive procurement plan, PREPA must describe internal or external staffing resources, constraints, and potential solutions to any constraints, as required, in order to meet the renewable energy generation and storage resource levels specified in the Modified Preferred Resource Plan.

PREPA does not currently have the internal capability and staff to evaluate project feasibility, system impacts or facility requirements. PREPA will rely on (i) external staffing resources until PREPA has hired or otherwise secured alternate capabilities, and (ii) support made available by LUMA as the Operator of the T&D System.

PREPA anticipates that integration of some proposed projects will require substantial T&D System upgrades. In evaluating such proposals, the T&D Operator will attempt to identify synergies and the timing of (a) new battery storage resources; (b) staged transmission reinforcements whose initial components can be completed in advance of an entire transmission project; (c) complementary

retirement of existing older thermal resources; and (d) operational guidance that can allow a project to proceed in stages, or with operational limitations based on system needs, subject to curtailment under certain conditions. The T&D System Operator will consider ways in which combinations of new storage resources and phased T&D System improvements may help mitigate constraints that may otherwise limit renewable energy deployments and will consider the assumptions used in interconnection analyses that account for these factors.

While Proponents have shown a high level of interest in the Tranche 1 RFP process, PREPA cannot yet determine whether this process will yield a sufficient number of high-quality, competitive proposals to procure the minimum quantities of renewable energy, energy storage and VPP resources, contemplated for Tranche 1. In addition, recent modeling and analysis by PREPA and its advisors indicates that the T&D System will require more than 1,500 MW (6,000 MWh) of energy storage resources to support appropriate levels of resource adequacy in the future. PREPA recommends that the Energy Bureau, PREPA and the T&D Operator discuss ways to ensure the deployment of a level of energy storage capacity that will support resource adequacy. PREPA has also commenced the assessment of (i) the quantities of renewable energy, required to ensure that the T&D Operator can fully charge the energy storage resources on a daily basis, and (ii) the risks and potential shortfalls of such an approach.

2. Counter-Party Risk

PREPA's current credit rating of CA, a non-investment grade rating reflecting PREPA's Title III status, presents a significant factor in the determination of Contract prices. A lower credit rating indicates a higher counter-party risk, which Proponents will factor into their cost of capital calculations. This results in higher cost of capital and a higher levelized cost of energy ("**LCOE**") in generating and energy storage resource proposals than would be appropriate if PREPA had a better credit rating, all else held equal. Proponents will usually determine contract price based on LCOE. As PREPA's credit rating improves, particularly as PREPA reaches an investment grade rating, PREPA's cost of capital should decrease, its riskiness as a contract counter-party will decline, and the LCOE should decrease as well, all else being equal. PREPA expects its credit rating to improve upon emergence from the ongoing PROMESA Title III proceeding. For earlier Tranches, which may result in Contracts executed prior to PREPA's emergence from its Title III proceedings, PREPA will give preference in its evaluation to Proponents that accept an automatic step-down in Contract price upon such emergence.

3. Request for Proposals (RFP) Template

Appendix 2 (*RFP Template*) sets forth the current version of the RFP template for energy resources, and this Section 3 provides a high-level overview of the template.

3.1 Background Information for the RFP

Each RFP will encourage Proponents to review the following documents, which provide further technical background:

a. **PREPA Integrated Resource Plan**: https://aeepr.com/es-pr/QuienesSomos/Paginas/ley57/Plan-Integrado-de-Recursos.aspx

b. **Energy Bureau Final Order on the PREPA IRP**: https://energia.pr.gov/wp-content/uploads/2020/08/AP20180001-IRP-Final-Resolution-and-Order.pdf

c. **Energy Bureau Procurement Plan Resolution**: https://energia.pr.gov/en/dockets/?docket=nepr-mi-2020-0012

Each RFP will also encourage Proponents to review the following additional documents, which are available for download at http://www.p3.pr.gov or at https://energia.pr.gov/en/laws/, for further background and the legal framework:

a. PREPA Organic Act, Act No. 83-1941, as amended;

b. Public-Private Partnership Authority Act, Act No. 29-2009, as amended;

c. Regulation for the Procurement, Evaluation, Selection, Negotiation and Award of Participatory Public-Private Partnerships Contracts under Act No. 29-2009, as amended;

d. Puerto Rico Energy Transformation and RELIEF Act, Act No. 57-2014, as amended;

e. PREPA Revitalization Act, Act No. 4-2016, as amended;

f. Act 82;

g. Act 83;

h. Act 17; and

i. Act 120.

3.2 RFP General Overview

Proponent Qualifications

Each RFP Tranche will solicit combined Statements of Qualifications and responses from companies and consortia interested in designing, constructing, installing, operating, and maintaining renewable energy generation, energy storage and/or VPP resources at one or more sites across Puerto Rico. Proponents should demonstrate:

a. capability and experience developing, constructing, installing, testing, and operating renewable energy resources;

b. capability and experience managing renewable energy and energy storage technology;

c. financial strength and capital resources engaged for project funding;

d. strong technical expertise, with a track record of high-quality operations; and

e. experience complying with regulatory and permitting approvals in Puerto Rico.

Energy Resource Characteristics

In accordance with the Final Order, the proposed resources may include, but are not limited to, solar PV, wind or hydro, energy storage, VPPs, or any combination of these technologies. The Final Order requires that PREPA not unnecessarily limit the level of overall procurement to 250 MW blocks, but rather directs PREPA to pursue a strategy that attempts to procure the resource capacity required under scenario S3S2B evaluated in the IRP. PREPA will seek renewable energy resources and energy storage projects on approximately a 2:1 MW ratio to conform to the overall targets for each Tranche of the RFP. To meet these thresholds, PREPA must consider both stand-alone and co-located renewable energy and energy storage projects on an integrated and non-integrated basis. If "shovel ready" utility scale renewable projects are available for expedited installation under agreements previously executed by PREPA, PREPA shall procure stand-alone energy storage projects with multiple hour duration and roughly one-half of the projected capacity of these "shovel ready" projects to be expedited for installation, either at utility scale or at distributed scale as a VPP, as part of RFP Tranche 1 selections.

All project proposals must comply with the appropriate Minimum Technical Requirements ("**MTRs**"), prepared and submitted together with the RFP, and with PREPA's current interconnection standards and requirements. A Proponent's ability to comply with MTRs and interconnection requirements will form part of the RFP selection criteria.

Proponents of all projects except VPPs shall submit all-inclusive turnkey proposals. The utility-scale renewable energy resources must have a minimum nominal rating of 20 MW, measured at the electrical interconnection point with the T&D System. VPP projects must have a minimum nominal rating of 5 MW made available through multiple electrical interconnections that do not exceed 1 MW AC of capacity. The standalone energy storage resources will have a minimum nominal rating of 20 MW and four (4) hours of storage. Storage alternatives offering two (2) hours and six (6) hours of storage will also be considered.

Proponents may also offer energy storage projects paired with a utility scale renewable energy project. For standalone energy storage, such offerings will be required to have a minimum nominal rating of 20 MW and four (4) hours of storage. Alternatives offering two (2) hours and six (6) hours of storage may also be considered. Proposals for hydro generation resources will not require energy storage support.

The same criteria used for the selection of utility scale renewable energy resources will apply to the evaluation of VPP proposals, except that the minimum capacity requirement shall be 5 MWs, which the Proponent must secure from multiple sites with different points of electrical interconnection that do not exceed 1 MW AC of capacity at each electrical interconnection. A Proponent may source energy and capacity for VPPs from existing facilities that do not currently sell such energy and capacity to PREPA. Proponents of VPPs will be responsible for all metering, SCADA, and other forms

of telemetry to create the VPP. VPPs will comply with applicable MTRs and interconnection standards.

Resultant Contracts

For each selected project, the Proponent shall enter into a Contract and an Interconnection Agreement under which the Proponent would sell, and PREPA would purchase: (a) for renewable generation, the net electric output, subject to specific energy delivery guarantees; (b) for energy storage resources, energy storage capacity subject to specific energy delivery and operating guarantees; (c) for VPP resources, capacity subject to specific energy delivery and operation guarantees; and (d) in each case, associated rights, benefits and credits of the Project, including environmental attributes (or "**RECs**").

3.3 Specific RFP Requirements

With the RFP process described in this Procurement Plan, PREPA seeks to comply with the requirements of the IRP and the Energy Bureau's Final Order and Procurement Plan Resolution. PREPA will contract under this Plan, and PREPA will evaluate and select resource proposals, on a competitive basis in accordance with the process set forth below and in the RFP.

a. (**Procurement Timeline**) Act 82, as amended by Act 120, requires PREPA to procure renewable energy resources in the following quantities by the end of specified years: twenty percent (20%) by 2022, forty percent (40%) by 2025, sixty percent (60%) by 2040, and one hundred percent (100%) by 2050. To comply with these targets, PREPA will solicit proposals to develop renewable generation and energy storage resources that can achieve commercial operation within twenty-four (24) months from the relevant Contract's execution date. This timeline, the Energy Bureau has concluded, should provide the Proponent with enough time to finalize all arrangements required to proceed, which are expected to include:

   i. Site Control;

   ii. Transmission Interconnect;

   iii. Permitting and Licensing;

   iv. Environmental Assessment;

   v. Engineer, Procure, & Construct (EPC) contract; and

   vi. Financial Closure;

   and with enough time to execute the work required to install the project to achieve commercial operation, which will include:

   vii. Final engineering and design;

   viii. Equipment procurement, fabrication, and delivery;

ix. Construction; and

x. Startup and commissioning.

Proposals should demonstrate the Proponent's ability to achieve commercial operation in a timeframe not to exceed twenty-four (24) months from the signing of the Contract. PREPA may also consider proposals with commercial operation dates not to exceed thirty (30) months from signing of the Contract, but projects proposing a shorter timeline will be preferred, and shorter development times will be given a higher score in the RFP evaluation process.

The ISO or the T&D Operator shall define system level schemes at a conceptual level. Proponents shall have responsibility for the design, construction, commissioning (Energy Resource facilities only). The T&D Operator shall have responsibility for work within their facilities and the overall acceptance of the system level scheme.

b. (**Proposal Submission Requirements**) Each RFP Tranche will require Proponents of utility scale renewable energy and energy storage resources to provide a project description, which shall cover the following, as relevant to the proposal:

i. Basic project description, including (1) project name; (2) site location (including map and site layout); (3) technology; (4) generating or discharge capacity; (5) MTR compliance strategy; (6) grid connection point and electrical one-line diagrams; (7) ancillary service capabilities; (8) forecasted commercial operation date; and (9) ownership structure;

ii. Site ownership, usage, and development status;

iii. Current status of issuance of all permits, licenses and other authorizations required for the implementation of the project;

iv. A detailed operation and maintenance plan, covering the proposed supply term;

v. Environmental permitting plan addressing all potentially applicable environmental permits (federal and local) including the following, as applicable:

1. List of potentially applicable permits evaluated or to be evaluated;

2. Result of applicability analysis for each potentially applicable permit or status of evaluation; and

3. Planned approach to obtain applicable permits including the following:

A. List of key activities necessary to obtain each applicable permit(s) and associated timing;

B. Identification of key individuals or consultants; and

C. Experience of those individuals in specific jurisdictions of project;

vi. Transmission or distribution upgrade plans, as applicable, demonstrating compliance with the requirements of Regulation 8915 or Regulation 8916, as applicable, status of interconnection or transmission service requests, and status of related agreements and approvals;

vii. A detailed description and drawings of transmission or distribution and substation facilities associated with the proposed project, and descriptions of any special protection schemes associated with the resource and their use. PREPA and the T&D Operator require Energy Resources that offer operational flexibility. Proponents must provide a detailed description of the scheduling or dispatch process, ramp rates, automatic generation control, existing or planned Inter-Control Center Protocol ties to PREPA and any energy magnitude and duration limitations. Proponents must also describe the capability, if any, of the resource to provide reactive support and dynamic reactive reserve;

viii. Proponents' design and development experience with the proposed technology or, in the case of proponents of VPPs, with the aggregation of multiple energy supply, storage or controllable load resources into a VPP;

ix. Proponents' operating experience with the proposed technology or, in the case of proponents of VPPs, with the aggregation of resources into a VPP and the management of such resources effectively to provide capacity and energy in response to dispatch instructions issued by the T&D Operator;

x. Financing plan, including (1) sources of debt and equity; (2) equity percentage by sponsor; (3) financing rates and other terms; (4) level of commitment by potential lenders for construction financing and permanent financing; and (5) tax credit qualifications;

xi. Proponents' management team and key individuals responsible for project permitting, financing, design, construction, and operation;

xii. Major milestone schedule, including provisions for (1) site acquisition, control, and development; (2) permitting and licensing; (3) transmission upgrades and interconnection, if applicable and as relevant to the project location; (4) financing; (5) engineering, procurement, and construction; and (6) testing;

xiii. For each of the above categories, Proponents shall provide references to any supporting documents or attachments;

xiv. Pricing terms which convey the essence of the proposed resource cost. The pricing proposal shall indicate:

1. Construction Start Date & Commercial Operation Date;

2. Supply Period;

3. For Renewable Energy Resource proposals, the "Base Rate" as defined in the relevant Final Proposal Version of Contract, representing the unit price of electricity, expressed in U.S. Dollars per kWh[2];

4. For Energy Storage Resource proposals:

   A. the "*Capability Payment Price*" or "*CPP*" as defined in the relevant Final Proposal Version of Contract, representing the monthly price of Energy Storage Resource capacity, expressed in U.S. Dollars per MW of discharge capacity; and

   B. the "*Variable O&M Price*" or "*VOMP*" as defined in the relevant Final Proposal Version of Contract, representing additional compensation for variable usage of the Facility, expressed in U.S. Dollars per MWh of discharge energy; and

5. For VPP proposals:

   A. the "*Demand Build Price*" or "*DB$*" as defined in the relevant Final Proposal Version of Contract, representing the monthly price of Demand Build Services, expressed in U.S. Dollars per kW-Month; and

   B. the "*Demand Reduction Price*" or "*DR$*" as defined in the relevant Final Proposal Version of Contract, representing the monthly price of Demand Reduction Services, expressed in U.S. Dollars per kW-Month;

xv. For all projects, Proponents shall estimate Project Interconnection Costs to (A) for Renewable Energy Resources and Energy Storage Resources, design, supply, install, test and commission the interconnection infrastructure required for the delivery of the project's energy or energy storage capacity (as applicable) to the T&D System, and (B) for VPPs, install communication and metering systems that will enable the T&D Operator to issue dispatch instructions to the VPP aggregator or its agent;

xvi. For all projects, Proponents shall specify performance:

1. For renewable energy generation proposals, the Energy Production Forecast shall indicate, as applicable given the nature of the proposed resource (i.e., solar PV, wind or hydro), the forecasted P10, P50, and P90 annual energy forecast in MWh for each day and hour (8,760 entries); and

[2] Note: PREPA will consider time-of-dispatch pricing following consultation with PREB.

2. For standalone energy storage resources, the guaranteed performance shall indicate:

   A. Guaranteed Capacity (MW / MWh);

   B. Peak Charging Time (hours);

   C. Peak Discharging Time (hours);

   D. AC-AC Round Trip Efficiency (%); and

   E. Equivalent Availability Factor (%);

   The guaranteed values shall account for long-term performance degradation;

xvii. Proponents shall indicate the anticipated suppliers, models, and countries of manufacture for major plant equipment;

xviii Proponents must provide specific evidence demonstrating their ability to raise financing;

xix. To the extent that a Proponent currently owns, or holds leasehold rights in, each parcel of land forming part of the site of the proposed project, such Proponent shall submit a certified true and correct copy of the deed of title or lease agreement, evidencing such ownership over, or leasehold interest in, such parcels of land. To the extent that a Proponent does not yet own or exercise control over a parcel of land that will form part of the proposed project site, the Proponent shall submit either:

1. the original version of a letter from the registered title holder of such parcel (A) confirming such owner's intention to transfer ownership of, or grant a lease over, such parcel to Proponent for the purpose of implementing the proposed project upon the award of a Contract by PREPA to the Proponent, and (B) attaching a certified true and correct copy of the deed of title for such parcel; or

2. a certified true and correct copy of a legally-binding agreement evidencing that the registered title holder of such parcel has granted the Proponent an option to purchase or lease such parcel upon the award by PREPA of a Contract for the implementation of the proposed project in form and substance reasonably satisfactory to PREPA;

xx. For Energy Resource proposals other than a Demand Resource proposal, the Proponent shall submit a detailed breakdown of the fixed and variable costs to operate and maintain the proposed resource in ten (10) year increments during the supply period;

xxi. Each Proponent shall submit a business continuity plan, detailed by scenario, with the aim of ensuring service continuity during all identified potential threats to the operation

of the proposed resource, including the occurrence of bomb threats, war, hurricanes, tornadoes (including waterspouts), earthquakes, tsunamis, active shooters, pandemics and other threats to public health and plane crashes; and

xxii. Each Proponent must submit a summary of all legal proceedings, claims, actions, or suits against the Proponent, the guarantor, or involving the facility or site.

c. (**Virtual Power Plants**) As specified in the Final Order, quantities sought in Tranches subsequent to the first two RFP Tranches may be adjusted as necessary to account for installations of distributed generation that contribute to meeting overall quantities in the Modified Preferred Resource Plan. To that end, the T&D Operator will support the deployment of DG resources under existing programs. In addition, each RFP will be structured such that all resources and storage amounts can be aggregates of smaller installations (also known as VPPs). As specified in the Final Order and in the Procurement Plan Resolution, VPPs are explicitly allowed and must be able to compete on fair terms. Each RFP Tranche will allow Proponents of VPPs to submit responses, with the assumption that the characteristics of the VPPs, including pricing and reliability, will be comparable to those provided on a utility scale. VPPs will be subject to the same selection criteria as other utility scale renewable energy resources except that the minimum capacity requirement will be reduced to 5 MWs, which must be spread across multiple sites with different points of electrical interconnection that do not exceed 1 MW AC of capacity at each electrical interconnection for installations to meet the minimum capacity requirement. Energy and capacity for VPPs may be sourced from existing facilities that do not currently sell such energy or capacity to PREPA. Proponents of VPPs will be responsible for all metering, SCADA, and other forms of telemetry to create the VPP. VPPs will be required to comply with applicable MTRs and interconnection standards, which will reflect the distributed nature of VPP generating and storage resources, their location on the T&D System (on distribution-level circuits) and their limited ability to provide certain services (e.g., voltage regulation). Other considerations applicable to VPPs include the following:

i. the Proponent shall source energy and capacity from VPPs aggregating only newly-installed energy resources or existing energy resources, which do not currently make available energy or capacity for dispatch by the T&D Operator;

ii. the Proponent shall install and maintain all metering, SCADA, and other forms of telemetry to establish, monitor, control and dispatch such VPP at its own cost and expense;

iii. VPPs shall comply with applicable MTRs and T&D Operator's standards for interconnection with the T&D System;

iv. VPPs shall be capable of supplying a minimum of 5 MW of dependable capacity, which the Proponent must aggregate from multiple sites;

v. VPPs must use existing, proven technology;

vi. all VPPs other than VPPs consisting exclusively of Demand Response Resources shall satisfy the same performance requirements as this RFP requires for a utility-scale Energy Resource;

vii. the supply period for a VPP shall extend for a period of ten (10) to twenty-five (25) years from the Commercial Operation Date;

viii. VPP Proponents will be responsible for funding all required changes/additions to the distribution and transmission system required by the project;

ix. the Proponent shall demonstrate that each Energy Resource and Demand Response Resource forming part of a proposed VPP can effect capacity responses / load reductions within the response time required when the T&D Operator curtails generation or sheds load on the T&D System throughout the entire supply period. PREPA will favor VPPs incorporating Energy Resources that can provide a rapid response and/or ramp up or down in response to specific control signals. VPP Proponents should detail the full, demonstrated capability of the proposed resource;

x. the Proponent shall contractually undertake to, and demonstrate its capability to, manage all capacity dispatch and load reduction instructions, including all notices, resource participation registration and deregistration, communications, controls, equipment, and other processes required to satisfy the T&D Operator's dispatch instructions;

xi. contract prices for VPP proposals shall cover all property and local taxes and tax abatements related to such VPP; and

xii. the resiliency benefits provided by VPPs will be considered in the evaluation of individual VPP project proposals by, among other things, accounting for potentially avoided transmission expenditures and transmission and distribution system loss savings.

Lessons learned through the solicitation of VPP resources in the Tranche 1 RFP will be applied to the procurement of VPP resources in subsequent Tranches. Data and insights obtained in the consideration of VPP resource proposals will be used to (1) refine performance requirements (e.g., commercial terms); (2) more precisely assess the value that VPPs can provide (e.g., grid services); and (3) gauge and potentially shorten the timeline for deployment and operation of VPPs.

Proposals for VPPs must, at minimum, have the following characteristics:

i. The generation and storage resources aggregated into the VPP must be complete, commercially operable, and available to commence operation under a Grid Service Agreement with PREPA (each, a "**GSA**") within a maximum of twenty-four (24) months from the date on which PREPA and a Proponent satisfy all of the conditions precedent for the effectiveness of such agreement.

ii. VPP Proponents shall provide:

1. the contractual framework under which the Proponent would supply capacity and (if applicable) energy, as well as other grid services, to PREPA from Energy Resources owned by third parties;

2. the responsibilities of the Proponent relating to the assembly, registration, and confirmation of the status of resources to be provided by third parties;

3. certified true and correct copies of each agreement that would govern the relationship between the Proponent, as an aggregator and individual third parties committing their resources for aggregation into the VPP;

4. the manner in which the Proponent would coordinate and dispatch resources;

5. the nature of the assets, including software, servers, network communications equipment, resource control equipment, sensors and monitoring equipment required to support the dispatch of resources committed to the VPP;

6. the geographical location of each Energy Resource, and, where applicable, Demand Response Resource, forming part of the proposed VPP;

7. a description of the aggregation of the program participants, and expected generating capacity and load drop values, equipment, and technology;

8. a description of the Proponent's plans for recruiting, engaging, monitoring the performance of, and maintaining the participation of program participants;

9. for each Energy Resource forming part of a VPP, each performance penalty imposed on either the third party which owns such resource or the Proponent in association with such resource within the past five (5) years; and

10. any material actions, suits, claims, or proceedings (threatened or pending) against the Proponent, relating to each Energy Resource forming part of the proposed VPP.

4. Proposal/Contract Terms & Conditions

4.1 General

Each RFP Tranche will solicit proposals for turn-key systems that will be fully operational upon testing and commissioning. Proponents shall procure, install, and operate all transmission facilities that will be part of the Proponent's facilities, such as the interconnection line and breakers, that are necessary to interconnect the Proponent's project to the T&D System. Proponents will also be responsible for all necessary upgrades to transmission facilities required to accommodate the interconnection of the project. Equipment and real property required to support such upgrades shall be transferred to PREPA

upon commissioning and the T&D System Operator will be responsible for operations and maintenance. Contracts with Proponents will obligate Proponents to provide operation, maintenance, and monitoring services for the renewable generation and energy storage resources they propose.

Proposals must meet the following requirements:

a. each Proponent may submit more than one (1) proposal if each proposal separately complies with the RFP requirements on a standalone basis;

b. the price submission set forth in each proposal to develop and construct an Energy Resource shall cover all of the Proponent's costs to (i) install, test and commission the transmission or distribution infrastructure required to connect such resource to the T&D System, and (ii) ensure that such resource complies with all Applicable Law currently in effect;

c. each Proponent shall identify all property and local taxes and tax abatements, related to its proposed project and Contract prices shall cover all such taxes;

d. proposals should demonstrate an ability to achieve commercial operation in a timeframe not to exceed twenty-four (24) months from the signing of the Contract. PREPA will also consider proposals with a guaranteed commercial operation date not to exceed thirty (30) months from signing of the Contract, but such proposals will receive a lower score in the RFP evaluation process than those proposing shorter development times;

e. for Renewable Energy Resource proposals, Proponents shall report project capacity and P50 Energy Yield for such resources during the proposed supply period;

f. prior to the date on which PREPA will sign a Contract, each Proponent shall provide evidence of its ability to provide equity funding at least equal to thirty percent (30%) of the forecasted costs to develop the proposed project by the forecasted date on which the Proponent will first draw down on loan facilities made available by lenders to the project;

g. the supply period under each Contract (i) for both utility-scale and VPP resources, may extend for a duration of up to twenty-five (25) years, and (ii) for VPP resources, extend for a minimum of ten (10) years for VPPs;

h. proposals must be site-specific;

i. each renewable energy resource proposal must qualify as a renewable energy resource;

j. the facility will comply with the MTRs applicable to the technology;

k. proposals should identify specific point(s) of interconnection;

l. proposals should identify and include costs of any property and local taxes and tax abatements;

m. the asset must use an existing proven technology;

n. proposals should explain any identified environmental liabilities (e.g., potential site remediation requirements);

o. proposals should identify any material actions, suits, claims, or proceedings (threatened or pending) against the Proponent;

p. the financing plan shall include either the Proponent's or guarantors' senior unsecured debt and/or corporate issuer ratings documentation from Fitch, Moody's and Standard & Poor's showing the name of the rating agency, the type of rating, and the rating of the Proponent or guarantor; and

q. production forecasts for renewable energy facilities and performance guarantees shall be subject to performance tests and remedies such as liquidated damages to be negotiated with PREPA. Proposals should provide supporting energy production reports (PVsyst, wind resource assessment, hydro assessment, etc.) documenting assumptions used in the production forecasts.

Each RFP Tranche will include draft Contract templates for a Solar PPOA, ITC Compliant ESSA, Standalone ESSA, and GSA each as defined in Section 4.3 (*Final Proposal Version of Contracts*).

4.2 Contract Exceptions

Following its delivery of a Notice of Intent to Respond, each responding Proponent should (a) review the preliminary template version of the relevant Contract set forth in the Appendices of the RFP, and (b) submit a revised version of such Contract that shows all of the material changes proposed by such Proponent in blackline form together with a brief explanation of the rationale for each such change as a comment linked to the relevant provision containing such change (the "**Contract Exceptions**"). Proponents are encouraged to minimize the number of changes to a Contract template they suggest. The Contract Exceptions need not include changes related to the contextualization of the Contract for such Proponent's specific project proposal(s), which will be done during the final negotiation of a Contract with the Proponents of selected proposals.

4.3 Final Proposal Version of Contracts

Upon receipt of Proponents' Contract Exceptions, the Evaluation Committee will review and assess all such proposed exceptions, and prepare and issue to all Proponents a final form version of each Contract template, that takes into account in each case the Contract Exceptions but only to the extent that the Evaluation Committee deems this necessary in its sole discretion (each, a "**Final Proposal Version of Contract**"). Appendices 3-6 of this Procurement Plan set forth the Final Proposal Version of Contract for (a) the Power Purchase & Operating Agreement for Solar PV Facilities (the "**Solar PPOA**"), (b) the Energy Storage Services Agreement for ITC Compliant Energy Storage Resources (the "**ITC Compliant ESSA**"), (c) the Energy Storage Services Agreement for Standalone Energy Storage Resources (the "**Standalone ESSA**"), and (d) the GSA for VPP Resources, in each case for the Tranche 1 RFP. Each Proponent should submit their proposals in response to an RFP on the assumption that the relevant Final Proposal Version of Contract shall govern the terms and conditions

under which such Proponent will design, construct, install, own, operate and maintain its proposed project as well as make available renewable energy and/or energy storage capacity and related services (as applicable) for sale to PREPA. To the extent that a Proponent intends to submit a proposal for a Renewable Energy Resource other than solar PV technology, PREPA should develop and issue a Contract template that accommodates such other resource as part of the package of documents representing the Final Proposal Version of Contracts.

4.4 Interconnection Studies; Interconnection Agreement Negotiations

During the proposal evaluation process, PREPA will arrange to have interconnection studies performed and system upgrade cost estimates prepared as follows:

a. a feasibility study for short-listed candidate projects will be performed to develop order-of-magnitude interconnection and T&D System upgrade cost estimates;

b. Proponents will be allowed to adjust pricing to reflect Feasibility Study results;

c. Feasibility Study results will influence the selection of a final short-list of projects, and may be iterative; and

d. PREPA will require completion of a System Impact Study followed by a Facilities Study for short-listed projects.

The Proponent shall bear the interconnection and system upgrade study costs. Additionally, the Proponent will be responsible for the design, procurement, installation, commissioning, and acceptance testing of all equipment shown by these studies to be necessary to interconnect the Proponent's proposed facility to the T&D System. PREPA and the Proponent shall execute an Interconnection Agreement that reflects the study results in coordination with the execution of the Contract. PREPA expects to use a *pro forma* interconnection agreement, wherein the primary points of negotiation will be related to the physical interconnection requirements.

4.5 Effectiveness of Contracts

Subject to Joint Regulation 8815 and relevant directives of the FOMB, each Contract executed by PREPA shall only enter into full force and effect upon approval from PREPA's Executive Director, PREPA's Governing Board, the Energy Bureau and the FOMB.

5. Procurement Scale / Type

The Final Order requires flexibility in the award of renewable energy contracts. As stated in the Final Order, *"[t]he Procurement Plan must allow for PREPA to choose to select resources for PPOAs in excess of the 1,000 MW minimum (solar PV or energy- equivalent other renewable) or 500 MW minimum (battery energy storage, 4-hour duration equivalent) for either or both renewable energy and battery storage capacity if cost-effective economically and if installation feasibility allows.The Procurement Plan may contemplate contracting a lower quantity of resources than the minimum solicitation amount, depending on the responses received."*

PREPA will strive to contract for the minimum quantities of renewable and energy storage resources identified in the Final Order, and if circumstances warrant, will present opportunities to its Governing Board and the Energy Bureau, in accordance with Regulation 8815, to exceed the specified minimum quantities. Further, if transmission studies indicate that significant system upgrades are required to support the Tranche 1 and 2 RFPs, PREPA will communicate these costs and upgrades to the Energy Bureau.

6. Planned Implementation Timeline

As the Energy Bureau has directed and as described in Section 3.3 (*Specific RFP Requirements*), each RFP Tranche will solicit energy resource proposals that can reach commercial operation within twenty-four (24) months of the execution date each Contract. PREPA may consider proposals with commercial operation commencement dates not to exceed thirty (30) months from the Closing Date, but such proposals will be disfavored; shorter development times will be given a higher score in the RFP evaluation process.

7. RFP Schedule

As described in Section 1.3 (*Procurement Process*), PREPA has developed, with the Energy Bureau's guidance and approval, a Procurement Plan to comply with the Modified Action Plan for renewable generation and energy storage resources to achieve compliance with the RPS. In accordance with Energy Bureau directives, PREPA plans to issue a series of RFPs (RFP Tranches) for the provision of renewable energy in support of attainment of Act 82's RPS goals, and for the provision of battery energy storage capacity in quantities needed to meet PREPA's peak load requirements and to satisfy requirements for the integration of renewable energy generation.

PREPA issued the Tranche 1 RFP on February 22, 2021. It expects to issue Tranche 2 on August 30, 2021. The expected timeline of the release of subsequent RFPs will be six (6) month intervals to be issued in sequence (i.e., every six (6) months, over the next three (3) years for a total of six (6) tranches of RFP releases). The procurement of resources may be front-loaded within the five-year period to allow time for construction, interconnections, and commissioning within the five-year Action Plan.

8. Adjustments for Distributed Generation (DG)

As specified in the Final Order, quantities of resources sought subsequent to the first two RFP Tranches may be adjusted if or as necessary to account for installations of DG that contribute to meeting overall quantities specified in the Modified Preferred Resource Plan, and for resources that PREPA identifies and contracts in excess of the minimum amounts required in each of the earlier RFPs. For purposes of the Procurement Plan, DG resources are resources added to the system outside of the RFP process.

PREPA will support the deployment of distributed generation resources under existing programs (e.g., net metering). In addition, PREPA will structure the RFPs issued under this Procurement Plan such that all resources and storage amounts can be aggregates of smaller installations (that is, VPPs are explicitly allowed and will be able to compete on fair terms). As long as the T&D Operator has

visibility into the VPP, and the characteristics of the distributed resource, including pricing and reliability, are comparable to resources provided on a utility scale, there is no reason VPPs cannot compete with utility-scale resources for provision of energy and storage capacity.

9. Evaluation Parameters

9.1A General

The Final Order and the Procurement Plan Resolution specified certain evaluation parameters to be employed in evaluating responses to an RFP. Proposals made in response to each RFP issued under this Procurement Plan shall indicate the proposed RFP Tranche, and shall address at least the following evaluation parameters:

a. Least-cost, energy basis (measured based on levelized cost of energy).

b. Least-cost, capacity basis. The proposal should specifically describe the manner in which the project will provide ancillary services (e.g., frequency response, operating reserve, reactive support) in addition to capacity to meet peak load.

c. Recognition of T&D System loss benefits associated with the selection of VPP and DG bids.

d. Recognition of the potential that proposed resources will provide additional resiliency benefits and/or will permit avoidance of incremental T&D System costs.

e. Estimated timeline for completing installation of resources, with faster installation timelines to be accorded preference.

f. Technical superiority of location for interconnection purposes.

g. Adherence to locational preferences closer to load.

h. Community impacts and acceptance of proposed resource.

i. Locational diversity around the island of Puerto Rico in proportion to load, within each MiniGrid region, and especially in MiniGrid regions exhibiting relatively less existing capacity in proportion to existing peak load.

9.1B Minimum Requirements of RFP Response

a. (**General**) As a minimum, proposals will be expected to clearly identify their pricing structure, estimate the project's connection costs and impacts upon the existing T&D System, and provide a timeline for completing installation as described herein.

b. (**Technical and Operational Capabilities Minimum Criteria**) Proponents shall demonstrate the following:

i. Ownership / establishment by Proponent (or, for a Proponent consortium, at least one (1) member of such consortium) of one (1) or more existing renewable energy and/or energy storage resources, including VPPs, (each, a "**Reference Project**"), with each Reference Project satisfying the following requirements:

1. For renewable energy and/or energy storage resources other than VPPs:

   A. experience developing, financing, constructing, and operating such project;

   B. compliance with the initial development timeline for such project;

   C. utilization of cost-effective technology;

   D. installed capacity of at least 20 MW;

   E. utilization of technology similar to that which the Proponent intends to submit in its proposal under this RFP; and

   F. direct or indirect ownership by the Proponent or its Affiliate of at least thirty-five percent (35%) of the legal entity which directly owns such Reference Project.

2. For energy storage resources, experience developing and assembling the proposed system for such resource in at least one (1) commercial (non-demonstration) grid-connected installation;

3. For VPPs:

   A. experience aggregating multiple generation and/or storage resources; and

   B. installed VPP capacity either (i) currently in commercial operation, supplying capacity and energy to one (1) or more purchasers, or (ii) contractually committed to supply capacity and energy prior to the second anniversary of the issuance of this RFP;

ii. For each existing energy and/or energy storage project designated as a Reference Project, a certification confirming no material or sustained violation of Applicable Law, relating to any environmental matter involving the development, construction or operation of such project during the past three (3) years;

iii. For each Reference Project, a certification confirming such project's compliance with energy-related policies, practices, and regulations and all other Applicable Law during the past three (3) years; and

iv. For each Reference Project, a certification confirming no record of Unsatisfactory Performance.

Each RFP shall require that all Proponents satisfy the minimum eligibility requirements set forth in Section 3.2 of the Tranche 1 RFP.

c. (**Interconnection Requirements**) PREPA will view a Proponent's T&D System interconnection plan as a crucial factor in evaluating the delivery risk associated with each proposal submitted in response to an RFP. The T&D Operator shall indicate to Proponents, to the best of its ability, the extent to which any transmission or distribution locational limitations could affect the cost and feasibility of interconnecting utility scale renewable or energy storage projects at various points on the T&D System. It will also, insofar as practicable, identify limitations that could limit the location or geographic dispersion of resources to be aggregated as VPPs. Proponents must consider the following factors in any proposal submitted pursuant to any RFP Tranche:

i. The physical limitations on the delivery of energy to the T&D System.

1. Utility-scale energy resources (i.e., Energy Resources other than VPPs) can interconnect to the transmission systems at a voltage level of at least 38 kV.

2. the capacity of an energy resource connecting to the 38 kV system cannot exceed 25 MW.

3. the power generation / discharge capacity of a renewable energy resource and/or energy storage resources that will form part of a VPP at each point of interconnection to the T&D System cannot exceed 1 MW and shall comply with the applicable interconnection regulations; and

4. for all VPP resources proposals, PREPA will give a preference to those resources connected to 13.2 kV feeders, the highest distribution voltage in Puerto Rico.

ii. Projected system upgrade costs required by the additional energy injected onto the T&D System by the proposed resource.

iii. Rights-of-way necessary to construct the transmission lines and interconnection facilities needed to connect the proposed resource to the T&D System.

Proponents (other than those proposing a VPP resource) shall (i) provide a detailed T&D System interconnection plan with their proposals, and (ii) ensure that the proposed transmission system or distribution system interconnection plan satisfies all applicable MTR requirements, as well as relevant requirements of Regulation 8915 or Regulation 8916, as applicable.

Each Proponent should exercise its best efforts to provide an accurate estimate of the Proponent's Estimated Interconnection Costs. Following PREPA's selection of proposals for further consideration in Phase II, the T&D Operator will conduct a Feasibility Study on such projects to assess order-of-magnitude interconnection and required T&D System upgrade costs ("**PREPA's Estimated Costs**"). The T&D Operator will cluster such proposals for interconnection studies. Such studies will analyze the impacts of integrating a group or cluster of Energy Resources at specific locations when ranking or selecting proposals for further consideration, in particular with regard to assessing any required network upgrades or the potential to utilize shared interconnection facilities across multiple projects. Following selection of proposals for Phase III, System Impact Studies followed by Facility Studies will be completed for final short-listed projects.

While each Proponent shall have the responsibility to fund all of the T&D System interconnection costs under the Contract, PREPA will permit a Proponent to adjust its price proposal in the Contract to the extent that PREPA's Estimated Costs exceed the Proponent's Estimated Interconnection Costs for purposes of allowing a Proponent to recover such excess costs through the Contract price. Where the Proponent's Estimated Interconnection Costs exceed PREPA's Estimated Costs, PREPA will correspondingly require a downward adjustment of the proposed Contract price to reflect a Proponent's need to recover interconnection costs lower than the Proponent's Estimated Interconnection Costs.

d. (**Minimum Technical Requirements for Projects**) The T&D Operator will prepare MTRs describing minimum technical requirements required for each technology group connected to the T&D System and include the MTRs in the RFP for:

   i. Utility-Scale Solar;

   ii. Wind;

   iii. Energy Storage; and

   iv. VPPs.

e. (**Financial Minimum Criteria**)

   i. Financial Capacity of Team: Proponent must demonstrate adequate financial wherewithal to complete the development of its proposed project.

   ii. Financial Capability of Team: Proponent must demonstrate adequate financial wherewithal to fulfill the terms of the Contract and Interconnection Agreements.

9.2 Phase I Quality Control Review

As described in Section 1.3 (*Procurement Process*), Joint Regulation 8815 establishes a three-phase selection process: (a) quality control review, (b) the Evaluation Committee review and recommendation, and (c) Contract negotiation. The purpose of the quality control review is to

determine which proposals satisfy the minimum requirements outlined in an RFP. PREPA will notify each Proponent whether its proposal passed the Phase I quality control evaluation and whether such proposal will advance to Phase II.

PREPA's quality control review will use the information supplied by the Proponents in each proposal. Each Proponent shall provide the information listed in the Proposal Completeness Checklist by the Proposal Submission Deadline to be included in the evaluation.

During the quality control review, PREPA will determine which proposals satisfy the minimum requirements outlined in the RFP. PREPA (i) will reject any proposal that fails to comply with the Financial and No Disbarment Criteria, and (ii) reserves the right to reject any proposal for any reason whatsoever regardless of whether such proposal complies with such requirements in accordance with the RFP, in each case without scoring, and any such proposal will not advance to the next phase. PREPA will notify each Proponent whether its proposal(s) passed the quality control review and whether such Proponent will advance to Phase II.

9.3 Phase II

PREPA will publish a list of median price proposals for each technology group that will advance to Phase II on its website. Each selected Proponent shall deliver to PREPA the Proposal Security within seven (7) business days of such Proponent's receipt of notification of such selection.

During Phase II, the Evaluation Committee will review and evaluate each proposal in accordance with the selection criteria. For the Procurement Plan, the Evaluation Committee will likely select more than one Proponent. Phase II will be divided into a qualitative evaluation and a pricing evaluation. The Evaluation Committee will assign weights for each of the price-related and qualitative criteria. The Evaluation Committee may select one or more proposals to advance to Phase III.

a. (**Phase II – Qualitative Evaluation**) In connection with its qualitative evaluation, T&D Operator will conduct Feasibility Studies and independently model interconnection and system upgrade costs, where possible analyzing clusters of potential projects, based on an initial selection of RFP responses that PREPA ranks high on its list of projects eligible for contracting. In addition, T&D Operator will evaluate the extent to which multiple projects have proposed or can be made to share the same interconnection facility, if reasonable and applicable for any given set of proposals. PREPA shall give priority to those proposals that provide resource installations at or technically close to the indicated priority locations. T&D Operator will evaluate the impact of each proposed resource on the T&D System and will endeavor to notify Proponents whose proposals will require additional network upgrades. The Proponents' proposal should include the Proponent's Estimated Interconnection Costs. PREPA's review will include:

    i. verification that a Proponent has provided all information listed in the Proposal Completeness Checklist;

ii. organization of the proposals into groups according to (1) the proposed technology, and (2) groups that will allow for distributed generation benefits to be recognized for resiliency and for avoided T&D System cost purposes;

iii. a review of the information supplied by the Proponent in the RFP proposal data forms;

iv. development of a qualitative score according to the information supplied by each Proponent for the proposed type of Energy Resource and technology, based on the qualitative evaluation criteria specified below;

v. calculation of an initial qualitative score according to the information supplied by the Proponent for the proposed technology. The qualitative score will be based on technical viability, development status, developer experience, and financing plan and qualifications. The Evaluation Committee will prefer projects with faster installation timelines, and those with better technical locations for interconnection purposes;

vi. calculation of the composite Phase II score from the weighted qualitative score; and

vii. development of a list of preferred proposals from the highest scoring proposals within each technology category.

The Phase II qualitative evaluation will also consider the following criteria:

Table 0-3 — Phase II Qualitative Criteria

Item	Category / Criteria
A	Technical Viability
B	Development and Schedule Risk
C	Permitting Risk
D	Environmental Impacts
E	Contractor Experience
F	Financing Plan and Qualifications
G	T&D System Integration
H	Site Control
I	Community Impacts and Acceptance
J	Operations and Maintenance Plan
K	Additional Benefit of VPP
L	Contract Exceptions (if applicable)

The Phase II qualitative evaluation will use the information supplied by the Proponent in the proposal data forms and templates contained in the RFP Appendices, considering the following criteria:

i. (**Technical Viability**) The Evaluation Committee will review each proposal for conformance to the technical requirements in the RFP including compliance with appropriate PREPA MTRs.

ii. (**Development and Schedule Risk**) The Evaluation Committee will assess the completeness and feasibility of the proposed project implementation and evaluate the likelihood of meeting the milestone dates and expected performance.

iii. (**Permitting Risk**) The Evaluation Committee will examine the Proponent's permitting plan and schedule and the likelihood that the Proponent can obtain required permits. This examination will consider whether the Proponent has identified the relevant permits and approvals necessary for construction and operation of the proposed project.

iv. (**Environmental Impacts**) The Evaluation Committee will assess the project's overall impact on the environment, whether the project will likely result in potentially significant environmental impacts, and the degree to which potential impacts can be satisfactorily mitigated. This will include an examination of any known sensitive environmental features on or adjacent to the site such as waterways, wetlands, floodplains, archaeology and architectural resources, historic properties, degraded ambient air quality, contamination, ongoing hazardous materials remediation, threatened and endangered species, airports, residences or other sensitive noise receptors, and a discussion of storm-resistant features and other reliability features to determine the suitability of the project at the proposed site location.

v. (**Experience**) The Evaluation Committee will evaluate the Proponent's experience and success in developing projects of a design and size similar to the proposed project.

vi. (**Debt Financing Plan and Qualifications**) The Evaluation Committee will evaluate the Proponent's proposed financing plan and experience in successfully financing projects of a similar size and complexity. The evaluation will also determine if the Proponent has any financing commitment for the project that will be provided by a creditworthy entity that is likely to be acceptable in form and substance to PREPA.

vii. (**T&D System Integration**) The project's technical characteristics will be evaluated to identify those projects that address PREPA's system needs as defined in the RFP and the IRP. The evaluation team will evaluate risks to reliability (voltage control, reactive capability, protection coordination, frequency response, etc.) and deliverability to the T&D System, as well as the potential for avoidance of T&D System costs and enhancement of system resiliency associated with particular project locations or configurations.

viii. (**Site Control**) The Project Committee will assess whether a Proponent owns or leases the project site (and, in the case of a lease, will consider the alignment of the term of such lease with the term of the applicable Contract) or otherwise has the ability to obtain control over, and access to, such site prior to the occurrence of the "Guaranteed Construction Start Date" set forth in the template Contract. This evaluation criterion does not apply to proposals for VPPs.

ix. (**Community Impacts and Acceptance**) The Evaluation Committee will review the proposal for potential socioeconomic benefits and harm to the community. The committee will assess known community support for or opposition to a Proponent's project, including the Proponent's plan to manage community relations.

x. (**Operations and Maintenance Plan**) Proponents are asked in Appendix C of each RFP to provide information about their operations and maintenance plan, as applicable, including contract term, scope, experience, and pricing. Proponents proposing a VPP as a resource should provide detailed information concerning their plans to identify,

aggregate and contract for individual generation and storage resources that will be dedicated to such resource.

xi. (**Additional Benefit of VPPs**) The Evaluation Committee will consider and evaluate the additional benefits that distributed resources procured as part of a VPP may provide, including (i) the potential to avoid transmission and distribution costs (including T&D System losses), (ii) the possible enhancement of local resiliency by serving critical or priority loads, and (iii) the potential for completion of any required installation in shorter periods, or more immediate availability as a capacity resource based on an existing installation, than would be true of a new-build project.

During the screening process, the Evaluation Committee may request additional information or clarifications from the Proponents. These requests, and any communications with a Proponent during the evaluation process, shall not be construed as contract negotiations. Requests made by the Evaluation Committee for additional information or clarifications will be in writing via email. Proposals with outstanding requests beyond the response period may be removed from consideration and further evaluation.

At the conclusion of the Phase II qualitative evaluation, PREPA will notify Proponents whether their proposals will advance for further evaluation of pricing proposals.

b. (**Phase II – Pricing Evaluation**) The Phase II evaluation will determine the cost effectiveness of the shortlisted proposals. This detailed pricing evaluation will include and reflect information received in response to any clarifying questions, interviews, site visits, and other due diligence, and will consider the all-in costs that each proposal will likely impose on Ratepayers, to the extent that the evaluation team can quantify such costs. Such all-in costs will include:

i. contract charges, including pass through costs;

ii. costs for required transmission reinforcements;

iii. costs for required distribution reinforcements;

iv. system impacts including, but not limited to, impact on transmission transfer capability, and PREPA capacity requirements and deliverability; and

v. LCOE or, in the case of energy storage proposals, LCOS.

The LCOE or LCOS, as applicable, is defined as the present value of the estimated annual costs of a proposal or cost component of a proposal over the evaluation period (i.e., the proposed Contract term) divided by the equivalent present value of the energy (or capacity) that resource is estimated to produce over the same period. Levelized cost is expressed in $/MWh or $/kW-year.

Paragraph (b) (*Pricing Evaluation*) of Section 6.2 (*Phase II: Evaluation Committee Review and Recommendation*) of the RFP template sets forth the other pricing-related factors the Evaluation Committee will consider in the final pricing assessment during Phase II evaluation.

The Evaluation Committee will give preference in its evaluation to Proponents whose pricing proposals consider the future emergence of PREPA from protection under PROMESA and contain a price adjustment mechanism that would reflect PREPA's improved credit quality at such time. PREPA anticipates that Puerto Rico's emergence from Title III bankruptcy will make PREPA a more attractive contract counter-party, that project developers will factor this into their cost of capital calculations and that they will incorporate the results in their project's LCOE or LCOS. Proponents should identify any information they believe they will need from PREPA to conduct a pricing sensitivity analysis around Puerto Rico's pre- and post-emergence from Title III bankruptcy.

Following completion of the Phase II pricing evaluations, the Evaluation Committee will recommend proposals to proceed with Phase III contract negotiations as described in Section 1.3 (*Procurement Process*). Selection of a proposal for contract negotiations shall not be construed as a commitment to execute a Contract. During the period between PREPA's selection of proposals for Phase III evaluation and the date of execution of any Contract, PREPA will conduct additional due diligence on the proposals. This may include, but not be limited to, onsite visits, management interviews, environmental, legal, and regulatory due diligence, detailed engineering assessments, and facility dispatch modeling.

10. Other Considerations

The Tranche 1 RFP solicits proposals for at least 1,000 MW of renewable energy and 500 MW of battery storage capacity resources. Greater quantities of renewable generation and energy storage resources may be selected if Proponents submit cost-effective energy resource proposals with feasible installation plans, thus accelerating the level of installations that would otherwise arise from subsequent RFPs. Energy storage bids can include MW and MWh from existing resources currently not contracted to PREPA, if they meet technical requirements for visibility, control, and other related technical needs.

This Procurement Plan treats DG renewable resources as resources built and operated by PREPA's customers which offset demand and, for the most part, benefit from PREPA's net-metering programs. VPPs may aggregate DG, renewable resources, and energy storage resources such that the VPP behaves, from the utility's perspective, as a single renewable energy resource. Proponents may submit VPP resource proposals that aggregate smaller installations, including existing facilities. VPP Proponents may participate in PREPA's net-metering programs to the extent that they elect this option, in accordance with the discussion of this subject set forth in Appendix A to the Procurement Plan Resolution, at item VII. 2.

Lessons learned in the solicitation of VPP resource proposals in the initial RFP Tranches will inform the procurement of VPP resources in subsequent RFP Tranches. In keeping with the Energy Bureau's directive in this regard, PREPA anticipates that data, insights and lessons learned from its conduct of

the initial RFP will be used in subsequent Tranches to (a) set realistic performance requirements (e.g., commercial terms); (b) assess the value that VPPs can provide (e.g., grid services); and (c) better gauge and potentially shorten the timeline for deployment and operation of VPPs based on its experience and best practices. As T&D Operator, LUMA will also assess the current capability of PREPA's grid to accommodate increased levels of renewable generation capacity.

Each RFP will include an attachment that lists those substations where interconnection is considered feasible for utility scale installations, where it is technically possible to determine this. The list will furnish (a) explanatory caveats where uncertainties exist as to the range of potential interconnection capacity, and (b) the maximum quantities of renewable energy or battery storage system capacity that can be connected at each of these locations, for the purpose of indicating to developers where feasible locations are. PREPA is not bound by this information to accommodate any given MW amount at any given connection point, and it should not be construed as a limitation on the maximum amount of renewable energy or battery storage system MWs that can be connected to the grid.

Priority locations to be identified in the RFP and accompanying materials will include locations for utility scale and distributed generation renewable energy projects with energy storage. PREPA will strive to identify those locations at which interconnection of required energy and storage resources will enhance reliability and can be accomplished quickly.

PREPA will reflect in its procurement process explicit performance incentive metrics related to the timeliness and effectiveness of PREPA's procurement and interconnection of resources consistent with metrics reporting requirements being developed under Case No. NEPR-MI-2019-0007.

Appendix 1. Joint Regulation 8815

Appendix 2. RFP Template

Appendix 3. Solar PPOA

Appendix 4. ITC Compliant ESSA

Appendix 5. Standalone ESSA

Appendix 6. GSA

Exhibit B

RENEWABLE ENERGY GENERATION AND ENERGY STORAGE RESOURCE PROCUREMENT PLAN – UPDATE NO. ~~1~~2

Submission to the Puerto Rico Energy Bureau

Date Issued: ~~June 15~~July 23, 2021

Puerto Rico Electric Power Authority

CONTENTS

APPENDICES

I. INTRODUCTION

This version of the Renewable Energy and Energy Storage Resource Procurement Plan updates the version which the Puerto Rico Electric Power Authority ("**PREPA**") submitted to the Puerto Rico Energy Bureau ("**Energy Bureau**") on ~~December 22~~June 15, 2021 (as updated, the "**Procurement Plan**"), as required by the Energy Bureau's May 11, 2021 Resolution and Order in Case No. NEPR-MI-2020-0012, *In Re: The Implementation of the Puerto Rico Electric Power Authority Integrated Resource Plan and Modified Action Plan*. The Procurement Plan seeks proposals from Proponents interested in designing, constructing, installing, operating and maintaining all forms of renewable generation as defined by Act 82 (defined below), energy storage and/or virtual power plant projects at one or more sites across Puerto Rico. This version of the Procurement Plan incorporates (i) the lessons PREPA learned in administering Request for Proposals No. 112648, Renewable Energy Generation and Energy Storage Resources, Tranche 1 of 6 (the "**Tranche 1 RFP**"), ~~and (ii~~(ii) updates to roles and responsibilities reflecting the transition of LUMA Energy, LLC and LUMA Energy ServCo (collectively, the "**T&D Operator**" or "**LUMA**") into their role as the T&D Operator of PREPA's transmission and distribution system (the "**T&D System**"), and (iii) those requirements that originated from the planned Optimization Proceeding and other Energy Bureau Resolutions and Orders issued after the publication of the Tranche 1 RFP. For the Tranche 1 RFP, PREPA has administered, and will continue to administer, the Tranche 1 RFP process through the award of all Contracts. However, it is possible that for any of Tranches 2-6 of the RFP, the Puerto Rico Public-Private Partnerships Authority ("**P3A**") ~~will~~may administer ~~each~~such process for, on behalf of, and working in collaboration with, PREPA.

II. EXECUTIVE SUMMARY

1. Background & Context

As background and context for the preparation of this Procurement Plan:

a. on March 15, 2018, the Energy Bureau issued a Resolution and Order which directed PREPA to file an updated Integrated Resource Plan ("**IRP**"), as required under Puerto Rico Act 57 of May 27, 2014 (Act 57-2014). PREPA prepared an IRP intended to consider all reasonable resources to satisfy the demand for electrical services over a twenty (20) year planning horizon. On February 13, 2019, PREPA filed its IRP along with supporting workpapers and other documentation with the Energy Bureau. PREPA subsequently amended and refiled this IRP on June 7, 2019;

b. on August 24, 2020, the Energy Bureau issued a "*Final Resolution and Order on the Puerto Rico Electric Power Authority's Integrated Resource Plan*" (the "**Final Order**") that approved, in part, and rejected, in part, PREPA's proposed IRP. The Final Order modified PREPA's Action Plan and ordered that PREPA adopt and implement this modified Action Plan (the "**Modified Action Plan**"). In the Final Order, the Energy Bureau found that:

i. *increased deployment of solar photovoltaic (PV) and battery resources should be pursued if the results of procurement processes produce costs that reflect the parameters associated with Scenario S3S2 (for all loading levels under that scenario) and if those resources are available for faster installation than was assumed for PREPA's ESM Plan; and*

ii. *a Modified Preferred Resource Plan for the purpose of initial procurement planning includes the solar PV and battery energy storage quantities contained in Scenario S3S2B for the first five years of the Action Plan period;*

c. the Final Order's Modified Action Plan contains specific directives and requirements, which included the formulation of the Procurement Plan. As summarized in Section A3 of the Final Order, the Energy Bureau ordered:

i. *PREPA to develop, with the Energy Bureau's guidance and approval, a detailed procurement plan for renewable resources and battery energy storage to achieve compliance with the renewable portfolio standard ("**RPS**");*

ii. *PREPA to issue a series of RFPs for the provision of (a) renewable energy in support of Act 82's RPS goals, and (b) battery energy storage in support of (i) capacity requirements needed to meet PREPA's peak load requirements and (ii) requirements for integration of renewable energy generation;*

iii. *that competitive procurements to obtain Power Purchase and Operating Agreements (PPOA) for these resources must be open to all forms of renewable energy, including, but not limited to wind, hydro, solar PV, Virtual Power Plant (VPP), and storage … that PREPA should not unnecessarily limit the level of overall procurement to 250 MW blocks, but rather needs to pursue a strategy that attempts to procure the amount of resources required under S3S2B; and*

iv. *PREPA to submit to the Energy Bureau a draft renewable resource and battery energy storage resource procurement plan (Procurement Plan) on or before sixty (60) days from the notification date of the Final Resolution and Order.*

PREPA filed a status report on the development of its draft Procurement Plan with the Energy Bureau on September 23, 2020. The Energy Bureau opened a new docket for the consideration of PREPA's Procurement Plan on October 6, 2020, designating the new docket as Case No. NEPR-MI-2020-0012. On October 9, 2020, at PREPA's request, the Energy Bureau convened a Technical Conference to address PREPA's Procurement Plan status report. PREPA submitted its draft Procurement Plan by Motion dated October 23, 2020. PREPA subsequently sought a further Technical Conference and reiterated this request on three occasions in November and December; and

d. on December 8, 2020, in Case No. NEPR-MI-2020-0012, the Energy Bureau issued a Resolution and Order (the "**Procurement Plan Resolution**") which specified changes to PREPA's draft Procurement Plan and directed PREPA to make corresponding changes to the draft Request for Proposals ("**RFP**") document that accompanied that draft Procurement Plan. Finding that these changes will align the Final Procurement Plan and associated RFPs with its Final Order and applicable regulations and laws, the Energy Bureau approved some of the core elements of PREPA's draft Procurement Plan, modified others and directed certain questions relating to technical issues to PREPA. The Energy Bureau ordered PREPA to carry out the terms of the Procurement Plan as modified by the Procurement Plan Resolution and as specified in the included Technical Appendices.

2. Content of Procurement Plan

This Procurement Plan (i) positions PREPA to satisfy the requirements of the Final Order and the Procurement Plan Resolution, and (ii) provides a thoughtful approach to building out future renewable energy and energy storage resources in accordance with the requirements of Act 82, informed by the lessons learned in the administration of the Tranche 1 RFP to date. Ultimately, the Procurement Plan aims to:

a. increase the availability of renewable energy and energy storage resources as part of PREPA's generation system;

b. reduce energy prices to levels consistent with PREPA's 2020 Certified Fiscal Plan projections; and

c. increase the resiliency of ~~PREPA's transmission and distribution system (~~the ~~"~~T&D System~~")~~ as required by the IRP.

As set out in Article III, the Procurement Plan follows the format indirectly specified in Section IV, Subsection D(4)(b) of the Final Order, as follows:

a. (**Procurement Plan Description**) Section 1 provides a detailed overview of the current iteration of the Procurement Plan.

b. (**Counter-Party Risk**) Section 2 discusses how this Procurement Plan has been structured to minimize PREPA counter-party risk and thus potentially incentivize bidders to offer lower prices, given PREPA's current financial status and prospects for its improvement over time.

c. (**Request for Proposals Template**) Section 3 discusses the template which PREPA developed for the Tranche 1 RFP, as updated to reflect lessons learned in the administration of that RFP Tranche (as defined below) and the specifics of this iteration of the Procurement Plan.

d. (**Proposal/Contract Terms & Conditions**) Section 4 describes key contract terms and conditions under which respondents proposing each type of energy resource (each, a "**Proponent**") will develop, finance and install renewable generation and energy storage

resources, and make such resources available for dispatch by the T&D Operator (as defined below) (each, a "**Contract**").

e. (**Procurement Scale / Type**) Section 5 discusses the scale and type of energy resources which PREPA intends to procure in accordance with this Procurement Plan.

f. (**Planned Implementation Timeline**) Section 6 presents a planned timeline for the selection and development of energy resources through the achievement of commercial operation.

g. (**RFP Schedule**) Section 7 describes the current schedule for the issuance and administration of RFPs for Tranches 2-6.

h. (**Adjustments for Distributed Generation**) Section 8 describes how resource quantities requested in individual RFP Tranches subsequent to the first two (2) Tranches may be adjusted to account for installations of distributed generation ("**DG**") resources that contribute to the resource quantities targeted in the Modified Preferred Resource Plan, and for resources in excess of the minimum amounts required in each of the earlier RFPs that may be selected and developed.

i. (**Evaluation Parameters**) Section 9 sets forth the parameters to be applied in evaluating energy resource proposals as discussed in the Final Order and the Procurement Plan Resolution.

j. (**Other Considerations**) Section 10 (i) discusses considerations specific to combined or individual proposals for renewable generation, energy storage or combinations of renewable generation and energy storage resources, and proposals which aggregate energy storage and other energy resources for connection to the distribution system (each, a "**Virtual Power Plant**" or "**VPP**"), and (ii) discusses the renewable generation integration study that has been performed to assess the current capability of the T&D System to accommodate increased levels of renewable generation capacity.

3. Lessons Learned from Tranche 1 RFP Process

While PREPA has not ~~commenced~~completed its evaluation of Proponent proposals submitted through the Tranche 1 RFP process as of the date of this Procurement Plan, PREPA ~~has~~and the T&D Operator have identified the following ~~three~~five (~~3~~5) lessons learned from the Tranche 1 RFP process to date:

~~a. (**Peak Irradiance Period Curtailment**) Notwithstanding the parallel scale-up of energy storage resource capacity connected to the T&D System, the rapid scale-up of utility-scale renewable energy resources within the Puerto Rico generation mix likely means that PREPA will need to curtail the dispatch of material quantities of energy sourced from PV energy resources in the future, primarily during the peak irradiance levels between 11 am and 3 pm each day, which will expose PREPA to the risk of accruing take-or-pay liability under each Solar PPOA (as defined below) (the "**Peak Irradiance Period**"). To mitigate such risk, PREPA~~

~~recommends the deployment of strategies for shifting daily energy production to either side of, and enhancing demand during, the Peak Irradiance Period, including:~~

~~i. deploying energy storage resources in accordance with the amounts and timeline specified by the Energy Bureau for Tranches 1-6;~~

~~ii. taking actions to support the development and selection of non-solar renewable energy resources, such as wind power projects, which make available material quantities of energy for dispatch into the T&D System outside of the Peak Irradiance Period. This may require (A) carve-outs for wind turbine projects in future RFP Tranches, and/or (B) the prioritization during the RFP selection process of non-solar renewable energy resources such as wind power projects;~~

~~iii. prioritizing (during the RFP selection process) VPP resources, which provide demand-build services during the Peak Irradiance Period;~~

~~iv. prioritizing (during the RFP selection process) to the extent that PREPA determines the potential additional costs of such resources to be in the best interest of ratepayers, additional utility-scale energy storage resources, which store the excess energy, produced during the Peak Irradiance Period;~~

~~v. adopting a time-of-dispatch price structure under which PREPA pays for energy at (A) when made available for dispatch outside of the Peak Irradiance Period, the bid price, and (B) when made available for dispatch within such period, a material discount from the bid price;~~

~~vi. coordinating the T&D System capacity upgrades with the scale-up of new PV energy resources; and~~

~~vii. requiring accurate day-ahead and week-ahead renewable energy production forecasts, which allow the T&D Operator to balance electrical supply with demand, plan for and minimize potential renewable curtailment and maximize system reliability, during the Peak Irradiance Period.~~

~~While thermal generation resources interconnected with the T&D System would ideally 'fit around' and support the scale-up of renewable energy resources, which PREPA will procure, many of PREPA's current thermal energy resources lack the flexibility and reliability to provide such support, which will exacerbate the curtailment problem.~~

~~b. (**Parallel Procurement of GCCC System**) PREPA's existing communication infrastructure has the capability to integrate utility-scale renewable energy and, with some modifications, energy storage resources connected to the transmission system. PREPA, however, does not have the communications and energy management infrastructure in place, required for the integration of VPP resources connected to the distribution system. Thus, in parallel with its procurement of VPP resources, PREPA will need to separately procure an Energy Management~~

~~System, Advanced Distribution Monitoring System, GIS System, Advanced Metering Infrastructure and other systems (collectively, the "**Grid Control Center Communication System**" or "**GCCC System**") which will allow PREPA to communicate with, dispatch and integrate VPP resources. The March 2021 version of the PREPA 10-Year Infrastructure Plan prepared for submission to the Central Office for Recovery, Reconstruction and Resiliency, the Federal Emergency Management Agency ("**FEMA**") and the Energy Bureau allocates approximately $ 380 Million of Federal funding for the purchase of various components of the Grid Control Center Communication System. As PREPA does not have control over the deployment of these funds by FEMA and the other involved federal and Puerto Rico agencies, PREPA cannot currently forecast when it will purchase and install the GCCC System. Nor can PREPA identify the vendors that will supply the GCCC System or the types of systems and technologies which the selected vendors will supply. The uncertainty around the timing and final specifications of the GCCC System:~~

~~i. exposes PREPA to the risk of accruing liability for delays in commissioning under each Grid Service Agreement due to the likelihood that PREPA may not have the ability to integrate VPP resources selected as part of the Tranche 1 RFP process within the two year period in which Proponents have to install, test and commission such resources; and~~

~~ii. prevents PREPA from finalizing MTRs for VPP resources, which heavily depend on the specifications of systems that collectively comprise the GCCC System.~~

~~For the foregoing reasons, PREPA recommends suspending the procurement of VPP resources as part of the RFPs for Tranche 1 and Tranche 2 until such time as PREPA purchases the GCCC System.~~

~~c.~~

a. (**Interconnection Study Fees**) The Tranche 1 RFP did not clearly define the requirement or process for Proponents to pay for the interconnection studies, as anticipated by the Procurement Plan.[1] For Tranches 2-6, the RFP will include provisions to address this issue. For Tranche 1, PREPA issued Communication No. 2 on June 23, 2021, describing the payment requirement for proposals selected for Phase III evaluation and permitting Proponents that object to paying for Tranche 1 interconnection studies to withdraw from the RFP process.

b. (**VPP MTRs**) PREPA has noted in the procurement plan that the Puerto Rico and US energy sector have little experience with VPP MTRs and that technical issues with integrating storage and VPP resources are significant. For the Tranche 1 RFP, PREPA requested that proponents submit draft MTRs with their proposals, delivered those to LUMA, and solicited draft MTRs from LUMA that would serve as the basis to finalize VPP MTRs for Tranche 1 and future

[1] See Section 4.4 ("The Proponent shall bear the interconnection and system upgrade study costs. Additionally, the Proponent will be responsible for the design, procurement, installation, commissioning, and acceptance testing of all equipment shown by these studies to be necessary to interconnect the Proponent's proposed facility to the T&D System.")

RFPs. LUMA delivered MTRs for VPPs for use in Tranche 1, and PREPA made those available to VPP proponents.

To provide a uniform opportunity for feedback on the VPP MTRs for Tranche 1, PREPA issued Communication No. 2 on June 23, 2021, which (i) requested VPP Proponents to submit any MTR comments to PREPA through the "Messaging" tab of event No. 112658 on PowerAdvocate® by no later than 8:00 pm Atlantic Standard Time on July 30, 2021, and (ii) committed PREPA to assess timely comments submitted by Proponents, update the same and distribute a final version of the VPP MTRs to VPP Proponents for Tranche 1.

For Tranches 2-6, PREPA will include draft MTRs at the outset of the RFP process and allow RFCs and comments the MTRs through the formal RFP process. Through this process, PREPA and LUMA will engage all proponents and request feedback on the MTRs for VPPs in a structured, transparent manner.

c. (**Proponent Queue**) Puerto Rico has not had an overall policy set with respect to upgrade costs and interconnection capacity allocation. Thus, Proponents participating in Tranche 1, and in prior procurement processes, did not receive a queue number or queue position, or participate in any other organization methodology, to guide evaluation priorities versus competing Proponents.

This results in difficulties in administration of network upgrades, a cumbersome allocation of shared cost responsibility based the project impact on the grid and other problems. After cost allocation to the individual Proponents is determined, if any proponent decides to withdraw from the process, a re-study and re-assignment of network upgrade costs to a new pool of Proponents is required. This will impact the timeline and the cost of the study to customers and there might be numerous re-study requests due to the withdrawals. Additionally, since a single Proponent might submit several configurations of a project and might be interested in different Point of Interconnection (POI) locations across the grid, the process becomes even more complicated when determining which of these projects impact the grid and how costs are allocated to these projects. Future communication with the proponents on any of the next steps such as the generation interconnection agreement, cost estimates, and power flow study reports also become complicated with no queue position given to the proponents at the time of application submission.

Utilities in the U.S. typically use a queue of Proponents to address the issues described above. PREPA and LUMA recommend the implementation of a queue system for Tranches 2-6.

d. (**Timing Between Tranches**) LUMA and PREPA have determined that the current RFP schedule does not provide enough time between Tranches to integrate lessons learned (including those that may be learned following evaluation of proposals) and to make adjustments that address curtailment risk and other issues arising in the interconnection study and integration analyses. The compressed timeline reduces PREPA's ability to present to Proponents a clear picture upfront of the expected environment for their proposed projects, increasing their risk. The clearer the picture that PREPA can give to Proponents, the better, more responsive proposals it can expect to receive.

e. (**Source Code Access**) To dispatch resources, VPP Proponents will utilize a Grid Services Delivery System (the "**GSDS**"), which depends upon multiple bespoke and proprietary computer source code for its operation (the "**Source Code**"). The owner of the Source Code incorporated in each GSDS will typically grant the VPP aggregator a non-exclusive license to use the Source Code for purposes of operating the GSDS. Due to the proprietary nature of Source Code, a third party such as PREPA cannot take over the operation of a VPP without first obtaining license rights to use the relevant Source Code. Source Code access could become essential to the operation of the VPP in the event that either (i) the VPP aggregator enters into bankruptcy or otherwise fails to perform under the Grid Services Agreement with PREPA, or (ii) a Source Code owner enters into bankruptcy or otherwise fails to update and maintain the Source Code For this reason, a State-owned utility in at least one other US electricity market requires (A) VPP aggregators to place a human readable version of the Source Code into escrow, and (B) each Source Code owner to grant such utility a non-exclusive license to use the escrowed Source Code upon the occurrence of either of the foregoing events (collectively, the "**Escrow & Licensing Requirements**"). With each GSDS utilizing up to thirty (30) or more separate assemblies of Source Code, compliance with the Escrow & Licensing Requirements involves a highly complex, time-consuming, and cost intensive process with as many as thirty (30) or more Source Code owners.

For the Tranche 1 RFP, PREPA initially prepared a template Grid Service Agreement which, among other things, obligated a VPP aggregator to comply with specific Escrow & Licensing Requirements. Two (2) VPP Proponents, however, vigorously pushed back on the Escrow & Licensing Requirements and in the end, PREPA withdrew these requirements from the Proposal form of Grid Service Agreement. Thus, the terms of the current Grid Service Agreement expose PREPA to the risk of the permanent loss of access to VPP resources arising out of PREPA's inability to utilize the Source Code incorporated into a GSDS.

This risk will not become material until the aggregate size of VPP Resources becomes so large that the T&D Operator will be unable to source replacement capacity from other resources connected to the T&D System to compensate for the loss of VPP resources as to which PREPA or its successor lacks the necessary rights to step in and use the required Source Code. PREPA can protect itself from this risk by (i) imposing Escrow & Licensing Requirements and/or (ii) maintaining sufficient excess available capacity in the T&D System to offset the loss of the VPP capacity. To safeguard the secure and resilient operation of the T&D System, PREPA recommends that, for Tranches 2-6, the Escrow & Licensing Requirements should apply when

VPPs connected to the distribution system achieve an aggregate resource capacity of at least 100 MW.

4. Role of T&D Operator During the Procurement Program

On June 22, 2020, PREPA, LUMA Energy, and the P3A entered into the Puerto Rico Transmission and Distribution System Operation and Maintenance Agreement ("**T&D OMA**"). Under the conditions outlined in the OMA, LUMA Energy serves as Operator and provides O&M Services for the T&D System in Puerto Rico.

On June 1, 2021, LUMA began operation of the T&D System. As Operator, LUMA plays an active role in the integration of generation procured as a part of this Procurement Plan. LUMA's T&D System planning activities as defined in the T&D OMA, include, but are not limited to, Section 5.13 (d), Procurement of Generation Projects and Generation Supply Contracts. In addition to system planning, LUMA will be responsible for generation resource integration, T&D System improvements, as well as T&D System operation and maintenance.

In this procurement, LUMA will have the primary responsibility to carry out different types of technical studies required for the PPOA counterparty to connect to the grid and enter commercial operation. The studies may include analysis of load flows, voltage fluctuations, short circuits, protection and coordination of relays, verification of the grounding design, power quality and stability, among others, which are collected during feasibility, system impact and facilities studies.

The point of interconnection of a utility scale resource with a new PPOA will require construction projects to upgrade and expand the existing infrastructure in the utility electrical system localities (substations, transmission centers, etc.) where the resource will connect to the T&D System. In relation to these types of projects, LUMA will have active participation in areas such as approval of design for construction, inspection, safety, testing, commissioning, approval for energization and commercial operation, among others.

Once PREPA, the Energy Bureau, P3A, and the Financial Oversight and Management Board for Puerto Rico ("**FOMB**") approve a project, the PPOA project will proceed through the interconnection design, construction, including required system upgrades, testing and commissioning stages defined by LUMA before entering commercial operation.

III. PROCUREMENT PLAN

1. Procurement Plan Description

The Energy Bureau has endorsed PREPA's plan to (i) use RFPs for the solicitation of new renewable generation and energy storage resources on a competitive basis, based on terms and conditions set forth in template Contracts, and (ii) engage selected Proponents through the finalization and execution

of Contracts covering these resources. The Procurement Plan envisions the issuance of six (6) RFPs (each, a "**Tranche**" and collectively, the "**Tranches**"), spaced over a three-year timeline in accordance with the guidance provided by the Final Order on minimum energy resource quantities and timing, as set out in Table 1-4 of Section 1.4 (*Procurement Schedule*) below.

With this approach, PREPA aims to secure the following benefits:

a. ~~PREPA~~the T&D Operator will have an opportunity to model the renewable integration and the T&D System to determine any needed system upgrades and the preferred interconnection locations to which projects can be connected (minimizing system impacts). These locations will likely evolve over time, as the T&D System improves and ~~PREPA~~the T&D Operator allocates preferred interconnection locations to selected Proponents in earlier RFP Tranches.

b. This approach allows ~~LUMA Energy, LLC and LUMA Energy ServCo (collectively,~~ the ~~"~~T&D Operator~~")~~ jointly acting in their capacity as the "*Operator*" under the Operation & Maintenance Agreement, dated June 22, 2020~~, with P3A and PREPA~~, to plan for system improvements that support large-scale renewable energy and energy storage integration.

c. PREPA can spread procurement commitments associated with each Contract over time and take advantage of future technological gains as well as reduced capacity and energy pricing.

d. This approach buys additional time for PREPA to improve its credit position as it navigates the Title III process. PREPA expects that renewable resource capacity and energy pricing will improve as its credit position improves.

~~PREPA~~The T&D Operator has engaged the services of ~~Sargent & Lundy~~a consultant to evaluate system impacts associated with the addition of new renewable energy resources, identify needed system upgrades, determine an approximate capacity value that results in minimal system impacts, and provide an initial screening for preferred interconnection locations. Through the work ~~Sargent & Lundy~~this consultant continues to perform, ~~PREPA~~the T&D Operator will identify the scale and scope of the system improvements required to accommodate the addition of both renewable generation and energy storage resources procured under the RFP. PREPA will ~~prioritize~~lead the procurement of complementary energy storage installations ~~and "no regrets"~~based on T&D System needs as determined through studies and plans performed by the T&D System Operator. The T&D Operator will develop necessary T&D System improvements that will support both near-term and longer-term increases in the interconnection of new renewable energy resources.

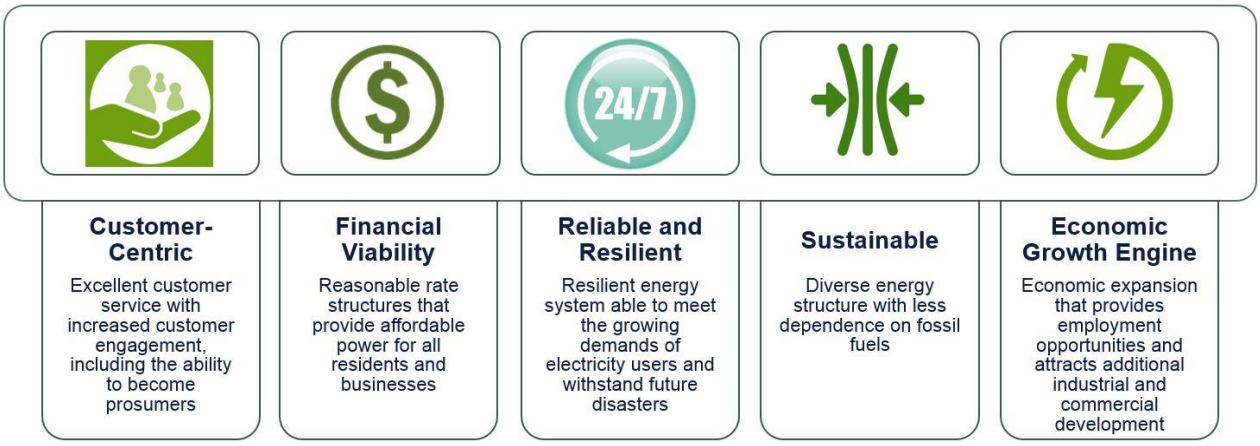
The Procurement Plan Resolution requires PREPA to develop, maintain, update and file with the Energy Bureau every six (6) months a timeline for anticipated installation of energy storage and renewable energy resources. The first of these timelines will be submitted on or before July 30, 2021, in accordance with the Energy Bureau's June 3, 2021 Resolution and Order granting extensions of time in Case No. NEPR-MI-2020-0012. In addition, ~~PREPA~~the T&D Operator will attempt to streamline its interconnection analyses and allow for installations of the required renewable and storage resources and T&D System improvements as rapidly as possible.

The following provides a discussion of PREPA's Vision Statement, key regulatory drivers, the procurement process, acceptable renewable energy resources, the status of the development of an RFP and the Contracts and uncertainties and unknowns.

1.1 PREPA Vision Statement

Noting the need for an efficient and resilient system, on February 1, 2018, the PREPA Governing Board released its vision statement to guide the future of the utility.

Figure 1-1 – PREPA's Five Pillars



The Governing Board's vision addresses the reliability and resilience of the system, the transition to a system that is sustainable both financially and environmentally, and its importance in acting as an economic growth engine for Puerto Rico. These elements were noted and factored into the structuring of the IRP submissions. The resulting Procurement Plan takes a positive step towards realizing this vision through the procurement of renewable energy and storage resources, designed for reliability and resilience, which will reduce PREPA's dependence upon fossil fuel resources. The following table presents the Vision Statement:

Table 1-1 – 2018 Governing Board Vision Statement

Pillar	Summary
System is Customer-Centric	The system serves the customer with affordable, reliable power, with transparent metrics for quality of service and with equitable consideration across all customers. Quality/Reliability can be differentiated for customers in a manner that serves their total cost and risk objectives. Customers are engaged by innovative products and value-added services that provide choice among rate plan and risk management options and provide access to wholesale contracting options for large customers. Customers are empowered with behind-the-meter alternatives for energy

Pillar	Summary
	efficiency, demand management, and distributed generation, with the ability to become prosumers if they so choose.
System Promotes Financial Viability	The system is premised on positive economics on both sides of the meter. Rates are reasonable and create value for the customer, while pricing is sufficient to cover costs. Rate and market design create incentives to purchase, consume or produce energy in a manner that benefits the entire system. Subsidies are minimized, and those that remain have a non-distortionary impact. Operational excellence and sound long-term planning reduce the cost to serve. Rates are affordable within a model that allows the utility to earn a reasonable rate of return and service its debt. The business model is robust to changes such as outmigration and reduction in energy demand and does not create disincentives for adoption of cheaper energy resources, either at the grid level or at the customer premises.
System is Reliable and Resilient	The grid is thoughtfully planned, well maintained, and safely operated to achieve defined reliability and resiliency goals. There is visibility into the system at all levels, and control where appropriate. Standards for recoverability create a measure for resilience. The choice of architecture (distributed vs. regionalized vs. centralized) is intentionally made to balance reliability/resilience and cost objectives while also taking advantage of advancements in technology and innovation.
System is a Model of Sustainability	There is a progressive focus on diversifying energy resources and reducing the carbon intensity of the power sector, in both primary generation and backup generation. Power generation is efficient and minimizes emissions. Customers have incentives to use energy wisely and to generate their own clean energy. The grid and grid systems are designed to take maximum advantage of increasingly cost-effective renewable power generation alternatives and to integrate emerging technologies.
System serves as an Economic Growth Engine for Puerto Rico	The quality, reliability, and cost of power attracts new commercial and industrial development to Puerto Rico and encourages existing commercial and industrial customers to expand their operations. Transformation and reinvestment in the power system creates new jobs. Innovation in the generation and delivery of power creates a local ecosystem of businesses that provide for evolving needs for equipment, technology, and services in Puerto Rico and beyond.

1.2 Key Regulatory Drivers

The Final Order provided a summary of Puerto Rico's laws and regulations as they apply to the IRP and the Modified Action Plan. This Section 1.2 restates these "regulatory drivers," in part to reinforce the importance of these legislative initiatives. The Energy Bureau structured the Modified Action Plan

to support compliance with these laws and regulations, and PREPA has developed this Procurement Plan in accordance with the Modified Action Plan.

a. **Act 82-2010:** Act 82-2010, as amended ("**Act 82**"), known as the Puerto Rico Energy Diversification Policy through Sustainable and Alternative Renewable Energy Act, established the first renewable energy portfolio standard in Puerto Rico and required that a retail energy provider procure twelve percent (12%) of its power needs through renewable energy by 2015, fifteen percent (15%) by 2020 with a goal of reaching twenty percent (20%) by 2035. Act 82 was amended in 2019 to, among other things, establish new RPS milestones: twenty percent (20%) by 2022, forty percent (40%) by 2025, sixty percent (60%) by 2040 and one hundred percent (100%) by 2050. Act 82 created Renewable Energy Certificates (RECs) that encompassed all the environmental and social attributes of one megawatt-hour (MWh) of electricity and that could be traded beyond the borders of Puerto Rico.

b. **Act 83-2010:** Act 83-2010, as amended ("**Act 83**"), known as the Puerto Rico Green Energy Incentives Act, was established to, among other things: achieve the diversification of energy sources; reduce the dependency on fossil fuels; reduce and stabilize energy costs; reduce the flight of capital caused by the import of fossil fuels; and preserve and improve the environment. Act 83 also created a Green Energy Fund to fund the development of sustainable energy systems that further energy use savings and efficiency. The legislation also contained Green Energy Initiatives and tax benefits to encourage consumers and businesses to use renewable energy.

c. **Act 120-2018:** Act 120-2018, as amended ("**Act 120**"), known as the Puerto Rico Electric Power System Transformation Act, created the legal framework required for the sale, disposition, and/or transfer of the assets, operations, functions, and services of PREPA. Under Act 120, any contract related to a PREPA Transaction must have an Energy Compliance Certificate from the Energy Bureau. Moreover, the legislation grants PREPA and P3A the authority to sell PREPA assets related to electric power generation and transfer or delegate any of PREPA's operations, functions, or services. The legislation also notes, however, that the regulatory framework must be consistent with the new realities in Puerto Rico and the energy industry; it must, therefore, among other things, allow for the use of DG, microgrids and more renewable energy. The Legislature also notes that the electric system must be resilient to weather events and the effects of climate change on the island. Act 120-2018 also points out "…the importance of regulating the energy industry and the need to have an independent regulatory entity that carries out its duties firmly and resolutely."

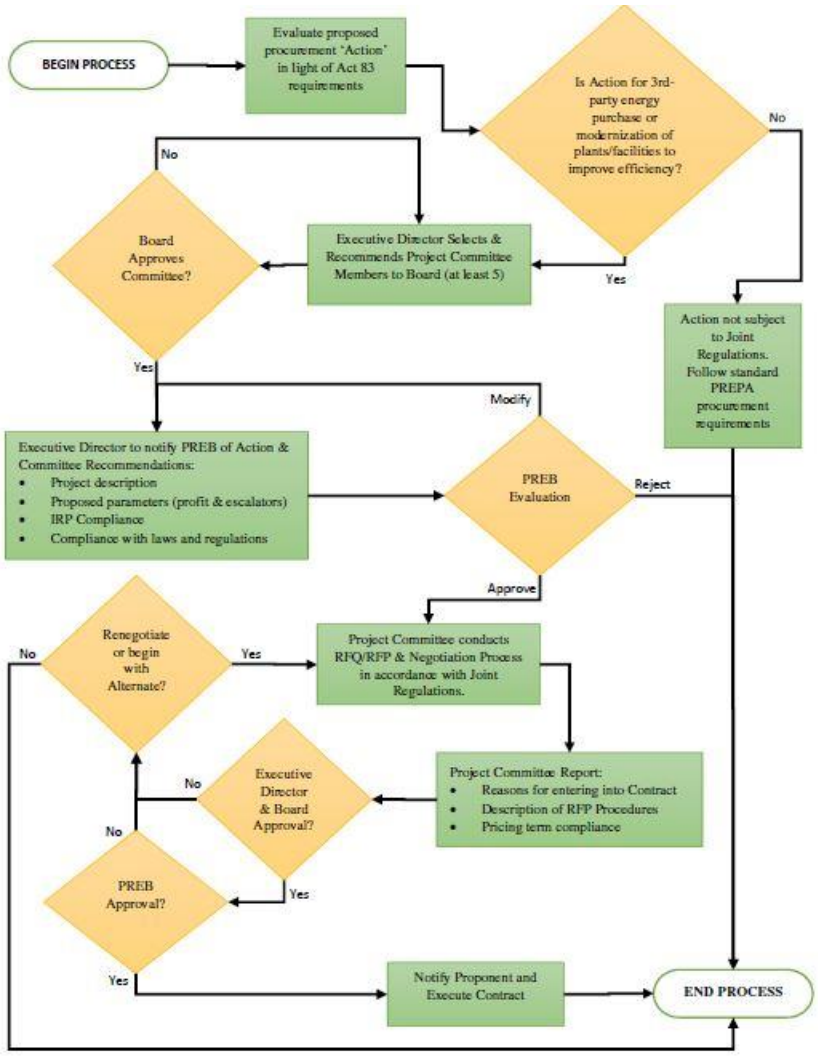
d. **Act 17-2019:** Act 17-2019 ("**Act 17**"), known as the Puerto Rico Energy Public Policy Act, built upon the foundation created for integrated resource planning in Act 57 and sharpened the focus on accelerated renewable energy provision, energy conservation and efficiency, DR and DG. In so doing, Act 17 increased the renewable portfolio to a minimum of twenty percent (20%) by 2022, forty percent (40%) by 2025, sixty percent (60%) by 2040 and one hundred percent (100%) by 2050 and created an energy efficiency target of thirty percent (30%) by 2040. Act 17 also emphasizes the role of "prosumer" generation~~,~~ and envisions an enhanced role for microgrids. Further, Act 17 reinforces the authority of the Energy Bureau to conduct

IRP proceedings. Act 17 also states that the IRP will be prepared by the electric power company responsible for the operations of the electrical system and shall be approved by the Energy Bureau. Allowance for preparation by an entity other than PREPA acknowledges the changes contemplated under future IRPs as a result of the implementation of Act 120. The legislation also set forth more detail than that contained within Act 57 on the content of the IRP, but the content requirements are consistent with the Energy Bureau's IRP requirements contained in Regulation 9021. A central point throughout the legislation is that actions taken regarding generation and related matters must conform to the approved IRP, thereby highlighting the importance of the IRP as a central planning tool. Any changes or amendments to the IRP shall be approved by the Energy Bureau.

1.3 Procurement Process

The Final Order addressed the Procurement Process by referencing Regulation 8815, attached to this document for ease of reference as Appendix 1 (the "**Joint Regulation 8815**"). As stated in the Final Order, "*PREPA or the T&D Operator, with oversight by the Energy Bureau under the processes of Regulation 8815, shall run all competitive auctions in accordance with this Modified Action Plan*." Joint Regulation 8815, also known as the *Joint Regulation for the Procurement, Evaluation, Selection, Negotiation, and Award of Contracts for the Purchase of Energy and for the Procurement, Evaluation, Selection, Negotiation, and Award Process for the Modernization of the Generation Fleet*, governs the processes for contracting with third parties for the purchase of energy. The following flowchart represents a high-level summary of the procurement process required by Joint Regulation 8815.

Figure 1-1 – Summary Procurement Process - Joint Regulation 8815



PREPA and the Puerto Rico Energy Commission (the Energy Bureau's predecessor) developed and promulgated Joint Regulation 8815 in 2016. This regulation addresses the formation of an evaluation committee, the Process to Issue RFQs/RFPs, the Evaluation and Selection Process, Selection of Proponents, Contract Award, and Reconsideration and Review.

A high-level summary of the key components of Joint Regulation 8815 as it applies to this Procurement Plan follows.

a. (**Evaluation Committees**) A committee (the "**Evaluation Committee**") with at least five (5) members, appointed by the Executive Director and approved by PREPA's Governing Board, will manage the administration of, and evaluate all proposals submitted by Proponents relating to, the RFP(s) in accordance with this Procurement Plan.

b. (**RFP Issuance**) The Procurement Plan Resolution directs PREPA to consolidate the RFQ and the RFP process to expedite the procurement process. Thus, the consideration of each Proponent's qualifications will be incorporated into the evaluation of individual resource proposals in determining the winning Proponents. For the issuance of an RFP, the Evaluation Committee shall advertise the RFP by means of a public notice in one newspaper of general circulation, the internet sites for PREPA and the Energy Bureau, and, at the discretion of the Evaluation Committee, in one or more national or international journals. The RFP shall include the following provisions:

i. a description of the Project and its importance based on the IRP;

ii. a description of the proposed schedule for the procurement process;

iii. a due date, time, and method for submission of requests for clarification(s) and proposals (and the place for submission of proposals);

iv. instructions as to the format of proposals and the information required for a proposal to be considered complete;

v. any options or alternative proposals allowed;

vi. applicable proponent eligibility requirements, scoring criteria, and minimum resource size;

vii. applicable proposal evaluation criteria that will be used to evaluate proposals and proponents;

viii. applicable proposal security;

ix. a statement regarding funding contingencies or other conditions, contingencies, approvals, authorizations, or certifications which are required to award a Contract;

x. a draft of the proposed Contract or summaries of key terms and conditions;

xi. parameters approved by the Energy Bureau in connection with profit margins and pricing escalators;

xii. PREPA's authorized representative for RFP communications;

xiii. policy statements encouraging local participation; and

xiv. other applicable terms and conditions as determined by PREPA's Governing Board.

Proposals received on or before the due date set forth in the RFP will be stamped (date and time of receipt) and will be kept in the custody of PREPA. PREPA will not disclose the proposals publicly and only members of the Evaluation Committee, the Energy Bureau and

other members designated by the Governing Board or Executive Director of PREPA shall have access to the proposals during the selection and evaluation period.

c. (**Evaluation and Selection Process**) Joint Regulation 8815 establishes a three-phase selection process: (i) quality control review ("**Phase I**"), (ii) evaluation committee review and recommendation ("**Phase II**"), and (iii) contract negotiation ("**Phase III**"). Phase I allows PREPA to determine which proposals satisfy the minimum requirements outlined in the RFP. PREPA will notify each Proponent whether such Proponent's proposal passed Phase I evaluation and advance to Phase II. During Phase II, the Evaluation Committee will review and evaluate each proposal in accordance with the selection criteria. The Evaluation Committee may select one or more proposals to advance to Phase III evaluation. To comply with the Procurement Plan, PREPA will require more than one Proponent. Therefore, the Evaluation Committee will likely make recommendations to PREPA's Executive Director and the Governing Board to carry out discussions and negotiations with more than one Proponent at the same time for proposals that fall within a competitive range as defined in the regulation. Assuming negotiations will proceed with more than one Proponent during Phase III, each Proponent will receive written notification containing the details and describing the following procedures:

   i. No statement or action shall bind PREPA other than a Contract with a Proponent, duly executed and delivered by PREPA, which has become effective in accordance with its terms.

   ii. The Evaluation Committee may invite each Proponent to one or more meetings to discuss and answer questions.

   iii. The Evaluation Committee shall determine the content and scope of each meeting.

   iv. If the Evaluation Committee convenes any meetings with a Proponent of energy resources that fall within the competitive price range, then the Evaluation Committee will give all Proponents that propose a similar energy resource and a price that falls within such competitive price range, an opportunity to discuss and review their proposals with an authorized representative of the Evaluation Committee.

   v. The Evaluation Committee shall establish procedures and schedules to control meetings, advise Proponents on deficiencies and allow an opportunity to cure, resolve uncertainties or otherwise clarify the terms and conditions of the proposal, address any suspected mistakes, provide an opportunity to modify economic terms, technical aspects, or other aspects which may result from the discussions, and keep a record of the date, time, place, and attendees of the meetings.

   vi. The Evaluation Committee may require Proponents to submit, in writing, confirmation of any clarification of a proposal.

vii. Authorized Representatives of the Evaluation Committee may carry out negotiations in whole or in part through written or telephone communications, at the discretion of the Evaluation Committee.

viii. The Evaluation Committee may request "Best and Final Offers" or proceed to negotiations with one (or more) proponents within the competitive range.

ix. Additional negotiations may follow receipt of Best and Final Offers.

Subject to PREPA's right to reject any or all proposals, PREPA shall select the proposal(s) considered most advantageous to PREPA, PREPA's ratepayers and Puerto Rico. Proposals judged to be "most advantageous" will meet minimum requirements, demonstrate economic benefits, reliability, and resiliency, and fit with the overall needs of the T&D System. In accordance with the Energy Bureau's directive, the RFP evaluation process during Phase I and II shall not exceed seventy-five (75) days unless circumstances require that the Evaluation Committee extend such process. The Evaluation Committee will evaluate proposals, based on price/cost and relevant estimated system upgrade costs as well as non-price terms such as construction and operational experience, risks and risk mitigation measures, and other pertinent criteria. The RFP will clearly define the scoring system and all evaluation criteria.

d. (**Selection of Proponents**) Joint Regulation 8815 prohibits the selection of Proponents that have been convicted of any of the offenses set forth in Act 458-2000. Other grounds for disqualification include when a Proponent:

i. enters into insolvency or bankruptcy;

ii. makes a formal, public announcement that it is unable, or does not intend, to pay its debts and obligations;

iii. has been convicted of any of the criminal offenses set forth in Act 428-2004;

iv. has not fulfilled its obligations relating to the payment of taxes under the laws of the Commonwealth or the relevant jurisdiction in which it maintains its principal operations;

v. has engaged in collusive acts or is guilty of serious misrepresentations;

vi. has experienced material changes to its business;

vii. fails to comply with substantive requirements of the RFP; or

viii. is otherwise in material breach of Joint Regulation 8815.

When assessing the financial condition of a Proponent, PREPA may consider bank statements, financial statements (last three (3) fiscal years), or other information that would allow it to assess the financial condition of the Proponent. The Evaluation Committee shall specify in the

RFP the financial information which the Proponent must provide to comply with the applicable minimum standards of financial condition.

e. (**Approval of Contract(s)**) Upon completion of the negotiation of the Contract(s) with a Proponent, the Evaluation Committee shall prepare a report which shall include the reasons for entering into such Contract(s), the reasons for selecting the Proponent(s), a description of the procedures followed, and other information pertinent to the procedures followed and the evaluations conducted. The Evaluation Committee shall provide the report and proposed Contract(s) to the Executive Director and the Governing Board of PREPA within thirty (30) days for approval. The Governing Board shall have the right to reject, accept, or return the proposed Contract for renegotiation. If the Governing Board of PREPA approves the report and Contract(s), PREPA shall provide a copy of the report and the Contract(s) to the Energy Bureau for its evaluation and approval. If the Energy Bureau approves the Contract(s), the Evaluation Committee will notify Proponents of the RFP results. Once the Energy Bureau approves a Contract, PREPA shall have no right to modify the Contract or the scope of the Project in any material way without the approval of the Energy Bureau. Subject to (i) the completion of the required Feasibility, System Impact and Facilities Studies, (ii) the approval by the Governing Board and the Energy Bureau, and (iii) the review and approval by the ~~Financial Oversight and Management Board for Puerto Rico (“~~FOMB~~”)~~, PREPA and the Proponent may execute the Contract(s).

f. (**Reconsideration and Review**) Proponents may request reconsideration of the final awarding of a Contract in accordance with applicable administrative law. These reconsideration and judicial review rights will be described in the notifications sent to Proponents.

1.4 Procurement Schedule

As specified in the Final Order, the Procurement Plan communicates the expected timeline for the release of subsequent RFPs in sequence (i.e., every six (6) months, over the next three (3) years for a total of six (6) tranches of RFP releases). These RFP Tranches contemplate the procurement of renewable energy resources in quantities and within timelines conforming with Act 82's RPS goals, and the procurement of energy storage resources in support of capacity needed to meet PREPA's peak load requirements and in support of renewable energy generation integration requirements.

The schedule of minimum RFP quantities, in conformance with quantities targeted in the Modified Preferred Resource Plan, follows:

a. **1st Tranche**: at least 1,000 MW solar PV (or energy-equivalent other renewable), at least 500 MW (2,000 MWh or equivalent) battery energy storage;

b. **2nd Tranche**: at least 500 MW solar PV (or energy-equivalent other renewable), at least 250 MW (1,000 MWh or equivalent) battery energy storage;

c. **3rd Tranche**: at least 500 MW solar PV (or energy-equivalent other renewable), 250 MW (1,000 MWh or equivalent) battery energy storage;

d. **4th Tranche**: at least 500 MW solar PV (or energy-equivalent other renewable), 250 MW (1,000 MWh or equivalent) battery energy storage;

e. **5th Tranche**: 500 MW solar PV (or energy-equivalent other renewable), 125 MW (500 MWh or equivalent) battery energy storage; and

f. **6th Tranche**: 750 MW solar PV (or energy-equivalent other renewable), 125 MW (500 MWh or equivalent) battery energy storage.

Table 1-4 - Guidance for Renewables, and Battery Energy Storage RFP Tranches

		Renewables, MW		4-hr. Battery Storage equivalent, MW[1]	
RFP Target Release Date	**Procurement Tranche**	**Minimum**	**Cumulative**	**Minimum**	**Cumulative**
Dec-20 (~~actually~~ released Feb-22)	1	1000	1000	500	500
~~Jun~~Aug-21	2	500	1500	250	750
Dec-21	3	500	2000	250	1000
Jun-22	4	500	2500	250	1250
Dec-22	5	500	3000	125	1375
Jun-23	6	750	3750	125	1500

1) Other storage durations (i.e., 2-hour and 6-hour) will be considered.

PREPA issued the Tranche 1 RFP on February 22, 2021 and expects the RFP for Tranche 2 RFP to be issued by the end of June 2021. The target release dates for subsequent RFPs occur every six (6) months, over the next three (3) years, for a total of six (6) tranches of RFP releases. The procurement of resources may be front-loaded within the five-year period ~~in order~~ to allow time for construction, interconnections, and commissioning within the five-year Action Plan.

1.5 Uncertainties and Unknowns

As part of a competitive procurement plan, PREPA must describe internal or external staffing resources, constraints, and potential solutions to any constraints, as required, in order to meet the renewable energy generation and storage resource levels specified in the Modified Preferred Resource Plan.

PREPA does not currently have the internal capability and staff to evaluate project feasibility, system impacts or facility requirements. PREPA will rely on (i) external staffing resources until PREPA has hired or otherwise secured alternate capabilities, and (ii) support made available by LUMA as the Operator of the T&D System.

PREPA anticipates that integration of some proposed projects will require substantial T&D System upgrades. In evaluating such proposals, ~~PREPA~~the T&D Operator will attempt to identify synergies and the timing of (a) new battery storage resources; (b) staged transmission reinforcements whose initial components can be completed in advance of an entire transmission project; (c) complementary

retirement of existing older thermal resources; and (d) operational guidance that can allow a project to proceed in stages, or with operational limitations based on system needs, subject to curtailment under certain conditions. ~~PREPA~~The T&D System Operator will consider ways in which combinations of new storage resources and phased T&D System improvements may help mitigate constraints that may otherwise limit renewable energy deployments and will consider the assumptions used in interconnection analyses that account for these factors.

While Proponents have shown a high level of interest in the Tranche 1 RFP process, PREPA cannot yet determine whether this process will yield a sufficient number of high-quality, competitive proposals to procure the minimum quantities of renewable energy, energy storage and VPP resources, contemplated for Tranche 1. In addition, recent modeling and analysis by PREPA and its advisors indicates that the T&D System will require more than 1,500 MW (6,000 MWh) of energy storage resources to support appropriate levels of resource adequacy in the future. PREPA recommends that the Energy Bureau, PREPA and the T&D Operator discuss ways to ensure the deployment of a level of energy storage capacity that will support resource adequacy. PREPA has also commenced the assessment of (i) the quantities of renewable energy, required to ensure that the T&D Operator can fully charge the energy storage resources on a daily basis, and (ii) the risks and potential shortfalls of such an approach.

2. Counter-Party Risk

PREPA's current credit rating of CA, a non-investment grade rating reflecting PREPA's Title III status, presents a significant factor in the determination of Contract prices. A lower credit rating indicates a higher counter-party risk, which Proponents will factor into their cost of capital calculations. This results in higher cost of capital and a higher levelized cost of energy ("**LCOE**") in generating and energy storage resource proposals than would be appropriate if PREPA had a better credit rating, all else held equal. Proponents will usually determine contract price based on LCOE. As PREPA's credit rating improves, particularly as PREPA reaches an investment grade rating, PREPA's cost of capital should decrease, its riskiness as a contract counter-party will decline, and the LCOE should decrease as well, all else being equal. PREPA expects its credit rating to improve upon emergence from the ongoing PROMESA Title III proceeding. For earlier Tranches, which may result in Contracts executed prior to PREPA's emergence from its Title III proceedings, PREPA will give preference in its evaluation to Proponents that accept an automatic step-down in Contract price upon such emergence.

3. Request for Proposals (RFP) Template

Appendix 2 (*RFP Template*) sets forth the current version of the RFP template for energy resources, and this Section 3 provides a high -level overview of the template.

3.1 Background Information for the RFP

Each RFP will encourage Proponents to review the following documents, which provide further technical background:

a. **PREPA Integrated Resource Plan**: ~~https://aeepr.com/es-pr/QuienesSomos/Paginas/ley57/Plan-Integrado-de-Recursos.aspx~~https://aeepr.com/es-pr/QuienesSomos/Paginas/ley57/Plan-Integrado-de-Recursos.aspx

b. **Energy Bureau Final Order on the PREPA IRP**: ~~https://energia.pr.gov/wp-content/uploads/2020/08/AP20180001-IRP-Final-Resolution-and-Order.pdf~~https://energia.pr.gov/wp-content/uploads/2020/08/AP20180001-IRP-Final-Resolution-and-Order.pdf

c. **Energy Bureau Procurement Plan Resolution**: ~~https://energia.pr.gov/en/dockets/?docket=nepr-mi-2020-0012~~https://energia.pr.gov/en/dockets/?docket=nepr-mi-2020-0012

Each RFP will also encourage Proponents to review the following additional documents, which are available for download at http://www.p3.pr.gov or at https://energia.pr.gov/en/laws/, for further background and the legal framework:

a. PREPA Organic Act, Act No. 83-1941, as amended;

b. Public-Private Partnership Authority Act, Act No. 29-2009, as amended;

c. Regulation for the Procurement, Evaluation, Selection, Negotiation and Award of Participatory Public-Private Partnerships Contracts under Act No. 29-2009, as amended;

d. Puerto Rico Energy Transformation and RELIEF Act, Act No. 57-2014, as amended;

e. PREPA Revitalization Act, Act No. 4-2016, as amended;

f. Act 82;

g. Act 83;

h. Act 17; and

i. Act 120.

3.2 RFP General Overview

Proponent Qualifications

Each RFP Tranche will solicit combined Statements of Qualifications and responses from companies and consortia interested in designing, constructing, installing, operating, and maintaining renewable

energy generation, energy storage and/or VPP resources at one or more sites across Puerto Rico. Proponents should demonstrate:

a. capability and experience developing, constructing, installing, testing, and operating renewable energy resources;

b. capability and experience managing renewable energy and energy storage technology;

c. financial strength and capital resources engaged for project funding;

d. strong technical expertise, with a track record of high-quality operations; and

e. experience complying with regulatory and permitting approvals in Puerto Rico.

Energy Resource Characteristics

In accordance with the Final Order, the proposed resources may include, but are not limited to, solar PV, wind or hydro, energy storage, VPPs, or any combination of these technologies. The Final Order requires that PREPA not unnecessarily limit the level of overall procurement to 250 MW blocks, but rather directs PREPA to pursue a strategy that attempts to procure the resource capacity required under scenario S3S2B evaluated in the IRP. PREPA will seek renewable energy resources and energy storage projects on approximately a 2:1 MW ratio to conform to the overall targets for each Tranche of the RFP. To meet these thresholds, PREPA must consider both stand-alone and co-located renewable energy and energy storage projects on an integrated and non-integrated basis. If "shovel ready" utility scale renewable projects are available for expedited installation under agreements previously executed by PREPA, PREPA shall procure stand-alone energy storage projects with multiple hour duration and roughly one-half of the projected capacity of these "shovel ready" projects to be expedited for installation, either at utility scale or at distributed scale as a VPP, as part of RFP Tranche 1 selections.

All project proposals must comply with the appropriate ~~PREPA~~ Minimum Technical Requirements ("**MTRs**"), prepared and submitted together with the RFP, and with PREPA's current interconnection standards and requirements. A Proponent's ability to comply with MTRs and interconnection requirements will form part of the RFP selection criteria.

Proponents of all projects except VPPs shall submit all-inclusive turnkey proposals. The utility-scale renewable energy resources must have a minimum nominal rating of 20 MW, measured at the electrical interconnection point with the T&D System. VPP projects must have a minimum nominal rating of 5 MW made available through multiple electrical interconnections that do not exceed 1 MW AC of capacity. The standalone energy storage resources will have a minimum nominal rating of 20 MW and four (4) hours of storage. Storage alternatives offering two (2) hours and six (6) hours of storage will also be considered.

Proponents may also offer energy storage projects paired with a utility scale renewable energy project. For standalone energy storage, such offerings will be required to have a minimum nominal rating of 20 MW and four (4) hours of storage. Alternatives offering two (2) hours and six (6) hours of storage

may also be considered. Proposals for hydro generation resources will not require energy storage support.

The same criteria used for the selection of utility scale renewable energy resources will apply to the evaluation of VPP proposals, except that the minimum capacity requirement shall be 5 MWs, which the Proponent must secure from multiple sites with different points of electrical interconnection that do not exceed 1 MW AC of capacity at each electrical interconnection. A Proponent may source energy and capacity for VPPs from existing facilities that do not currently sell such energy and capacity to PREPA. Proponents of VPPs will be responsible for all metering, SCADA, and other forms of telemetry to create the VPP. VPPs will comply with applicable MTRs and interconnection standards.

Resultant Contracts

For each selected project, the Proponent shall enter into a Contract and an Interconnection Agreement under which the Proponent would sell, and PREPA would purchase: (a) for renewable generation, the net electric output, subject to specific energy delivery guarantees; (b) for energy storage resources, energy storage capacity subject to specific energy delivery and operating guarantees; (c) for VPP resources, capacity subject to specific energy delivery and operation guarantees; and (d) in each case, associated rights, benefits and credits of the Project, including environmental attributes (or "**RECs**").

3.3 Specific RFP Requirements

With the RFP process described in this Procurement Plan, PREPA seeks to comply with the requirements of the IRP and the Energy Bureau's Final Order and Procurement Plan Resolution. PREPA will contract under this Plan, and PREPA will evaluate and select resource proposals, on a competitive basis in accordance with the process set forth below and in the RFP.

a. (**Procurement Timeline**) Act 82, as amended by Act 120, requires PREPA to procure renewable energy resources in the following quantities by the end of specified years: twenty percent (20%) by 2022, forty percent (40%) by 2025, sixty percent (60%) by 2040, and one hundred percent (100%) by 2050. ~~In order to~~To comply with these targets, PREPA will solicit proposals to develop renewable generation and energy storage resources that can achieve commercial operation within twenty-four (24) months from the relevant Contract's execution date. This timeline, the Energy Bureau has concluded, should provide the Proponent with enough time to finalize all arrangements required to proceed, which are expected to include:

   i. Site Control;

   ii. Transmission Interconnect;

   iii. Permitting and Licensing;

   iv. Environmental Assessment;

   v. Engineer, Procure, & Construct (EPC) contract; and

vi. Financial Closure;

and with enough time to execute the work required to install the project to achieve commercial operation, which will include:

vii. Final engineering and design;

viii. Equipment procurement, fabrication, and delivery;

ix. Construction; and

x. Startup and commissioning.

Proposals should demonstrate the Proponent's ability to achieve commercial operation in a timeframe not to exceed twenty-four (24) months from the signing of the Contract. PREPA may also consider proposals with commercial operation dates not to exceed thirty (30) months from signing of the Contract, but projects proposing a shorter timeline will be preferred, and shorter development times will be given a higher score in the RFP evaluation process.

The ISO or the T&D Operator shall define system level schemes at a conceptual level. Proponents shall have responsibility for the design, construction, commissioning (Energy Resource facilities only). The T&D Operator shall have responsibility for work within their facilities and the overall acceptance of the system level scheme.

b. (**Proposal Submission Requirements**) Each RFP Tranche will require Proponents of utility scale renewable energy and energy storage resources to provide a project description, which shall cover the following, as relevant to the proposal:

i. Basic project description, including (1) project name; (2) site location (including map and site layout); (3) technology; (4) generating or discharge capacity; (5) MTR compliance strategy; (6) grid connection point and electrical one-line diagrams; (7) ancillary service capabilities; (8) forecasted commercial operation date; and (9) ownership structure;

ii. Site ownership, usage, and development status;

iii. Current status of issuance of all permits, licenses and other authorizations required for the implementation of the project;

iv. A detailed operation and maintenance plan, covering the proposed supply term;

v. Environmental permitting plan addressing all potentially applicable environmental permits (federal and local) including the following, as applicable:

1. List of potentially applicable permits evaluated or to be evaluated;

2. Result of applicability analysis for each potentially applicable permit or status of evaluation; and

3. Planned approach to obtain applicable permits including the following:

A. List of key activities necessary to obtain each applicable permit(s) and associated timing;

B. Identification of key individuals or consultants; and

C. Experience of those individuals in specific jurisdictions of project;

vi. Transmission or distribution upgrade plans, as applicable, demonstrating compliance with the requirements of Regulation 8915 or Regulation 8916, as applicable, status of interconnection or transmission service requests, and status of related agreements and approvals;

vii. A detailed description and drawings of transmission or distribution and substation facilities associated with the proposed project, and descriptions of any special protection schemes associated with the resource and their use. PREPA and the T&D Operator require Energy Resources that offer operational flexibility. Proponents must provide a detailed description of the scheduling or dispatch process, ramp rates, automatic generation control, existing or planned Inter-Control Center Protocol ties to PREPA and any energy magnitude and duration limitations. Proponents must also describe the capability, if any, of the resource to provide reactive support and dynamic reactive reserve;

viii. Proponents' design and development experience with the proposed technology or, in the case of proponents of VPPs, with the aggregation of multiple energy supply, storage or controllable load resources into a VPP;

ix. Proponents' operating experience with the proposed technology or, in the case of proponents of VPPs, with the aggregation of resources into a VPP and the management of such resources effectively to provide capacity and energy in response to dispatch instructions issued by the T&D Operator;

x. Financing plan, including (1) sources of debt and equity; (2) equity percentage by sponsor; (3) financing rates and other terms; (4) level of commitment by potential lenders for construction financing and permanent financing; and (5) tax credit qualifications;

xi. Proponents' management team and key individuals responsible for project permitting, financing, design, construction, and operation;

xii. Major milestone schedule, including provisions for (1) site acquisition, control, and development; (2) permitting and licensing; (3) transmission upgrades and

interconnection, if applicable and as relevant to the project location; (4) financing; (5) engineering, procurement, and construction; and (6) testing;

xiii. For each of the above categories, Proponents shall provide references to any supporting documents or attachments;

xiv. Pricing terms which convey the essence of the proposed resource cost. The pricing proposal shall indicate:

1. Construction Start Date & Commercial Operation Date;

2. Supply Period;

3. For Renewable Energy Resource proposals, the "Base Rate" as defined in the relevant Final Proposal Version of Contract, representing the unit price of electricity, expressed in U.S. Dollars per kWh~~1~~2;

4. For Energy Storage Resource proposals:

A. the "*Capability Payment Price*" or "*CPP*" as defined in the relevant Final Proposal Version of Contract, representing the monthly price of Energy Storage Resource capacity, expressed in U.S. Dollars per MW of discharge capacity; and

B. the "*Variable O&M Price*" or "*VOMP*" as defined in the relevant Final Proposal Version of Contract, representing additional compensation for variable usage of the Facility, expressed in U.S. Dollars per MWh of discharge energy; and

5. For VPP proposals:

A. the "*Demand Build Price*" or "*DB$*" as defined in the relevant Final Proposal Version of Contract, representing the monthly price of Demand Build Services, expressed in U.S. Dollars per kW-Month; and

B. the "*Demand Reduction Price*" or "*DR$*" as defined in the relevant Final Proposal Version of Contract, representing the monthly price of Demand Reduction Services, expressed in U.S. Dollars per kW-Month;

xv. For all projects, Proponents shall estimate Project Interconnection Costs to (A) for Renewable Energy Resources and Energy Storage Resources, design, supply, install, test and commission the interconnection infrastructure required for the delivery of the project's energy or energy storage capacity (as applicable) to the T&D System, and (B)

~~1~~2 Note: PREPA will consider time-of-dispatch pricing following consultation with PREB.

for VPPs, install communication and metering systems that will enable the T&D Operator to issue dispatch instructions to the VPP aggregator or its agent;

xvi. For all projects, Proponents shall specify performance:

1. For renewable energy generation proposals, the Energy Production Forecast shall indicate, as applicable given the nature of the proposed resource (i.e., solar PV, wind or hydro), the forecasted P10, P50, and P90 annual energy forecast in MWh for each day and hour (8,760 entries); and

2. For standalone energy storage resources, the guaranteed performance shall indicate:

   A. Guaranteed Capacity (MW / MWh);

   B. Peak Charging Time (hours);

   C. Peak Discharging Time (hours);

   D. AC-AC Round Trip Efficiency (%); and

   E. Equivalent Availability Factor (%);

   The guaranteed values shall account for long-term performance degradation;

xvii. Proponents shall indicate the anticipated suppliers, models, and countries of manufacture for major plant equipment;

xviii Proponents must provide specific evidence demonstrating their ability to raise financing;

xix. To the extent that a Proponent currently owns, or holds leasehold rights in, each parcel of land forming part of the site of the proposed project, such Proponent shall submit a certified true and correct copy of the deed of title or lease agreement, evidencing such ownership over, or leasehold interest in, such parcels of land. To the extent that a Proponent does not yet own or exercise control over a parcel of land that will form part of the proposed project site, the Proponent shall submit either:

1. the original version of a letter from the registered title holder of such parcel (A) confirming such owner's intention to transfer ownership of, or grant a lease over, such parcel to Proponent for the purpose of implementing the proposed project upon the award of a Contract by PREPA to the Proponent, and (B) attaching a certified true and correct copy of the deed of title for such parcel; or

2. a certified true and correct copy of a legally-binding agreement evidencing that the registered title holder of such parcel has granted the Proponent an option to

purchase or lease such parcel upon the award by PREPA of a Contract for the implementation of the proposed project in form and substance reasonably satisfactory to PREPA;

xx. For Energy Resource proposals other than a Demand Resource proposal, the Proponent shall submit a detailed breakdown of the fixed and variable costs to operate and maintain the proposed resource in ten (10) year increments during the supply period;

xxi. Each Proponent shall submit a business continuity plan, detailed by scenario, with the aim of ensuring service continuity during all identified potential threats to the operation of the proposed resource, including the occurrence of bomb threats, war, hurricanes, tornadoes (including waterspouts), earthquakes, tsunamis, active shooters, pandemics and other threats to public health and plane crashes; and

xxii. Each Proponent must submit a summary of all legal proceedings, claims, actions, or suits against the Proponent, the guarantor, or involving the facility or site.

c. (**Virtual Power Plants**) As specified in the Final Order, quantities sought in Tranches subsequent to the first two RFP Tranches may be adjusted as necessary to account for installations of distributed generation that contribute to meeting overall quantities in the Modified Preferred Resource Plan. To that end, ~~PREPA~~the T&D Operator will support the deployment of DG resources under existing programs. In addition, each RFP will be structured such that all resources and storage amounts can be aggregates of smaller installations (also known as VPPs). As specified in the Final Order and in the Procurement Plan Resolution, VPPs are explicitly allowed and must be able to compete on fair terms. Each RFP Tranche will allow Proponents of VPPs to submit responses, with the assumption that the characteristics of the VPPs, including pricing and reliability, will be comparable to those provided on a utility scale. VPPs will be subject to the same selection criteria as other utility scale renewable energy resources except that the minimum capacity requirement will be reduced to 5 MWs, which must be spread across multiple sites with different points of electrical interconnection that do not exceed 1 MW AC of capacity at each electrical interconnection for installations to meet the minimum capacity requirement. Energy and capacity for VPPs may be sourced from existing facilities that do not currently sell such energy or capacity to PREPA. Proponents of VPPs will be responsible for all metering, SCADA, and other forms of telemetry to create the VPP. VPPs will be required to comply with applicable MTRs and interconnection standards, which will reflect the distributed nature of VPP generating and storage resources, their location on the T&D System (on distribution-level circuits) and their limited ability to provide certain services (e.g., voltage regulation). Other considerations applicable to VPPs include the following:

i. the Proponent shall source energy and capacity from VPPs aggregating only newly-installed energy resources or existing energy resources, which do not currently make available energy or capacity for dispatch by the T&D Operator;

ii. the Proponent shall install and maintain all metering, SCADA, and other forms of telemetry to establish, monitor, control and dispatch such VPP at its own cost and expense;

iii. VPPs shall comply with applicable MTRs and ~~PREPA~~T&D Operator's standards for interconnection with the T&D System;

iv. VPPs shall be capable of supplying a minimum of 5 MW of dependable capacity, which the Proponent must aggregate from multiple sites;

v. VPPs must use existing, proven technology;

vi. all VPPs other than VPPs consisting exclusively of Demand Response Resources shall satisfy the same performance requirements as this RFP requires for a utility-scale Energy Resource;

vii. the supply period for a VPP shall extend for a period of ten (10) to twenty-five (25) years from the Commercial Operation Date;

viii. VPP Proponents will be responsible for funding all required changes/additions to the distribution and transmission system required by the project;

ix. the Proponent shall demonstrate that each Energy Resource and Demand Response Resource forming part of a proposed VPP can effect capacity responses / load reductions within the response time required when the T&D Operator curtails generation or sheds load on the T&D System throughout the entire supply period. PREPA will favor VPPs incorporating Energy Resources that can provide a rapid response and/or ramp up or down in response to specific control signals. VPP Proponents should detail the full, demonstrated capability of the proposed resource;

x. the Proponent shall contractually undertake to, and demonstrate its capability to, manage all capacity dispatch and load reduction instructions, including all notices, resource participation registration and deregistration, communications, controls, equipment, and other processes required to satisfy the T&D Operator's dispatch instructions;

xi. contract prices for VPP proposals shall cover all property and local taxes and tax abatements related to such VPP; and

xii. the resiliency benefits provided by VPPs will be ~~taken into account~~considered in the evaluation of individual VPP project proposals by, among other things, accounting for potentially avoided transmission expenditures and transmission and distribution system loss savings.

Lessons learned through the solicitation of VPP resources in the Tranche 1 RFP will be applied to the procurement of VPP resources in subsequent Tranches. Data and insights obtained in the

consideration of VPP resource proposals will be used to (1) refine performance requirements (e.g., commercial terms); (2) more precisely assess the value that VPPs can provide (e.g., grid services); and (3) gauge and potentially shorten the timeline for deployment and operation of VPPs.

Proposals for VPPs must, at minimum, have the following characteristics:

i. The generation and storage resources aggregated into the VPP must be complete, commercially operable, and available to commence operation under a Grid Service Agreement with PREPA (each, a "**GSA**") within a maximum of twenty-four (24) months from the date on which PREPA and a Proponent satisfy all of the conditions precedent for the effectiveness of such agreement.

ii. VPP Proponents shall provide:

1. the contractual framework under which the Proponent would supply capacity and (if applicable) energy, as well as other grid services, to PREPA from Energy Resources owned by third parties;

2. the responsibilities of the Proponent relating to the assembly, registration, and confirmation of the status of resources to be provided by third parties;

3. certified true and correct copies of each agreement that would govern the relationship between the Proponent, as an aggregator and individual third parties committing their resources for aggregation into the VPP;

4. the manner in which the Proponent would coordinate and dispatch resources;

5. the nature of the assets, including software, servers, network communications equipment, resource control equipment, sensors and monitoring equipment required to support the dispatch of resources committed to the VPP;

6. the geographical location of each Energy Resource, and, where applicable, Demand Response Resource, forming part of the proposed VPP;

7. a description of the aggregation of the program participants, and expected generating capacity and load drop values, equipment, and technology;

8. a description of the Proponent's plans for recruiting, engaging, monitoring the performance of, and maintaining the participation of program participants;

9. for each Energy Resource forming part of a VPP, each performance penalty imposed on either the third party which owns such resource or the Proponent in association with such resource within the past five (5) years; and

10. any material actions, suits, claims, or proceedings (threatened or pending) against the Proponent, relating to each Energy Resource forming part of the proposed VPP.

4. Proposal/Contract Terms & Conditions

4.1 General

Each RFP Tranche will solicit proposals for turn-key systems that will be fully operational upon testing and commissioning. Proponents shall procure, install, and operate all transmission facilities that will be part of the Proponent's facilities, such as the interconnection line and breakers, that are necessary to interconnect the Proponent's project to the T&D System. Proponents will also be responsible for all necessary upgrades to transmission facilities required to accommodate the interconnection of the project. Equipment and real property required to support such upgrades shall be transferred to PREPA upon commissioning and the T&D System Operator will be responsible for operations and maintenance. Contracts with Proponents will obligate Proponents to provide operation, maintenance, and monitoring services for the renewable generation and energy storage resources they propose.

Proposals must meet the following requirements:

a. each Proponent may submit more than one (1) proposal if each proposal separately complies with the RFP requirements on a standalone basis;

b. the price submission set forth in each proposal to develop and construct an Energy Resource shall cover all of the Proponent's costs to (i) install, test and commission the transmission or distribution infrastructure required to connect such resource to the T&D System, and (ii) ensure that such resource complies with all Applicable Law currently in effect;

c. each Proponent shall identify all property and local taxes and tax abatements, related to its proposed project and Contract prices shall cover all such taxes;

d. proposals should demonstrate an ability to achieve commercial operation in a timeframe not to exceed twenty-four (24) months from the signing of the Contract. PREPA will also consider proposals with a guaranteed commercial operation date not to exceed thirty (30) months from signing of the Contract, but such proposals will receive a lower score in the RFP evaluation process than those proposing shorter development times;

e. for Renewable Energy Resource proposals, Proponents shall report project capacity and P50 Energy Yield for such resources during the proposed supply period;

f. prior to the date on which PREPA will sign a Contract, each Proponent shall provide evidence of its ability to provide equity funding at least equal to thirty percent (30%) of the forecasted costs to develop the proposed project by the forecasted date on which the Proponent will first draw down on loan facilities made available by lenders to the project;

g. the supply period under each Contract (i) for both utility-scale and VPP resources, may extend for a duration of up to twenty-five (25) years, and (ii) for VPP resources, extend for a minimum of ten (10) years for VPPs;

h. proposals must be site-specific;

i. each renewable energy resource proposal must qualify as a renewable energy resource;

j. the facility will comply with ~~PREPA~~the MTRs applicable to the technology;

k. proposals should identify specific point(s) of interconnection;

l. proposals should identify and include costs of any property and local taxes and tax abatements;

m. the asset must use an existing proven technology;

n. proposals should explain any identified environmental liabilities (e.g., potential site remediation requirements);

o. proposals should identify any material actions, suits, claims, or proceedings (threatened or pending) against the Proponent;

p. the financing plan shall include either the Proponent's or guarantors' senior unsecured debt and/or corporate issuer ratings documentation from Fitch, Moody's and Standard & Poor's showing the name of the rating agency, the type of rating, and the rating of the Proponent or guarantor; and

q. production forecasts for renewable energy facilities and performance guarantees shall be subject to performance tests and remedies such as liquidated damages to be negotiated with PREPA. Proposals should provide supporting energy production reports (PVsyst, wind resource assessment, hydro assessment, etc.) documenting assumptions used in the production forecasts.

Each RFP Tranche will include draft Contract templates for a Solar PPOA, ITC Compliant ESSA, Standalone ESSA, and GSA each as defined in Section 4.3 (*Final Proposal Version of Contracts*).

4.2 Contract Exceptions

Following its delivery of a Notice of Intent to Respond, each responding Proponent should (a) review the preliminary template version of the relevant Contract set forth in the Appendices of the RFP, and (b) submit a revised version of such Contract that shows all of the material changes proposed by such Proponent in blackline form together with a brief explanation of the rationale for each such change as a comment linked to the relevant provision containing such change (the "**Contract Exceptions**"). Proponents are encouraged to minimize the number of changes to a Contract template they suggest. The Contract Exceptions need not include changes related to the contextualization of the Contract for

such Proponent's specific project proposal(s), which will be done during the final negotiation of a Contract with the Proponents of selected proposals.

4.3 Final Proposal Version of Contracts

Upon receipt of Proponents' Contract Exceptions, the Evaluation Committee will review and assess all such proposed exceptions, and prepare and issue to all Proponents a final form version of each Contract template, that takes into account in each case the Contract Exceptions but only to the extent that the Evaluation Committee deems this necessary in its sole discretion (each, a "**Final Proposal Version of Contract**"). Appendices 3-6 of this Procurement Plan set forth the Final Proposal Version of Contract for (a) the Power Purchase & Operating Agreement for Solar PV Facilities (the "**Solar PPOA**"), (b) the Energy Storage Services Agreement for ITC Compliant Energy Storage Resources (the "**ITC Compliant ESSA**"), (c) the Energy Storage Services Agreement for Standalone Energy Storage Resources (the "**Standalone ESSA**"), and (d) the GSA for VPP Resources, in each case for the Tranche 1 RFP. Each Proponent should submit their proposals in response to an RFP on the assumption that the relevant Final Proposal Version of Contract shall govern the terms and conditions under which such Proponent will design, construct, install, own, operate and maintain its proposed project as well as make available renewable energy and/or energy storage capacity and related services (as applicable) for sale to PREPA. To the extent that a Proponent intends to submit a proposal for a Renewable Energy Resource other than solar PV technology, PREPA should develop and issue a Contract template that accommodates such other resource as part of the package of documents representing the Final Proposal Version of Contracts.

4.4 Interconnection Studies; Interconnection Agreement Negotiations

During the proposal evaluation process, PREPA will arrange to have interconnection studies performed and system upgrade cost estimates prepared as follows:

a. a feasibility study for short-listed candidate projects will be performed to develop order-of-magnitude interconnection and T&D System upgrade cost estimates;

b. Proponents will be allowed to adjust pricing to reflect Feasibility Study results;

c. Feasibility Study results will influence the selection of a final short-list of projects, and may be iterative; and

d. PREPA will require completion of a System Impact Study followed by a Facilities Study for short-listed projects.

The Proponent shall bear the interconnection and system upgrade study costs. Additionally, the Proponent will be responsible for the design, procurement ~~and~~, installation, commissioning, and acceptance testing of all equipment shown by these studies to be necessary to interconnect the Proponent's proposed facility to the T&D System. PREPA and the Proponent shall execute an Interconnection Agreement that reflects the study results in coordination with the execution of the

Contract. PREPA expects to use a *pro forma* interconnection agreement, wherein the primary points of negotiation will be related to the physical interconnection requirements.

4.5 Effectiveness of Contracts

Subject to Joint Regulation 8815 and relevant directives of the FOMB, each Contract executed by PREPA shall only enter into full force and effect upon approval from PREPA's Executive Director, PREPA's Governing Board, the Energy Bureau and the FOMB.

5. Procurement Scale / Type

The Final Order requires flexibility in the award of renewable energy contracts. As stated in the Final Order, *"[t]he Procurement Plan must allow for PREPA to choose to select resources for PPOAs in excess of the 1,000 MW minimum (solar PV or energy- equivalent other renewable) or 500 MW minimum (battery energy storage, 4-hour duration equivalent) for either or both renewable energy and battery storage capacity if cost-effective economically and if installation feasibility allows.The Procurement Plan may contemplate contracting a lower quantity of resources than the minimum solicitation amount, depending on the responses received."*

PREPA will strive to contract for the minimum quantities of renewable and energy storage resources identified in the Final Order, and if circumstances warrant, will present opportunities to its Governing Board and the Energy Bureau, in accordance with Regulation 8815, to exceed the specified minimum quantities. Further, if transmission studies indicate that significant system upgrades are required to support the Tranche 1 and 2 RFPs, PREPA will communicate these costs and upgrades to the Energy Bureau.

6. Planned Implementation Timeline

As the Energy Bureau has directed and as described in Section 3.3 (*Specific RFP Requirements*), each RFP Tranche will solicit energy resource proposals that can reach commercial operation within twenty-four (24) months of the execution date each Contract. PREPA may consider proposals with commercial operation commencement dates not to exceed thirty (30) months from the Closing Date, but such proposals will be disfavored; shorter development times will be given a higher score in the RFP evaluation process.

7. RFP Schedule

As described in Section 1.3 (*Procurement Process*), PREPA has developed, with the Energy Bureau's guidance and approval, a Procurement Plan to comply with the Modified Action Plan for renewable generation and energy storage resources to achieve compliance with the RPS. In accordance with Energy Bureau directives, PREPA plans to issue a series of RFPs (RFP Tranches) for the provision of renewable energy in support of attainment of Act 82's RPS goals, and for the provision of battery energy storage capacity in quantities needed to meet PREPA's peak load requirements and to satisfy requirements for the integration of renewable energy generation.

PREPA issued the Tranche 1 RFP on February 22, 2021. It expects to issue Tranche 2 on ~~June~~August 30, 2021. The expected timeline of the release of subsequent RFPs will be six (6) month intervals to be issued in sequence (i.e., every six (6) months, over the next three (3) years for a total of six (6) tranches of RFP releases). The procurement of resources may be front-loaded within the five-year period ~~in order~~ to allow time for construction, interconnections, and commissioning within the five-year Action Plan.

8. Adjustments for Distributed Generation (DG)

As specified in the Final Order, quantities of resources sought subsequent to the first two RFP Tranches may be adjusted if or as necessary to account for installations of DG that contribute to meeting overall quantities specified in the Modified Preferred Resource Plan, and for resources that PREPA identifies and contracts in excess of the minimum amounts required in each of the earlier RFPs. For purposes of the Procurement Plan, DG resources are resources added to the system outside of the RFP process.

PREPA will support the deployment of distributed generation resources under existing programs (e.g., net metering). In addition, PREPA will structure the RFPs issued under this Procurement Plan such that all resources and storage amounts can be aggregates of smaller installations (that is, VPPs are explicitly allowed and will be able to compete on fair terms). As long as the T&D Operator has visibility into the VPP, and the characteristics of the distributed resource, including pricing and reliability, are comparable to resources provided on a utility scale, there is no reason VPPs cannot compete with utility-scale resources for provision of energy and storage capacity.

9. Evaluation Parameters

9.1A General

The Final Order and the Procurement Plan Resolution specified certain evaluation parameters to be employed in evaluating responses to an RFP. Proposals made in response to each RFP issued under this Procurement Plan shall indicate the proposed RFP Tranche, and shall address at least the following evaluation parameters:

a. Least-cost, energy basis (measured based on ~~the basis of~~ levelized cost of energy).

b. Least-cost, capacity basis. The proposal should specifically describe the manner in which the project will provide ancillary services (e.g., frequency response, operating reserve, reactive support) in addition to capacity to meet peak load.

c. Recognition of T&D System loss benefits associated with the selection of VPP and DG bids.

d. Recognition of the potential that proposed resources will provide additional resiliency benefits and/or will permit avoidance of incremental T&D System costs.

e. Estimated timeline for completing installation of resources, with faster installation timelines to be accorded preference.

f. Technical superiority of location for interconnection purposes.

g. Adherence to locational preferences closer to load.

h. Community impacts and acceptance of proposed resource.

i. Locational diversity around the island of Puerto Rico in proportion to load, within each MiniGrid region, and especially in MiniGrid regions exhibiting relatively less existing capacity in proportion to existing peak load.

9.1B Minimum Requirements of RFP Response

a. (**General**) As a minimum, proposals will be expected to clearly identify ~~clearly~~ their pricing structure, estimate the project's connection costs and impacts upon the existing T&D System, and provide a timeline for completing installation as described herein.

b. (**Technical and Operational Capabilities Minimum Criteria**) Proponents shall demonstrate the following:

i. Ownership / establishment by Proponent (or, for a Proponent consortium, at least one (1) member of such consortium) of one (1) or more existing renewable energy and/or energy storage resources, including VPPs, (each, a "**Reference Project**"), with each Reference Project satisfying the following requirements:

1. For renewable energy and/or energy storage resources other than VPPs:

A. experience developing, financing, constructing, and operating such project;

B. compliance with the initial development timeline for such project;

C. utilization of cost-effective technology;

D. installed capacity of at least 20 MW;

E. utilization of technology similar to that which the Proponent intends to submit in its proposal under this RFP; and

F. direct or indirect ownership by the Proponent or its Affiliate of at least thirty-five percent (35%) of the legal entity which directly owns such Reference Project.

2. For energy storage resources, experience developing and assembling the proposed system for such resource in at least one (1) commercial (non-demonstration) grid-connected installation;

3. For VPPs:

A. experience aggregating multiple generation and/or storage resources; and

B. installed VPP capacity either (i) currently in commercial operation, supplying capacity and energy to one (1) or more purchasers, or (ii) contractually committed to supply capacity and energy prior to the second anniversary of the issuance of this RFP;

ii. For each existing energy and/or energy storage project designated as a Reference Project, a certification confirming no material or sustained violation of Applicable Law, relating to any environmental matter involving the development, construction or operation of such project during the past three (3) years;

iii. For each Reference Project, a certification confirming such project's compliance with energy-related policies, practices, and regulations and all other Applicable Law during the past three (3) years; and

iv. For each Reference Project, a certification confirming no record of Unsatisfactory Performance.

Each RFP shall require that all Proponents satisfy the minimum eligibility requirements set forth in Section 3.2 of the Tranche 1 RFP.

c. (**Interconnection Requirements**) PREPA will view a Proponent's T&D System interconnection plan as a crucial factor in evaluating the delivery risk associated with each proposal submitted in response to an RFP. ~~PREPA~~The T&D Operator shall indicate to Proponents, to the best of its ability, the extent to which any transmission or distribution locational limitations could affect the cost and feasibility of interconnecting utility scale renewable or energy storage projects at various points on the T&D System. It will also, insofar as ~~is~~ practicable, identify limitations that could limit the location or geographic dispersion of resources to be aggregated as VPPs. Proponents must consider the following factors in any proposal submitted pursuant to any RFP Tranche:

i. The physical limitations on the delivery of energy to the T&D System.

1. Utility-scale energy resources (i.e., Energy Resources other than VPPs) can interconnect to the transmission systems at a voltage level of at least 38 kV.

2. the capacity of an energy resource connecting to the 38 kV system cannot exceed 25 MW.

3. the power generation / discharge capacity of a renewable energy resource and/or energy storage resources that will form part of a VPP at each point of

interconnection to the T&D System cannot exceed 1 MW and shall comply with the applicable interconnection regulations; and

4. for all VPP resources proposals, PREPA will give a preference to those resources connected to 13.2 kV feeders, the highest distribution voltage in Puerto Rico.

ii. Projected system upgrade costs required by the additional energy injected onto the T&D System by the proposed resource.

iii. Rights-of-way necessary to construct the transmission lines and interconnection facilities needed to connect the proposed resource to the T&D System.

Proponents (other than those proposing a VPP resource) shall (i) provide a detailed T&D System interconnection plan with their proposals, and (ii) ensure that the proposed transmission system or distribution system interconnection plan satisfies all applicable MTR requirements, as well as relevant requirements of Regulation 8915 or Regulation 8916, as applicable.

Each Proponent should exercise its best efforts to provide an accurate estimate of the Proponent's Estimated Interconnection Costs. Following PREPA's selection of proposals for further consideration in Phase II, ~~PREPA~~the T&D Operator will conduct a Feasibility Study on such projects to assess order-of-magnitude interconnection and required T&D System upgrade costs ("**PREPA's Estimated Costs**"). ~~PREPA~~The T&D Operator will cluster such proposals for interconnection studies. Such studies will analyze the impacts of integrating a group or cluster of Energy Resources at specific locations when ranking or selecting proposals for further consideration, in particular with regard to assessing any required network upgrades or the potential to utilize shared interconnection facilities across multiple projects. Following selection of proposals for Phase III, System Impact Studies followed by Facility Studies will be completed for final short-listed projects.

While each Proponent shall have the responsibility to fund all of the T&D System interconnection costs under the Contract, PREPA will permit a Proponent to adjust its price proposal in the Contract to the extent that PREPA's Estimated Costs exceed the Proponent's Estimated Interconnection Costs for purposes of allowing a Proponent to recover such excess costs through the Contract price. Where the Proponent's Estimated Interconnection Costs exceed PREPA's Estimated Costs, ~~the Relevant Authority~~PREPA will correspondingly require a downward adjustment of the proposed Contract price to reflect a Proponent's need to recover interconnection costs lower than the Proponent's Estimated Interconnection Costs.

d. (**Minimum Technical Requirements for Projects**) The ~~Relevant Authority~~T&D Operator will prepare MTRs describing minimum technical requirements required for each technology group connected to the T&D System and include the MTRs in the RFP for:

i. Utility-Scale Solar;

ii. Wind; ~~and~~

iii. Energy Storage~~.~~; and

~~For VPP proposals, the RFP for Tranche 1 and Tranche 2 will invite Proponents to submit draft versions of MTRs together with their proposals. On the basis of this input, the Relevant Authority will prepare standard form MTRs for VPPs for issuance during Tranches 3 through 6~~

iv. VPPs.

e. (**Financial Minimum Criteria**)

i. Financial Capacity of Team: Proponent must demonstrate adequate financial wherewithal to complete the development of its proposed project.

ii. Financial Capability of Team: Proponent must demonstrate adequate financial wherewithal to fulfill the terms of the Contract and Interconnection Agreements.

9.2 Phase I Quality Control Review

As described in Section 1.3 (*Procurement Process*), Joint Regulation 8815 establishes a three-phase selection process: (a) quality control review, (b) the Evaluation Committee review and recommendation, and (c) Contract negotiation. The purpose of the quality control review is to determine which proposals satisfy the minimum requirements outlined in an RFP. ~~The Relevant Authority~~PREPA will notify each Proponent whether its proposal passed the Phase I quality control evaluation and whether such proposal will advance to Phase II.

~~The Relevant Authority~~PREPA's quality control review will use the information supplied by the Proponents in each proposal. Each Proponent shall provide the information listed in the Proposal Completeness Checklist by the Proposal Submission Deadline to be included in the evaluation.

During the quality control review, ~~the Relevant Authority~~PREPA will determine which proposals satisfy the minimum requirements outlined in the RFP. ~~The Relevant Authority~~PREPA (i) will reject any proposal that fails to comply with the Financial and No Disbarment Criteria, and (ii) reserves the right to reject any proposal for any reason whatsoever regardless of whether such proposal complies with such requirements in accordance with the RFP, in each case without scoring, and any such proposal will not advance to the next phase. ~~The Relevant Authority~~PREPA will notify each Proponent whether its proposal(s) passed the quality control review and whether such Proponent will advance to Phase II.

9.3 Phase II

~~The Relevant Authority~~PREPA will publish a list of median price proposals for each technology group that will advance to Phase II on its website. Each selected Proponent shall deliver to ~~the Relevant~~

~~Authority~~PREPA the Proposal Security within seven (7) business days of such Proponent's receipt of notification of such selection.

During Phase II, the Evaluation Committee will review and evaluate each proposal in accordance with the selection criteria. For the Procurement Plan, the Evaluation Committee will likely select more than one Proponent. Phase II will be divided into a qualitative evaluation and a pricing evaluation. The Evaluation Committee will assign weights for each of the price-related and qualitative criteria. The Evaluation Committee may select one or more proposals to advance to Phase III.

a. (**Phase II – Qualitative Evaluation**) In connection with its qualitative evaluation, ~~the Relevant Authority~~T&D Operator will conduct Feasibility Studies and independently model interconnection and system upgrade costs, where possible analyzing clusters of potential projects, based on an initial selection of RFP responses that ~~the Relevant Authority~~PREPA ranks high on its list of projects eligible for contracting. In addition, ~~the Relevant Authority~~T&D Operator will evaluate the extent to which multiple projects have proposed or can be made to share the same interconnection facility, if reasonable and applicable for any given set of proposals. ~~The Relevant Authority~~PREPA shall give priority to those proposals that provide resource installations at or technically close to the indicated priority locations. ~~The Relevant Authority~~T&D Operator will evaluate the impact of each proposed resource on the T&D System and will endeavor to notify Proponents whose proposals will require additional network upgrades. The Proponents' proposal should include the Proponent's Estimated Interconnection Costs. ~~The Relevant Authority~~PREPA's review will include:

   i. verification that a Proponent has provided all information listed in the Proposal Completeness Checklist;

   ii. organization of the proposals into groups according to (1) the proposed technology, and (2) groups that will allow for distributed generation benefits to be recognized for resiliency and for avoided T&D System cost purposes;

   iii. a review of the information supplied by the Proponent in the RFP proposal data forms;

   iv. development of a qualitative score according to the information supplied by each Proponent for the proposed type of Energy Resource and technology, based on the qualitative evaluation criteria specified below;

   v. calculation of an initial qualitative score according to the information supplied by the Proponent for the proposed technology. The qualitative score will be based on technical viability, development status, developer experience, and financing plan and qualifications. The Evaluation Committee will prefer projects with faster installation timelines, and those with better technical locations for interconnection purposes;

   vi. calculation of the composite Phase II score from the weighted qualitative score; and

vii. development of a list of preferred proposals from the highest scoring proposals within each technology category.

The Phase II qualitative evaluation will also consider the following criteria:

Table 0-3 — Phase II Qualitative Criteria

Item	Category / Criteria
A	Technical Viability
B	Development and Schedule Risk
C	Permitting Risk
D	Environmental Impacts
E	Contractor Experience
F	Financing Plan and Qualifications
G	T&D System Integration
H	Site Control
I	Community Impacts and Acceptance
J	Operations and Maintenance Plan
K	Additional Benefit of VPP
L	Contract Exceptions (if applicable)

The Phase II qualitative evaluation will use the information supplied by the Proponent in the proposal data forms and templates contained in the RFP Appendices, considering the following criteria:

i. (**Technical Viability**) The Evaluation Committee will review each proposal for conformance to the technical requirements in the RFP including compliance with appropriate PREPA MTRs.

ii. (**Development and Schedule Risk**) The Evaluation Committee will assess the completeness and feasibility of the proposed project implementation and evaluate the likelihood of meeting the milestone dates and expected performance.

iii. (**Permitting Risk**) The Evaluation Committee will examine the Proponent's permitting plan and schedule and the likelihood that the Proponent can obtain required permits. This examination will consider whether the Proponent has identified the relevant permits and approvals necessary for construction and operation of the proposed project.

iv. (**Environmental Impacts**) The Evaluation Committee will assess the project's overall impact on the environment, whether the project will likely result in potentially significant environmental impacts, and the degree to which potential impacts can be satisfactorily mitigated. This will include an examination of any known sensitive environmental features on or adjacent to the site such as waterways, wetlands, floodplains, archaeology and architectural resources, historic properties, degraded ambient air quality, contamination, ongoing hazardous materials remediation, threatened and endangered species, airports, residences or other sensitive noise receptors, and a discussion of storm-resistant features and other reliability features to determine the suitability of the project at the proposed site location.

v. (**Experience**) The Evaluation Committee will evaluate the Proponent's experience and success in developing projects of a design and size similar to the proposed project.

vi. (**Debt Financing Plan and Qualifications**) The Evaluation Committee will evaluate the Proponent's proposed financing plan and experience in successfully financing projects of a similar size and complexity. The evaluation will also determine if the Proponent has any financing commitment for the project that will be provided by a creditworthy entity that is likely to be acceptable in form and substance to ~~the Relevant Authority~~PREPA.

vii. (**T&D System Integration**) The project's technical characteristics will be evaluated to identify those projects that address PREPA's system needs as defined in the RFP and the IRP. The evaluation team will evaluate risks to reliability (voltage control, reactive capability, protection coordination, frequency response, etc.) and deliverability to the T&D System, as well as the potential for avoidance of T&D System costs and enhancement of system resiliency associated with particular project locations or configurations.

viii. (**Site Control**) The Project Committee will assess whether a Proponent owns or leases the project site (and, in the case of a lease, will consider the alignment of the term of such lease with the term of the applicable Contract) or otherwise has the ability to obtain control over, and access to, such site prior to the occurrence of the "Guaranteed Construction Start Date" set forth in the template Contract. This evaluation criterion does not apply to proposals for VPPs.

ix. (**Community Impacts and Acceptance**) The Evaluation Committee will review the proposal for potential socioeconomic benefits and harm to the community. The committee will assess known community support for or opposition to a Proponent's project, including the Proponent's plan to manage community relations.

x. (**Operations and Maintenance Plan**) Proponents are asked in Appendix C of each RFP to provide information about their operations and maintenance plan, as applicable, including contract term, scope, experience, and pricing. Proponents proposing a VPP as a resource should provide detailed information concerning their plans to identify, aggregate and contract for individual generation and storage resources that will be dedicated to such resource.

xi. (**Additional Benefit of VPPs**) The Evaluation Committee will consider and evaluate the additional benefits that distributed resources procured as part of a VPP may provide, including (i) the potential to avoid transmission and distribution costs (including T&D System losses), (ii) the possible enhancement of local resiliency by serving critical or priority loads, and (iii) the potential for completion of any required installation in shorter periods, or more immediate availability as a capacity resource based on an existing installation, than would be true of a new-build project.

During the screening process, the Evaluation Committee may request additional information or clarifications from the Proponents. These requests, and any communications with a Proponent during the evaluation process, shall not be construed as contract negotiations. Requests made by the Evaluation Committee for additional information or clarifications will be in writing via email. Proposals with outstanding requests beyond the response period may be removed from consideration and further evaluation.

At the conclusion of the Phase II qualitative evaluation, ~~the Relevant Authority~~PREPA will notify Proponents whether their proposals will advance for further evaluation of pricing proposals.

b. (**Phase II – Pricing Evaluation**) The Phase II evaluation will determine the cost effectiveness of the shortlisted proposals. This detailed pricing evaluation will include and reflect information received in response to any clarifying questions, interviews, site visits, and other due diligence, and will consider the all-in costs that each proposal will likely impose on Ratepayers, to the extent that the evaluation team can quantify such costs. Such all-in costs will include:

i. contract charges, including pass through costs;

ii. costs for required transmission reinforcements;

iii. costs for required distribution reinforcements;

iv. system impacts including, but not limited to, impact on transmission transfer capability, and PREPA capacity requirements and deliverability; and

v. LCOE or, in the case of energy storage proposals, LCOS.

The LCOE or LCOS, as applicable, is defined as the present value of the estimated annual costs of a proposal or cost component of a proposal over the evaluation period (i.e., the proposed Contract term) divided by the equivalent present value of the energy (or capacity) that resource is estimated to produce over the same period. Levelized cost is expressed in $/MWh or $/kW-year.

Paragraph (b) (*Pricing Evaluation*) of Section 6.2 (*Phase II: Evaluation Committee Review and Recommendation*) of the RFP template sets forth the other pricing-related factors the Evaluation Committee will consider in the final pricing assessment during Phase II evaluation.

The Evaluation Committee will give preference in its evaluation to Proponents whose pricing proposals consider the future emergence of PREPA from protection under PROMESA and contain a price adjustment mechanism that would reflect PREPA's improved credit quality at such time. PREPA anticipates that Puerto Rico's emergence from Title III bankruptcy will make PREPA a more attractive contract counter-party, that project developers will factor this into their cost of capital calculations and that they will incorporate the results in their project's LCOE or LCOS. Proponents should identify any information they believe they will need from PREPA ~~in order~~ to conduct a pricing sensitivity analysis around Puerto Rico's pre- and post-emergence from Title III bankruptcy.

Following completion of the Phase II pricing evaluations, the Evaluation Committee will recommend proposals to proceed with Phase III contract negotiations as described in Section 1.3 (*Procurement Process*). Selection of a proposal for contract negotiations shall not be construed as a commitment to execute a Contract. During the period between ~~the Relevant Authority~~PREPA's selection of proposals for Phase III evaluation and the date of execution of any Contract, ~~the Relevant Authority~~PREPA will conduct additional due diligence on the proposals. This may include, but not be limited to, onsite visits, management interviews, environmental, legal, and regulatory due diligence, detailed engineering assessments, and facility dispatch modeling.

10. Other Considerations

The Tranche 1 RFP solicits proposals for at least 1,000 MW of renewable energy and 500 MW of battery storage capacity resources. Greater quantities of renewable generation and energy storage resources may be selected if Proponents submit cost-effective energy resource proposals with feasible installation plans, thus accelerating the level of installations that would otherwise arise from subsequent RFPs. Energy storage bids can include MW and MWh from existing resources currently not contracted to PREPA, if they meet technical requirements for visibility, control, and other related technical needs.

This Procurement Plan treats DG renewable resources as resources built and operated by PREPA's customers which offset demand and, for the most part, benefit from PREPA's net-metering programs. VPPs may aggregate DG, renewable resources, and energy storage resources such that the VPP behaves, from the utility's perspective, as a single renewable energy resource. Proponents may submit VPP resource proposals that aggregate smaller installations, including existing facilities. VPP

Proponents may participate in PREPA's net-metering programs to the extent that they elect this option, in accordance with the discussion of this subject set forth in Appendix A to the Procurement Plan Resolution, at item VII. 2.

Lessons learned in the solicitation of VPP resource proposals in the initial RFP Tranches will inform the procurement of VPP resources in subsequent RFP Tranches. In keeping with the Energy Bureau's directive in this regard, PREPA anticipates that data, insights and lessons learned from its conduct of the initial RFP will be used in subsequent Tranches to (a) set realistic performance requirements (e.g., commercial terms); (b) assess the value that VPPs can provide (e.g., grid services); and (c) better gauge and potentially shorten the timeline for deployment and operation of VPPs based on its experience and best practices.

~~PREPA has commissioned a renewable generation integration study in order to~~ As T&D Operator, LUMA will also assess the current capability of PREPA's grid to accommodate increased levels of renewable generation capacity. ~~This study addresses the penetration of the maximum PV generation and energy storage system required to comply with the RPS guidelines of 40% renewable energy penetration by 2025 and includes both electrical and production cost/economic dispatch analyses. It also identifies, at a high level, preferred interconnection locations on T&D System based on the current capacity of the system and needed electrical system upgrades, in addition to providing a modeling basis for Feasibility, System Impact, and Facility Studies. The relevant findings from the renewable generation integration study will be made available to assist Proponents with their proposals. Thus far, the ongoing renewable generation integration analysis indicates that for the existing grid, the maximum acceptable penetration of renewable generation, given the current topology of the power grid without any additional electrical support, would be around 650 MW (existing plus new projects) before major system upgrades must be undertaken.~~

Each RFP will include an attachment that lists those substations where interconnection is considered feasible for utility scale installations, where it is technically possible to determine this. The list will furnish (a) explanatory caveats where uncertainties exist as to the range of potential interconnection capacity, and (b) the maximum quantities of renewable energy or battery storage system capacity that can be connected at each of these locations, for the purpose of indicating to developers where feasible locations are. ~~The Relevant Authority~~PREPA is not bound by this information to accommodate any given MW amount at any given connection point, and it should not be construed as a limitation on the maximum amount of renewable energy or battery storage system MWs that can be connected to the grid.

Priority locations to be identified in the RFP and accompanying materials will include locations for utility scale and distributed generation renewable energy projects with energy storage. ~~The Relevant Authority~~PREPA will strive to identify those locations at which interconnection of required energy and storage resources will enhance reliability and can be accomplished quickly.

~~The Relevant Authority~~PREPA will reflect in its procurement process explicit performance incentive metrics related to the timeliness and effectiveness of ~~the Relevant Authority~~PREPA's procurement and interconnection of resources consistent with metrics reporting requirements being developed under Case No. NEPR-MI-2019-0007.

Appendix 1. Joint Regulation 8815

Appendix 2. RFP Template

Appendix 3. Solar PPOA

Appendix 4. ITC Compliant ESSA

Appendix 5. Standalone ESSA

Appendix 6. GSA

Document comparison by Workshare Compare on Friday, July 23, 2021 7:51:09 PM

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Description	Procurement Plan_(Update No. 2_PREB Submission Version).DOCX
Rendering set	Standard

Legend:	
Insertion	
~~Deletion~~	
~~Moved from~~	
Moved to	
Style change	
Format change	
~~Moved deletion~~	
Inserted cell	
Deleted cell	
Moved cell	
Split/Merged cell	
Padding cell	

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Moved to	4
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Format changes	0
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