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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:** Motion to Submit Draft Copy of GSA in Compliance with the June 13, 2022 Order

# MOTION TO SUBMIT DRAFT COPY OF GSA IN COMPLIANCE WITH THE JUNE 13, 2022 ORDER

#### TO THE HONORABLE PUERTO RICO ENERGY BUREAU:

**COMES NOW** the Puerto Rico Electric Power Authority ("PREPA"), through its counsel of record, and respectfully submits and prays as follows:

- 1. On August 24, 2020, the Energy Bureau of the Public Service Regulatory Board of Puerto Rico (the "Energy Bureau") issued the IRP Final Order concerning PREPA's Integrated Resource Plan ("IRP"). The IRP Final Order places significant renewable energy production requirements on PREPA, including a requirement that, by 2025, PREPA source at least 40% of the energy production connected to PREPA's transmission and distribution system (the "T&D System") from renewable energy generation.
- 2. Pursuant to applicable law and the IRP, PREPA has an obligation under Puerto Rico law and the direction of the Energy Bureau to procure renewable generation, energy storage and virtual power plant resources on an urgent basis. In its *Resolution and Order* addressing PREPA's Draft Procurement Plan issued on December 8, 2020 (the "December 8 Order"), the Energy Bureau directed PREPA to "procure at least 1,000 MW of renewable energy resources and a minimum of 500 MW of battery storage resources with an effective

- duration of four (4) hours" in Tranche 1. Of this quantity of energy storage capacity, the Energy Bureau directed PREPA to ensure that at least 150 MW "are distributed battery storage resources (to be operated as [Virtual Power Plants ('VPPs')]."
- 3. In compliance with this directive, on February 22, 2021, PREPA conducted a competitive procurement process through an RFP to select one or more developers to (i) design, install, interconnect, test, commission, operate and maintain VPPs, among other resources, and (ii) enter into agreement(s) with PREPA for the same. PREPA received three proposals for VPPs, but only two of these proposals complied with the RFP requirements.
- 4. After various procedural milestones, on January 12, 2022, PREPA submitted a document titled *Motion in Compliance with the December 28 Order Submitting 167 MW of VPP Resources and Reiterating Request for Confidential Meeting and Extension of Time* ("January 12 Motion"). In this January 12 Motion in part, PREPA provided information to the Energy Bureau on the status of Virtual Power Plant Grid Service Agreements ("GSAs") and pending issues. In the January 12 Motion PREPA reiterated the request for a confidential meeting and filed drafts of Bespoke Contracts for VPP Resources ("Draft GSAs") with two VPP Proponents.
- 5. On March 1, 2022, PREPA filed a document titled Memorandum of Law in Support of Request for Confidential Treatment of Attachment A ("March 1 Memorandum"). The March 1 Memorandum included as Attachment A, filed under seal, a document titled Informative Motion Regarding Status of VPP Contract Negotiations and Delays in Finalizing Form of Interconnection Agreement ("March 1 Motion").
- 6. Through the March 1 Motion, PREPA provided an update on the status of PREPA's discussion regarding the VPP Proponents and with representatives of LUMA regarding

- a potential significant delay regarding the Interconnection Agreement. The March 1 Motion included as Exhibit A, on a confidential basis, a Bespoke GSA as it stood at the time with one of the VPP Proponents.
- 7. On March 17, PREPA filed a document titled Memorandum of Law in Support of Request for Confidential Treatment of Attachment A ("March 17 Memorandum"). The March 17 Memorandum included as Attachment A, filed under seal, a document titled Informative Motion Identifying Concerns Regarding Pricing and Certain Commercial Terms Offered by Tranche 1 VPP Project Proponents and Request for Confidential Meeting to Discuss Selection of Tranche 1 VPP Proposals ("March 17 Motion"). The March 17 Motion provided an update on the status of the two VPP Proponents and the finalization of the GSA's.
- 8. On April 28, 2022, PREPA submitted a document titled *Memorandum of Law in Support of Request for Confidential Treatment of Attachment A* ("April 28 Memorandum"). The April 28 Informative Motion included responses to the Energy Bureau questions from the April 11 Resolution and requested approval of four (4) utility-scale BESS projects totaling 240 MW and one (1) VPP resource totaling 17 MW.
- 9. In response to the April 28 Memorandum as well as previous filings, the June 13 Order entered by the Energy Bureau approved PREPA's request for authorization to finalize negotiations with the 17 MW VPP provider based on the record provided by PREPA of the proponent's ability to make the resource available for reasonable amounts of time and at costs comparable to those seen in the utility-scale resource proposals.
- 10. At the time the Energy Bureau determined "that the larger VPP proposal's failure to be

available for sufficient periods of time excludes it from reasonable consideration as a capacity resource in Tranche 1 given its offered pricing." The Energy Bureau further stated that it was "mindful that VPP resources can be beneficial to the system even at lower levels of availability, and even at higher per unit costs than utility-scale battery resources" and that it "anticipates that future procurement tranches that include solicitation for VPP resources will contain options for those resource offerings that will better accommodate flexible availability parameters and the comparative evaluation of those offers." The Energy Bureau required that PREPA present the final GSA for final approval no later than ten (10) days after finalizing such negotiations.

- 11. In compliance with the June 13 Order, the RFP Evaluation Committee conducted negotiations with and reached an agreement on the form of a VPP GSA for 17 MW with SunRun PR Operations LLC, a limited liability company owned and controlled by SunRun, Inc. PREPA management supported the decision of the RFP Evaluation Committee to recommend that the PREPA Governing Board approve PREPA's finalization and execution of this GSA. The PREPA Governing Board approved the GSA on October 26, 2022, and PREPA, LUMA and the Resource Provider finalized certain minor drafting points on November 2, 2022. The table set forth in **Annex A** summarizes certain key features of the GSA.
- 12. The selected GSA allows the development of Puerto Rico's first ever VPP, an achievement to be lauded, without overburdening the grid system (given the relatively small capacity of 17 MW) or PREPA's finances (based on annual costs of approximately \$1.8 million, a comparably short agreement duration of ten years, and the opportunity to renegotiate prices and services at year five). PREPA management essentially views this as a prototype system

which will allow PREPA to begin integrating VPPs, learn their requirements and operational impact and prepare for future RFPs of much larger VPP resources to meet the Energy Bureau's longer-term requirements consistent with the December 8 Order.

13. PREPA management notes that this VPP will not offer the same functionality as physical thermal or renewable power plants. It provides a demand shifting function from peak hours to off-peak hours (two defined 4-hour windows) through the combination of a Demand Build Service and a Demand Reduction Service, which PREPA can call on 260 cycles per year. The VPP does not provide ancillary services or standby, dispatchable capacity 24 hours a day. PREPA must use the services provided for the defined periods each day or pay the monthly fee anyway (i.e., \$4.50 per kW-Month for each service totaling \$9.00 per kW-Month), subject to standard and customary exceptions similar to PREPA's power purchase and operating agreements and energy storage service agreements in the RFP. All of that said, PREPA management believes this VPP provides a good test case to introduce VPPs to the grid system and set a cost-effective benchmark for future RFPs, and notes that it may negotiate additional services from the VPP in the future once PREPA and LUMA have completed the installation of a distributed energy resource management system to allow more automated dispatch and monitoring of the VPP.

WHEREFORE, for the reasons stated above, PREPA respectfully requests that the Energy Bureau APPROVE the draft of the GSA set out in Exhibit A in compliance with the June 13 order.

#### RESPECTFULLY SUBMITTED.

In San Juan, Puerto Rico, this 2nd day of November 2022.

/s Maraliz Vázquez-Marrero Maraliz Vázquez-Marrero mvazquez@diazvaz.law TSPR 16,187

/s Katiuska Bolaños-Lugo Katiuska Bolaños-Lugo kbolanos@diazvaz.law TSPR 18,888

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#### **CERTIFICATE OF SERVICE**

It is hereby certified that, on this same date, I have filed the above motion with the Office of the Clerk of the Energy Bureau using its Electronic Filing System at https://radicacion.energia.pr.gov/login, and a courtesy copy of the filling was sent to LUMA through its legal representatives at margarita.mercado@us.dlapiper.com and laura.rozas@us.dlapiper.com.

In San Juan, Puerto Rico, on this 2nd day of November 2022.

## ANNEX A

## **KEY FEATURES OF GSA**

| Feature                           | GSA Requirement  |  |  |
|-----------------------------------|--|--|--|
| Guaranteed Capability             | 17 MW  |  |  |
| Services                          | Demand Build Service (10:00 – 14:00 (Puerto Rico time))  |  |  |
|                                   | Demand Reduction Service (18:00 – 22:00 (Puerto Rico time))  |  |  |
| Annual Cost                       | ~\$1.836 million   |  |  |
|                                   | Renegotiation at year 5  |  |  |
| MTRs                              | Compliance with MTRs prepared and approved by LUMA   |  |  |
| Metering                          | Inverter-based with requirements for accuracy, data reporting and data verification  |  |  |
| Capacity Payments                 | Payment by PREPA for capacity, which Resource Provider makes available, but PREPA cannot take as a result of:  |  |  |
|                                   | 1. Force Majeure affecting PREPA in excess of 720 hours per year;  |  |  |
|                                   | 2. to the extent not due to a Force Majeure, curtailments or disconnections by PREPA in excess of 80 hours per year; or  |  |  |
|                                   | 3. breach by PREPA or LUMA (acting as PREPA's agent) under the GSA   |  |  |
| Milestones, Delay LDs and<br>Term | 1. Resource Provider shall achieve commercial operation date ("COD") within 24 months of the Closing Date.   |  |  |
|                                   | 2. 10-year term runs from Agreement Date.  |  |  |
|                                   | 3. Payment by Resource Provider of liquidated damages for delay due to its failure to achieve COD by the Guaranteed Commercial Operations Date ("GCOD").   |  |  |
|                                   | 4. Payment by PREPA of liquidated damages for delay where Resource Provider fails to achieve COD by GCOD due to delays caused by PREPA or LUMA (e.g., through breach of the GSA)   |  |  |
| Performance Guarantees            | (i) Guarantee by Resource Provider of key performance<br>requirements related to GSDS Availability and Guaranteed<br>Capability, and (ii) payment of liquidated damages by Resource<br>Provider for GSDS's failure to meet such requirements |  |  |

| Feature                               | GSA Requirement  |
|---------------------------------------|--|
| Performance Security                  | Delivery and maintenance by Resource Provider of a Performance Security issued (i) in the form of an on-demand standby letter of credit by a financial institution that satisfies minimum credit rating requirements, and (ii) in the face amount equal to:    |
|                                       | 1. prior to COD, \$50 per kW <i>multiplied by</i> the sum of the Guaranteed Capability for the Demand Reduction Service plus the Guaranteed Capability of the Demand Build Service, in each case for the fourth (4th) quarter of Agreement Year 3; and         |
|                                       | 2. from COD, \$70 per kW <i>multiplied by</i> the sum of the Guaranteed Capability for the Demand Reduction Service plus the Guaranteed Capability of the Demand Build Service, in each case for the fourth (4th) quarter of Agreement Year 3,                 |
|                                       | which secures Resource Provider's performance obligations under the GSA  |
| Parent Company<br>Guarantee           | For a Resource Provider with an unrestricted net worth of less than \$75,000,000, delivery and maintenance by Resource Provider of a Payment Guarantee by its parent company or other permitted guarantor, which satisfies the foregoing net worth requirement |
| Equity Transfer                       | Restrictions on the ability of the project sponsor to transfer equity to third parties without PREPA's consent, subject to exceptions for tax equity, affiliate transfers, financing considerations and minority share transfers                               |
| Dispute Resolution &<br>Governing Law | Disputes resolved in arbitration before PREB, an untested process which represents some risk to both sides   |
| ,                                     | Contract governed by the laws of the Commonwealth of Puerto Rico   |

# EXHIBIT A AGREED FORM OF GSA

#### **GRID SERVICES AGREEMENT**

#### **BETWEEN**

#### PUERTO RICO ELECTRIC POWER AUTHORITY

**AND** 

SUNRUN PR OPERATIONS LLC

DATED AS OF \_\_\_\_\_



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THIS GRID SERVICES AGREEMENT (the "Agreement") is entered into as of this \_\_ day of \_\_\_\_\_, (the "Agreement Date") between the Puerto Rico Electric Power Authority (including any successor thereto, "PREPA"), a public corporation and governmental instrumentality of the Commonwealth of Puerto Rico, created by Act of May 2, 1941, No. 83, as amended, employer identification number 660433747, represented in this act by its Executive Director, Mr. Josué A. Colón Ortiz, of legal age, married, engineer and resident of Caguas, Puerto Rico; and Sunrun PR Operations LLC ("Resource Provider"), a limited liability corporation, authorized to do business in Puerto Rico, employer identification number 384084619, with its principal office at A4 Reparto Mendoza, Humacao, PR 00791, and represented in this act by its Chief Legal and People Officer, Ms. Jeanna Steele, of legal age, and a resident of 225 Bush Street Suite 1400, San Francisco, CA 94104, authorized to sign this Agreement on behalf of Resource Provider as certified by the Resolution dated [●]. PREPA and Resource Provider are herein individually referred to as "Party" and collectively referred to as "Parties":

#### RECITALS

#### WHEREAS,

- A. To procure renewable energy generation and energy storage services at sites across the island of Puerto Rico in accordance with the requirements of the Puerto Rico Energy Public Policy Act (Act 17-2019), the Puerto Rico Energy Diversification Policy through Sustainable and Alternative Renewable Energy Act (Act 82-2010), PREB's Final Resolution and Order on PREPA's Integrated Resource Plan in Case No. CEPR-AP-2018-0001 issued on August 24, 2020, and PREB's Resolution and Order on PREPA's Draft Procurement Plan in Case No. NEPR-MI-2020-012 issued on December 8, 2020, PREPA has conducted a competitive procurement process based upon its issuance of Request for Proposals No. 112648, Renewable Energy and Energy Storage Resources, Tranche 1 of 6, on February 22, 2021 (as amended, the "RFP") to select one or more developers to (i) design, construct, install, interconnect, test, commission, operate and maintain renewable energy generation, virtual power plants, and/or energy storage resources, and (ii) enter into agreement(s) with PREPA for the same;
- B. Resource Provider, among other bidders, (i) submitted a proposal in response to the RFP on June 18, 2021 and separately submitted a bid bond as security for Resource Provider's satisfaction of the requirements of the RFP (the "Bid Security") and (ii) desires to (a) design, permit, deploy, install, operate and maintain a Grid Service Delivery System, which aggregates a network of 17 MW distributed energy resources collectively capable of functioning as a virtual power plant (the "Project"), and (b) sell and make available Grid Services produced thereby exclusively to PREPA in accordance with this Agreement; and
- C. PREPA (i) selected Resource Provider as one of the preferred bidders following the submission and evaluation of all proposals, and (ii) desires to purchase Grid Services in accordance with this Agreement;

**NOW THEREFORE**, in consideration of these premises and of the mutual covenants and agreements set forth herein, the Parties, intending to be legally bound, hereby agree to the following:

#### 1. **DEFINITIONS & INTERPRETATION**

#### 1.1 Definitions

In this Agreement:

- "40% Guaranteed Capability" means the enrollment by Resource Provider of Participant Resources with an aggregate capacity of at least forty percent (40%) of the Guaranteed Capability as evidenced by duly-executed and delivered Participant Service Agreements under which Participants have committed to make such capacity available to Resource Provider.
- "80% Guaranteed Capability" means the enrollment by Resource Provider of Participant Resources with an aggregate capacity of at least eighty percent (80%) of the Guaranteed Capability as evidenced by duly-executed and delivered Participant Service Agreements under which Participants have committed to make such capacity available to Resource Provider.
- "AC" means alternating electrical current.
- "Additional Costs" has the meaning set forth in paragraph (a) of Section 17.1 (Change-of-Law).
- "Affected Party" has the meaning set forth in Section 14.1 (General).
- "Affiliate" means, with respect to any specified Person, any other Person that, directly or indirectly, through one or more intermediaries, Controls (*e.g.*, has the status of a parent company), is Controlled by (*e.g.*, has the status of a subsidiary company), or is under common Control (*e.g.*, has the status of a sister company) with, such specified Person.
- "Agreement" has the meaning set forth in the preamble of this Agreement.
- "Agreement Date" has the meaning set forth in the preamble of this Agreement.
- "Agreement Date Obligations" has the meaning set forth in paragraph (a) of Section 2.3 (*Initial Effectiveness & Closing Date*).
- "Agreement Year" means each period of twelve (12) consecutive Months, provided that (i) the first such period shall begin on the Commercial Operation Date, (ii) each such subsequent year shall begin on the corresponding anniversary of such earlier date, and (iii) the last such period shall expire at the end of the Supply Period.
- "Ancillary Services" means any services required by the MTRs.
- "Applicable Law" or "Law" means, with respect to any Person, any constitution, bilateral or multilateral treaty, statute, law, rule, regulation, ordinance, judgment, order, decree, governmental consent or approval, or any published directive, guideline, requirement or other governmental restriction, which has the force of law, or any determination, or interpretation of any of the foregoing, by any judicial authority, which legally binds such Person or its property whether in effect as of the Resource Provider Execution Date or thereafter.
- "Applicable Standards" means the MTRs, any other applicable PREPA standards that PREPA has made available or identified to Resource Provider as applicable to Resource Provider's performance of its obligations under this Agreement, and any other codes, standards, or requirements set forth in any Applicable Law, including any applicable federal, state or local code, the latest standards of the Institute of Electrical and Electronic Engineers (IEEE), National Electrical Manufacturer's Association (NEMA), American Concrete Institute (ACI), American National Standards Institute (ANSI), International Code Council Code (ICC), National Fire Protection Association and the North American Electric Reliability Corporation (NERC), as well as the latest editions of the National Electrical Code and the National Electrical Safety Code

- (NESC), to the extent not inconsistent with the foregoing, in each case as modified from time to time.
- "Approved Design" has the meaning set forth in paragraph (c) of Section 4.1 (*Proposed Design*).
- "Approved Form" has the meaning set forth in paragraph (a) of Section 2.6 (Approved Form of Participant Service Agreement).
- "Arbitration Rules" has the meaning set forth in paragraph (a) of Section 21.5 (Arbitration).
- "Arbitrator" has the meaning set forth in paragraph (a) of Section 21.5 (Arbitration).
- "Availability Liquidated Damages" or "ALD" has the meaning set forth in paragraph (b) (Availability Liquidated Damages) of Section 1 (Capitalized terms used throughout this Appendix N have the meaning set forth in the Agreement, unless otherwise defined herein.
- GSDS Availability) of Appendix N (Performance Guarantees).
- "Balance" means, at any given time, the amount recorded in the Tracking Account.
- "Best and Final Offer" has the meaning set forth in the RFP.
- "Best Interests Determination" means a determination by PREPA that the Project will serve the best interests of its ratepayers following the completion of the phase III evaluation of the Project by PREPA as contemplated by the RFP.
- "Bid Security" has the meaning set forth in Recital B in the preamble of this Agreement.
- "Billing Period" means a Month, provided that (i) the first such period shall begin on the Commercial Operation Date and end on the final Day of the Month in which the Commercial Operation Date occurs, and (ii) the last such period shall begin on the first Day of the Month in which the Supply Period will expire and end on final Day of the Supply Period.
- **"Bulk-Power System EO"** means E.O. 13920 of May 1, 2020 as supplemented by and including the rules and regulations published by the U.S. Department of Energy in connection therewith, as such may be modified from time to time.
- **"Business Continuity Plans"** has the meaning set forth in paragraph (g) of Section 6.13 (*Information Security*).
- "Business Day" means a Day other than (i) a Saturday, a Sunday or a Day on which commercial banks in San Juan, Puerto Rico are required or authorized to close, or (ii) any other Day recognized as a holiday by PREPA as listed on Appendix A (*Holidays*) hereto or notified to Resource Provider from time to time.
- "C&I Participant" means a Participant that exceeds 500 kW-AC at its Interconnection Point.
- "Capability" means, for any time of determination, the aggregate Committed Capacity of all Participant Resources (expressed in kW), made available by the GSDS for Demand Reduction Service or Demand Build Service, as applicable, at such time in accordance with the requirements of Appendix H (*Grid Services*).

- "Capability Liquidated Damages" or "CLD" has the meaning set forth in paragraph (b) (Capability Liquidated Damages) of Section 2 (Capability) of Appendix N (Performance Guarantees).
- "Capability Shortfall Liquidated Damages" has the meaning set forth in item (2), paragraph (b) of Section 5.3 (*Initial Performance Tests*).
- "CGL" has the meaning set forth in paragraph (c) of Section 18.3 (Service Providers/Vendor Requirements).
- "Change-of-Law" means the enactment, approval or issuance of an Applicable Law after the Resource Provider Execution Date.
- "Claims" means all claims, actions, suits, demands, or proceedings brought by any Person for liabilities, judgments, losses, costs (including court costs, reasonable attorneys' fees and costs of investigation), fines, penalties, expenses and damages of whatsoever kind or nature, arising in contract, tort, or otherwise.
- "Closing Date" has the meaning set forth in paragraph (a) of Section 2.3 (*Initial Effectiveness & Closing Date*).
- "COD Termination Event" means the occurrence of the Long-Stop Date prior to the Commercial Operation Date.
- "Commercial Operation" means satisfaction of the requirements set forth in a certificate issued by Resource Provider in accordance with paragraph (e) of Section 5.3 (*Initial Performance Tests*) in the form set forth in Appendix R (*Form of Commercial Operation Date Certificate*).
- "Commercial Operation Date" means the date when Resource Provider first achieves Commercial Operation.
- "Committed Capacity" means, for any Participant Resource, the maximum rated AC output or load (as applicable), expressed in kW, for such resource based on the Operating Characteristics, subject to a maximum of one (1) MW, provided that:
- a. for Renewable Energy Resources, such term refers to the sum of the rated peak AC output for the inverters installed as part of such resource;
- b. for Energy Storage Resources, such term refers to the rated quantity of Dispatchable power capacity available to operate in charge mode for Demand Build Service and discharge mode for Demand Reduction Service, in each case on a sustained basis for a period of four (4) hours; and
- c. for Demand Response Resources, such term refers to the quantity of load under GSDS control for Grid Services.
- "Conditions Precedent" has the meaning set forth in paragraph (a) of Section 2.3 (*Initial Effectiveness & Closing Date*).
- "Confidential Information" means all Agreement terms and information provided or work performed in connection with the negotiation and performance of this Agreement, including in respect of PREPA, all information relating to PREPA's customers, customer and Participant lists,

Participant Data, PREPA Data, any other data and testing results produced under this Agreement and any other information identified by PREPA as confidential.

"Consulting Technical Expert" has the meaning set forth in Section 3.1 (Consulting Technical Expert).

"Control" means (i) the ownership (whether directly or indirectly) of more than fifty percent (>50%) of the total issued voting share capital or other voting interest of that company or corporation, or (ii) the ability to unilaterally appoint a majority of the board directors or equivalent body of that company or corporation through the ownership of securities with voting power or otherwise, without the need of the vote or approval of another, or (iii) the possession, direct or indirect, of the power to direct or cause the direction of the business affairs and/or operations of that company or corporation, without the need of the vote or approval of another; and the terms "Controls," "Controlled," and "Controlling" shall have a corresponding meaning, provided that if two (2) shareholders each own fifty percent (50%) of the total issued and outstanding shares of a corporation, then neither shareholder controls such corporation.

"COR3" means the Central Recovery and Reconstruction Office of Puerto Rico.

"Critical Project" has the meaning set forth in Title V of PROMESA.

"Day" means a period of twenty-four (24) consecutive hours, beginning at 00:00 hours on any Gregorian calendar day and ending at 24:00 hours on such day Puerto Rico time.

"Deemed Completion" means the occurrence of each of the following events: (i) the completion of the integration of the GSDS with the Grid System in all material respects, including the recruitment and enrollment of Participants, other than those activities that cannot reasonably be completed as a result of the occurrence of a PREPA Risk Event, and (ii) a delay in the occurrence of the Initial Integration beyond the corresponding time for completion thereof as set forth in the Milestone Schedule, the commencement of the Initial Performance Tests, or the interruption of an ongoing Initial Performance Test, for a period of at least fifteen (15) consecutive Days as determined under Section 3.4 (Extensions of Time), arising out of a PREPA Risk Event, in each case as evidenced by the delivery of a certificate by Resource Provider to PREPA, co-signed by the Consulting Technical Expert, certifying (A) the truth and correctness of each of the foregoing events, and (B) the date on which Resource Provider would have achieved Commercial Operation but for the occurrence of a PREPA Risk Event, which formed the basis for an extension of time of the Guaranteed Commercial Operation Date under Section 3.4 (Extensions of Time); provided that Deemed Completion shall never occur earlier than the Guaranteed Commercial Operation Date.

"**Default**" has the meaning set forth in Section 16.1 (*Definition*).

"**Demand Build Price**" or "**DB**\$" has the meaning set forth in Section 6 (*Demand Build Price*) of Appendix F (*Compensation*).

"Demand Build Service" has the meaning set forth in subsection (1), item (i) (VPP and <u>Participant Resources</u>), paragraph (a) (VPP and <u>Participant Resources</u>) of Section 3 (Service Requirements) of Appendix H (Grid Services).

"Demand Reduction Price" or "DR\$" has the meaning set forth in Section 4 (*Demand Reduction Price*) of Appendix F (*Compensation*).

- "Demand Reduction Service" has the meaning set forth in subsection (1), item (ii) (Demand Reduction Service), paragraph (a) (VPP and Participant Resources) of Section 3 (Service Requirements) of Appendix H (Grid Services).
- "Demand Response" means the ability to change utility-supplied electric usage by end-use customers from their normal consumption patterns in response to changes in the price of electricity during a Day and/or season or other economic compensation designed to induce change in the use of utility-supplied electricity, facilitating the balance by PREPA of supply and demand for Energy.
- "Demand Response Regulation" means the Energy Bureau Regulation for Energy Efficiency and Demand Response issued under Case No. NEPR-MI-2019-0015 on December 10, 2020.
- "Demand Response Resource" means an aggregation of end-use customers, connected to the Distribution System, that collectively participate in a Demand Response program of at least 50 kW, established by a DR Aggregator.
- "**Derating**" means Resource Provider's inability or failure to make the Grid Services available to PREPA up to the Guaranteed Capability, other than in the case of an Outage.
- "DERMS Unavailability Event" means the unavailability of the DERMS due to scheduled maintenance or downtime such that the GSDS cannot perform or support critical functions or otherwise provide Grid Services.
- "Designated Person" has the meaning set forth in paragraph (a) of Section 21.3 (Negotiation).
- "Disclosing Party" has the meaning set forth in paragraph (a) of Section 12.9 (Confidentiality).
- "Dispatch" means scheduling and directing the supply of Grid Services through a Dispatch Notice in accordance with this Agreement.
- "Dispatch Notice" means an operating instruction issued by PREPA (or the T&D Operator) and any subsequent updates given by them to Resource Provider, through supervisory equipment or otherwise in accordance with this Agreement, directing the GSDS to provide Grid Services.
- "Dispute" has the meaning set forth in Section 21.1 (Scope of the Dispute Resolution Provisions).
- "Dispute Notice" has the meaning set forth in paragraph (a) of Section 21.2 (Commencement of the Dispute Resolution Procedure).
- "Dispute Resolution Procedure" has the meaning set forth in Section 21.1 (*Scope of the Dispute Resolution Provisions*).
- "Distributed Energy Resources Management System" or "DERMS" means a system of assets consisting of servers and network communications equipment that enable (i) the exchange of data as described in Appendix M (Data, Integration and Testing Protocol) and Appendix V (Operational Forecast) and (ii) control functions required for the Dispatch of Grid Services.
- "Distribution System" means the network of distribution lines interconnected at voltages below 38 kV and associated electric substations owned by PREPA which distribute electricity to endusers in the Commonwealth of Puerto Rico.

"dollars" and "\$" means United States dollars.

"DR Aggregator" has the meaning given to the term "Demand Response Aggregator" in the Demand Response Regulation.

"**Drafting Input**" has the meaning set forth in paragraph (a) of Section 2.6 (*Approved Form of Participant Service Agreement*).

"Emergency" means an operational condition or situation affecting the Grid System (including system security and reliability or a declaration of an emergency event under Applicable Law or by any Governmental Authority), the DERMS, or the GSDS, which has resulted in, or will likely result in, imminent significant disruption of service to a significant number of customers or likely endangers life or property.

"Energy" means 60-cycle AC electric energy, measured in kWh.

"Energy Storage Resource" means a battery energy storage system or any other form of energy storage system connected to the Distribution System that satisfies the requirements of the applicable MTR.

"Environmental Costs" means any and all fixed and variable costs incurred by Resource Provider resulting from the imposition or assessment on, or as a result of the ownership or operations of, the GSDS by Applicable Law relating to the environment, issued by a Governmental Authority.

"Equity" means any capital paid or caused to be paid by or on behalf of Resource Provider's Shareholders or their Affiliates to Resource Provider for shares in Resource Provider or in the form of Shareholder loans to Resource Provider, which by their terms are subordinated to any indebtedness for borrowed money incurred by Resource Provider under financing documents with the Project Lenders.

"Equity Transfer" has the meaning set forth in paragraph (a) of Section 19.4 (Restrictions on Equity Transfers).

**"Escrow Triggering Condition**" has the meaning set forth in paragraph (b) of Section 4.4 (*Participants and Qualified Resources*).

"Exceptions" means liability arising from:

- a. a Party's fraud, willful misconduct or gross negligence;
- b. a Party's obligation to indemnify the other Party's Indemnitees under Section 13.1 (*General*) for personal injury or death of a third party and Section 13.5 (*Claims Arising from Infringement of Intellectual Property Rights*);
- c. Resource Provider's indemnity obligation under Section 13.3 (*Claims Arising From Environmental Harm*); or
- d. a Party's obligation to pay/provide credit for Liquidated Damages under this Agreement.

"FOMB" means the Financial Oversight & Management Board for Puerto Rico, or any successor thereto.

"FOMB Certification" has the meaning set forth in paragraph (a) of Section 16.2 (Certain Material Breaches).

"Force Majeure" has the meaning set forth in Section 14.1 (General).

"Force Majeure Waiting Period" means, for each Agreement Year, seven hundred twenty (720) hours.

"Forecasted Capability" means, with respect to each Grid Service for a given Time Interval, the Capability which Resource Provider can make available to PREPA for Dispatch in the day-ahead Operational Forecast applicable to such Time Interval, which for any given Time Interval shall not exceed the lesser of the Guaranteed Capability and the Committed Capacity of all the Participant Resources (expressed in kW).

"GAAP" means Generally Accepted Accounting Principles, as promulgated by the Financial Accounting Standards Board or its predecessors or successors.

"Governmental Authority" means any court, tribunal or governmental or quasi-governmental body, regulatory body, agency, authority, office, department, commission, board, bureau, public corporation, municipality or instrumentality, in each case at any federal, state, Commonwealth of Puerto Rico, county, municipal, or local level, having jurisdiction over a Party, the GSDS or the Participant Site, including FOMB and PREB, but excluding PREPA.

"Green Credits" means "renewable energy certificates" and "environmental and social attributes," as defined in the Green Energy Incentives Act of Puerto Rico (Act No. 83 of July 19, 2010), renewable energy credits, environmental attributes, emissions reductions, offsets, allowances or benefits however entitled (or payments in lieu thereof), whether monetary, fiscal or in the form of physical property, which are now or in the future may be available to a facility that generates or produces electricity by means of "green energy" (as defined in Act No. 83 of July 19, 2010), or from renewable or non-polluting resources, in each case, from any Governmental Authority or third party, including renewable energy credits established pursuant to Act No. 83 of July 19, 2010, but shall exclude (i) any Tax Credits and grants in lieu thereof, (ii) other tax incentives, benefits or credits, including those available under Puerto Rico Act 60-2019, (iii) any accelerated depreciation, and (iv) proceeds from (i) through (iii), each of which Resource Provider expressly reserves.

"Grid Services" means, collectively, the (i) Demand Reduction Service, (ii) the Demand Build Service, and (iii) Ancillary Services, Operating Characteristics or other performance required by the MTRs, a Dispatch Notice or this Agreement, and "Grid Service" means any one of the foregoing services.

"Grid Services Delivery System" or "GSDS" means the overall system of assets owned and/or operated by or obligated to Resource Provider (but excluding Participant Resources) necessary to provide Grid Services to PREPA through the aggregation of Participant Resources in accordance with this Agreement.

"Grid Services Period" or "GS Period" means the period of time during which PREPA has directed Resource Provider to Dispatch the Grid Services.

"Grid Services Window" means each of the four (4) consecutive hour periods for demand build and demand reduction specified in paragraph (d) (Availability Requirement) of Section 3 (Service

Requirements) of Appendix H (Grid Services), as adjusted from time to time in accordance with such paragraph.

"Grid System" means the interconnected network of high voltage transmission lines, low voltage distribution lines, and associated electric substations owned by PREPA, which transmit and distribute electricity to customers in the Commonwealth of Puerto Rico.

"Grid System Event" means any physical condition in the Grid System that prevents or impairs PREPA from accepting delivery of a Grid Service, including (a) any curtailment, reduction or disconnection instructions issued by PREPA in a Dispatch Notice (or otherwise) to either address and remedy an Emergency or otherwise carry out a decision rendered by the T&D Operator in accordance with Prudent Utility Practice, or (b) any condition in the Grid System (including an Emergency affecting such system) that causes or may cause physical damage to the GSDS, the Participant Resource or life endangerment, (c) any damage to or the tripping of protection relays, or (d) a DERMS Unavailability Event, but in each case excluding any such event resulting from Force Majeure affecting Resource Provider or a PREPA Risk Event pursuant to paragraphs (a), (c), or (d) of such definition.

"Grid System Waiting Period" means, for each Agreement Year, eighty (80) hours.

"GSDS Availability" or "GA" has the meaning set forth paragraph (a) (Guaranteed Availability) of Section 0 (GSDS Availability) in Appendix N (Performance Guarantees).

"Guaranteed Availability" has the meaning set forth in paragraph (a) (Guaranteed Availability) of Section 1 (GSDS Availability) of Appendix N (Performance Guarantees).

"Guaranteed Capability" or "GC" means, for each Quarter of each Agreement Year during the Supply Period, the capacity set forth in the column captioned "Guaranteed Capability" of the respective tables for Demand Reduction Service and Demand Build Service in Appendix G (Guaranteed Capability), which corresponds to such Quarter.

"Guaranteed Commercial Operation Date" means the second (2<sup>nd</sup>) anniversary of the Closing Date, as adjusted in accordance with Section 3.4 (*Extensions of Time*).

"hour" means each period of sixty (60) minutes, with the first such period for any Day beginning at 00:00 (Puerto Rico Time) and including each sixty (60)-minute interval thereafter.

"Indemnitees" means, with respect to either PREPA or Resource Provider, (i) permitted successors and assigns, and (ii) as to both the Party and its permitted successors and assigns, their respective lenders, Affiliates, directors, officers, equity-holders, partners, employees, representatives, agents and contractors, and each of their respective heirs, successors and assigns.

"Indemnifying Party" has the meaning set forth in Section 13.1 (General).

"Independent Expert" means an engineering consulting firm, jointly appointed and engaged by the Parties.

"Independent Valuator" has the meaning set forth in paragraph (e) of Section 9.7 (*Price Adjustments*).

"**Initial Integration**" means the first time that Resource Provider has integrated the GSDS and Participant Resources with the Distribution System.

"Initial Integration Date" means the date on which Initial Integration occurs.

"Initial Performance Tests" has the meaning set forth in paragraph (a) of Section 5.3 (Initial Performance Tests).

"Insolvency Event" means, with respect to any Person, that such Person becomes the subject of any voluntary or involuntary bankruptcy, insolvency, reorganization, arrangement, readjustment, composition, liquidation or similar proceedings and, in the case of any such involuntary proceeding, such proceeding is not dismissed or stayed within sixty (60) days after it is commenced.

"Intellectual Property" means, collectively, on a worldwide basis, all of the following: (i) all inventions and discoveries (whether patentable or unpatentable and whether or not reduced to practice) and all improvements thereto, and all patents (including continuations, continuations-inpart, renewals, reissues, and extensions thereof), patent applications and patent disclosures; (ii) all trademarks, service marks, certification marks, trade dress, logos, domain names, URLs, trade names, brand names, model names, corporate names and other source indicators (whether registered or unregistered), including all goodwill associated therewith, and all applications, registrations, and renewals in connection therewith; (iii) all moral rights and copyrights (whether registered or unregistered) in any content or work of authorship (including charts, documentation and forms), and all applications, registrations and renewals in connection therewith; (iv) all mask works and all applications, registrations, and renewals in connection therewith; (v) all trade secrets and confidential information (including confidential ideas, research and development, know-how, formulas, compositions, manufacturing and production processes and techniques, technical data, designs, drawings, specifications, customer, sales prospect, distributor and supplier lists, pricing and cost information, and marketing plans and proposals); (vi) all computer software, (including all source code, object code, firmware, development tools, files, records and data, and all media on which any of the foregoing is recorded); (vii) all industrial designs and any registrations and applications therefor; (viii) databases and data collections and all rights therein; (ix) any similar, corresponding or equivalent rights to any of the foregoing; and (x) any documents or other tangible media containing any of the foregoing, and all rights to prosecute and perfect the foregoing through administrative prosecution, registration, recordation, or other proceeding, and all causes of action and rights to sue or seek other remedies arising from or relating to the foregoing (including for any past or on-going infringement, violation or misappropriation).

"Intellectual Property Rights" means all rights to Intellectual Property existing under (i) trademark Law; (ii) copyright Law and database rights; (iii) design patent or industrial design Law; (iv) patent Law; (v) semi-conductor chip or mask work Law; or (vi) any other statutory provision or common law principle relating to such subject matter (including Laws governing know-how, including trade secret Law) including: (a) all grants and registrations worldwide in connection with the foregoing and all other rights with respect thereto existing other than pursuant to grants and registrations; and (b) all applications for any such grant or registration, all rights to make such applications and the right to control their prosecution, rights or priority under international conventions, and all amendments, continuations, divisions and continuations-in-part of such applications, and all corrections, reissues, patents of addition, extensions and renewals of any such grant, registration or right.

"Interconnection Point" means, for each Participant Resource, the point where such resource connects to the Distribution System, including the points at which (i) a Participant Resource subject to PREPA Regulation 8915 (e.g., those of C&I Participants) or (ii) a group of Participant Resources which, in the aggregate, have capacity equal to or greater than the capacity threshold specified in Regulation 8915, are interconnected to the Grid System.

"Interest" means the compensation for the accrual of monetary obligations under this Agreement computed Monthly and prorated daily from the time each such obligation becomes past due based on an annual interest rate equal to the lesser of: (i) (a) for payments due during the first five (5) Days after such a payment becomes due, in each case, the Prime Commercial Lending Rate as set by Citibank NA., New York, New York or any other bank as mutually agreed by the Parties or any other equivalent rate as mutually agreed by the Parties (for the purposes of this definition, the "Prime Rate"), and (b) for payments due beginning on the sixth (6<sup>th</sup>) Day after such a payment is due, the Prime Rate plus five percent (5%); and (ii) the maximum rate allowable under Article 1169 of the Puerto Rico Civil Code or successor statute applicable to past due amounts. The provisions of this definition shall not be construed to limit the applicable rate of interest on the project debt.

"kW" means kilowatt-AC.

"kWh" means kilowatt hour.

"Legal Challenge" means any action, suit or proceeding brought or commenced by a third party (excluding any Affiliate of a Party) seeking to (i) contest the validity of this Agreement, Participant Service Agreements, any Permits, or the design, deployment, installation, operation, or maintenance of the GSDS which materially impairs the ability of the Parties to perform their respective obligations hereunder or delays the deployment, installation or operation of the GSDS, or (ii) avoid, enjoin, rescind, set aside, stay, subordinate, or otherwise alter or impair, the RFP, this Agreement or any of the transactions contemplated hereby in any way.

"Liability Cap" means five hundred sixty-nine thousand one hundred sixty dollars (\$569,160).

"Liquidated Damages" means, collectively, Capability Shortfall Liquidated Damages, Resource Provider Delay Liquidated Damages, PREPA Delay Liquidated Damages, Availability Liquidated Damages, Capability Liquidated Damages, and Termination Liquidated Damages.

"Long-Stop Date" means the earlier to occur of (i) the first date on which accrued Resource Provider Delay Liquidated Damages (determined without reference to the operation of paragraph (c) of Section 3.5 (*Delay Liquidated Damages*)) exceeds the Security Amount, and (ii) the one hundred eightieth (180<sup>th</sup>) Day after the Guaranteed Commercial Operation Date.

"LUMA" means LUMA Energy, LLC.

"Major Updates" has the meaning set forth in paragraph (b) of Section 6.2 (Scheduled Maintenance).

"Malware" means computer software, code or instructions that: (i) intentionally, and with malice intent by a third party, adversely affect the operation, security or integrity of a computing, telecommunications or other digital operating or processing system or environment, including without limitation, other programs, data, databases, computer libraries and computer and communications equipment, by altering, destroying, disrupting or inhibiting such operation, security or integrity; (ii) without functional purpose, self-replicate written manual intervention; (iii) purport to perform a useful function but which actually performs either a destructive or harmful function, or perform no useful function other than utilize substantial computer, telecommunications or memory resources with the intent of causing harm; or (iv) without authorization collect and/or transmit to third parties any information or data, including such software, code or instructions commonly known as viruses, Trojans, logic bombs, worms, adware and spyware.

"Materials" has the meaning set forth in paragraph (b) of Section 8.2 (Data and Materials).

"Milestone" means any of the milestone events set out in the column captioned "Milestone" in the table set forth in the Milestone Schedule.

"Milestone Schedule" means the schedule set out in Appendix D (Milestone Schedule).

"Minimum Acceptance Capability" has the meaning set forth in item (2), paragraph (b) of Section 5.3 (*Initial Performance Tests*).

"Minor Updates" has the meaning set forth in paragraph (b) of Section 6.2 (Scheduled Maintenance).

"Modification Limit" means one hundred thousand dollars (\$100,000), representing one percent (1.0%) of Resource Provider's total estimated cost for the design, deployment, installation, testing, and commissioning of the GSDS as of the Agreement Date.

"Month" means a calendar month, which shall begin at 00:00 on the first Day of such calendar month and end at 00:00 on the first Day of the next calendar month.

"Monthly Payment" or "MP" has the meaning set forth in Section 1 (Data Collection) of Appendix F (Compensation).

"MTRs" means the minimum technical requirements applicable to the VPP for integration with the DERMS and the Grid System set forth in Appendix K (*Minimum Technical Requirements*), as PREPA may modify or replace them from time to time after the Closing Date in accordance with Section 4.2 (*Modifications*).

"MW" means megawatt-AC.

"MWh" means megawatt hour.

"Negotiation Period" has the meaning set forth in paragraph (a) of Section 21.3 (Negotiation).

"Non-Affected Party" has the meaning set forth in paragraph (d) of Section 14.1 (General).

"Net Energy Metering Program" or "NEM" means the net metering program which PREPA has established in accordance with the Puerto Rico Net Metering Program Act, Act No. 114 of August 16, 2007, as amended, allowing for the interconnection to the T&D System of renewable generation and energy storage equipment installed on electric customer premises, the delivery of excess electricity generated by this equipment into the T&D System and compensation in the form of electricity invoice credits for same, as such program may be amended from time to time.

"Net REC Quantity" means, for any applicable period, a quantity of Green Credits equal to (A) the quantity of Green Credits attributable to the net quantity of Energy delivered by the GSDS into the Grid System as part of the Demand Reduction Service less (B) the quantity of Green Credits attributable to the aggregate quantity of Energy allocable to Grid Services Periods pursuant to which PREPA has issued a Dispatch Notice for Demand Build Service (based upon the amount of load increase requested by PREPA).

"NIST" means National Institute of Standards and Technology.

- "Non-Scheduled Derating" means any Derating other than a Scheduled Derating.
- "Non-Scheduled Outage" means any Outage other than a Scheduled Outage.
- "OMA" means the Operation and Maintenance Agreement, dated June 22, 2020, among PREPA, P3A, LUMA Energy LLC and LUMA Energy Servco LLC.
- "Operating Characteristics" has the meaning set forth in Appendix J (Operating Characteristics).
- "Operating Procedures" means the procedures for the VPP's operation and integration with the DERMS and the Grid System, as set out in Appendix L (*Operating Procedures*), as amended from time to time.
- "Operational Forecast" means the information set forth in Appendix V (Operational Forecast).
- "Opt-Out Date" means the date which occurs one hundred sixty-five (165) Days after the Resource Provider Execution Date.
- "Other Minimum Acceptance Criteria" means, collectively, the MTRs, Operating Characteristics, and any other criteria set out in the Testing Protocol and Operating Procedures.
- "Outage" means, for any period of time, Resource Provider's failure or inability to make Grid Services available to PREPA for any reason.
- "P3A" means the Public-Private Partnership Authority of Puerto Rico or any successor thereto.
- "Party" and "Parties" has the meaning set forth in the preamble of this Agreement.
- "Participant" means a customer of PREPA that commits a Qualified Resource to Resource Provider pursuant to a Participant Service Agreement for utilization by the GSDS in the VPP.
- "Participant Data" means all data provided by Resource Provider to PREPA and all data provided by PREPA to Resource Provider regarding Participants pursuant to this Agreement.
- "Participant Energy Storage Resource" means a Participant Resource that also qualifies as an Energy Storage Resource.
- "Participant Resources" means, collectively and for each Participant, each of the Qualified Resources that Resource Provider makes available through the GSDS pursuant to a Participant Service Agreement signed by such Participant, and "Participant Resource" means any such resource.
- "Participant Service Agreement" means an agreement in the Approved Form between a Participant and Resource Provider which sets forth the terms and conditions under which the Participant makes available to Resource Provider a Qualified Resource for use in the provision of Grid Services under this Agreement.
- "Participant Site" means, for each Participant, each site on which such Participant has located a Oualified Resource.

- "Payment Guarantee" means a completed version of a guarantee in the form set forth in Appendix BB (*Form of Payment Guarantee*), duly-executed by an authorized representative of the Permitted Guarantor.
- "Payment Guarantee Cross-Default" means, during the Term (as defined in Section 1.1 (General) of the Payment Guarantee), the occurrence of the following two events: (i) a breach of any of the representations made by the Permitted Guarantor under Section 2.1 (Representations), or any of the obligations of the Permitted Guarantor arising out of Section 2.2 (Covenants), of the Payment Guarantee, and (ii) Resource Provider's failure to rectify such breach within sixty (60) Days of the occurrence of such breach, including through the delivery of a replacement Payment Guarantee executed by a new Permitted Guarantor or such other credit support as may be acceptable to PREPA, acting reasonably.
- "Pending Permit Delay" means, for any Permit for which Resource Provider has duly and properly applied and has exercised / continues to exercise diligent efforts to obtain, the denial of or delay in granting such Permit by the relevant Governmental Authority for any reason, other than Resource Provider's failure to comply with the requirements for the issuance of such Permit, which materially impairs the ability of Resource Provider to achieve Commercial Operation or otherwise perform its obligations under this Agreement.
- "**Performance Guarantees**" means the Guaranteed Availability and Guaranteed Capability, as set forth in Appendix N (*Performance Guarantees*).
- "**Performance Security**" has the meaning set forth in paragraph (a) of Section 2.5 (*Performance Security*).
- "Performance Tests" means tests which verify that the VPP (i) Dispatches the Grid Services in accordance with the Operating Characteristics, (ii) meets the Performance Guarantees, and (iii) complies with each of the Other Minimum Acceptance Criteria, in each case in accordance with the Testing Protocol.
- "Permitted Guarantor" means any Person that (i) directly or indirectly holds an ownership interest of at least twenty-five percent (25%) in Resource Provider and (ii) has an Unrestricted Net Worth of at least seventy-five million dollars (\$75,000,000).
- "**Permits**" means all permits, licenses, approvals, authorizations, consents, variances, or waivers issued by a Governmental Authority with jurisdiction over Resource Provider and the GSDS which Resource Provider or its contractors will require for the design, deployment, installation, ownership, operation, maintenance, or financing of the GSDS.
- "Permitted Outage Hour" means any hour during the Supply Period in which an Outage or Derating occurs as a result of a Scheduled Outage, Scheduled Derating, Force Majeure affecting Resource Provider or a PREPA Risk Event.
- "**Person**" means an individual, partnership, corporation, limited liability company, joint venture, association, joint-stock company, trust, unincorporated organization, or a government or agency or political subdivision thereof.
- "Personally Identifiable Information" means an individual's identifiable information and any other information that may be used to track, locate or identify such individual (or which is otherwise protected by privacy Laws), including any automatically generated information (such as IP

addresses and other customer identifiers) that identifies or is unique or traceable to a particular individual or computer or other electronic devices capable of accessing the internet, including without limitation, name, address, telephone number, social security number, credit card account numbers, email addresses, user identification numbers or names and passwords, which PREPA employees and individuals who have obtained products or services from PREPA for personal, family or household purposes, disclose to Resource Provider or its subcontractors in connection with this Agreement.

"Post-Resource Provider Execution Date Environmental Costs" means all Environmental Costs resulting from measures required to comply with a Change-of-Law.

"Post- Resource Provider Execution Date Taxes" means any additional Taxes resulting from measures required to comply with a Change-of-Law.

"Pre-Operation Period" means the period of time from (and including) the Closing Date up to (but excluding) the Commercial Operation Date.

"PREB" means the Puerto Rico Energy Bureau or any successor thereto.

"PREB Approved Form" has the meaning set forth in paragraph (d) of Section 2.6 (Approved Form of Participant Service Agreement).

"PREB Extension Approval" has the meaning given in paragraph (b) of Section 3.4 (Extensions of Time).

"PREPA" has the meaning set forth in the preamble of this Agreement.

"PREPA Bankruptcy" means the proceeding commenced pursuant to the Puerto Rico Oversight, Management, and Economic Stability Act (PROMESA), pending as of the Agreement Date in the PROMESA Court, Case No. 17-4780.

"PREPA Data" means the data and other information prepared or collected by PREPA and delivered to Resource Provider in accordance with this Agreement.

"PREPA Delay Liquidated Damages" has the meaning set forth in paragraph (a) of Section 3.5 (Delay Liquidated Damages).

"PREPA Risk Event" means any of the following events:

- a. Force Majeure or a Legal Challenge in each case affecting PREPA;
- b. a Grid System Event;
- c. a breach, delay, or failure by PREPA in performing any material obligation under this Agreement; or
- d. following any modifications to the MTRs under Section 4.2 (*Modifications*), the duration of the GSDS' unavailability as reasonably required to carry out changes to the GSDS to comply with such modifications,

which, in each case, did not result from an act or omission of Resource Provider, Force Majeure affecting Resource Provider, or the circumstances described in Section 7.2 (*Curtailment for Breach*).

"PREPA Trademarks" has the meaning set forth in Section 4.5 (Co-Branding; Use of PREPA's Trademarks).

"Pricing Notice" has the meaning set forth in paragraph (a) of Section 9.7 (*Price Adjustments*).

"Pricing Proposal" has the meaning set forth in paragraph (c) of Section 9.7 (*Price Adjustments*).

"Priority 1 Level" means an Outage or complete business shutdown, where Resource Provider cannot perform its obligations under this Agreement.

"Priority 2 Level" means a Derating that affects a major element of Resource Provider's ability to operate, while some aspects of Resource Provider's business can continue.

"Project" has the meaning set forth in Recital B of the preamble of this Agreement.

"Project Lenders" means any Person providing, arranging, insuring or guaranteeing all or part of any financing, refinancing or other funding, including any tax equity financing, for the GSDS or any part thereof, or any agent, trustee or other Person representing or acting on behalf of any such Person.

"PROMESA" means Public Law No: 114-187 (June 30, 2016), otherwise known as the Puerto Rico Oversight, Management, and Economic Stability Act.

"PROMESA Court" means the United States District Court for the District of Puerto Rico.

"Proposed Design" has the meaning set forth in paragraph (b) of Section 4.1 (*Proposed Design*).

"Proposed Initial Integration Date" has the meaning set forth in Section 5.1 (Scheduling Integration).

"Protection and Control Equipment" has the meaning set forth in Section 4.6 (*Protection and Control Equipment*).

"Prudent Utility Practices" means the spectrum of possible practices, methods, conduct and actions (including the practices, methods, conduct, and actions engaged in or approved by a significant portion of the power industry in the United States) that, at a particular time, in the exercise of reasonable discretion at the time a decision was made, could have been expected to accomplish the desired result in a manner consistent with Applicable Laws and Applicable Standards for reliability, safety and economy.

"Puerto Rico Controller" means the Office of the Controller for the Commonwealth of Puerto Rico.

"Qualified Bank" means a national bank, national association, commercial bank or other financial institution organized under the laws of the United States or a political subdivision thereof or validly existing in the country of its organization and registered to do business in the United States, having a branch located within Puerto Rico or the contiguous United States, in each case that has a long-

term issuer rating of at least (i) if headquartered within Puerto Rico, then "B+" by Standard & Poor's Ratings Services, "B1" by Moody's Investors Services Inc., or "B+" by Fitch Ratings Inc. or (ii) if headquartered outside of Puerto Rico, then "A-" by Standard & Poor's Ratings Services, "A3" by Moody's Investors Services Inc., or "A-" by Fitch Ratings Inc., or in each case if the relevant rating agencies cease to engage in business or rate the obligations in question, then an equivalent rating from another internationally recognized rating agency selected by Resource Provider with the written consent of PREPA; provided that, if such financial institution's ratings satisfy such minimum ratings, no other credit rating agency shall have placed such financial institution on credit watch with negative implications.

"Qualified Operator" means Resource Provider, an Affiliate of Resource Provider or a Sponsor, or, if a third-party contractor of Resource Provider or its Affiliate, an entity with at least two (2) years' experience operating facilities of a type similar to the GSDS or another qualified and experienced operator reasonably acceptable to PREPA.

"Qualified Resource" means one or more Energy Storage Resource, Renewable Energy Resource or Demand Response Resource, integrated with Protection and Control Equipment into a resource that collectively (i) does not exceed 1 MW-AC at its Interconnection Point and (ii) can be utilized by Resource Provider to provide one or more Grid Services to PREPA in accordance with the terms of this Agreement, including Appendix H (*Grid Services*).

"Qualified Sponsor" means a Person that (i) has an Unrestricted Net Worth of at least seventy-five million dollars (\$75,000,000) as demonstrated by audited financial statements prepared in accordance with GAAP and furnished to PREPA and (ii) is not a Restricted Person.

"Qualified Transferee" means a Person that (i) has provided to PREPA the certifications and documentation required by Appendix B (*PREPA Signing Conditions*), other than items (k) and (l) of Part 1 thereof and item (a) of Part 2 thereof, but construing references to Resource Provider therein instead as a reference to such Person, and (ii) is not a Restricted Person, provided that, prior to the Commercial Operation Date, such Person shall have additionally provided to PREPA its audited financial statements prepared in accordance with GAAP, demonstrating that such Person has an Unrestricted Net Worth of at least twenty-five million dollars (\$25,000,000) (or that its Ultimate Parent Company satisfies the requirements of a Qualified Sponsor).

"Quarter" means, for each calendar year (or part thereof) during the Term, each period of three (3) consecutive Months beginning on the first of January, April, July and October during such year.

"Ramp Rate" has the meaning set forth in Appendix H (*Grid Services*).

"Receiving Party" has the meaning set forth in paragraph (a) of Section 12.9 (Confidentiality).

"Registry" has the meaning set forth in Section 9.5 (*Green Credits*).

"Renewable Energy Resource" means any renewable energy resource, connected to the Distribution System, that qualifies as a source of "green energy" under the Law for Diversification through Sustainable and Alternative Energy in Puerto Rico, Act No. 82-2010, as amended, including, but not limited to, solar PV generating facilities, wind generating facilities, hydroelectric generating facilities or any combination of these technologies.

"Resource Provider" has the meaning set forth in the preamble of this Agreement.

"Resource Provider Delay Liquidated Damages" or "RPDLD" means, for each Day of delay applicable under paragraph (b) of Section 3.5 (*Delay Liquidated Damages*), an amount (expressed as \$ per Day) determined in accordance with the following formula:

$$RPDLD = LD \cdot \frac{GC - EC}{GC}$$

where:

RPDLD = Resource Provider Delay Liquidated Damages for such Day, expressed in \$;

LD = the amount expressed as \$ per Day, set forth in the column captioned "Resource Provider Delay Liquidated Damages", which corresponds to the Milestone captioned "Commercial Operation" in the Milestone Schedule;

GC = the sum of the Guaranteed Capability for Demand Build Service and the Guaranteed Capability for Demand Reduction Service applicable to such Day, expressed in kW; and

EC = the sum of capacity enrolled in the VPP for Demand Build Service and Demand Reduction Service as of such Day, expressed in kW.

"Resource Provider Execution Date" means the date on which Resource Provider executes and delivers this Agreement as set forth immediately below Resource Provider's signature line.

"Restricted Person" means any Person that has been, or that has any Affiliate that has been, within the past ten (10) years: (i) charged with, or convicted of, money laundering, drug trafficking, terrorist-related activities or other money laundering predicate crimes under any Applicable Law, (ii) assessed civil penalties under any such Applicable Laws; or (iii) had any of its funds seized or forfeited in an action under any such Applicable Laws.

"**RFP**" has the meaning set forth in Recital A in the preamble of this Agreement.

"Scheduled Derating" means a planned Derating that Resource Provider has coordinated in advance with PREPA with a mutually agreed commencement date, time, and duration, and set out in the Scheduled Maintenance Program pursuant to Article 6 (*Operation of the GSDS*).

"Scheduled Expiration Date" has the meaning set forth in paragraph (b) of Section 2.5 (*Performance Security*).

"Scheduled Maintenance Program" has the meaning set forth in paragraph (c) of Section 6.2 (Scheduled Maintenance).

"Scheduled Outage" means a planned Outage that Resource Provider has coordinated in advance with PREPA with a mutually agreed commencement and duration, and set out in the Scheduled Maintenance Program pursuant to Article 6 (*Operation of the GSDS*).

"Security Amount" means (i) prior to the Commercial Operation Date, fifty dollars (\$50) per kW multiplied by the sum of the Guaranteed Capability for the Demand Reduction Service plus the

Guaranteed Capability of the Demand Build Service, in each case for the fourth (4<sup>th</sup>) quarter of Agreement Year 3, or such higher amount as agreed in accordance with paragraph (c) of Section 3.5 (*Delay Liquidated Damages*), and (ii) thereafter, seventy dollars (\$70) per kW *multiplied* by the sum of the Guaranteed Capability for the Demand Reduction Service *plus* the Guaranteed Capability of the Demand Build Service, in each case for the fourth (4<sup>th</sup>) quarter of Agreement Year 3.

"Service of Process Agent" has the meaning set forth in Section 1.1 (General) of the Payment Guarantee.

"**Shareholder**" means, for any time of determination, any direct holder of capital stock in Resource Provider at such time.

"Source Code" means (i) the human readable source code of the GSDS that consists of narrated documentation related to the compilation, linking, packaging and platform requirements of the GSDS and any other materials or software sufficient to enable a reasonably skilled programmer to build, modify and use the code within a commercially reasonable period of time for the purpose of establishing, operating, and/or maintaining the GSDS and diagnosing errors and that can reasonably be compiled by a computer for execution, (ii) all internal proprietary tools used by Source Code Owner to develop or test the platform, (iii) instructions to enable hosting the platform, and (iv) and a list of any third party tools, applications and services used to develop, test or support the GSDS.

"Source Code Escrow Agent" means an escrow agent approved by PREPA.

"Source Code Escrow Agreement" means a multi-party escrow agreement among PREPA, the Source Code Escrow Agent and all Source Code Owners depositing Source Code into the Source Code Escrow which, among other matters, names PREPA as beneficiary thereunder, and is otherwise acceptable in form and substance to PREPA and Resource Provider.

"Source Code Owner" means the developer and/or owner of the Source Code authorized to deposit the Source Code with the Source Code Escrow Agent upon the terms of the Source Code Escrow Agreement.

"Sponsor" means the Ultimate Parent Company of Resource Provider.

"Step-In Event" means the occurrence of a Default by Resource Provider.

"Step-In Rights" has the meaning set forth in paragraph (a) of Section 4.9 (PREPA Step-In Rights).

"Stored Energy" means, for any Participant Energy Storage Resource and any time of determination, the quantity of Energy stored in such resource at such time in MWh.

"Subject Time Extension Claim" has the meaning given in paragraph (b) of Section 3.4 (Extensions of Time).

"Supply Period" means the period that commences on the Commercial Operation Date and expires on the ten  $(10^{th})$  anniversary thereof.

"T&D Operator" means LUMA, or any future operator of Puerto Rico's electric power Grid System and any of LUMA's or such operator's Affiliates, including PREPA's assignee under the circumstances described in Section 19.2 (*PREPA's Right to Assign*).

- "Tax Credits" means the production or investment tax credits (including any grants or payment in lieu thereof) and any tax deductions or other benefits under the Internal Revenue Code or other Applicable Law available as a result of the ownership and operation of the GSDS, the aggregation of the Participant Resources or the Dispatch of Grid Services (including, without limitation, tax credits (including any grants or payments in lieu thereof) and accelerated and/or bonus depreciation).
- "Taxes" means any and all taxes, fees or other charges of any nature whatsoever, including tariffs, duties, income taxes and repatriation (tollgate) taxes, imposed or assessed by a Governmental Authority responsible for implementing Applicable Law relating to tax on or as a result of the installation, ownership or operations of the GSDS.
- "Technical Dispute" has the meaning set forth in paragraph (b) of Section 21.3 (Negotiation).
- "**Technical Input**" has the meaning set forth in paragraph (c) of Section 4.1 (*Proposed Design*).
- "**Technical Recommendation**" has the meaning set forth in paragraph (b) of Section 21.4 (*Technical Recommendation*).
- "**Term**" has the meaning set forth in Section 2.2 (*Initial Term*).
- "Termination Balance" has the meaning set forth in paragraph (b) of Section 17.2 (*Tracking Account*).
- "**Termination Date**" means the date of the earliest to occur of any of the events set forth in Section 15.1 (*Termination Date*).
- "**Termination Liquidated Damages**" means the liquidated damages contemplated by Section 15.3 (*Termination Damages*).
- "**Testing Protocol**" means PREPA's standard protocols for testing and commissioning the VPP set forth in Appendix M (*Data, Integration and Testing Protocol*), as amended from time to time.
- "Time Interval" means, with respect to the twenty-four (24) consecutive, fifteen (15) minute periods during each Grid Services Window of each Day during an Agreement Year, any one (1) of such fifteen (15) minute periods.
- "Tracking Account" has the meaning set forth in paragraph (a) of Section 17.2 (*Tracking Account*).
- "Trademark License Agreement" means the trademark license agreement entered into between PREPA and the Resource Provider substantially in the form set forth in Appendix Z (Form of Trademark License Agreement).
- "Transfer" has the meaning set forth in Section 19.2 (PREPA's Right to Assign).
- "Tribunal" has the meaning set forth in paragraph (a) of Section 21.5 (Arbitration).
- "Unrestricted Net Worth" means, for any Person, the sum of (i) the subscribed and paid-up equity (including additional paid-in capital), and (ii) the Unrestricted Retained Earnings, in each case of such Person.

"Unrestricted Retained Earnings" means, for any Person, the amount of accumulated profits and gains realized out of the normal and continuous operations of such Person after deducting distributions to stockholders and transfers to capital stock or other accounts, and which is (i) not appropriated by its board of such Person for corporate expansion projects or programs; (ii) not covered by a restriction for dividend declaration under a loan agreement; (iii) not required to be retained under special circumstances obtaining in such Person such as when there is a need for a special reserve for probable contingences; and (iv) not otherwise covered by any other legal restriction (which refers to any injunction, judgement, or order issued by any judicial authority) on the ability of such Person to distribute or otherwise apply its equity.

"Ultimate Parent Company" means, with respect to any Person, the Person that Controls such first Person but is not itself Controlled by any other Person.

"VPP" means the GSDS and the aggregated Participant Resource(s) under its operation and control.

"Week" means a seven (7) Day period beginning at 00:00 (Puerto Rico Time) on Monday and finishing immediately prior to 00:00 on the immediately following Monday, and "Weekly" has a corresponding meaning.

"Wholly-Owned Affiliate" means, with respect to the Sponsor, any Person that:

- a. owns directly or indirectly one hundred percent (100%) of the issued share capital and voting rights of the Sponsor;
- b. has one hundred percent (100%) of its issued share capital and voting rights owned directly or indirectly by the Sponsor; or
- c. has one hundred percent (100%) of its issued share capital and voting rights owned directly or indirectly by another Person which owns directly or indirectly one hundred percent (100%) of the issued share capital and voting rights of the Sponsor.

"Year" means a calendar year, which shall be the twelve (12) Month period beginning 00:00 on January 1 and ending at 00:00 on the subsequent January 1.

# 1.2 <u>Rules of Interpretation</u>

The rules of interpretation listed below shall apply when interpreting this Agreement:

- a. Words importing the singular also include the plural and vice versa.
- b. References to natural persons or parties include any person having legal capacity.
- c. References to a Person include such Person's successors and assigns; provided that with respect to a Party and its rights and obligations under this Agreement, references to a Party shall only include such Party's successors and assigns if this Agreement permits such successors and assigns.
- d. Words importing one gender include the other gender.
- e. The words "include" and "including" mean "including, but not limited to" and corresponding grammatical variants.

- f. Except as otherwise expressly stated herein, all references in this Agreement to this Agreement (including the Appendices hereto) or to contracts, agreements, or other documents shall be deemed to mean this Agreement (including the Appendices hereto) and such contracts, agreements or other documents, as the same may be modified, supplemented, or amended from time to time.
- g. Except as otherwise expressly stated herein, all references to Sections, Articles, and Appendices in this Agreement are references to the Sections, Articles, and Appendices of this Agreement.
- h. Words and abbreviations not defined in this Agreement which have generally accepted technical or design, engineering, or construction industry meanings are used in this Agreement in accordance with such recognized meanings.
- i. The terms "hereof," "herein," "hereto," "hereunder" and words of similar or like import, refer to this entire Agreement, together with its Appendices, and not any one particular Article, Section, Appendix, or other subdivision of this Agreement.
- j. The headings contained in this Agreement are used solely for convenience and do not constitute a part of the Agreement between the Parties hereto, nor should they be used to aid in any manner in the construction of this Agreement.
- k. References to PREPA in the definitions of Dispatch Notice, Grid System Event and Trademark License Agreement, and in Section 4.5 (*Co-Branding; Use of PREPA's Trademarks*), Section 6.5 (*Restoration of the GSDS*), Article 7 (*Dispatching Obligations*), Section 8.2 (*Data and Materials*), Section 9.1 (*General*), and in Section 9.4 (*Ancillary Services*), include its dispatching center(s) and the T&D Operator, as applicable.
- 1. Terms used in the present tense may be interpreted as referring to the past tense and vice versa.
- m. Nothing contained in this Agreement shall be construed or interpreted to limit in any way PREB's power and authority under the Laws of the Commonwealth of Puerto Rico.

#### 2. TERM, EFFECTIVENESS & PERFORMANCE SECURITY

# 2.1 Signing Conditions

The Parties shall complete their respective obligations set out in Appendix B (*PREPA Signing Conditions*) no later than the Agreement Date. Resource Provider recognizes that submittal of the certifications and documents set out in Appendix B (*PREPA Signing Conditions*) constitute an essential condition of this Agreement.

#### 2.2 Initial Term

The term of this Agreement (the "**Term**") shall begin with the Agreement Date and continue until the expiration of the Supply Period, unless extended or earlier terminated in accordance with the terms hereof. If the Parties extend the Term, then the word "Term" shall thereafter be deemed to mean the original Term as so extended.

# 2.3 <u>Initial Effectiveness & Closing Date</u>

- The rights and obligations of the Parties under Article 1 (Definitions & Interpretation), this a. Article 2, Section 3.6 (Exchange of Information), Section 3.7 (Cooperation), Article 11 (Liability), Article 12 (Representations, Warranties, & Covenants), Article 14 (Force Majeure), Article 15 (Termination), Article 19 (Assignment & Transfer), Article 20 (Notices), Article 21 (Dispute Resolution) and Article 22 (Miscellaneous Provisions), shall enter into full force and effect on the Agreement Date (collectively, the "Agreement Date **Obligations**"). PREPA shall notify Resource Provider of the Agreement Date within five (5) Business Days after PREPA executes this Agreement. Subject to the foregoing rights and obligations that become effective on the Agreement Date, the remaining provisions of this Agreement shall become effective on the date (the "Closing Date") as of which the Parties jointly sign a certificate, in the form set forth in Appendix Q (Form of Conditions Precedent Certificate), confirming the satisfaction or waiver of each of the conditions precedent set out in Appendix C (Conditions Precedent) (the "Conditions Precedent"). The Parties shall issue such certificate within five (5) Business Days after the occurrence of such satisfaction or waiver. Each Party shall use its commercially reasonable efforts to satisfy their respective Conditions Precedent (other than the Condition Precedent set forth in paragraph (c) of Part 3 (Other Conditions) of Appendix C (Conditions Precedent)) and cause the Closing Date to occur no later than sixty (60) Days after the Agreement Date.
- b. If either (i) the Closing Date does not occur for any reason within one hundred eighty (180) Days after the Agreement Date, or (ii) PREPA notifies Resource Provider of its intention either not to (A) accept the Best and Final Offer made by Resource Provider, or (B) issue a Best Interests Determination for the Project, in each case for any reason whatsoever, then, without limiting Section 15.2 (No Discharge of Obligations), this Agreement shall automatically terminate at midnight on such Day. Upon termination of this Agreement in accordance with this paragraph (b) of this Section 2.3, (A) neither Party shall incur any liability to the other Party, and (B) PREPA shall return the Bid Security to Resource Provider unless (1) Resource Provider breached any of the Agreement Date Obligations in a material way and failed to cure such breach within ten (10) Business Days of the occurrence of such breach, and (2) the occurrence of such breach would have prevented Resource Provider from fulfilling its obligations in the time required under this Agreement or was reasonably related to the non-issuance of the Best Interests Determination for the Project, in which case PREPA shall have the right, as its sole and exclusive remedy for such breach by Resource Provider (other than, in the case of a breach of Section 12.9 (Confidentiality), the right to seek specific performance), to draw on the full face amount of the Bid Security.
- c. If either (i) the Agreement Date has not occurred by the Opt-Out Date or (ii) PREPA has not issued to Resource Provider a Best Interests Determination for the Project by the Opt-Out Date, then in either case at any time thereafter prior to the date that both the Agreement Date has occurred and PREPA has issued to Resource Provider a Best Interests Determination for the Project, and without limiting paragraph (b) of this Section 2.3, Resource Provider may terminate this Agreement with immediate effect by notice to PREPA. Without limiting Section 15.2 (No Discharge of Obligations), if Resource Provider terminates this Agreement in accordance with this paragraph (c) of this Section 2.3, (i) neither Party shall incur any liability to the other Party, and (ii) PREPA shall return the Bid Security to Resource Provider unless (A) Resource Provider breached any of the Agreement Date Obligations in a material way and Resource Provider failed to cure such breach within ten (10) Business Days of notice from PREPA of the occurrence of such

breach, and (B) the occurrence of such breach would have prevented Resource Provider from fulfilling its obligations in the time required under this Agreement or was reasonably related to the non-issuance of the Best Interests Determination for the Project by the Opt-Out Date, in which case PREPA shall have the right, as its sole and exclusive remedy for such breach by Resource Provider (other than, in the case of a breach of Section 12.9 (*Confidentiality*) the right to seek specific performance), to draw on the full face amount of the Bid Security.

#### 2.4 Extension

The Parties may agree to extend the Term of this Agreement, with approval from PREB, for up to two (2) consecutive periods of five (5) Agreement Years each, following the expiration of the initial Supply Period. Either Party may notify the other of its desire to extend the Term in writing as provided for under this Section 2.4 not less than eighteen (18) Months prior to the expiration of the initial Supply Period or extended Supply Period, as the case may be. During any extension, all provisions contained herein shall remain in effect unless otherwise agreed in writing.

# 2.5 <u>Performance Security</u>

- a. To secure the due, proper, timely, and full performance of Resource Provider's obligations under this Agreement, Resource Provider shall provide to PREPA as a condition precedent to the Closing Date, at Resource Provider's sole expense, one or more on first demand, irrevocable standby letters of credit issued by a Qualified Bank substantially in the form set forth in Appendix S (*Form of Performance Security*) (or cash collateral or other on-first demand, irrevocable security acceptable to PREPA in its sole discretion) in an amount equal to the Security Amount (the "**Performance Security**").
- b. Resource Provider shall (i) maintain the Performance Security in full force and effect and in accordance with this Agreement until the date that occurs sixty (60) Days after the expiration of the Term (the "Scheduled Expiration Date"), and (ii) together with the delivery of each Performance Security or replacement thereof, deliver a written statement dated as of the delivery date duly signed by its authorized representative certifying that the issuer of such Performance Security meets the requirements of a Qualified Bank.
- c. Resource Provider shall cause a Qualified Bank to issue, reissue or replace any Performance Security (in compliance with this Section 2.5) in accordance with the following:
  - 1. to the extent that the Performance Security will expire or cease to exist prior to the Scheduled Expiration Date, then no later than twenty-one (21) Days prior to the date of such expiration or cessation;
  - 2. in the event that the issuer of the Performance Security ceases to meet the requirements of a Qualified Bank, then no later than twenty-eight (28) Days after the date of such cessation; and
  - 3. if the Parties agree to increase the Guaranteed Capability, then promptly upon the date of such agreement.
- d. PREPA shall have the right to draw down on the Performance Security (via a full or one or more partial drawings) to satisfy any outstanding, unpaid amounts owed to PREPA

hereunder or as otherwise specifically provided herein, upon the occurrence of any of the following events:

- 1. a COD Termination Event;
- 2. Resource Provider's failure to pay Liquidated Damages when due and after invoiced under Section 10.3 (*Invoice for Liquidated Damages*) of this Agreement;
- 3. Resource Provider's failure to provide replacement Performance Security in accordance with paragraph (c) of this Section 2.5; provided that (i) PREPA deposits the amount so drawn in an escrow account in a bank selected by PREPA until Resource Provider delivers the replacement Performance Security to PREPA and upon such delivery, PREPA shall cause the release of the undrawn amounts on deposit in such account to Resource Provider, and (ii) PREPA shall have the right to draw from the escrow account in accordance with paragraph (d) of this Section 2.5 and Resource Provider shall bear the costs of opening and maintaining such escrow account;
- 4. except as otherwise covered by items (1) to (3), paragraph (d) of this Section 2.5, a Default by Resource Provider;
- 5. Payment Guarantee Cross-Default; or
- 6. any other event that expressly entitles PREPA to draw down or claim on the Performance Security under this Agreement.

PREPA shall have the right to draw down on the entire undrawn portion of the face amount of the Performance Security upon the occurrence of (i) the events described in items (1), (3) and (5), paragraph (d) of this Section 2.5, and (ii) PREPA's termination of this Agreement following the occurrence of a Default by Resource Provider.

# 2.6 <u>Approved Form of Participant Service Agreement</u>

- a. No later than sixty (60) Days after the Agreement Date, Resource Provider shall submit to PREPA a draft form Participant Service Agreement that shall comply with the requirements set forth in this Agreement, including Appendix Y (*Participant Service Agreement Requirements*). PREPA shall review and comment on such draft within twenty (20) Business Days to confirm compliance with the requirements set forth in this Agreement, including Appendix Y (*Participant Service Agreement Requirements*), and deliver to Resource Provider written notice that PREPA either (i) accepts the draft form Participant Service Agreement (the "Approved Form"), or (ii) does not accept such draft form Participant Service Agreement, in which case PREPA shall simultaneously deliver to Resource Provider a written and detailed description of PREPA's objections to such draft form Participant Service Agreement and PREPA's required amendments thereto, which amendments PREPA shall reasonably propose in good faith and align with Prudent Utility Practices and the requirements of Appendix Y (*Participant Service Agreement Requirements*) (the "Drafting Input").
- b. If PREPA has provided Drafting Input to Resource Provider in accordance with the foregoing, then no later than ten (10) Days following Resource Provider's delivery to PREPA of Resource Provider's revised form Participant Service Agreement, which revised

form Participant Service Agreement shall be consistent with the Drafting Input, PREPA shall review such revised form Participant Service Agreement and notify Resource Provider in writing either that (i) such revised design constitutes the Approved Form, or (ii) PREPA does not accept such revised form Participant Service Agreement, in which case PREPA shall simultaneously deliver to Resource Provider further Drafting Input. The Parties shall repeat the foregoing process until PREPA accepts the draft form Participant Service Agreement as an Approved Form, which approval PREPA shall not unreasonably withhold.

- c. The Parties shall use good faith efforts to agree upon an Approved Form of the Participant Service Agreement within ninety (90) Days of Resource Provider's submission of the revised draft form Participant Service Agreement, after Resource Provider has received PREPA's Drafting Input for the first time.
- d. PREPA shall submit the Approved Form of the Participant Service Agreement to PREB for approval and exercise reasonable efforts to obtain PREB's approval of such form. Resource Provider shall not contract with any Participants using the Participant Service Agreement in connection with their Qualified Resources until PREB has approved the Approved Form of the Participant Service Agreement (such form of agreement, as so approved, the "PREB Approved Form").
- e. Resource Provider shall use the PREB Approved Form when contracting with Participants to enroll the Qualified Resources under this Agreement. Resource Provider shall not amend the PREB Approved Form in any material respect without PREPA's and PREB's prior approval. PREPA reserves the right to review any executed Participant Service Agreement.
- f. Notwithstanding this Section 2.6, PREPA's and PREB's approval of the Approved Form and PREB Approved Form, respectively, and PREPA's review of any executed Participant Service Agreement shall not constitute an approval or endorsement of such agreement, or be effective as a waiver of any of PREPA's rights under this Agreement. Resource Provider shall advise each Participant of such limitation.
- g. Resource Provider shall achieve 40% Guaranteed Capability and 80% Guaranteed Capability by the corresponding time for completion / occurrence set forth in the Milestone Schedule.

#### 3. PRE-OPERATION PERIOD

#### 3.1 Consulting Technical Expert

No later than the Closing Date, PREPA shall consult with Resource Provider and appoint a technical consultant (the "Consulting Technical Expert") to review technical matters, assist in the resolution of technical issues and monitor the works undertaken by, or on behalf of, Resource Provider (i) for the design, deployment and installation of the GSDS, (ii) the identification and aggregation of Qualified Resources, and (iii) the operation and maintenance of the GSDS and delivery of Grid Services from the VPP, during the Supply Period. PREPA may designate different Consulting Technical Experts for different purposes under this Agreement. The Consulting Technical Expert's staff shall include suitably qualified professionals who possess the competence to carry out such duty. The Consulting Technical Expert shall conduct reviews of works performed by, or on behalf of, Resource Provider in accordance with Appendix I (*Progress Review*). Resource Provider shall consider all non-binding technical recommendations issued by the Consulting

Technical Expert during the Pre-Operation Period. Whenever carrying out its duties in accordance with this Agreement, the Consulting Technical Expert shall act on behalf of PREPA. Any of the foregoing actions undertaken by or on behalf of PREPA shall not relieve Resource Provider from any responsibility it has under this Agreement.

### 3.2 Resource Provider's Development Obligations

Resource Provider shall (i) recruit and enroll Participants, (ii) design, deploy, finance, install, test, and commission, and use commercially reasonable efforts to permit, the GSDS, and (iii) achieve Commercial Operation no later than the Guaranteed Commercial Operation Date, at its own cost, in accordance with the Milestone Schedule, the requirements of all Permits, the MTRs, the Approved Design, Prudent Utility Practices, the other provisions of this Agreement, Applicable Law and Applicable Standards. The Commercial Operation Date may not occur earlier than thirty (30) Days prior to the Guaranteed Commercial Operation Date unless mutually agreed by the Parties in accordance with the notification and integration process described in this Agreement.

# 3.3 Regular Updates

Resource Provider shall submit progress reports to PREPA on (i) the design, deployment, permitting, third-party contracting, financing, installation, recruitment and enrollment of Participants for the GSDS; and (ii) identification of Qualified Resources (including their resource classification), enrollment of Participants and execution of Participant Service Agreements, no later than the tenth (10<sup>th</sup>) Business Day of every Month, commencing on the first Month following the Closing Date and continuing until the Commercial Operation Date. Resource Provider acknowledges that PREPA may keep PREB and other Governmental Authorities apprised of its progress.

#### 3.4 Extensions of Time

- a. Resource Provider shall have the right to an extension of the time for the completion or occurrence of any Milestone or deadline expressly stated herein where a Force Majeure affecting Resource Provider or a PREPA Risk Event directly delays Resource Provider's ability to achieve such Milestone or deadline, but only to the extent that (i) such delay would not have occurred but for the occurrence of such event, (ii) Resource Provider exercises its commercially reasonable efforts to mitigate the effects of such delay, and (iii) Resource Provider has notified PREPA of such delay and provided PREPA with a detailed explanation of the circumstances leading to such delay, as promptly as possible, but no later than ten (10) Business Days after Resource Provider becomes aware of the delay.
- b. If Resource Provider exercises its right to an extension of time in accordance with paragraph (a) of this Section 3.4, then the time for completion or occurrence of such Milestone or deadline shall extend by the number of Days during which such event giving rise to such delay prevented Resource Provider from achieving such Milestone or deadline; provided that, notwithstanding any other provision of this Agreement to the contrary, with respect to any extension of the Milestone for Commercial Operation, such extensions shall not exceed seventy-three (73) Days (being the aggregate ten percent (10%) of the period allocated for the time for completion or occurrence on the Agreement Date) without the prior written approval of PREB (which PREPA shall request upon receipt of a legally-valid claim for an extension of time under paragraph (a) of this Section 3.4 from Resource Provider (the "Subject Time Extension Claim") specifying the nature and extent of the expected delay (the "PREB Extension Approval")).

c. If PREPA has requested a PREB Extension Approval, but PREB has not yet provided such approval, PREPA hereby waives its right to (i) receive Resource Provider Delay Liquidated Damages, or (ii) terminate this Agreement for a COD Termination Event, in each case to the extent that such rights arise from the delay period set forth in the Subject Time Extension Claim, provided that Resource Provider continues to comply with its obligation under clause (ii), paragraph (a) of this Section 3.4 to mitigate the effects of such delay.

#### 3.5 Delay Liquidated Damages

- a. To the extent that (i) a PREPA Risk Event delays Resource Provider's ability to achieve Commercial Operation as determined under Section 3.4 (Extensions of Time) and (ii) Resource Provider achieves Deemed Completion, then PREPA shall pay to Resource Provider, no later than forty-five (45) Days after receipt of an invoice therefor and as Resource Provider's sole and exclusive remedy in respect of such delay, an amount per Day of such delay equal to one thirtieth (1/30) of the product of the aggregate Guaranteed Capability for the first Agreement Year multiplied by the sum of the Demand Reduction Price plus the Demand Build Price applicable to the first Agreement Year as liquidated damages (the "PREPA Delay Liquidated Damages") for each day that a PREPA Risk Event delayed achievement of Commercial Operation; provided that (A) if, upon the occurrence of Commercial Operation Date, the Capability established by the Initial Performance Tests falls below the aggregate Guaranteed Capability for the first Agreement Year, then the Parties shall reduce the PREPA Delay Liquidated Damages and Resource Provider shall credit PREPA's account for any overpayment according to the ratio that such Capability bears to Guaranteed Capability; and (B) the Term shall reduce for each Day in respect of which PREPA has paid PREPA Delay Liquidated Damages. The Parties acknowledge and agree that the PREPA Delay Liquidated Damages represent a fair and reasonable estimate of the losses which Resource Provider will suffer if Commercial Operation does not occur by the Guaranteed Commercial Operation Date, and accordingly the Parties hereby waive their right to dispute the validity of this paragraph (a) of this Section 3.5.
- b. Subject to paragraph (c) of Section 3.4 (Extensions of Time), for each Day of delay in achieving Commercial Operation after the Guaranteed Commercial Operation Date until the earlier of (i) the Commercial Operation Date, and (ii) the Long-Stop Date, other than any Day in respect of which PREPA has an obligation to pay PREPA Delay Liquidated Damages in accordance with paragraph (a) above (or, if Deemed Completion shall have occurred, any Day included within the fifteen (15) consecutive Day period contemplated by the definition of Deemed Completion), Resource Provider shall pay to PREPA, as liquidated damages, the Resource Provider Delay Liquidated Damages, no later than fortyfive (45) Days after receipt of an invoice therefor. The Resource Provider Delay Liquidated Damages shall constitute PREPA's sole and exclusive remedy in respect of such delay, other than those remedies arising out of the termination by PREPA for delay under Section 15.1 (Termination Date). The Parties acknowledge and agree that the Resource Provider Delay Liquidated Damages represent a fair and reasonable estimate of the losses which PREPA will suffer if Commercial Operation does not occur by the Guaranteed Commercial Operation Date, and accordingly the Parties hereby waive their right to dispute the validity of this paragraph (b) of this Section 3.5.
- c. The Parties acknowledge and agree that Resource Provider's maximum aggregate liability arising out of this Agreement for delays in achieving Commercial Operation shall not exceed the Security Amount. If, prior to the Commercial Operation Date, the accrued

Resource Provider Delay Liquidated Damages (determined without reference to the Security Amount) exceed, or will likely exceed, the applicable Security Amount, then Resource Provider shall have the right to increase the Security Amount by an amount specified in a written notice to PREPA; provided that, if the amount of such increase exceeds the amount (expressed in USD) corresponding to the product of the per Day Resource Provider Delay Liquidated Damages amount *multiplied by* the number of Days corresponding to a ten percent (10%) increase, in the aggregate with all of the extensions of time to achieve Commercial Operation, then such increase shall not become effective until PREPA obtains PREB's approval of such increase (which PREPA shall request upon receipt of a written request from Resource Provider specifying the nature and extent of the expected increase). If Resource Provider desires to increase the Security Amount under this paragraph (c) of this Section 3.5, then such increase shall not become effective until Resource Provider has delivered a replacement Performance Security with a total face amount to cover the increased Security Amount.

#### 3.6 Exchange of Information

For purposes of conducting any investigations and evaluations as the Parties may deem reasonable and necessary to determine the feasibility of the GSDS, the identification and aggregation of Qualified Resources and the technical aspects related to the provision of Grid Services, the Parties agree to cooperate reasonably and in good faith and provide each other and their respective representatives reasonable and timely access to relevant personnel, advisors, properties, and books and records including Participant Data, provided the information is not privileged, confidential or protected under other agreements with third parties or by Law. Subject to the conditions stated in the previous sentence, each Party hereby agrees to cooperate and exchange information necessary to design, deploy, permit, finance, install and operate the GSDS. Notwithstanding anything in this Agreement to the contrary, Resource Provider shall remain solely responsible for designing, deploying, permitting, financing, installing and operating the GSDS.

### 3.7 Cooperation

To the extent legally permitted, the Parties agree to cooperate reasonably and in good faith in the mutually beneficial endeavor to (i) identify Qualified Resources, enroll Participants and execute Participant Service Agreements, (ii) obtain financing for the GSDS, and (iii) obtain all necessary Permits, endorsements and approvals for design, deployment, and installation of the GSDS, and testing and operation of the VPP. Notwithstanding anything in this Agreement to the contrary, Resource Provider shall remain solely responsible for obtaining the items set out in clauses (i) through (iii) of this Section 3.7.

### 3.8 <u>Protocols & Procedures</u>

No later than one hundred eighty (180) Days after the Closing Date, the Parties, in consultation with the Consulting Technical Expert, shall agree upon any adjustments or additions to the Testing Protocol (including in respect of the Performance Tests) and Operating Procedures applicable to the GSDS, taking into consideration Prudent Utility Practices, the MTRs, the Approved Design, the Operating Characteristics, equipment supplier and manufacturer recommendations set forth in their operating manuals, and the terms and conditions of this Agreement. The Testing Protocol and Operating Procedures shall only be modified with the written consent of the Parties. In the event of any conflict between the terms and conditions of this Agreement and the agreed adjustments or additions to the Testing Protocol or Operating Procedures, if any, the terms and conditions of this Agreement shall prevail. Resource Provider acknowledges and agrees that (i) its compliance with

the Operating Procedures or Testing Protocol does not relieve Resource Provider from any liability that it would otherwise have under this Agreement, and (ii) PREPA shall not be liable to Resource Provider or any other Person by reason of its review or approval of the Operating Procedures or Testing Protocol.

### 4. **VPP REQUIREMENTS**

### 4.1 Proposed Design

- a. No later than ninety (90) Days after the Closing Date, PREPA shall review and comment on the preliminary design of the VPP, exclusive of the design of any individual Participant Resource installation, provided by Resource Provider together with the execution of this Agreement.
- b. No later than sixty (60) Days after PREPA provides its comments (or approval) pursuant to paragraph (a) of this Section 4.1, Resource Provider shall submit to PREPA the general design of the VPP (the "**Proposed Design**"), including a typical system design for and expected allocation of anticipated Participant Resources, high level design drawings, single lines, and typical Participant Resource interconnection drawings. Resource Provider agrees to ensure that the Proposed Design will (i) comply with Prudent Utility Practices, the Operating Characteristics, Permits, Applicable Laws, Applicable Standards, and the MTRs, and (ii) incorporate all equipment required for the VPP to comply with the MTRs.
- c. No later than thirty (30) Days following Resource Provider's delivery to PREPA of the Proposed Design, PREPA shall complete its review of the Proposed Design and deliver to Resource Provider written notice that PREPA either (i) accepts the Proposed Design (the "Approved Design"), or (ii) does not accept such design based on its review, in which case PREPA shall simultaneously deliver to Resource Provider a written and detailed description of PREPA's objections to such design and PREPA's required modifications thereto, which modifications PREPA shall reasonably propose in good faith and consistent with Prudent Utility Practices (the "Technical Input"). To the extent the Technical Input involves a change in MTRs for the GSDS, the provisions of Section 4.2 (Modifications) of this Agreement shall apply.
- d. If PREPA provides Technical Input to Resource Provider in accordance with the foregoing, then no later than ten (10) Business Days following Resource Provider's delivery to PREPA of Resource Provider's revised Proposed Design, which revised Proposed Design Resource Provider shall ensure is consistent with the MTRs and Technical Input, PREPA shall review such revised Proposed Design and notify Resource Provider in writing either that (i) such revised design constitutes the Approved Design, or (ii) PREPA does not accept such design, in which case PREPA shall simultaneously deliver to Resource Provider further Technical Input. The Parties shall repeat the foregoing process until PREPA accepts an Approved Design, which approval PREPA shall not unreasonably withhold or delay.
- e. The Parties shall exercise commercially reasonable efforts to agree upon an Approved Design within sixty (60) Days of Resource Provider's submission of the revised Proposed Design, after Resource Provider has received PREPA's Technical Input. The Parties' failure to agree on the Approved Design within one hundred eighty (180) Days after Resource Provider's submission of a Proposed Design shall constitute grounds for an extension of time for the occurrence of Milestones to the extent otherwise permitted under Section 3.4 (Extensions of Time).

f. Resource Provider shall not, without PREPA's written consent (which PREPA shall not unreasonably withhold), commence the development or deployment of the GSDS until the Parties have agreed on an Approved Design; provided that, Resource Provider may, at its risk, order long-lead equipment prior to the achievement of the Approved Design.

#### 4.2 <u>Modifications</u>

- a. PREPA reserves the right to modify or expand the MTRs, or require changes to the application programming interface of the GSDS, in each case from time to time in accordance with Prudent Utility Practices and Applicable Law and in consultation with Resource Provider.
- b. If PREPA modifies or expands the MTRs in consideration of the risk of imminent and substantial harm to human life, property, or the Grid System (including degradation of service) or other Emergency or to address reliability or safety margins, then PREPA shall notify Resource Provider thereof in writing, providing the rationale in reasonable detail for such change, and Resource Provider shall implement such change within a reasonable period of time.
- c. If Resource Provider implements any modifications or expansions to the MTRs, or the application programming interface of the GSDS, that PREPA requires under paragraph (b) of this Section 4.2, or as requested by PREPA and agreed by Resource Provider, acting reasonably, then the following shall apply:
  - 1. Resource Provider shall assume the cost of such implementation, up to a total cost which, when added to any costs that PREPA previously required and incurred by Resource Provider pursuant to this Section 4.2 during the Term, does not exceed the Modification Limit. If such modification or expansion in any manner increases the cost or liability to Resource Provider of operating the GSDS or reduces the GSDS' ability to provide Grid Services, then the Parties shall treat that portion of Resource Provider's increased costs of operation or reasonably projected lost revenue under this Agreement arising out of such reduction as a cost of such change, provided that Resource Provider shall take all reasonable steps to minimize or mitigate such costs and losses; and
  - 2. If Resource Provider's costs attributable to such change (as reasonably determined and evidenced in writing to PREPA), when added to any costs Resource Provider previously incurred pursuant to PREPA's request for modification or expansion in accordance with paragraphs (a) and (b) of this Section 4.2 during the Term, exceed the Modification Limit, then PREPA shall increase the Monthly Payment to allow Resource Provider to recover that portion of the cost in excess of the Modification Limit in Monthly installments (i) in respect of modifications to the GSDS, over a term of eighteen (18) Months, or (ii) for a reduction to the GSDS' ability to provide Grid Services, over the remaining Supply Period or so long as the reduction exists.
- d. Each Party shall notify the other in advance of any changes to its system, and the reasons for those changes, that would reasonably require modification or expansion of the MTRs, affect the Protection and Control Equipment, or otherwise affect the integration of the GSDS with the DERMS.

- e. Notwithstanding anything in this Section 4.2 to the contrary, and only if not the result of changes required by PREPA, Resource Provider shall assume the total cost (without reimbursement) of implementing modifications to the MTRs or requirements for protection devices resulting from any deviations from the Operating Characteristics or the Approved Design or any changes to Resource Provider's system whatsoever.
- f. Resource Provider shall not make any modifications to the GSDS after the Commercial Operation Date that would materially impact the Grid System or Resource Provider's performance under this Agreement without PREPA's prior approval, which approval PREPA shall not unreasonably withhold, condition or delay. In no event will Resource Provider make any modifications to the GSDS that cause the GSDS to fall below the information technology and information assurance standards set forth in Section 6.13 (Information Security).
- g. No later than the Commercial Operation Date and on each anniversary thereof during the Supply Period, Resource Provider shall deliver to PREPA a certification, in such format as PREPA shall specify, that confirms that, as of the date of such certification, the GSDS continues to conform with the information technology and information assurance standards set forth in Section 6.13 (*Information Security*).

#### 4.3 Project Manager

- a. Each Party shall appoint a project manager with suitable training and skills to manage and oversee such Party's performance, and serve as such Party's primary representative, under this Agreement.
- b. The project manager shall have the authority to act for and on behalf of such Party with respect to all matters relating to this Agreement; provided that the project manager shall not have authority to make amendments to, or grant waivers under, this Agreement. Each Party shall make its project manager available during business hours or make arrangements for back-up outside of normal working hours.
- c. Each Party shall provide the other Party with any changes in contact information for the project manager as soon as reasonably possible.
- d. If a Party's project manager position becomes vacant for any reason, such Party shall, no later than twenty (20) Business Days after becoming aware of such vacancy, notify the other Party and, as soon as reasonably practicable thereafter, fill the position in accordance with paragraph (a) of this Section 4.3.

# 4.4 <u>Participants and Qualified Resources</u>

a. Resource Provider shall ensure that only one (1) Participant Resource connects at an Interconnection Point to a meter utilized by the GSDS. Prior to entering into a Participant Service Agreement, Resource Provider shall (i) ensure that the Participant has not enrolled its Qualified Resource in any Demand Response program or entered into a participant service agreement with another supplier of grid services or any other contract to supply Energy or make capacity available from its Qualified Resource, whether to PREPA or otherwise, (ii) exercise reasonable efforts to verify that the Participant has complied with PREPA's interconnection requirements for the relevant Qualified Resource, and (iii) present PREPA with information regarding such Participant, its Qualified Resource and

any interconnection agreement such Participant may have in place with PREPA that is reasonably sufficient to enable the Resource Provider and PREPA to assess the Participant's and its Qualified Resource's compliance with this Agreement. If PREPA rejects a proposed Qualified Resource or a Participant Resource as a result of PREPA's supplemental screening and review in accordance with Appendix H (*Grid Services*), Resource Provider may reduce the Guaranteed Capability for the remainder of the Supply Period, but only to the extent that such reduction arises from rejection of such Participant Resource under PREPA's supplementary screening and review. A reduction of the Guaranteed Capability pursuant to this paragraph (a) of this Section 4.4 shall not be considered a failure by Resource Provider to meet its Performance Guarantees.

- b. Resource Provider shall have the right to increase the Guaranteed Capability of the Participant Resources during any Agreement Year with PREPA's prior approval; provided that (i) such increase shall not exceed twenty percent (20%) of the applicable Guaranteed Capability during the immediately preceding Agreement Year, and (ii) such increase shall not become effective until PREPA obtains PREB's approval thereof. If the aggregate Guaranteed Capability for the Grid Services in any Quarter of an Agreement Year will exceed 150 MW (the "Escrow Triggering Condition"), whether as a result of an increase described in the preceding sentence or otherwise in accordance with the respective tables for Demand Reduction Service and Demand Build Service in Appendix G (Guaranteed Capability), then as a condition precedent to the approval and applicability of such increase and no later than five (5) Business Days prior to the start of such Quarter, (1) the Parties shall enter into one or more Source Code Escrow Agreement(s), and (2) Resource Provider shall (A) place the Source Code into escrow, (B) keep such Source Code updated with the latest version, and (C) ensure that the Source Code Owner(s) grant a license to PREPA (or the T&D Operator, if so designated by PREPA) to use the Source Code, in each case to ensure that, if a Step-In Event occurs, then in accordance with Section 4.9 (PREPA Step-In Rights), PREPA shall have the right to access promptly and utilize the Source Code for the purposes of ensuring the continued operation of the VPP until the resolution of such event.
- c. If a Participant violates any Applicable Law, Resource Provider shall take all appropriate action against that Participant including, if necessary, disensollment of the Participant and termination of the applicable Participant Service Agreement.

#### 4.5 Co-Branding; Use of PREPA's Trademarks

In connection with Resource Provider's provision of the Grid Services and subject to the terms and conditions related to Resource Provider's use of PREPA's (and any T&D Operator's) name(s), trademarks, and logos (collectively "**PREPA Trademarks**") set forth in the Trademark License Agreement, Resource Provider shall co-brand certain media using the PREPA Trademarks in accordance with the following requirements:

a. Resource Provider shall co-brand specific marketing material created by Resource Provider in relation to this Agreement and each Participant Service Agreement with a PREPA Trademark that PREPA as approved by PREPA in writing which approval PREPA shall not unreasonably withhold. If Resource Provider makes any changes, modifications or revisions to such approved marketing materials, then Resource Provider shall request additional prior approval from PREPA in accordance with this Section 4.5.

- b. Resource Provider shall not use PREPA Trademarks either as a standalone or as part of a co-branding effort on any materials other than as described in this Section 4.5. Without limiting the generality of the foregoing sentence, Resource Provider shall ensure that none of its employees' uniforms, equipment, or vehicles use PREPA Trademarks.
- c. Resource Provider shall not change any co-branded materials in paragraph (a) of this Section 4.5 (i) in a way that would degrade, detract from or interfere with PREPA's branding, or (ii) to introduce any new third party branding on such materials.

If requested by PREPA, Resource Provider shall enter into a separate and substantially similar Trademark License Agreement with a T&D Operator.

## 4.6 <u>Protection and Control Equipment</u>

- a. Resource Provider shall, at no cost to PREPA, ensure the proper construction, configuration, securitization, operation, and maintenance of all equipment related to the VPP, including protection and control equipment, internal breakers, relays, switches, sensors, meters and other monitoring devices and synchronizing equipment installed by or for each Participant (collectively, the "**Protection and Control Equipment**") to ensure the standard of reliability, quality, and safety as required by this Agreement, Prudent Utility Practices, the Operating Characteristics, Permits, Applicable Laws, Applicable Standards, and the MTRs.
- b. Resource Provider shall respond promptly to all requests by Participants, whether communicated directly to Resource Provider or whether communicated to PREPA, for repairs and maintenance.
- c. Subject to any limitations on access rights imposed by the owner or lessee of the premises occupied by the applicable Participant Resource, PREPA shall have the right, but not the obligation, to inspect and approve the installation and setting of Protection and Control Equipment related to a Participant Resource at any time during the progress of installation, setting, and testing. PREPA may elect to inform Resource Provider of any problem PREPA observes and any recommendations it has for correcting problems with the Protection and Control Equipment or its settings, and Resource Provider shall address such problems to the reasonable satisfaction of PREPA.
- d. PREPA's inspection and approval of any Protection and Control Equipment and its settings, or PREPA's reporting and recommendations to Resource Provider regarding such inspections, shall not be considered as an endorsement by PREPA of the design of any Protection and Control Equipment or device settings, as a warranty of the safety, durability, or reliability of said Protection and Control Equipment or device settings, or as a waiver of any of PREPA's rights under this Agreement. PREPA's failure to exercise its rights under paragraph (c) of this Section 4.6 shall not constitute a waiver by PREPA of, or otherwise release Resource Provider from, the obligation to comply with any provision of this Agreement.
- e. The Parties shall cooperate in good faith in agreeing to the general design standards for any Protection and Control Equipment and device settings.
- f. Within a reasonable period of time after Resource Provider's receipt of the comments referred to in paragraph (b) of this Section 4.6 or notification by PREPA of problems

related to Resource Provider's performance of its obligations under paragraph (c) of this Section 4.6, but no later than ninety (90) Days after such receipt or notification (unless such condition is causing a safety hazard or damage to the Grid System or the facilities of any of PREPA's customers, in which event the Resource Provider must make the correction as soon as practicable), Resource Provider shall implement PREPA's proposals. If Resource Provider disagrees with PREPA's proposals, the Parties shall resolve such Dispute in accordance with Article 21 (*Dispute Resolution*).

### 4.7 GSDS Modifications

From and after the Initial Integration Date, Resource Provider shall not carry out any modifications to the GSDS that will, or may reasonably be expected to, impair the VPP's compliance with the MTRs, alter its Operating Characteristics or expand or limit its ability to provide the Grid Services to PREPA on the basis of the contemplated Approved Design, in each case without PREPA's prior written consent. The Parties acknowledge that this Section 4.7 does not restrict Resource Provider's performance of routine maintenance or technology upgrades (including capacity augmentation) required to ensure safe and reliable operation or regular replacement of equipment to maintain the performance of the GSDS in accordance with this Agreement and the Approved Design.

### 4.8 <u>Intellectual Property Rights</u>

During the performance of its obligations under this Agreement, Resource Provider undertakes not to use or cause others to use any process, program, software, design, device, or material that infringes on the Intellectual Property Rights of a third party.

### 4.9 PREPA Step-In Rights

- a. If, following the occurrence of the Escrow Triggering Condition, a Step-In Event occurs, then PREPA, or the T&D Operator if so designated by PREPA, shall have the right, subject to the consent of the PREB and upon not less than twenty four (24) hours' notice to Resource Provider of such Step-In Event, to access the Source Code provided to PREPA or placed into escrow, as applicable, and to utilize such Source Code to take over management of the operation and maintenance of the GSDS (the "Step-In Rights") until Resource Provider has (i) cured the conditions or circumstances giving rise to the Step-In Event, and (ii) demonstrated to PREPA's reasonable satisfaction its readiness and ability to resume operation of the GSDS in accordance with this Agreement.
- b. In connection with the exercise of its Step-In Rights, PREPA, or the T&D Operator if so designated by PREPA to exercise the Step-In Rights, shall, amongst others:
  - 1. comply with Prudent Utility Practices; provided that in any case, PREPA's or T&D Operator's, as the case may be, liability to Resource Provider shall be limited to:
    - i. any actual loss or damage to the GSDS resulting from PREPA's or PREPA's nominee's (as applicable) exercise of its Step-In Rights; and
    - ii. any amounts to which Resource Provider has a right under the indemnity provisions under Article 13 (*Indemnification*) resulting from any negligent act or omission of PREPA or T&D Operator, as the case may be, that arises out of or is in any manner connected with the exercise by PREPA or PREPA's nominee (as applicable) of its Step-In Rights; and

- 2. continue to pay the Monthly Payments, provided that PREPA may deduct from the Monthly Payments, as applicable:
  - i. reasonable costs and expenses incurred by PREPA or T&D Operator, as the case may be, in the exercise of its Step-In Rights; and
  - ii. any amounts payable to PREPA under the indemnity provisions under Article 13 (*Indemnification*) resulting from any negligent act or omission of Resource Provider that arises out of or is in any manner connected with the Step-In Event.
- c. Resource Provider shall cooperate in all respects with PREPA or PREPA's nominee (as applicable) in the exercise of its Step-In Rights, including providing the cooperation of Resource Provider's senior staff to direct any personnel or subcontractors and obtaining any Permits or other consents and approvals required during the exercise of its Step-In Rights. Resource Provider shall provide formal and on-the-job training for an adequate number of PREPA or T&D Operator personnel, as the case may be, in accordance with a training program agreed between the Parties from time to time in order to facilitate PREPA's exercise of its Step-In Rights, provided that such personnel shall not be required to have participated in any such training program as a condition to PREPA exercising its Step-In Rights.
- d. Other than any Step-In Rights of the PREB under Resource Provider's license or at law, Resource Provider shall not provide any other customer or relevant third party the right to:
  - 1. take over operation of the GSDS or exercise any right analogous to PREPA's or PREPA's nominee's (as applicable) rights as set forth in this Section 4.9; or
  - 2. nominate, appoint or replace the operator of the GSDS.
- e. For the avoidance of doubt, if an Insolvency Event occurs with respect to Resource Provider or the Source Code Owner, then PREPA shall, without prejudice to or limitation of any other rights or remedies, have the right to exercise all rights and elections (including all licenses, privileges, remedies and protections) under this Agreement, the Source Code Escrow Agreement, the Bankruptcy Code and all other Applicable Laws with respect to this Agreement, the Source Code Escrow Agreement, and the respective subject matter of each of these agreements, including with respect to the Source Code, the Step-In Rights and all related work product.
- f. Without limiting the generality of the foregoing, Resource Provider acknowledges and agrees that, if an Insolvency Event occurs with respect to Resource Provider or the Source Code Owner:
  - 1. all rights and licenses granted to PREPA under this Agreement and the Source Code Escrow Agreement shall continue in full force and effect and shall not be affected, even by Resource Provider's rejection of this Agreement, the Source Code Escrow Agreement, or any license agreement between Resource Provider and Source Code Owner with respect to the Source Code, as applicable, in accordance with the respective terms and conditions of those agreements and subject to PREPA's rights of election under the Bankruptcy Code;

- 2. PREPA shall have the right to a complete duplicate of (or complete access to, as appropriate) all Intellectual Property and embodiments of Intellectual Property with respect to the Source Code, if not already in PREPA's possession, Resource Provider shall promptly deliver to PREPA all such Intellectual Property and embodiments of Intellectual Property with respect to the Source Code, unless Resource Provider or the Source Code Owner elects to and does in fact continue to perform all of its obligations under this Agreement and the Source Code Escrow Agreement, as applicable; and
- 3. the automatic stay under Section 362 of the Bankruptcy Code (11 U.S.C. § 362) shall not apply to any instructions from PREPA to the Source Code Escrow Agent relating to the escrow deposit materials.

### 5. INTEGRATION, TESTING & COMPLETION

### 5.1 Scheduling Integration

Resource Provider shall notify PREPA in writing of the proposed Initial Integration Date (the "**Proposed Initial Integration Date**") and the start-up and testing schedule for the VPP no later than ninety (90) Days prior to the forecasted Commercial Operation Date. Resource Provider shall have the right to postpone or accelerate such date with at least fourteen (14) Days' advance written notice to PREPA.

# 5.2 <u>Initial Integration</u>

Resource Provider shall not deploy the GSDS without PREPA's prior approval, which approval PREPA shall not unreasonably withhold or delay. Subject to Resource Provider's compliance with this Agreement, PREPA agrees to allow the GSDS to connect with the DERMS and for data exchanges between the GSDS and the DERMS to occur in accordance with the terms of this Agreement from the Initial Integration Date. PREPA shall have the right to have a representative present to witness the integration process from and after the Initial Integration Date.

### 5.3 Initial Performance Tests

- a. On or promptly after the Initial Integration Date, Resource Provider shall conduct the initial Performance Tests on the VPP to, among other things, (i) verify and validate that the exchange of data occurs reliably and consistently and that the GSDS and the DERMS properly produce and transfer the data and data files, (ii) demonstrate the controllability of the Capability by Resource Provider via the operable communications system, (iii) verify that the Capability of the GSDS to make available each of the Grid Services from Participant Resources that meet or exceed the Guaranteed Capability for such service in respect of the first Agreement Year and (iv) verify that the VPP complies with the MTRs and criteria set out in the Testing Protocol, and the provisions of paragraphs (b) and (c) of Section 6.8 (Supply Period Performance Tests) shall apply mutatis mutandis to such tests (the "Initial Performance Tests").
- b. Resource Provider warrants that the Initial Performance Tests shall establish that the Capability of the GSDS to make available the Grid Services in the first Agreement Year will meet or exceed the Guaranteed Capability for such year in respect of each such service. If the Initial Performance Tests establish that the Capability of the GSDS to make available

the Grid Services falls below the Guaranteed Capability, then prior to the Long-Stop Date, Resource Provider may, at its election:

- take corrective actions to increase the Capability of the GSDS to make available
  the Grid Services prior to the Long-Stop Date until the Initial Performance Tests
  demonstrate that the Capability of the Grid Services meets or exceeds the
  Guaranteed Capability; or
- 2. if the Capability of the Grid Services for the first Agreement Year does not meet or exceed at least eighty percent (80%) of the Guaranteed Capability for such year (the "Minimum Acceptance Capability"), then credit PREPA's account in the amount of (i) for Demand Build Service, \$200 per kW for each kW of difference between the Guaranteed Capability and actual Capability of the Demand Build Service, and (ii) for Demand Reduction Service, \$200 per kW for each kW of difference between the Guaranteed Capability and actual Capability of the Demand Reduction Service, in each case for such Agreement Year as liquidated damages and a payment credit that PREPA can use to offset future payments under this Agreement (the "Capability Shortfall Liquidated Damages"), which Capability Shortfall Liquidated Damages shall be PREPA's sole and exclusive remedy for a failure of Resource Provider to achieve the Minimum Acceptance Capability; provided that if, by the Long-Stop Date, such corrective actions result in the Capability meeting or exceeding the Minimum Acceptance Capability but not the Guaranteed Capability for the first Agreement Year, then Resource Provider shall credit PREPA's account for the Capability Shortfall Liquidated Damages. The Parties acknowledge and agree that the Capability Shortfall Liquidated Damages represent a fair and reasonable estimate of the loss that PREPA will suffer if such a Capability shortfall occurs, and accordingly, Resource Provider hereby waives its right to dispute the enforceability of this paragraph (b) of this Section 5.3.
- c. If the Initial Performance Tests establish that the VPP fails to comply with the Other Minimum Acceptance Criteria, then Resource Provider may, at its election:
  - 1. take corrective actions to improve the performance of the VPP; and
  - 2. repeat the Initial Performance Tests to establish that the VPP satisfies the MTRs and criteria set out in the Testing Protocol,

in each case, prior to the Long-Stop Date.

- d. Subject to paragraphs (b) and (c) of this Section 5.3, if the Initial Performance Tests do not establish that the VPP meets both the Minimum Acceptance Capability and Other Minimum Acceptance Criteria, then PREPA shall have the right to reject the results of such tests.
- e. Following the successful completion of the Initial Performance Tests (or crediting of Capability Shortfall Liquidated Damages, as applicable) and satisfaction of all other criteria to achieve Commercial Operation, Resource Provider shall notify PREPA in writing of the test results and the Commercial Operation Date by issuing a certificate thereof in the form set forth in Appendix R (*Form of Commercial Operation Date Certificate*). PREPA shall confirm and countersign such notification, which confirmation PREPA shall not unreasonably withhold or delay, and if the demonstrated Capability falls

below the Guaranteed Capability, then subject to paragraphs (b) and (c) of this Section 5.3, the Parties shall amend this Agreement to reduce the Guaranteed Capability accordingly.

### 6. **OPERATION OF THE GSDS**

#### 6.1 General

Resource Provider shall:

- a. during each Grid Services Window of each Day in each Billing Period:
  - 1. continuously operate the GSDS for Dispatch of the Grid Services from Participant Resources without interruption, as required by a Dispatch Notice and in accordance with the applicable Participant Service Agreement;
  - 2. make Demand Reduction Service available to PREPA at Interconnection Points, in the aggregate up to the applicable Guaranteed Capability for such service; and
  - 3. make Demand Build Service available to PREPA at Interconnection Points, in the aggregate up to the applicable Guaranteed Capability for such service,

in each case (as applicable to such hour) other than during the occurrence of any Permitted Outage Hour;

- b. from the Initial Integration Date until the expiry of the Supply Period:
  - 1. operate and test the VPP, and maintain, repair and, if necessary, replace the GSDS, or any portion thereof in accordance with (i) the Operating Procedures, (ii) the Testing Protocol, (iii) the MTRs, (iv) Dispatch Notices, (v) Prudent Utility Practices, (vi) this Agreement, and (vii) Applicable Law and Applicable Standards, and subject to the Operating Characteristics;
  - 2. manage the enrollment and disenrollment of Participants and enablement and disablement of Participant Resources in accordance with (i) the Operating Procedures, (ii) the Testing Protocol, (iii) the MTRs, (iv) Prudent Utility Practices, (v) this Agreement, and (vi) Applicable Law and Applicable Standards, and subject to the Operating Characteristics; and
  - 3. ensure that any contractor that Resource Provider engages for the operation, testing, maintenance, or repair of the GSDS as a whole qualifies as a Qualified Operator; and
- c. during the Supply Period, ensure that the VPP satisfies the Performance Guarantees, provided that the remedies set out in Appendix N (*Performance Guarantees*) constitute PREPA's exclusive remedies in respect of Resource Provider's failure to satisfy the Performance Guarantee.

### 6.2 <u>Scheduled Maintenance</u>

a. Resource Provider shall (i) ensure that no more than fifty (50) hours in aggregate of Scheduled Outages or Scheduled Deratings during Grid Services Windows occur per

Agreement Year, (ii) plan its Scheduled Maintenance Program to occur during the hours of 23:00 – 4:00 (Puerto Rico time), as to minimize interruptions or reductions to the provision of Grid Services, and (iii) cooperate with PREPA to coordinate the Scheduled Outages and Scheduled Deratings with Grid System needs. Resource Provider may only use the allowance for Scheduled Outages or Scheduled Deratings in the Agreement Year in which the allowance accrues, and any unused hours shall not be carried over to subsequent Agreement Years.

- b. Resource Provider shall utilize Scheduled Outages and Scheduled Deratings to implement updates to the GSDS, including, for example, bug fixes, patches, error corrections, and minor enhancements (collectively, "Minor Updates") or new versions of the GSDS that include significant hardware changes or enhancements in the features, performance or functionality of the GSDS (collectively, "Major Updates").
- c. Resource Provider shall, at least sixty (60) Days prior to the Commercial Operation Date, submit a written schedule of Scheduled Outages and Scheduled Deratings ("Scheduled Maintenance Program") for the remaining portion of the first Year of the VPP's operations and, if the Commercial Operation Date occurs after September 1, for the following Year, setting forth the proposed Scheduled Outages and Scheduled Deratings periods. Thereafter, Resource Provider shall submit to PREPA, in writing, by September 1 of each Year, its proposed Scheduled Maintenance Program for the next Year.
- d. Resource Provider shall provide the following information for each proposed Scheduled Outage and Scheduled Derating:
  - 1. description of the work that Resource Provider will perform during such event;
  - 2. approximate start date and time;
  - 3. approximate end date and time;
  - 4. approximate time to restore the GSDS to full operation; and
  - 5. for Scheduled Deratings, Grid Services available during such event.
- e. PREPA shall have thirty (30) Days from receipt of the proposed Scheduled Maintenance Program to notify Resource Provider whether it accepts the program or requires a rescheduling (and the period during which Resource Provider can perform such maintenance). If PREPA fails to respond during such period, then the Scheduled Maintenance Program shall be deemed accepted.
- f. Resource Provider shall use reasonable efforts to accommodate any request from PREPA to reschedule the Scheduled Maintenance Program. If Resource Provider cannot accommodate PREPA's request to reschedule the Scheduled Maintenance Program, then Resource Provider shall provide reasons therefor and alternative dates for the Scheduled Maintenance Program. PREPA shall select between the alternative dates proposed by Resource Provider to finalize the Scheduled Maintenance Program.
- g. Resource Provider shall notify PREPA at least seven (7) Days prior to the start of any Scheduled Outage or Scheduled Derating and shall maintain close coordination with PREPA as such event approaches.

- h. If a condition occurs that impacts the Scheduled Maintenance Program, then Resource Provider shall promptly, on becoming aware of such condition, notify PREPA of such change (including an estimate of the length of such Scheduled Outage or Scheduled Derating) and request PREPA's approval to revise the Scheduled Maintenance Program, which approval PREPA shall not unreasonably withhold or delay. Resource Provider shall bear any costs incurred by PREPA for revisions made less than sixty (60) Days before the start date of a Scheduled Outage or Scheduled Derating or that results in such event being scheduled less than sixty (60) Days before the start of the revised Scheduled Outage or Scheduled Derating, other than in cases of Force Majeure or a PREPA Risk Event.
- i. Only those Outages or Deratings that (i) meet the submittal timelines in paragraph (c) of this Section 6.2 and (ii) PREPA approves in accordance with this Section 6.2 shall constitute a Scheduled Outage or Scheduled Derating, respectively.

#### 6.3 Non-Scheduled Outages & Deratings

- a. If Resource Provider determines that it requires a Non-Scheduled Outage or Non-Scheduled Derating, then Resource Provider shall coordinate the timing of such Non-Scheduled Outage or Non-Scheduled Derating, as applicable, with PREPA.
- b. Resource Provider shall use commercially reasonable efforts to notify PREPA of any Non-Scheduled Outage or Non-Scheduled Derating no later than 17:00 hours (Puerto Rico time) on the third (3<sup>rd</sup>) Business Day prior to the Day that such Non-Scheduled Outage or Non-Scheduled Derating will occur. In the event of an unexpected Non-Scheduled Outage or Non-Scheduled Derating, Resource Provider shall provide notice to PREPA by telephone or email as soon as reasonably practicable and, in all cases other than Force Majeure, no more than fifteen (15) minutes following the occurrence of such Non-Scheduled Outage or Non-Scheduled Derating. Thereafter, Resource Provider shall, as soon as reasonably practicable, provide PREPA with a written notice that includes (i) the event or condition, (ii) the date and time of such event or condition, (iii) the expected end date and time of such event or condition, (iv) for Non-Scheduled Deratings, the Grid Services available during such event or condition, and (v) any other information reasonably requested by PREPA.
- c. Notwithstanding the delivery of a notice of a Non-Scheduled Outage or coordination with PREPA to resolve such event, the GSDS shall be deemed unavailable for the duration of any Non-Scheduled Outage for the purposes of the calculation of GSDS Availability.

### 6.4 Emergencies

- a. No later than the Initial Integration Date, each Party shall cooperate with the other in establishing written Emergency plans, including (i) recovery from a local or widespread electrical blackout, (ii) voltage reduction to effect load curtailment, (iii) policies for the delivery by PREPA to Resource Provider of prompt written notice of the occurrence of all Emergency and follow-up, and (iv) frequent status reports on any ongoing Emergency.
- b. Resource Provider shall (i) make technical information and data available to PREPA concerning start-up times and black-start capabilities, (ii) promptly inform PREPA of any Emergency at or other material issues with the GSDS, and (iii) if requested by PREPA, submit a remediation program setting out the actions Resource Provider shall take to

- mitigate the Emergency or other material issues to the GSDS, and (iv) abide by such program.
- c. If the GSDS has a Scheduled Outage, Non-Scheduled Outage, Scheduled Derating or Non-Scheduled Derating and such event occurs or would occur coincident with an Emergency, then PREPA may request that Resource Provider makes commercially reasonable efforts, consistent with Prudent Utility Practices, to reschedule the Scheduled Outage, Non-Scheduled Outage, Scheduled Derating or Non-Scheduled Derating, as applicable, or if such event has begun, to expedite the completion thereof.

### 6.5 Restoration of the GSDS

Following any Emergency, Outage, or Derating, Resource Provider shall provide as much advance notice as reasonably practicable to PREPA of the date and time that it will bring the GSDS, or any part thereof, back online, provided that Resource Provider shall furnish at least two (2) Days' prior notice for restoration from a Scheduled Outage or Scheduled Derating and at least two (2) hours' notice for restoration from a Non-Scheduled Outage, Non-Scheduled Derating or Emergency, in each case, in accordance with the Operating Procedures. PREPA shall have the right to rely on such notice for purposes of delivering Dispatch Notices to Resource Provider.

#### 6.6 Communication

- a. Resource Provider shall provide, install, commission, maintain, repair, and replace (as necessary), at its own cost and expense, such communication facilities as required to integrate the VPP with the DERMS. Resource Provider shall describe such communication facilities in its Proposed Design.
- b. PREPA shall have the right to approve items provided by Resource Provider in accordance with this Section 6.6, which approval PREPA shall not unreasonably withhold or delay.

### 6.7 <u>Record Keeping</u>

- a. Each Party shall keep complete and accurate books, accounts, records, and other data required for the proper administration of all transactions with respect to all matters relating to this Agreement.
- b. Resource Provider shall maintain such records and data for a minimum of five (5) Years after the preparation of such records or data and for any additional length of time required by regulatory agencies with jurisdiction over each of the Parties; provided that neither Party shall dispose of or destroy any records without thirty (30) Days' prior written notice to the other Party. Within ten (10) Days after receipt of the notice of intention to destroy or dispose, the other Party shall have the right to require the notifying Party in writing to deliver to it certain records at the requesting Party's sole cost and expense. No more than ten (10) Days from receipt of such notice, the Party proposing to dispose of or destroy such records shall deliver any records requested by the requesting Party.
- c. Resource Provider shall maintain, in physical or electronic copy, (i) operation and maintenance manuals and other detailed technical documentation for design, engineering, deployment, testing, commissioning, operation, maintenance, and repair of the GSDS, and (ii) an accurate and up-to-date operating log with records of (1) real power available for each hour, (2) Outages, Deratings or Emergencies, and GSDS Availability, (3) any unusual

conditions found during inspections, (4) any safety incident, accident or other occurrence at a Participant Site that results in injury to persons or damage to property, (5) electrical characteristics of the VPP and settings or adjustments thereof, (6) maintenance performance, (7) all material data in relation to Performance Tests and other testing, Performance Guarantees, metering, invoicing, payments, Claims, reimbursements, credits and any other charges to PREPA, and (8) any other significant events related to the operation of the VPP.

d. Either Party shall have the right from time to time, upon fourteen (14) Days' written notice to the other Party and during regular business hours, to examine the books, accounts, records, and other data of the other Party relating to the proper administration of this Agreement any time during the period that this Agreement requires the records to be maintained.

#### 6.8 Supply Period Performance Tests

- a. During each Agreement Year of the Supply Period, PREPA shall have the right to request Resource Provider to perform one (1) of each Performance Test in accordance with the Testing Protocol. PREPA's decision to forgo any such Performance Test is not a waiver of PREPA's right to require any subsequent Performance Tests. PREPA may also request Resource Provider to perform a Performance Test following Resource Provider's completion of a Major Updates or to ensure the resolution of a Priority 1 Level or Priority 2 Level problem report.
- b. Resource Provider shall submit to PREPA, for evaluation and approval, all Performance Tests reports certified by an experienced and duly qualified independent company with specialized expertise in network communications equipment and software evidencing that the GSDS satisfies each of the MTRs and the Performance Guarantees. PREPA shall have the right to approve such company, which approval PREPA shall not unreasonably withhold or delay. For the avoidance of doubt, Resource Provider acknowledges and agrees that PREPA will not accept manufacturers' test reports as evidence of compliance with this requirement.
- c. Resource Provider shall coordinate with, and the Performance Tests shall be witnessed by, PREPA's personnel and the Consulting Technical Expert. Resource Provider shall provide PREPA with at least thirty (30) Days' advance written notice of all Performance Tests, field tests, or other matters that PREPA may witness hereunder. The Parties shall cooperate in good faith to determine mutually acceptable dates for such testing of all Performance Tests.

#### 6.9 Operational Forecast

Resource Provider shall provide to PREPA, in good faith but solely for PREPA's information, the Operational Forecast which, at the time they are notified, shall be Resource Provider's estimate of the Grid Services it expects to make available to PREPA under this Agreement for the relevant period:

a. at least three (3) Months prior to the start of each Agreement Year, Resource Provider's Operational Forecast of its expected Capability for each Month of the following Agreement Year;

- b. at least two (2) Months prior to the start of the Month in which the Commercial Operation Date is then expected by Resource Provider to occur and at least two (2) Months prior to the start of each Month thereafter, Resource Provider's Operational Forecast of its expected daily Capability for each Day of the Month in question;
- c. on or before 12:00 hours on the Friday prior to the start of the Week in which the Commercial Operation Date is then expected by Resource Provider to occur, and at least on or before 12:00 hours on each Friday prior to the start of each Week thereafter, Resource Provider's Operational Forecast of its expected daily Capability for each remaining Day of the Month in question; and
- d. on or before 12:00 hours and 00:00 hours of each Day, a rolling forecast looking a minimum of four (4) Days ahead.

#### 6.10 Quarterly Reports

- a. During the Supply Period, Resource Provider shall prepare and deliver to PREPA a report by the tenth (10<sup>th</sup>) Day of the first Month of each Quarter, describing the operation and maintenance activities performed in respect of the VPP during the previous Quarter, including the occurrence of any:
  - 1. Scheduled Outages or Scheduled Deratings;
  - 2. Non-Scheduled Outage or Non-Scheduled Derating; and
  - 3. Emergencies;

which complies with the requirements set forth in Appendix AA (*Reporting*).

- b. In addition, during the Supply Period, Resource Provider shall track and report each Quarter on the following items:
  - 1. All problem resolution requests submitted by PREPA and their resolution.
  - 2. Modifications to the GSDS, such as Major Updates, Minor Updates, and other modifications that did not require downtime but resulted in changes to the GSDS, including software, firmware, hardware, and communication protocols.
  - 3. Errors or inconsistencies in measurements and Resource Provider's corrective actions to resolve such errors to metering equipment, as specified in Appendix U (*Metering*).

#### 6.11 Customer Service

- a. Throughout the Supply Period, Resource Provider shall (i) ensure that Participants can contact Resource Provider (or its representative(s)) during regular business hours to direct questions and report complaints or emergencies and (ii) provide customer service to its Participants in accordance with Appendix X (*Customer Service Requirements*).
- b. PREPA may, but has no obligation to, conduct surveys of Participants regarding engagement, use, or satisfaction with Resource Provider and the GSDS during or after the

- Supply Period. PREPA has no obligation to share with Resource Provider any information about the survey, its results or the survey analysis.
- c. Resource Provider shall inform PREPA of any survey of Participants that it conducts, including the terms and content of each survey, distribution information, and complete survey results together with any analysis thereof.

# 6.12 Adverse Physical Impact

If malfunction arises in relation to the operation of the GSDS that has an adverse physical impact on the Grid System, the equipment of PREPA's customers or other suppliers, or which PREPA reasonably determines presents an immediate danger to such personnel or equipment, Resource Provider shall initiate and diligently pursue reasonable action to rectify such malfunction within three (3) Days of receipt by Resource Provider of a demand from PREPA.

### 6.13 <u>Information Security</u>

- Resource Provider shall maintain and enforce safety and security procedures to safeguard Confidential Information in its possession, including any Confidential Information that Resource Provider provides to any contractors, consultants, and other third parties retained by Resource Provider in connection with its performance of this Agreement. Resource Provider warrants that it shall (i) use NIST industry best practices for physical and systems security measures to prevent destruction, loss, alteration or unauthorized access to, use of, or tampering with, the GSDS, the DERMS, software, and Confidential Information, including to protect the confidentiality and integrity of any of Confidential Information, operation of PREPA's systems, and to prevent viruses and Malware from being placed in any software provided to PREPA, on Resource Provider's or PREPA's website, or in Resource Provider's or PREPA's programming; and (ii) use NIST industry best practices for physical security and precautionary measures to prevent unauthorized access or damage to facilities, equipment, meters, sensors and other monitoring devices under its control or the control of its contractors, consultants, and other third parties retained by Resource Provider in connection with its performance of this Agreement, including to protect the confidentiality and integrity of any Confidential Information as well as the operation of PREPA's systems. Resource Provider shall, at a minimum, protect Confidential Information and provide the standard of care consistent with the then-current NIST cybersecurity requirements and, in any case, no less robust than the standard of care implemented by Resource Provider in respect of its own Confidential Information.
- b. No later than the Commercial Operation Date and on each anniversary thereof during the Supply Period, Resource Provider shall deliver to PREPA, as available, evidence of Resource Provider's information security safeguards, including current ISO27001 reports, SSAE 16 SOC2 Type 2 reports, annual third-party penetration tests, and any other reports of a similar nature, prepared by Resource Provider during previous the Agreement Year. If a report identifies any critical or high-risk findings, Resource Provider shall, within ten (10) Days of each such report's completion and at no cost to PREPA, mitigate all critical and high-risk findings and provide supporting evidence of such mitigation to PREPA.
- c. Resource Provider shall use commercially reasonable efforts to prevent Malware from accessing any aspect of the Grid Services, the GSDS, the DERMS or any other information systems, operating environments and processes used or relied upon by Resource Provider to provide the Grid Services, including the information, data and other materials delivered

by or on behalf of Resource Provider to PREPA, the customers of PREPA, the Participants or any third party providers (collectively, the "Environment"). Throughout the Term, Resource Provider shall implement improvements to, and upgrades of, its Malware prevention and correction programs and processes consistent with the then-current National Institute of Standards and Technology industry standards and, in any case, no less robust than the programs and processes implemented by Resource Provider in respect of its own information systems. If Malware enters the Environment, Resource Provider shall notify PREPA as soon as it becomes aware of such presence and take immediate action, at Resource Provider's cost, to eliminate and remediate the Malware effects. Resource Provider shall regularly, and otherwise at the request of PREPA, provide sufficient evidence of its efforts to continuously monitor and evaluate the effectiveness of Resource Provider's information security safeguards. Resource Provider shall require that its subcontractors also comply with the obligations of Resource Provider under this Section 6.13.

- d. PREPA shall advise Resource Provider of its security procedures with respect to Confidential Information, including information regarding the GSDS, Participant Data and any other Confidential Information provided by Resource Provider to PREPA. The Parties shall remove all Confidential Information from any media taken out of service and shall destroy or securely erase such media in accordance with PREPA's security requirements and otherwise in a manner designed to protect against unauthorized access to or use of any Confidential Information. Prior to the Commercial Operation Date, Resource Provider shall develop and submit to PREPA a plan detailing Resource Provider's procedures for such removal, destruction, and erasure.
- If either Party discovers or becomes aware of a breach or potential breach of security e. related to PREPA Data, Participant Data or Confidential Information in its possession or under its control, such Party (the "Breached Party") shall promptly (i) notify the other Party of such potential, suspected, or actual security breach, regardless of whether such breach has compromised any Confidential Information, (ii) investigate and promptly remediate the effects of the breach, regardless of whether the Breached Party caused the breach, (iii) cooperate with the other Party with respect to any such breach or unauthorized access or use, (iv) comply with all applicable privacy and data protection Laws governing PREPA's or any other individual's or entity's data, and (v) to the extent that the Breached Party caused such breach, provide the other Party with reasonable assurances satisfactory to that such breach or potential breach shall not reoccur. Each Party shall preserve and provide to the other Party any forensic evidence obtained as a result of its investigation and remediation of such a breach. The Breached Party shall fund all costs associated with the remediation of any such breach. If such breach relates to any Personally Identifiable Information, notification of individuals affected will be at the Parties' discretion and in discussion in accordance with Applicable Law and at the sole expense of the Breached Party.
- f. Except as otherwise provided in this Agreement, within ten (10) Business Days after any request by PREPA during the Term and upon the termination of this Agreement, Resource Provider shall destroy, delete, and erase, where technically feasible, all PREPA Data and Participant Data received from PREPA and in its possession by using industry-standard data elimination methods used to prevent unauthorized disclosure of information, and for Personally Identifiable Information, such methods shall be consistent with applicable provisions of Puerto Rico law. A duly authorized representative of Resource Provider shall certify in writing that all PREPA Data and Participant Data received from PREPA has been

destroyed, deleted, and erased upon completion of such data elimination and immediately forward such certification to PREPA for its records. Prior to the Commercial Operation Date, Resource Provider shall develop and submit to PREPA a plan detailing Resource Provider's procedures for such removal, destruction, and erasure. Notwithstanding the foregoing, Resource Provider may retain system-wide historical archived backups for disaster recovery/business continuity purposes. Resource Provider shall delete any PREPA Data and Participant Data received from PREPA found in the backups following the expiry of Resource Provider's retention period for such backups. Notwithstanding the foregoing, Resource Provider may retain a copy of any PREPA Data and Participant Data received from PREPA only to the extent necessary to satisfy any ongoing compliance or other legal obligations of Resource Provider.

- g. Resource Provider agrees to implement (to the extent not already implemented) and maintain during the Supply Period a business continuity plan, a disaster recovery plan, and an incident response plan (collectively the "Business Continuity Plans") consistent with the level of risk associated with the work under this Agreement. Resource Provider may utilize a Business Continuity Plan it already has in existence prior to the execution of this Agreement. Resource Provider shall provide the Business Continuity Plans to PREPA on or before the Commercial Operation Date. Resource Provider may, at its own election, update the Business Continuity Plans during the Supply Period to reflect lessons learned from actual recovery events and as required due to significant changes in risk or business or regulatory environment. PREPA may review the Business Continuity Plans at any time during the Supply Period, and Resource Provider shall make such Business Continuity Plans available to PREPA promptly upon request.
- h. Resource Provider shall cause its employees and any contractors, consultants, and other third parties retained by Resource Provider in connection with its performance of this Agreement, to comply, at no cost to PREPA, with all Applicable Laws related to the obligations assumed by Resource Provider under this Agreement, including those related to data privacy, data security, and the transmission of technical or personal data.

# 6.14 Status Meeting

At least once every Year and no later than thirty (30) Days from Resource Provider's receipt of a request from PREPA, Resource Provider shall meet with representatives of PREPA to review the status of the VPP program, including Participant satisfaction and Resource Provider's compliance with this Agreement. Resource Provider shall also explain the operation of the VPP and provide such training and documentation as PREPA may require to understand and operate the Grid System efficiently and safely with the incorporation of the VPP.

#### 7. **DISPATCHING OBLIGATIONS**

#### 7.1 Dispatching

a. Without prejudice to the requirements of Appendix F (*Compensation*), PREPA shall have the right, exclusively by providing Dispatch Notices to Resource Provider in accordance with the Operating Procedures, to direct Resource Provider to Dispatch the Capabilities of the VPP seven (7) Days per Week during twenty-four (24) hours per Day (including holidays) other than during any Permitted Outage Hours, from the Initial Integration Date until the expiry of the Supply Period, and such right shall include the right to require

Resource Provider to (i) curtail, reduce or increase the Grid Services, and (ii) disconnect or connect the GSDS, in each case in accordance with:

- 1. Prudent Utility Practices (such as reasons affecting safety margins or reliability levels in the Grid System, power quality problems as well as outages and disconnections ("vías libres") of the transmission center or line due to disturbances, maintenance, improvements, and Emergencies);
- 2. the requirements of Applicable Law and Permits; and
- 3. the Operating Procedures and Appendix H (*Grid Services*);

subject to the Operating Characteristics, the applicable Operational Forecast and the Scheduled Maintenance Program.

- b. Subject to paragraph (c) of this Section 7.1, each Dispatch Notice shall remain effective for the duration of the Dispatch period specified therein unless and until PREPA modifies such Dispatch Notice by providing Resource Provider with an updated Dispatch Notice. If PREPA cannot issue an electronic notification for reasons beyond PREPA's control, PREPA may provide Dispatch Notices by (in order of preference, unless the Parties agree to a different order) electronic mail, or telephonically to Resource Provider's personnel designated in the Operating Procedures to receive such communications.
- c. If PREPA submits a Dispatch Notice that directs action which does not conform with the Operating Characteristics or Operational Forecast, then Resource Provider shall promptly notify PREPA of the non-conformity and PREPA shall modify its Dispatch Notice to so conform. Until PREPA submits a modified Dispatch Notice, Resource Provider shall, as applicable, Dispatch the VPP in accordance with the Operational Forecast, and the VPP will not be deemed unavailable, but only to the extent the VPP was otherwise available but could not be Dispatched because of its inability to operate outside of the Operating Characteristics or Operational Forecast.

### 7.2 Curtailment for Breach

Notwithstanding Section 7.1 (*Dispatching*), PREPA shall have the additional right during the Supply Period to curtail or modify the Dispatch of the VPP or to require the curtailment or disconnection of any Participant Resource not capable of being operated in accordance with this Agreement or resulting in the VPP's non-compliance with the MTRs, and Resource Provider shall have no right to any Claim for compensation or otherwise, when Resource Provider fails to:

- a. operate the GSDS in accordance with this Agreement or the MTRs; provided that (i) for any modifications to the MTRs under Section 4.2 (*Modifications*), Resource Provider has had a reasonable period of time to comply with such modification pursuant to paragraph (e) of Section 4.2 (*Modifications*); or
- b. successfully complete the Resource Provider Performance Tests requested by PREPA under paragraph (a) of Section 6.8 (*Supply Period Performance Tests*) with reasonable prior notice.

For the avoidance of doubt, any curtailment or reduction shall end at the instruction of PREPA, which PREPA shall give promptly, and in any event no later than forty-eight (48) hours, after Resource Provider cures such non-compliance.

#### 8. **METERING AND DATA**

#### 8.1 <u>Meter Ownership & Installation</u>

- a. Resource Provider shall:
  - 1. own or lease, install and maintain any meters and metering equipment located at the Interconnection Point for each Participant Resource (other than those revenue or demand meters installed or required by PREPA) in accordance with Appendix U (*Metering*) and ensure that such Resource Provider-installed meters and equipment conform to the electrical service, metering, and tariff requirements applicable to such Participant Resource. Resource Provider shall also (i) ensure that the meters and metering equipment for each Participant Resource meet PREPA's specifications, (ii) locate such meter and metering equipment behind and as reasonably close as practicable to any PREPA-owned meter previously or to be installed, and (iii) obtain PREPA's approval of such Resource Provider-installed meters and equipment, which approval PREPA shall not unreasonably withhold or delay, and of which decision PREPA shall inform Resource Provider no later than ten (10) Days after Resource Provider's notice to PREPA regarding the installation of the proposed meters; and
  - 2. ensure that each Participant has an installed and operational meter compliant with Appendix U (*Metering*) with appropriate meter communication equipment prior to the inclusion of the Participant Resource in the VPP.
- b. In addition to the requirements set forth in paragraph (a) of this Section 8.1, each Participant shall have and take service through a PREPA-approved meter, capable of recording usage in 5-minute intervals and being read remotely by a remote meter reading system approved by PREPA. If a Participant does not have and take service through a meter that meets such requirements, Resource Provider shall supply and install such meter at Resource Provider's or Participant's expense.
- c. Resource Provider shall provide PREPA with any telemetry data for a Participant Resource required by Appendix U (*Metering*) that PREPA's meter does not provide.
- d. The Parties shall comply with the provisions of Appendix U (*Metering*).

### 8.2 Data and Materials

a. Each Party (i) shall own all data prepared or collected by such Party, which such Party delivers to the other Party in connection with the Grid System or its operations, and (ii) grants to the other Party a limited, non-exclusive, non-transferable, non-sublicensable, royalty-free, irrevocable license to use such Party's data for purposes of administering, and performing under, this Agreement; provided, however, that, together with the grant by Resource Provider of the foregoing license to PREPA, Resource Provider also grants an identical license to LUMA. The Party licensee shall not, and PREPA shall ensure that LUMA does not, (i) use such data other than in accordance with its performance under this

Agreement, (ii) disclose, sell, assign, lease, or otherwise provide to third parties such data, except as required for the purposes of administering and performing under this Agreement, or (iii) commercially exploit such data. The Parties acknowledge and agree that the availability of financial compensation shall not preclude injunctive relief to prevent disclosure of such data.

b. Unless otherwise provided in this Agreement, each Party (i) shall own all drawings, specifications, technical information, reports, studies, documents, materials, and business information of any type whatsoever (the "Materials") provided by it to the other Party, or prepared or developed by it for use by the other Party, in the performance of this Agreement, and (ii) grants to the other Party a limited, non-exclusive, non-transferable, royalty-free, irrevocable license to use such Materials in the performance of this Agreement provided, however, that, together with the grant by Resource Provider of the foregoing license to PREPA, Resource Provider also grants an identical license to LUMA. Any restrictions or claims to ownership or rights included on or within the Materials delivered by a Party to the other Party that conflict or are inconsistent with this paragraph (b) of this Section 8.2 are null and void.

#### 9. SALE & PURCHASE

### 9.1 General

- Resource Provider agrees to aggregate, provide and sell Grid Services supported by the Participant Resources as defined herein exclusively to PREPA in accordance with this Agreement.
- b. PREPA agrees to pay for the Grid Services through Monthly Payments determined in accordance with Appendix F (*Compensation*), from the Initial Integration Date until the expiration of the Supply Period, subject to the terms of this Agreement.

### 9.2 Title & Risk of Loss

For each applicable Participant Resource, good and valid legal title to, and the risk of loss of, the Energy that Resource Provider makes available to PREPA through the provision of the Grid Services shall transfer from Resource Provider to PREPA at the Interconnection Point for such resource and PREPA shall be responsible for any risk of loss of all such Energy on the PREPA side of such Interconnection Point. Except as set forth herein, PREPA reserves the right to retain all rights, title, benefits, and other interest in, arising out of or related to, the generation, transmission, distribution, or supply of such Energy that it or any of its Affiliates may realize through its existing or future power generation sources, customer agreements or other projects or improvements to the Grid System.

# 9.3 Right of Resale

PREPA shall have the right to resell all or any portion of the Energy that Resource Provider makes available to PREPA through the provision of the Grid Services, and after the Initial Integration Date Resource Provider shall, at no cost to PREPA, take reasonable actions to assist PREPA in obtaining, and otherwise reasonably cooperate with PREPA in connection with any proceedings or filings with any Governmental Authority in support of PREPA's right to resell, such Energy, including submission of any reasonably required reports or filings with applicable Governmental Authorities.

# 9.4 <u>Ancillary Services</u>

The Parties acknowledge and agree that PREPA may, from time to time after the Commercial Operation Date, request Resource Provider to provide PREPA with the Ancillary Services specified in the MTRs by delivering notice thereof to Resource Provider pursuant to Article 7 (*Dispatching Obligations*). Resource Provider shall make commercially reasonable efforts to provide such services in accordance with such request.

### 9.5 Green Credits

If, from and after the Commercial Operation Date, Resource Provider accrues a right to Green Credits associated with the provision of the Grid Services to PREPA, or otherwise generated in connection with the operation of the VPP for the benefit of PREPA, then, for each calendar quarter during the Supply Period, and in partial consideration for the Monthly Payments, Resource Provider shall convey to PREPA, at no additional cost, a quantity of Green Credits equal to the Net REC Quantity calculated for such quarter in accordance with this Section 9.5. The Parties shall execute all documentation required to confirm the registration of such Green Credits with the North American Renewables Registry or another similar registry acceptable to Resource Provider and PREPA (the "Registry") and the transfer of such Green Credits as reasonably requested by PREPA in accordance with the rules of the Registry (but in any event no more frequently than on a quarterly basis), in each case, at Resource Provider's expense. PREPA shall have the sole right to own, market, trade, sell or otherwise transfer the Green Credits conveyed to PREPA in accordance with this Section 9.5.

# 9.6 Improvement in PREPA's Financial Condition

Following PREPA's emergence from the PREPA Bankruptcy, if Resource Provider enters into any refinancing, Resource Provider and PREPA shall discuss in good faith an adjustment to the Demand Build Price and Demand Reduction Price to share the benefit of any savings accruing to Resource Provider from such refinancing. For avoidance of doubt, the Parties shall only adjust the Demand Build Price and Demand Reduction Price in accordance with this Section 9.6 if mutually agreed by the Parties.

#### 9.7 Price Adjustments

- a. At any time after the commencement of the fifth (5<sup>th</sup>) Agreement Year, either Party may furnish the other Party with a notice (a "**Pricing Notice**") indicating that it wishes to engage in negotiations with respect to a modification of the Demand Reduction Payment and/or the Demand Build Payment. Upon delivery of a Pricing Notice, the Parties shall negotiate in good faith with respect to modification of the pricing terms of this Agreement for a period of not less than forty-five (45) days. If at the conclusion of such negotiation period the Parties shall not have mutually agreed on changes to the pricing terms of this Agreement, then either Party may submit such dispute to an Independent Valuator for determination pursuant to a "baseball" style resolution mechanism.
- b. A Party that proposes to submit a pricing dispute to an Independent Valuator shall first submit to the other Party a list of three (3) proposed Independent Valuators. Within ten (10) days of receipt of such list, the other Party must either select one of the three Independent Valuators proposed, or respond with its own list of three (3) proposed Independent Valuators. If such a response is made, each Party shall strike two of the three (3) Independent Valuators from the list proposed by the other Party, and the Parties shall

- then meet to consider if either of the remaining Independent Valuators would be mutually acceptable. If the Parties have not agreed on the Independent Valuator within ten (10) days, the two remaining Independent Valuators shall select an Independent Valuator (which may be one of the two remaining or may be a different Independent Valuator that was not on either list). The Independent Valuator shall act as an expert and not an arbitrator.
- c. Within ten (10) days after an Independent Valuator has been selected, each Party shall submit to the Independent Valuator a pricing proposal specifying the changes to the Demand Reduction Payment and/or the Demand Build Payment that such Party proposes for the Agreement (a "Pricing Proposal"). A Pricing Proposal shall be limited to changes to the Demand Reduction Payment and/or the Demand Build Payment and may not include any other changes to this Agreement. Each Party may submit additional supporting documentation with its Pricing Proposal, and copies of all materials submitted to the Independent Valuator shall also be furnished to the other Party. Within thirty (30) days of receipt of the two (2) Pricing Proposals, the Independent Valuator must select one of the Pricing Proposals for implementation by the Parties, and upon such selection the Parties shall promptly enter into an amendment to this Agreement implementing such Pricing Proposal. For sake of clarity, the Independent Valuator must only select one of the two (2) Pricing Proposals (without making any changes thereto), and is expressly prohibited from specifying any other pricing adjustments or other remedies. Any Pricing Proposal so implemented will be effective retroactively to the date of the applicable Pricing Notice (and any necessary adjustments to prior invoices shall be reflected as soon as practicable on the next invoice issued). The costs of the Independent Valuator shall be shared equally by the Parties.
- d. If either Party issues a Pricing Notice hereunder, neither Party shall thereafter be permitted to issue a Pricing Notice until the date that is five (5) years after the prior Pricing Notice.
- e. As used herein, an "**Independent Valuator**" means an internationally recognized investment bank, accounting firm or other professional services firm that is regularly engaged in providing valuations of renewable energy projects or assets with at least five (5) years' experience in the valuation of renewable energy projects or assets and which has not performed any work for either of the Parties, any of their respective Affiliates or, in the case of PREPA, the government of Puerto Rico, within the three (3) year period prior to its appointment.

#### 10. PAYMENT & BILLINGS

#### 10.1 Invoice for Monthly Payment

- a. On or before the fifteenth (15<sup>th</sup>) Day following the end of each Billing Period, Resource Provider shall provide PREPA with a written invoice for the Monthly Payment relating to such Billing Period. Each invoice shall include, as applicable, the Monthly Payment, any applicable Green Credits, the Balance, information necessary to determine VPP performance, insurance payments, credits or payments owing to PREPA, and an itemized statement of all other charges under this Agreement, as of such Billing Period.
- b. PREPA shall use reasonable efforts to review each invoice and notify Resource Provider of any invoicing issues within thirty (30) Days after receipt thereof. Upon PREPA's request, Resource Provider shall furnish, within seven (7) Days, such further information as PREPA may reasonably request in support of the invoice. PREPA's delay in reviewing

an invoice will not defer the due date for payment of amounts owed by PREPA under such invoice.

- c. To the extent that an invoice complies with the requirements set forth in this Agreement, and subject to any direct agreement with Project Lenders, PREPA shall remit payment of undisputed amounts owed under such invoice no later than forty-five (45) Days after PREPA's receipt of such invoice and all required supporting documentation and certifications. Resource Provider acknowledges and agrees that PREPA may withhold payment (without accruing Interest) beyond such date if and so long as Resource Provider has failed to provide evidence that it has maintained the insurance policies required by this Agreement and in accordance with Section 17.2 (*Tracking Account*).
- d. PREPA will charge all payments that it owes under this Agreement to PREPA's budget account number 01-4042-54710-050-668-0000 and estimates that its costs under this Agreement will not exceed eighteen million three hundred sixty thousand dollars (\$18,360,000). For the avoidance of doubt, the Parties have set out the expected account number and estimate of costs for informational purposes to satisfy the requirements of the Puerto Rico Controller. This paragraph does not bind the Parties or modify any other provision of this Agreement.
- e. If agreed or determined that PREPA has underpaid an invoice, then Interest shall accrue on the payments due to Resource Provider commencing on the Day after the date on which PREPA had the obligation to remit such payment pursuant to paragraph (c) of this Section 10.1, and continue until, but excluding, the relevant payment date.
- f. If agreed or determined that PREPA has overpaid an invoice, then PREPA shall have the right to deduct the amount of such overpayment (plus Interest, calculated from the date of such overpayment to its repayment, in cases where the overpayment resulted from amounts stated in Resource Provider's invoices) from future payments in the immediately following Billing Period(s) until PREPA has received full credit for such overpayment.
- g. If PREPA fails to dispute an invoice prior to the first anniversary of the date on which PREPA received such invoice, then it shall be deemed to have waived its right to later dispute such invoice.

#### 10.2 Resource Provider Invoice Certification

Resource Provider shall submit all invoices in the form acceptable to PREPA and shall include in each such invoice the following certification:

#### **No Interest Certification:**

"We certify under penalty of nullity that no public servant of PREPA will derive or obtain any benefit or profit of any kind from the contractual relationship, which is the basis of this invoice. If such benefit or profit exists, the required waiver has been obtained prior to entering into the Agreement. The only consideration to be received in exchange for the performance of the grid services provided is the agreed-upon price that has been negotiated with an authorized representative of PREPA. The total amount shown on this invoice is true and correct. The grid services have been rendered, and no payment has been received."

## Resource Provider's Signature

Resource Provider acknowledges that the above certification constitutes an essential requirement of this Agreement and that PREPA will not process for payment invoices provided without this certification. In order to comply with the certification requirements set forth above, Resource Provider shall require that its subcontractors also include the certification set forth above in any invoices submitted in connection with Energy or services provided under this Agreement.

#### 10.3 Invoice for Liquidated Damages

- a. If Liquidated Damages accrue under this Agreement or moneys are otherwise due from Resource Provider to PREPA in accordance with this Agreement, PREPA shall provide Resource Provider with a written invoice for such Liquidated Damages or amounts, showing the basis for the calculation of the amounts payable by Resource Provider thereunder. Resource Provider shall use reasonable efforts to review each invoice and notify PREPA of any invoicing issues within thirty (30) Days after receipt thereof. Resource Provider shall remit payment of amounts owed under such invoice no later than ten (10) Business Days after Resource Provider's receipt of such invoice (including in the event of a disputed invoice). If Resource Provider does not pay the full amount of any such invoice when due, any unpaid amount thereof shall bear Interest, from the Day following the due date until, but excluding the relevant payment date.
- b. If Resource Provider fails to dispute an invoice prior to the first anniversary of the date on which Resource Provider received such invoice, then it shall be deemed to have waived its right to later dispute such invoice.

### 10.4 Payment Set-Off

Notwithstanding the payment requirements set forth in this Article 10, either Party shall have the right to set off any amounts due and owing to the other Party pursuant to this Agreement, but which remain unpaid, provided that (i) such amounts are undisputed, have been determined to be owed by a final determination pursuant to Article 21 (*Dispute Resolution*), or are explicitly described in this Agreement, and (ii) the Party seeking to exercise the right of set-off has provided the other Party with five (5) Business Days' advance written notice describing in reasonable detail the amounts that it will set off before effecting any such set off.

#### 10.5 Payment Method

A Party shall make payments to the other Party by wire transfer to an account with a bank specified by such Party in writing, which such Party shall notify to the other Party prior to the Closing Date, or with such other banks as may thereafter be specified by a Party in writing at least ten (10) Days prior to the date in which payment becomes due. Either Party may, by written notice to the other Party, change the address to which the notifying Party remits such payments.

### 10.6 <u>Disputed Invoices</u>

The Parties shall use their reasonable efforts to resolve any Dispute regarding payment of any invoice issued under this Article 10 by amicable negotiation, provided that if the Parties fail to resolve such Dispute by the payment due date, then either Party may refer the Dispute for resolution in accordance with Article 21 (*Dispute Resolution*).

#### 11. LIABILITY

#### 11.1 General

From and after the Initial Integration Date, (i) Resource Provider shall have responsibility for the VPP, including the GSDS and Participant Resources, and (ii) PREPA shall have responsibility for the DERMS and the Grid System.

# 11.2 <u>Foreseeable Damages</u>

Subject to the limitations set forth in Section 11.3 (No Liability) and Section 11.5 (Liability Cap), and except where a provision of this Agreement expressly entitles PREPA to draw down on the entire undrawn portion of the face amount of the Performance Security, each Party shall have liability for direct, actual and foreseeable damages suffered by the other Party as a necessary consequence of the first Party's negligent performance or omissions or failure to perform its respective obligations under this Agreement, including during any cure period in accordance with Article 15 (Termination), and as stated under Article 1168 of the Puerto Rico Civil Code. For purposes of this provision, the "foreseeable damages" shall include (without duplication) (i) if the Agreement is terminated due to the first Party's negligent performance or omissions or failure to perform its respective obligations under this Agreement, the direct economic loss of the other Party, if any, resulting from termination of this Agreement, (ii) all costs, brokerage fees, commissions, legal expenses, and other similar transaction costs and expenses, reasonably incurred by the other Party in connection with the first Party's negligent performance or omissions or failure to perform its respective obligations under this Agreement, and (iii) with respect to Resource Provider, costs and losses to Resource Provider in respect of any debt financing of the GSDS (including as a result of any acceleration of such debt).

#### 11.3 No Liability

Neither Party nor its officers, directors, shareholders, agents, employees, and representatives shall, in any event, be liable to the other Party or its officers, directors, shareholders, agents, employees or representatives for Claims for incidental, consequential, special, punitive or indirect damages to persons or property, whether arising in tort, contract or otherwise, connected with or resulting from performance or non-performance under this Agreement including without limitation, Claims made by either Party's customers or suppliers, Claims made by third parties, Claims made by either Party for lost profits (other than payments expressly contemplated by any provision of this Agreement) or Claims arising from Force Majeure; provided that nothing contained in this Section 11.3 shall exclude or limit a Party's liability for (x) fraud, willful misconduct or gross negligence or (y) the foreseeable damage expressly contemplated by clauses (ii) and (iii) of Section 11.2 (*Foreseeable Damages*).

### 11.4 Obligation to Pay

Nothing in this Article 11 shall relieve either Party of its obligation to make payments that become due pursuant to Article 10 (*Payment & Billings*).

### 11.5 <u>Liability Cap</u>

A PARTY'S LIABILITY TO THE OTHER PARTY UNDER THIS AGREEMENT, WHETHER BASED ON CONTRACT, WARRANTY OR TORT, INCLUDING ERRORS OR OMISSIONS, NEGLIGENCE, STRICT LIABILITY OR OTHERWISE, OR ANY

OTHER CLAIM OR CAUSE OF ACTION, WITH RESPECT TO ANY AND ALL CLAIMS, SHALL NOT EXCEED THE AMOUNT EQUAL TO THE LIABILITY CAP, PROVIDED THAT (I) NOTHING CONTAINED IN THIS SECTION 11.5 SHALL EXCLUDE OR LIMIT A PARTY'S LIABILITY FOR THE EXCEPTIONS, AND (II) FOR PURPOSES OF DETERMINING RESOURCE PROVIDER'S TOTAL AGGREGATE LIABILITY UNDER THIS AGREEMENT THAT IS WITHIN THE LIABILITY CAP, THE PARTIES SHALL DEDUCT THE PROCEEDS OF INSURANCE RECEIVED BY RESOURCE PROVIDER (OR THAT RESOURCE PROVIDER WOULD HAVE RECEIVED HAD RESOURCE PROVIDER COMPLIED WITH THE TERMS OF THIS AGREEMENT), RELATING TO THE EVENT OR CIRCUMSTANCES WHICH RESULTED IN SUCH LIABILITY.

#### 12. REPRESENTATIONS, WARRANTIES, & COVENANTS

### 12.1 Compliance with Law

The Parties shall, at all times and in all material respects, comply with Applicable Law, including the Bulk-Power System EO (if in effect), and such other Laws applicable to (i) the design, deployment, installation, and maintenance of the GSDS, (ii) testing and operation of, and recruitment and enrollment of Participants and incorporation of Qualified Resources in, the VPP, and (iii) Resource Provider as an Electric Power Company or Electric Power Generation Company (each, as defined under Act 57-2014), as the case may be. Resource Provider shall give all required notices, shall procure and maintain all Permits, and shall pay all charges and fees required in connection therewith. Once obtained, Resource Provider shall comply with and promptly submit to PREPA copies, of all material Permits and other permits contemplated by this Section 12.1. Furthermore, pursuant to Section 5(f) of Act 120-2018 and subject to the provisions of this Agreement, Resource Provider shall at all times comply with the public policy and regulatory framework applicable to the VPP.

# 12.2 Fines & Penalties

Each Party shall have sole responsibility for the payment of any and all fines or other penalties incurred by or imposed upon such Party or its agents, suppliers, employees or subcontractors for noncompliance by such Party, its agents, employees, suppliers, or subcontractors with Applicable Law to or in connection with, (i) in the case of Resource Provider, the design, deployment, installation, or maintenance of the GSDS, or testing or operation of, or recruitment or enrollment of Participants and incorporation of Qualified Resources in, the VPP, in each case except to the extent that any act or omission of PREPA caused such noncompliance, and (ii) in the case of PREPA, the proper operation of the Grid System, except to the extent that any act or omission of Resource Provider caused such noncompliance, in each case as determined by applicable Governmental Authority having jurisdiction over the VPP and/or the Grid System, subject to the indemnification provisions of Article 13 (*Indemnification*).

### 12.3 Resource Provider Representations & Warranties

- a. Resource Provider represents and warrants to PREPA on the Agreement Date, and again on the Closing Date, as follows:
  - 1. Resource Provider is a corporation, duly organized, validly existing under the laws of the Commonwealth of Puerto Rico; and Resource Provider has all requisite

power and authority to conduct its business, to own its properties, and to execute, to deliver, and to perform its obligations under this Agreement;

- 2. the execution, delivery, and performance by Resource Provider of this Agreement have been duly authorized, and do not and will not (i) require any additional internal consent or approval of Resource Provider, any Sponsor or any Affiliate of either of them; or (ii) violate any provision of Resource Provider's certificate of formation or operating agreement, or any material indenture, contract or agreement to which it is a party or by which it or its properties may be bound, or any Applicable Law, determination or award presently in effect;
- 3. Resource Provider is not in default under any document or instrument referred to in clause (ii), item (2), paragraph (a) of this Section 12.3, which default could reasonably be expected to have a material adverse effect on the ability of Resource Provider to perform its obligations under this Agreement;
- 4. this Agreement constitutes a legal, valid, and binding obligation of Resource Provider, enforceable against Resource Provider in accordance with its terms, except as may be limited by applicable bankruptcy, insolvency, or similar Laws affecting the enforcement of rights generally; and
- 5. except as previously disclosed in writing, there is no pending action or proceeding in which Resource Provider is a party before any court, governmental agency, or arbitrator that could reasonably be expected to affect materially and adversely the financial condition or operations of Resource Provider or the ability of Resource Provider to perform its obligations under, or which purports to affect the legality, validity or enforceability of, this Agreement as in effect on the date hereof.

# 12.4 Resource Provider Covenants

Resource Provider covenants that, throughout the term of this Agreement, it shall:

- a. deliver the Grid Services to PREPA free and clear of all liens, security interests, Claims, and encumbrances or any interest therein or thereto by any Person;
- b. obtain and maintain written authorization from each Participant to act as an aggregator on behalf of such Participant and its contracted Participant Resource(s); and
- c. not use, grant, pledge, assign, or otherwise commit any Grid Service or portion thereof provided from or through any Participant Resources to any entity other than PREPA during the term of this Agreement.

#### 12.5 PREPA Representations & Warranties

PREPA represents and warrants to Resource Provider on the Agreement Date, and again on the Closing Date, as follows:

a. pursuant to Act No. 83 of May 2, 1941, as amended, PREPA is a public corporation duly organized and validly existing under the Laws of the Commonwealth of Puerto Rico and has all requisite power and authority to conduct its business as now conducted, to own its properties, and to execute, to deliver, and to perform its obligations under this Agreement;

- b. the execution, delivery, and performance by PREPA of this Agreement, including PREPA's agreement that all of Resource Provider's costs and obligations owed to Resource Provider under the Agreement constitute administrative expenses (i) has been duly authorized by PREPA's governing board in accordance with Applicable Law, (ii) does not and will not require any additional internal consent or approval of PREPA, (iii) does not require any approval from the PROMESA Court or any other additional external consent or approval, other than those approvals expressly identified in this Agreement, and (iv) does not and will not violate any Applicable Law, including any provision of Act No. 83 of May 2, 1941, as amended, or its regulations, or any material indenture, contract or agreement to which it is a party or by which its properties may be bound;
- c. this Agreement is a legal, valid, and binding obligation of PREPA, enforceable against PREPA in accordance with its terms, except as may be limited by applicable bankruptcy, insolvency or similar Laws affecting the enforcement of rights generally;
- d. (i) Resource Provider's right to payment for charges validly incurred in accordance with this Agreement or owed by PREPA under this Agreement arise from a post-petition transaction with PREPA, (ii) the consideration made available by Resource Provider benefits PREPA, and supports PREPA's obligations, under this Agreement, and (iii) as a result of the foregoing, Resource Provider's right to payment for charges validly incurred in accordance with this Agreement or owed by PREPA under this Agreement during the PREPA Bankruptcy constitute reasonable and necessary expenses of preserving PREPA and an administrative expense; and
- e. other than the PREPA Bankruptcy, except as previously disclosed in writing, there is no pending action or proceeding in which PREPA is a party before any court, governmental agency or arbitrator that could reasonably be expected to affect materially and adversely the financial condition or operations of PREPA or the ability of PREPA to perform its obligations under, or which purports to affect the legality, validity or enforceability of, this Agreement as in effect on the date hereof.

### 12.6 Resource Provider Payments

PREPA shall exercise commercially reasonable efforts to ensure that Monthly Payments under this Agreement constitute necessary operating expenses.

#### 12.7 Resource Provider's Financial Statements

For each of Resource Provider's fiscal years (or part thereof) during the Term, commencing with the fiscal year 2022, Resource Provider shall deliver to PREPA its audited financial statements for such fiscal year, prepared in accordance with GAAP, no later than one hundred twenty (120) Days following the completion of such fiscal year.

#### 12.8 Resource Provider's Officers

If a change or substitution of one or more of Resource Provider's corporate officers occurs, then Resource Provider shall deliver to PREPA a certification of the names of its corporate officers.

# 12.9 <u>Confidentiality</u>

- a. Each Party (the "Receiving Party") shall keep all Confidential Information obtained from the other Party (the "Disclosing Party"), and not otherwise generally available to the public (but without limitation of any liability the Receiving Party may have to the Disclosing Party for information that becomes generally available to the public through the negligence or willful misconduct of any of the Receiving Party, its Affiliates or their respective employees, agents and representatives), confidential and use such information solely in connection with the performance of its obligations under this Agreement. Disclosure of such Confidential Information may be made only within the Receiving Party's organization to key personnel, to third parties serving as the Receiving Party's legal, financial or technical advisors, whose duties justify their need to review and know such material, and to lenders, prospective lenders, investors and prospective investors. The Receiving Party shall require each Person (and personnel thereof) to agree in writing for the benefit of the Disclosing Party to maintain the confidentiality of such Confidential Information.
- b. To the extent any Governmental Authority requires a Receiving Party to disclose such Confidential Information or requires such information to secure a governmental approval or authorization, such Receiving Party shall promptly notify the Disclosing Party and use its commercially reasonable efforts to seek a confidentiality agreement that assures confidential treatment of the Confidential Information consistent with the terms of this paragraph (b) of this Section 12.9. In the event the Receiving Party cannot obtain a confidentiality agreement, such Receiving Party shall use commercially reasonable efforts to obtain through court action the appropriate protective order. Notwithstanding the foregoing and paragraph (a) of this Section 12.9, PREPA may disclose the terms and conditions of this Agreement to (i) FOMB, PREB, COR3, P3A, the PROMESA Court, and any Governmental Authority for the purpose of obtaining the consents and approvals, together with such additional information as may be required to obtain such consents and approvals, (ii) COR3, P3A, any owner of the Grid System, and any potential or thenexisting T&D Operator and their respective advisors and lenders, and (iii) the Puerto Rico Controller through the filings required by Applicable Law, which will make this Agreement subject to the open records requirement.

### 12.10 Local Content

- a. Resource Provider agrees to use its reasonable efforts, when soliciting and obtaining personnel to perform services for the VPP in Puerto Rico, to ensure that individuals who are *bona fide* residents of Puerto Rico as defined in paragraph (c) of this Section 12.10 perform not less than thirty percent (30%) of the total personnel hours expended in Puerto Rico during the design, deployment and installation of the GSDS (prior to the Commercial Operation Date) and not less than thirty percent (30%) of the total personnel hours expended in Puerto Rico during Resource Provider's performance of the Grid Services pursuant to this Agreement (following the Commercial Operation Date).
- b. Resource Provider agrees to use its reasonable efforts, when soliciting and selecting subcontractors and vendors to perform services for the VPP in Puerto Rico, to ensure that business concerns owned and controlled by one or more individuals, who are *bona fide* residents of Puerto Rico as defined in paragraph (c) of this Section 12.10, perform not less than thirty percent (30%) of the total personnel hours expended in Puerto Rico during the design, deployment and installation of the GSDS (prior to the Commercial Operation

Date), and recruitment and enrollment of Participants and incorporation of Qualified Resources in the VPP, as measured by person-hours on an annual basis. For purposes of the preceding sentence, "owned and controlled" means a business: (i) owned at least fifty-one percent (51%) by one or more of such individuals (e.g., in the case of a corporate form of organization such individuals must hold at least fifty-one percent (51%) of all voting stock of the corporation; in the case of a partnership or other form of business concern such individuals must hold at least fifty-one percent (51%) of the beneficial interests in the partnership or business concern); and (ii) one or more of such Persons (who need not be owners of the business) control the management and daily business operations.

- c. For purposes of this paragraph (c), a "bona fide resident of Puerto Rico" means an individual who has been a resident of Puerto Rico immediately prior to commencing work on the VPP. To the extent that despite Resource Provider's reasonable efforts Resource Provider has failed to achieve the goals set forth in paragraphs (a) and (b) of this Section 12.10, Resource Provider may, for purposes of calculating satisfaction of such percentages of local content, include the services of individuals who at some time prior to commencing work on the VPP, but not necessarily including the period of time immediately prior to commencing work on the VPP, were residents of Puerto Rico for at least five (5) consecutive Years and who relocated to Puerto Rico in order to perform work on the VPP. Resource Provider shall, in good faith, be entitled to rely on the representation of each individual applicant and of each subcontractor or vendor as to whether such individual, subcontractor or vendor meets the criteria set forth herein. Resource Provider shall require equivalent undertakings from its subcontractors.
- d. Nothing contained herein shall be interpreted as obligating Resource Provider to take any action which would violate Applicable Law or any affirmative action program or equal opportunity obligation to which Resource Provider or its Affiliates are or may be bound under Applicable Law.

# 12.11 Subcontracting

Neither Party shall be relieved of its obligations under this Agreement as a result of subcontracting any of its obligations to a third party.

### 12.12 Administrative Expense Treatment

PREPA and Resource Provider stipulate that this Agreement is a post-petition agreement executed after the petition date and entitled to administrative expense treatment under PROMESA and the Bankruptcy Code. Further, PREPA stipulates that all of Resource Provider's costs and obligations owed to Resource Provider under this Agreement will be treated as administrative expenses and will support such recovery in any proceeding before any relevant court.

# 13. INDEMNIFICATION

### 13.1 General

Subject to the other provisions of this Article 13, each Party (the "Indemnifying Party") shall indemnify and hold harmless the other Party and each of its Indemnitees from and against any and all Claims by third parties for or on account of injury, bodily or otherwise, or death of persons or for damage to or destruction of third party property, in each case to the extent resulting from or

arising out of the Indemnifying Party's violation of Law, negligence, willful misconduct or failure to perform under this Agreement.

# 13.2 Notice of Claim

In the event any Party to this Agreement receives notice of any Claim for which such Party elects to assert a right of indemnification under this Article 13 the Party receiving such notice shall give prompt written notice to the other Party of such Claim. The Party required to give the indemnification and hold harmless under the terms and provisions of this Agreement will have control of the defense of any such Claim (except to the extent prevented by any legal conflict of interest), including the selection of counsel to handle same. In addition to the counsel so selected, the Party being indemnified and held harmless shall be entitled to be represented by counsel of his or her choosing, but in such event, such Party shall bear the cost and expense of said additional counsel. The Party required to give the indemnification and hold harmless under the terms and provisions of this Agreement may settle a Claim only with the written consent of the other Party, such consent not to be unreasonably withheld.

# 13.3 Claims Arising From Environmental Harm

Resource Provider shall indemnify and hold harmless PREPA, and each of its Indemnitees, against any and all Claims arising directly or indirectly out of any environmental harm due to the actions of Resource Provider or Resource Provider's agents or employees during the design, development, and installation of the GSDS, and testing or operation of or recruitment and enrollment of Participants and incorporation of Qualified Resources in the VPP, as a result of the presence at the GSDS of pollutants, hazardous substances, materials or wastes in excess of amounts and concentrations permitted by Applicable Law then in effect, to the extent resulting from or arising out of Resource Provider's violation of Law, negligence, willful misconduct or failure to perform under this Agreement. In the event Resource Provider fails to reimburse PREPA for such Claims within thirty (30) Days of receipt of written notice from PREPA stating that such Claims were incurred (including reasonable documentation of such Claims), PREPA may offset the amount of such Claims against amounts due to Resource Provider from PREPA under this Agreement. In the event Resource Provider disputes that Claims are due to the actions of Resource Provider or Resource Provider's agents, the Parties shall resolve such Dispute pursuant to Article 21 (Dispute Resolution), and PREPA shall not offset any such disputed amounts until final settlement under such Article 21 (Dispute Resolution).

# 13.4 Claims Arising from GSDS and Participant Service Agreements

- a. Resource Provider shall indemnify and hold harmless PREPA, and each of its Indemnitees against any and all claims, to the extent resulting from or arising out of Resource Provider's violation of Law, negligence, wilful misconduct or failure to perform under this Agreement, relating to the:
  - 1. Resource Provider's design, deployment, installation, ownership, operation and/or maintenance of the GSDS, or testing or operation of or recruitment and enrollment of Participants and incorporation of Qualified Resources in the VPP;
  - 2. Resource Provider's obligation to the Participant(s) pursuant to any Participant Service Agreement entered into between Resource Provider and a Participant; and
  - 3. Resource Provider's breach of confidentiality with respect to Participant Data.

In the event Resource Provider fails to reimburse PREPA for such Claims within thirty (30) Days of receipt of written notice from PREPA stating that such Claims were incurred (including reasonable documentation of such Claims), PREPA may offset the amount of such Claims against amounts due to Resource Provider from PREPA under this Agreement, provided that if Resource Provider disputes that Claims are due to the actions of Resource Provider or Resource Provider's agents, the Parties shall resolve such Dispute pursuant to Article 21 (*Dispute Resolution*), and PREPA shall not offset any such disputed amounts until final settlement under such Article 21 (*Dispute Resolution*).

b. PREPA shall indemnify and hold harmless Resource Provider, and each of its Indemnitees, against any and all Claims relating to PREPA's breach of confidentiality with respect to Participant Data. In the event PREPA fails to reimburse Resource Provider for such Claims within thirty (30) Days of receipt of written notice from Resource Provider stating that such Claims were incurred (including reasonable documentation of such Claims), Resource Provider may the amount of such Claims in the Monthly Invoice; provided that if PREPA disputes that Claims are due to the actions of PREPA or PREPA's agents, the Parties shall resolve such Dispute pursuant to Article 21 (*Dispute Resolution*), and Resource Provider shall not invoice any such disputed amounts until final settlement under such Article 21 (*Dispute Resolution*).

# 13.5 Claims Arising from Infringement of Intellectual Property Rights

- a. Resource Provider shall indemnify and hold harmless PREPA, and each of its Indemnitees, against any and all Claims arising directly or indirectly out of the infringement of third party Intellectual Property Rights, to the extent resulting from or arising out of Resource Provider's violation of Law, negligence, willful misconduct or failure to perform under this Agreement, including patent infringement due to the use of technical features of the GSDS to perform under this Agreement. In the event Resource Provider fails to reimburse PREPA for such Claims within thirty (30) Days of receipt of written notice from PREPA stating that such Claims were incurred (including reasonable documentation of such Claims), PREPA may offset the amount of such Claims against amounts due to Resource Provider from PREPA under this Agreement, provided that if Resource Provider disputes that Claims are due to the actions of Resource Provider or Resource Provider's agents, the Parties shall resolve such Dispute pursuant to Article 21 (*Dispute Resolution*), and PREPA shall not offset any such disputed amounts until final settlement under such Article 21 (*Dispute Resolution*).
- b. PREPA shall indemnify and hold harmless Resource Provider, and each of its Indemnitees from and against any and all Claims relating to any item, information, system, deliverable, software or service provided or used in relation to the Grid Services provided by PREPA to Resource Provider pursuant to this Agreement, or Resource Provider's use thereof (or access or other rights thereto) authorized by PREPA in any circumstance, that infringes or misappropriates a third party Intellectual Property Rights; provided, however, PREPA shall have no liability or obligation to Resource Provider to the extent the claim of infringement or misappropriation is caused by Resource Provider's unauthorized use or modification of such item or Resource Provider's use of such item in combination with any product or equipment not owned, developed, contemplated or authorized by PREPA or with respect to any item not provided by PREPA. If any deliverable or item provided by PREPA hereunder is held to constitute, or in PREPA's reasonable judgment is likely to constitute, an infringement or misappropriation of third party Intellectual Property Rights, PREPA will in addition to its indemnity obligations, at its expense and option, and after

consultation with Resource Provider regarding Resource Provider's preference in such event, either procure the right for Resource Provider to continue using such deliverable or item, replace such deliverable or item with a non-infringing equivalent, provided that such replacement does not result in a degradation of the functionality, performance or quality of the deliverable or item, modify such deliverable or item, or have such deliverable or item modified, to make it non-infringing, provided that such modification does not result in a degradation of the functionality, performance or quality of the deliverable or item, or create a feasible workaround that would not have any adverse impact on PREPA.

### 13.6 Claims Arising from Infringement of Joint Employment

Resource Provider shall indemnify and hold harmless PREPA, and each of its Indemnitees, against all Claims relating to any personnel supplied by Resource Provider, its Affiliates and/or their subcontractors pursuant to this Agreement being alleged or found to be an employee or agent of PREPA, to the extent resulting from or arising out of Resource Provider's violation of Law, negligence, willful misconduct or failure to perform under this Agreement, including (i) the cost of any additional compensation or employee benefits PREPA is required to provide to or pay for on behalf of any personnel supplied by Resource Provider, its Affiliates and/or their subcontractors; and (ii) any claim brought by any personnel supplied by Resource Provider, its Affiliates and/or subcontractors against PREPA based upon the employer-employee relationship. In the event Resource Provider fails to reimburse PREPA for such Claims within thirty (30) Days of receipt of written notice from PREPA stating that such Claims were incurred (including reasonable documentation of such Claims), PREPA may offset the amount of such Claims against amounts due to Resource Provider from PREPA under this Agreement. In the event Resource Provider disputes that Claims are due to the actions of Resource Provider or Resource Provider's Affiliates, the Parties shall resolve such Dispute pursuant to Article 21 (Dispute Resolution), and PREPA shall not offset any such disputed amounts until final settlement under such Article 21 (Dispute Resolution).

# 14. **FORCE MAJEURE**

### 14.1 General

"Force Majeure" means, subject to Section 14.2 (*Instances of Force Majeure*), any event or circumstance beyond the reasonable control of the affected Party (the "Affected Party") and not resulting from the fault or negligence of the Affected Party claiming the Force Majeure, which wholly or partially prevents the Affected Party from performing any of its obligations under this Agreement, but only if and to the extent that:

- a. the Affected Party could not have prevented, avoided, or removed such circumstance, despite the exercise of reasonable diligence in accordance with consistent with Prudent Utility Practices;
- b. the Affected Party has taken all reasonable precautions, due care, and reasonable alternative measures in order to (i) avoid the effect of such event or circumstance on the Affected Party's ability to perform such obligation under this Contract, and (ii) mitigate the consequences thereof;
- c. such event or circumstance did not directly or indirectly arise out of the breach by the Affected Party of any of its obligations under this Agreement or the fault or negligence of the Affected Party; and

d. the Affected Party has given the other Party ("**Non-Affected Party**") notice of such event or circumstance in accordance with Section 14.3 (*Notice*).

Except as provided in Section 14.4 (*Consequences*), Force Majeure shall excuse the Affected Party claiming the Force Majeure from performing the obligation affected by such Force Majeure and the Affected Party shall have no liability for damages or otherwise to the extent caused by such non-performance. The Affected Party shall bear the burden of proving whether Force Majeure has occurred.

### 14.2 Instances of Force Majeure

Provided that a claim of Force Majeure satisfies the requirements of Section 14.1 (*General*), Force Majeure may include the following events: (i) acts of God, strikes (national and other general strikes), industrial disturbances, acts of public or foreign enemy, war, blockades, boycotts, riots, insurrections, epidemics, pandemics, earthquakes, storms, tornado, drought, hail, sabotage, works to rule, go-slows and other public agitation; (ii) invasion, terrorism, rebellion, plague, lightning, hurricane, natural calamity, floods, civil disturbances, lockouts, fires, explosions, the act or failure to act of any Governmental Authority, including quarantine and lock-downs; (iii) any Pending Permit Delay; (iv) failure or delay of any subcontractor or supplier of the Affected Party to perform as a result of an event that would constitute Force Majeure hereunder; and (v) port congestion or closure. Notwithstanding the foregoing, Force Majeure shall expressly not include:

- a. an Insolvency Event suffered by a Party or any of its subcontractors or suppliers at any tier;
- b. any full or partial reduction in the provision of Grid Services caused by or arising from a mechanical or equipment breakdown, software defect, or defect or other conditions attributable to normal wear and tear, and not damage caused by a separate Force Majeure;
- c. any changes in prevailing market prices for goods, fuel or labor;
- d. strikes, lockouts, works to rule, go-slows, and other industrial disturbances that are limited to personnel of Resource Provider and any of its Affiliates;
- e. any failure by a Party to obtain and/or maintain a Permit, other than in the case of a Pending Permit Delay;
- f. any Pending Permit Delays in excess of eighteen (18) Months;
- g. any promulgation by the U.S. Department of Energy of implementation rules for the Bulk-Power System EO after the Agreement Date that causes delay in excess of twelve (12) Months;
- h. the lack of wind, sun, or any other resource of an inherently intermittent nature;
- i. Resource Provider's inability to obtain sufficient power or materials to operate the GSDS, except where an event of Force Majeure causes such inability;
- j. Resource Provider's failure to obtain additional funds, including funds authorized by a state or the federal government or agencies thereof, to supplement the payments made by PREPA pursuant to this Agreement;

- k. a forced Outage of the GSDS, except where a Force Majeure causes such forced Outage;
- 1. litigation or administrative or judicial action pertaining to Resource Provider's interest in this Agreement, the GSDS, Resource Provider's relationship to its Participants, any Permits, or the design, development, installation, ownership, maintenance or operation of the GSDS; or
- m. any full or partial reduction in either the ability of the VPP to deliver the Grid Services or in the ability of PREPA to accept the Grid Services, caused by any action or inaction of a third party, including any vendor or supplier of Resource Provider or PREPA, except where an event of Force Majeure causes such reduction.

### 14.3 Notice

A Party claiming Force Majeure shall, within ten (10) Days after becoming aware of the occurrence of the event(s) which forms the basis for such claim, give the Non-Affected Party written notice thereof, describing (i) the particulars of such occurrence, (ii) an estimate of the duration of the impact of such event on the Affected Party's ability to perform its obligations, and (iii) how such claim otherwise satisfies the requirements of Section 14.1 (*General*), provided that if the Affected Party fails to notify the other Party within such ten (10) Day period, the Affected Party will not be precluded from claiming Force Majeure, but Force Majeure will be deemed to have commenced as of the date on which such notice is given.

### 14.4 <u>Consequences</u>

Subject to Appendix F (*Compensation*), neither Party shall be excused by reason of Force Majeure from the obligation to make any payments when due to the other Party.

# 14.5 <u>Disputes</u>

If a Party Disputes the other Party's claim of Force Majeure, such Dispute shall be resolved pursuant to Article 21 (*Dispute Resolution*).

# 14.6 Extended Force Majeure

Either Party may terminate this Agreement, without further liability for either Party, by notice in writing to the other Party upon the occurrence and continuation of Force Majeure that substantially prevents the performance of a Party for more than twenty-four (24) consecutive Months.

#### 15. **TERMINATION**

# 15.1 <u>Termination Date</u>

Subject to Section 15.2 (*No Discharge of Obligations*), this Agreement shall automatically terminate on the earlier to occur of:

- a. expiration of the Term;
- b. mutual consent of the Parties in writing;
- c. termination of the Agreement identified in a written notice delivered by the non-defaulting Party following the occurrence and continuation of a Default, provided that the termination

date occurs no earlier than thirty (30) Days after the issuance of such notice, and if the defaulting Party can cure such Default, such Party fails to cure such Default within such thirty (30) Day period;

- d. the inability of the Parties to achieve the Closing Date by the date required under Section 2.3 (*Initial Effectiveness & Closing Date*);
- e. prior to the Initial Integration Date only, the determination by Resource Provider (as notified to PREPA in writing) to terminate this Agreement upon the continuance of a Pending Permit Delay in excess of eighteen (18) Months) without further liability to either Party;
- f. termination of this Agreement by a Party in accordance with Section 14.6 (*Extended Force Majeure*);
- g. termination of the Agreement by PREPA in accordance with Section 15.4 (*PREPA Right to Terminate for Convenience*);
- h. a COD Termination Event; or
- i. a Payment Guarantee Cross-Default.

# 15.2 No Discharge of Obligations

Cancellation, expiration, or earlier termination of this Agreement shall not relieve the Parties of obligations incurred prior to, or as a result of, such cancellation, expiration, or earlier termination of this Agreement, which by their nature should survive such events, including Articles 11 (Liability), 13 (Indemnification), 14 (Force Majeure), 15 (Termination), 21 (Dispute Resolution) and 22 (Miscellaneous Provisions), Sections 2.5 (Performance Security), 3.5 (Delay Liquidated Damages), 6.7 (Record Keeping), 12.9 (Confidentiality), 16.2 (Certain Material Breaches), and 17.2 (Tracking Account), and Appendix N (Performance Guarantees). The Articles, Sections, and Appendices designated in the preceding sentence shall survive the Termination Date, provided that Section 12.9 (Confidentiality) and Article 13 (Indemnification) shall expire on the third (3<sup>rd</sup>) anniversary of the Termination Date. Without limiting the foregoing, termination of this Agreement shall not discharge either Party from any Claim or obligation it owes to the other Party under this Agreement by reason of any transaction, loss, cost, damage, expense, or liability which shall occur or arise (or the circumstances, events, or basis of which shall occur or arise) prior to the Termination Date. Any such Claim or obligation owed (whether the same shall be known or unknown at termination or whether the circumstances, events, or basis of the same shall be known or unknown at termination) shall survive the Termination Date. Except as otherwise expressly contemplated by this Agreement, any indebtedness by either Party to the other shall be considered payable within ninety (90) Days after the Termination Date. PREPA shall return to Resource Provider the Performance Security less any amounts drawn by PREPA in accordance with this Agreement following any cancellation, expiration or early termination of this Agreement.

### 15.3 <u>Termination Damages</u>

If PREPA terminates this Agreement under paragraphs (c), (h) or (i) of Section 15.1 (*Termination Date*), Resource Provider shall pay to PREPA liquidated damages equal to the then applicable Security Amount as of the date of such termination as Resource Provider's sole liability and PREPA's sole and exclusive remedy for such termination (the "**Termination Liquidated** 

**Damages**"). The Parties acknowledge and agree that the Termination Liquidated Damages represent a fair and reasonable estimate of the losses which PREPA will suffer as a result of such termination, and accordingly hereby waive their right to dispute the validity of this Section 15.3.

# 15.4 PREPA Right to Terminate for Convenience

At any time up until the Commercial Operation Date, if PREPA determines that it no longer needs the Grid Services to be provided by Resource Provider, PREPA may choose to cancel this Agreement by giving Resource Provider written notice of its decision to cancel. No cause need be cited or demonstrated by PREPA. If PREPA exercises its right to terminate this Agreement pursuant to this Section 15.4 after Resource Provider has commenced development activity on the GSDS for this Agreement, immediately upon receipt of such termination notice, Resource Provider shall cease all development activity and proceed to take such steps as may be necessary to mitigate the losses due to such termination. Resource Provider shall use commercially reasonable efforts to salvage the value of any equipment or materials purchased or contracts signed for the GSDS. Resource Provider shall consult PREPA in respect of all such mitigation efforts. After the completion of all such mitigation efforts, PREPA shall pay the costs incurred by Resource Provider in connection with its performance of this Agreement from and after the Agreement Date, including administrative and general overhead costs and demobilization costs, determined in accordance with GAAP principles consistently applied, plus an amount equal to eight (8) percent of those costs to account for loss of profit, plus the costs incurred as a direct result of the termination, less the value of any salvaged materials or equipment retained by Resource Provider, all of which costs and valuations are subject to PREPA's prior approval, which PREPA shall not unreasonably withhold or delay. Payment will be made by PREPA within thirty (30) Days after such approval. If PREPA does not approve all amounts requested by Resource Provider as compensation for the termination and Resource Provider disagrees with that decision, such Dispute shall be resolved pursuant to Article 21 (Dispute Resolution).

### 16. **DEFAULT**

### 16.1 Definition

The following events shall constitute a "**Default**" under this Agreement:

- a. for Resource Provider as the defaulting Party only, the provision of materially incorrect or misleading information, representation or certification submitted (or made) by Resource Provider in connection with either (i) the submission of Resource Provider's proposal to PREPA in response to the RFP, or (ii) the execution, delivery or performance by Resource Provider of this Agreement, in each case relating to either (a) corruption or bribery matters, or (b) a representation made by Resource Provider under Section 16.2 (*Certain Material Breaches*);
- b. except as otherwise covered in paragraph (a) of this Section 16.1, a materially incorrect or misleading representation or warranty made by a Party under this Agreement or any certification submitted by a Party in connection with the execution, delivery of performance of this Agreement, which in either case remains uncured for a period of at least sixty (60) Days after receipt by such Party of notice thereof from the other Party;
- c. for Resource Provider as the defaulting Party only, default by Resource Provider in the observance or performance of any covenant contained in Section 2.5 (*Performance Security*) where such default continues uncured for a period of at least thirty (30) Days

- after the date on which Resource Provider receives written notice from PREPA of such failure;
- d. a Party's failure to remit in full any amount due and payable under this Agreement to the other Party, which the first Party fails to cure within sixty (60) Days after the date on which the first Party receives written notice from the other Party of such failure (other than disputed amounts, which the Parties shall resolve in accordance with Article 21 (*Dispute Resolution*));
- e. for Resource Provider as defaulting Party, a default by Resource Provider under paragraphs (a) or (b) of Section 16.2 (*Certain Material Breaches*);
- f. except as otherwise covered in paragraphs (c) or (d) of this Section 16.1, default by a Party in the observance or performance of any of the material terms, covenants, or conditions contained in this Agreement, which remains uncured for a period of ninety (90) Days after the date on which the first Party receives written notice from the other Party of such failure, or such longer period (not to exceed an additional cure period of ninety (90) Days if the first Party can cure such default and diligently pursues such cure);
- g. for Resource Provider only as the defaulting Party:
  - 1. an Insolvency Event;
  - 2. after the Commercial Operation Date, the GSDS Availability falls below eighty percent (80%) in any Quarter;
  - 3. after the Commercial Operation Date, Resource Provider fails to maintain at least 5 MW of Participant Resources;
  - 4. Resource Provider fails to cure an adverse physical impact on the Grid System, for which Resource Provider has responsibility, or the equipment of PREPA's customers or other suppliers or which PREPA reasonably determines presents an immediate danger to such personnel or equipment in accordance with Section 6.9 (Operational Forecast);
  - 5. Resource Provider transfers, conveys, loses, or relinquishes its right to own the GSDS to any Person (other than a valid assignee of Resource Provider under this Agreement);
  - 6. Resource Provider modifies its GSDS control schema in a manner that adversely affects its ability to perform its obligations to PREPA under this Agreement; or
  - 7. a Payment Guarantee Cross-Default,

in each case for any reason other than a PREPA Risk Event or Force Majeure affecting Resource Provider; and

h. for PREPA only as the defaulting Party, at any time during the Term, condemnation of the Project by PREPA or any Governmental Authority of Puerto Rico in accordance with Applicable Law.

### 16.2 Certain Material Breaches

- a. Pursuant to FOMB's contract review policy (FOMB POLICY: REVIEW OF CONTRACTS, as modified on October 30, 2020), Resource Provider represents and warrants to PREPA on the Agreement Date, and again on the Closing Date, (i) the due execution by Resource Provider and delivery to PREPA of a certification (the "FOMB Certification") in the form set out in Appendix P (Form of FOMB Certification), and (ii) the completeness, accuracy, and correctness of all information included in such FOMB Certification. As acknowledged, certified, and agreed in the FOMB Certification, any misrepresentation, inaccuracy, or falseness in such FOMB Certification shall render this Agreement null and void, and Resource Provider shall reimburse PREPA immediately for any amounts, payments or benefits received from PREPA under this Agreement.
- b. In accordance with Article 3.4 of Act 2-2018, as amended, known as the Anti-Corruption Code for a New Puerto Rico of the Commonwealth of Puerto Rico, as amended, Resource Provider acknowledges and agrees that its conviction or guilty plea for any of the crimes as enumerated in Article 3.4 of such Act, in addition to any other applicable liability, shall render this Agreement null and void, and Resource Provider shall reimburse PREPA immediately for any amounts, payments or benefits received from PREPA under this Agreement that directly resulted from the committed crime, but only to the extent required by Act 2-2018.
- c. PREPA shall have the right to terminate this Agreement if Puerto Rico or United States Federal Court convicts Resource Provider under Articles 4.2, 4.3 or 5.7 of Act 1-2012, as amended, known as the Organic Act of the Office of Government Ethics of Puerto Rico, of any of the crimes listed in Articles 250 through 266 of Act 146-2012, as amended, known as the Puerto Rico Penal Code, any of the crimes typified in Act 2-2018, as amended, known as the Anti-Corruption Code for a New Puerto Rico or any other felony that involves the misuse of public funds or property, including the crimes mentioned in Article 6.8 of Act 8-2017, as amended, known as the Act for the Administration and Transformation of Human Resources in the Government of Puerto Rico.
- d. Resource Provider acknowledges and agrees that the conditions outlined throughout this Section 16.2 constitute essential requirements of this Agreement.

# 16.3 Remedies & Disputes

Upon the occurrence of a Default, the non-defaulting Party shall have the right to invoke its remedies under this Agreement and/or under Applicable Law. Any Disputes in connection with the existence of a Default shall be resolved in the manner prescribed in Article 21 (*Dispute Resolution*).

# 17. CHANGE-OF-LAW & TAXES

# 17.1 <u>Change-of-Law</u>

- a. Resource Provider shall bear all costs, including all Taxes and Environmental Costs, applicable to the deployment and operation of the GSDS, provided that, PREPA shall reimburse Resource Provider:
  - 1. for a Change-of-Law with respect to Applicable Law of any jurisdiction within the United States other than the Commonwealth of Puerto Rico, fifty percent (50%) of

the Post-Resource Provider Execution Date Taxes and Post-Resource Provider Execution Date Environmental Costs, subject to Section 17.2 (*Tracking Account*); and

2. for a Change-of-Law with respect to Applicable Law of the Commonwealth of Puerto Rico or any jurisdiction withing the Commonwealth of Puerto Rico, one hundred percent (100%) of the Resource Provider's additional costs resulting from measures required to comply with such Change-of-Law,

in each case, arising from such Change-of-Law net of any cost reductions (collectively, the "Additional Costs"); and

b. PREPA shall reimburse the Additional Costs by way of an equitable adjustment to the Demand Build Price and/or Demand Reduction Price, as applicable. The Parties agree that PREPA shall have the right to (i) an annual audit of the payment or credit adjustments made in accordance with this paragraph, and (ii) adjust the Demand Build Price and/or Demand Reduction Price, if necessary, as a result of the findings of such audit. Both Parties shall have the right to participate in such audit.

# 17.2 <u>Tracking Account</u>

- a. The Parties shall record all Additional Costs referred to in item (1), paragraph (a) of Section 17.1 (*Change-of-Law*) that are paid by PREPA according to Section 17.1 (*Change-of-Law*) in a notional, unfunded, non-interest bearing, tracking account maintained by PREPA (the "**Tracking Account**"). Resource Provider shall have the right, upon reasonable notice and during business hours, to audit PREPA's records reflecting the Balance in the Tracking Account and to identify and object to any error in such calculations. If the Parties cannot agree on an adjustment to the Balance in the Tracking Account within thirty (30) Days of PREPA's receipt of Resource Provider's objection, then a Party may refer such matter to dispute resolution by either Party pursuant to Article 21 (*Dispute Resolution*).
- b. If the Tracking Account has a Balance at the beginning of the final Agreement Year, then until such time as the Balance reduces to zero (as described below), PREPA shall have the right to withhold and retain up to fifty percent (50%) of the amounts due in each Billing Period of the remaining Term. The Parties shall subtract the retained amount from the Balance until the Balance equals zero (0). For sake of clarity, PREPA shall not withhold and retain any amounts to the extent such retention and withholding would result in a negative Balance in the Tracking Account, and if any such negative Balance ever exists PREPA shall promptly (and in any event within thirty (30) Days) pay to Resource Provider an amount sufficient to reduce such deficit to zero (0). If any portion of the Balance remains outstanding at the expiration of the Term under Section 2.2 (Initial Term), then PREPA shall have the option to extend the Term until such time as the Balance shall have been reduced to zero (0) by applying such monthly retention as set forth above; provided that in no event shall any such extension exceed an additional two (2) Agreement Years. If, at the expiration of the initial Term under Section 2.2 (*Initial Term*), as may be extended by the preceding sentence, an undisputed Balance exists in the Tracking Account, then Resource Provider shall repay such Balance to PREPA within thirty (30) Days after the expiration of the Term. If this Agreement terminates pursuant to Article 15 (Termination) for any reason other than PREPA's Default or pursuant to paragraph (f) of Section 15.1 (Termination Date) due to a Force Majeure affecting PREPA, and an undisputed Balance remains in the Tracking Account (the "Termination Balance"), Resource Provider shall

repay such Termination Balance to PREPA within thirty (30) Days of the Termination Date. Notwithstanding anything to the contrary herein, Resource Provider shall have the option to prepay all or any portion of the Balance or the anticipated Termination Balance, if applicable, at any time or from time to time (and if any such prepayment in full occurs during an extension of the Initial Term pursuant to this Section 17.2, such extension shall automatically terminate effective upon such prepayment).

# 17.3 Taxes

- a. Resource Provider will promptly pay and discharge all Taxes, assessments, and governmental charges or levies imposed upon it or in respect of all or any part of its property or business, all trade accounts payable in accordance with usual and customary business terms, and all Claims for work, labor or materials which, if unpaid, might become a lien or charge upon any of its property; provided that Resource Provider shall not be required to pay any such Taxes, assessment, charge, levy, account payable or Claim if: (i) the validity, applicability or amount thereof remains contested in good faith by appropriate actions or proceedings which will prevent the forfeiture or sale of any property of Resource Provider or any material interference with the use thereof by Resource Provider, and (ii) Resource Provider shall set aside on its books reserves deemed by it to be adequate with respect thereto.
- b. PREPA shall pay or cause to be paid all Taxes on or with respect to the purchase and sale of Grid Services (including sales tax, excise tax, municipal license tax, and value-added tax) and (ii) the purchase, use and disposition of Green Credits.

#### 18. **INSURANCE**

#### 18.1 Resource Provider Requirements

Resource Provider shall obtain and maintain, or cause to be obtained and maintained on its behalf, in full force and effect from the date of mobilization or Commercial Operation Date and during the Term of this Agreement and thereafter as provided herein policies of insurance covering all operations engaged in by this Agreement, which shall be formally agreed with an insurance company authorized to do business in Puerto Rico having a minimum AM Best rating of at least A- VII, and to that effect, it shall provide in original certificates of insurance and endorsements as follows:

- a. Worker's Compensation Insurance: If at any time Resource Provider has employees, Resource Provider shall procure and maintain, or cause to be procured and maintained on its behalf, Worker's Compensation Insurance as required by the Worker's Compensation Act of the Commonwealth of Puerto Rico. Resource Provider shall also have responsibility for compliance with said Worker's Compensation Act by all its subcontractors, agents, and invitees. Resource Provider shall furnish PREPA a certificate from the State Insurance Fund, in a form acceptable to PREPA, showing that all personnel employed in the work are covered by the Worker's Compensation Insurance, in accordance with this Agreement.
- b. Commercial General Liability Insurance: Resource Provider shall procure and maintain, or cause to be procured and maintained on its behalf, Commercial General Liability Insurance with limits of one million dollars (\$1,000,000) per occurrence and two million dollars (\$2,000,000) aggregate. Such insurance shall include specific coverage for

- contractual liability, explosion, collapse and underground coverage "XCU", sudden and accidental pollution, products, and completed operations liability.
- c. Automobile Liability Insurance: Resource Provider shall procure and maintain, or cause to be procured and maintained on its behalf, Automobile Liability Insurance with limits of one million dollars (\$1,000,000) combined single limit covering all owned, if any, nonowned, and hired automobiles, located in Puerto Rico.
- d. Cyber/Network Security/Privacy Liability Insurance: Resource Provider shall procure and maintain, or cause to be procured and maintained on its behalf, Cyber/Network Security/Privacy Liability insurance with minimum limits of five million dollars (\$5,000,000) per occurrence and per policy aggregate. Such insurance shall include cyber and network risks such as security breaches, data theft or loss, unauthorized access/use, the negligent transmission of a computer virus, identity theft, and any invasion, violation, breach, or infringement of any right to privacy resulting from both electronic and non-electronic events with respect to any confidential or non-public personal information. The retroactive coverage date of the insurance policy shall be no later than the Agreement Date. Such insurance shall remain in effect after the termination of this Agreement in order to respond to any Claims or losses subsequently made. Insurance required by this subsection shall be maintained in full effect at all times during the term of this Agreement and for three (3) Years after the Termination Date.
- e. *Excess Umbrella Liability Insurance*: Resource Provider shall procure and maintain, or cause to be procured and maintained on its behalf, Excess Umbrella Liability Insurance with limits of four million dollars (\$4,000,000) per occurrence and in the aggregate in excess of the limits of insurance provided in paragraph (b), (c) and (f) of this Section 18.1.
- f. *Employer's Liability Insurance*: To the extent that Resource Provider employs employees, Resource Provider shall procure and maintain, or cause to be procured and maintained on its behalf, Employer's Liability Insurance with minimum bodily injury limits of one million dollars (\$1,000,000) for each employee and one million dollars (\$1,000,000) for each accident, covering against the liability imposed by Law upon Resource Provider as a result of bodily injury, by accident or disease, including death arising out of and in the course of employment, outside of and in the course of employment, and outside of and distinct from any claim under the Worker's Compensation Act of the Commonwealth of Puerto Rico.
- g. Business Interruption Insurance: Resource Provider shall procure and maintain, or cause to be procured and maintained on its behalf, Business Interruption Insurance, subject to a reasonable deductible, to include business interruption/loss of income for at least six (6) Months, with a waiting period not exceeding sixty (60) Days except in the case of windstorms, in which case coverage is only available for named windstorms with a minimum payout trigger of 85 mph applying, in each case as it might be reasonable and economically achievable. Resource Provider shall ensure that this policy is put into effect on or before the Commercial Operation Date.

### 18.2 Requirements for Resource Provider Policies

Resource Provider shall ensure that the provider of the Commercial General Liability Insurance, Automobile Liability Insurance and Cyber/Network Security/Privacy Liability Insurance, as required under Section 18.1 (*Resource Provider Requirements*), endorses or provides that, such insurance to include:

a. as Additional Insured for Claims arising under this Agreement only:

Puerto Rico Electric Power Authority Risk Management Office PO Box 364267 San Juan, PR 00936-4267;

- b. a thirty (30) Days' cancellation or nonrenewal notice (ten (10) Days for non-payment of premium) to be sent by certified mail to Resource Provider (with a copy to PREPA) with return receipt to the above address sent by Resource Provider;
- c. an endorsement including this Agreement under contractual liability coverage and identifying it by number, date and the Parties, or confirming that the Commercial General Liability form includes contractual coverage for this Agreement;
- d. a waiver of subrogation for Claims arising under this Agreement in favor of PREPA; and
- e. the breach of any of the warranties or conditions in these policies by Resource Provider shall not prejudice PREPA's rights under this policy, which may be provided by a standard severability of interests/separation of insured's clause.

### 18.3 Service Providers/Vendor Requirements

Service providers and vendors retained by Resource Provider to design, engineer, deploy, operate and maintain the GSDS (but not the Participant or installers of Participant Resources) shall obtain and maintain in full force and effect before the Commercial Operation Date policies of insurance covering all work engaged in by such service provider or vendor under this Agreement, which shall be formally agreed with insurance companies authorized to do business in Puerto Rico, and to that effect Resource Provider shall provide in the original certificate of insurance and endorsements from such service provider or vendor, as follows:

- a. Worker's Compensation Insurance: To the extent required by Applicable Law, Resource Provider shall cause such service providers and vendors to provide and maintain Worker's Compensation Insurance as required by the Worker's Compensation Act of the Commonwealth of Puerto Rico. Resource Provider shall also have responsibility for compliance with said Worker's Compensation Act by all its subcontractors, agents, and invitees. Resource Provider shall furnish PREPA a certificate from such service providers and vendors from the State Insurance Fund showing that all personnel employed in the work are covered by the Worker's Compensation Insurance, in accordance with this Agreement.
- b. *Employer's Liability Insurance*: To the extent any such service provider or vendor is required to procure Worker's Compensation Insurance, Resource Provider shall also cause such service provider or vendor to procure and maintain Employer's Liability Insurance with minimum bodily injury limits of one million dollars (\$1,000,000) for each employee and one million dollars (\$1,000,000) for each accident, covering against the liability imposed by Law upon Resource Provider as a result of bodily injury, by accident or disease, including death arising out of and in the course of employment and outside of and distinct from any claim under the Worker's Compensation Act of the Commonwealth of Puerto Rico.

- c. Commercial General Liability Insurance: Resource Provider shall cause such service providers and vendors to procure and maintain, or cause to be procured and maintained on its behalf, Commercial General Liability Insurance ("CGL") with limits of one million dollars (\$1,000,000) per occurrence and two million dollars (\$2,000,000) aggregate. There shall be no endorsement or modification of the CGL limiting the scope of coverage for liability arising from explosion, collapse, or underground "XCU" property damage and perils. Continuing CGL insurance shall cover liability arising from products completed operations and liability assumed under an insured contract for at least two (2) Years following substantial completion of the work.
- d. *Automobile Liability Insurance*: To the extent required by Applicable Law, Resource Provider shall cause such service providers and vendors to procure and maintain, or cause to be procured and maintained on its behalf, Automobile Liability Insurance with limits of one million dollars (\$1,000,000) combined single limit covering all owned, non-owned, and hired automobiles located in Puerto Rico.
- e. *Cyber/Network Security/Privacy Liability Insurance*: Resource Provider shall cause any such service provider or vendor providing software design services to provide and maintain, or cause to be provided and maintained on its behalf, Cyber/Network Security/Privacy Liability insurance with minimum limits of five million dollars (\$5,000,000) per occurrence and per policy aggregate.
- f. *Excess Umbrella Liability Insurance*: Resource Provider shall cause its contractors to procure and maintain Excess Umbrella Liability Insurance with limits of four million dollars (\$4,000,000) per occurrence and in the aggregate in excess of the limits of insurance provided in paragraph (c) of this Section 18.3.
- g. *Builder's Risk Insurance*: To the extent Resource Provider performs construction services, Resource Provider shall procure or cause its prime contractor to procure and maintain in force Builder's Risk Insurance for the entire work. Such insurance shall be written in an amount equal to the total contract sum as well as subsequent modifications of that sum. The insurance shall apply on a replacement cost basis as follows:
  - 1. The insurance as required above shall be written to cover all risks of physical loss except those specifically excluded in the policy, including industry standard sublimits and aggregate limits.
  - 2. Resource Provider shall pay any deductible applicable to the insurance purchased in compliance with this requirement.
  - 3. Waiver of Subrogation. Resource Provider shall cause the builder's risk insurers to waive all rights of subrogation against PREPA and its officers, directors, agents, and employees for recovery for damages caused by fire and other perils to the extent covered by builder's risk or property insurance purchased pursuant to the requirements of this Agreement or any other property insurance applicable to the work.<sup>1</sup>

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<sup>&</sup>lt;sup>1</sup> Note to PREB: LUMA requested Professional Liability insurance, but Resource Provider did not agree.

# 18.4 Requirements for the Applicable Service Provider and Vendor Policies

Resource Provider shall cause its contractors (but not the Participants or installers of Participant Resources) to ensure that the provider of the Commercial General Liability Insurance, Automobile Liability Insurance, and Cyber/Network Security/Privacy Liability Insurance, as required under Section 18.3 (*Service Providers/Vendor Requirements*), endorses, or provides that, such insurance to include:

a. as Additional Insured:

Puerto Rico Electric Power Authority Risk Management Office PO Box 364267 San Juan, PR 00926-4267;

- b. a thirty (30) Days' cancellation or nonrenewable notice to be sent by certified mail with return receipt to the above address;
- c. an endorsement including this Agreement under contractual liability coverage and identifying it by number, date and the Parties, or confirming that the Commercial General Liability form includes contractual coverage for this Agreement;
- d. a waiver of Subrogation in favor of PREPA; and
- e. the breach of any of the warranties or conditions in these policies by the relevant contractor or designer shall not prejudice PREPA's rights under this policy, which may be provided by a standard severability of interests/separation of insureds clause.

#### 18.5 Application of Proceeds

Subject to the terms and conditions of any direct agreement or other similar agreement executed by PREPA, Resource Provider and/or a Project Lender, Resource Provider shall apply any and all insurance proceeds received in connection with the damage or loss of the GSDS, toward the repair, reconstruction, or replacement of the GSDS, and as permitted by Project Lenders.

# 18.6 General

Resource Provider and its service providers and vendors shall cause their respective insurers or agents to provide no later than ten (10) days prior to date of mobilization or Commercial Operation Date, original certificates of insurance evidencing the insurance policies. Any deductible applicable on required insurance policies under Article 18 (*Insurance*) shall be paid by Resource Provider, service providers or vendors. Failure to obtain certificates of insurance does not relieve any such service provider or vendor of the insurance requirements set forth herein. Failure to obtain the insurance coverage required by Article 18 (*Insurance*) shall in no way relieve or limit Resource Provider or any such service providers and vendors or obligations and liabilities under the provisions of this Agreement.

### 19. ASSIGNMENT & TRANSFER

#### 19.1 Restriction on Assignment

Except as otherwise provided in this Article 19, neither Party shall assign or transfer this Agreement without the prior written consent of the other Party, which consent such Party shall not unreasonably withhold or delay. Any attempt to assign this Agreement without the prior written consent of the corresponding Party shall be void. Any failure of a Party to respond to any request by the other Party for consent to assignment pursuant to this Section 19.1 shall not be deemed or construed as an acceptance or consent to such proposed assignment.

# 19.2 PREPA's Right to Assign

Notwithstanding Section 19.1 (*Restriction on Assignment*), the Parties acknowledge that PREPA is undergoing a transformation process, and therefore agree that, after the front-end transition period of a Partnership Contract, Sale Contract, or any other PREPA Transaction (as these terms are defined in Act 120-2018), PREPA may sell, assign, convey, transfer, pledge, mortgage, sublease, delegate, hypothecate, or otherwise dispose (each, a "**Transfer**") any of its rights, title, or interest in this Agreement as permitted by Applicable Law and at any time, without Resource Provider's consent, and without cost, expense, or incremental liability to PREPA, to a T&D Operator, an Affiliate of PREPA, or any Governmental Authority of Puerto Rico; provided that PREPA shall notify Resource Provider no later than thirty (30) Days before the effective date of any such Transfer. Unless otherwise agreed by PREPA, following the Transfer, PREPA shall be released from all obligations under this Agreement to the extent such transferee assumes such obligations in writing, provided that, for any Transfer to an Affiliate of PREPA, PREPA shall guarantee the payment obligations of such Affiliate arising out of this Agreement following such assignment.

#### 19.3 Resource Provider's Right to Assign

Notwithstanding Section 19.1 (Restriction on Assignment), Resource Provider shall have a. the right to assign, pledge or encumber this Agreement in its entirety or in part without PREPA's consent to the Project Lenders as collateral security in order to obtain financing or other funding. PREPA agrees to execute and deliver an agreement consenting to any assignment as collateral security in favor of the Project Lenders containing terms and conditions that are customary for transactions of this kind. PREPA agrees to cooperate in good faith in this regard and to provide other customary and reasonable documents and acknowledgments as the Project Lenders may reasonably request in connection with the financing in connection with this Agreement, including estoppel certificates and direct agreement or consent to an assignment in accordance with this Section 19.3 and substantially in the form of Appendix T (Form of Direct Agreement) and a legal opinion addressed to the Project Lenders with respect to due authorization and capacity of PREPA to enter into such agreement or consent, and enforceability thereof, in each case as reasonably acceptable to PREPA, provided that Resource Provider shall reimburse PREPA for the documented out-of-pocket costs of negotiating and providing such documents, acknowledgments, opinions, certificates, consents, and agreements. In addition, Resource Provider shall have the right to assign this Agreement as collateral security to any agent, trustee, or other Person (including any corporation or partnership) representing the Project Lenders under the financing documents. If Resource Provider shall assign this Agreement as collateral security pursuant to this Section 19.3, then so long as the secured obligations, or any consolidation, modification, or extension of such obligation shall remain outstanding, the following provisions shall apply:

- 19.3 shall not be deemed to constitute an assignment or transfer of this Agreement, nor shall any assignee referred to above, as such, be deemed to be an assignee or transferee of this Agreement so as to require such assignee, as such, to assume the performance of any of the terms and conditions of Resource Provider to be performed hereunder; provided that the purchaser at any sale of this Agreement in any proceeding for the foreclosure of any assignment, or the assignee or transferee of this Agreement in any proceedings for the foreclosure of any assignment or transfer in lieu of the foreclosure of any assignment, shall be deemed to be an assignee or transferee within the meaning of paragraph (a) of this Section 19.3 and shall be deemed to have agreed to perform all of the terms, covenants and conditions on the part of Resource Provider to be performed hereunder from and after the date of such purchase and assignment.
- 2. Notwithstanding any other provision of this Agreement, any sale of Resource Provider's rights in this Agreement in any secured creditor's sale, any proceeding for the foreclosure of any assignment, or the assignment or transfer of this Agreement in lieu of the foreclosure of any assignment, shall be deemed to be a permitted sale, transfer or assignment of this Agreement, and this Agreement shall continue in full force and effect following any such sale, transfer or assignment.
- If PREPA terminates this Agreement prior to the expiration of the Term due to a 3. Default by Resource Provider or rejects or disaffirms this Agreement pursuant to any bankruptcy Law or proceeding or other similar Applicable Law or proceedings affecting creditors' rights generally with respect to a bankruptcy proceeding relating to Resource Provider or otherwise, PREPA agrees, if outstanding obligations to a Project Lender exist, and subject to the receipt of all necessary approvals, to enter into a new grid services agreement with the Project Lender (or its designee or nominee) on substantially similar terms to this Agreement; provided that such designee or nominee qualifies as a Substitute Provider (as defined in the form of direct agreement included at Appendix T (Form of Direct Agreement), (ii) has provided to PREPA its audited financial statements prepared in accordance with GAAP, demonstrating that such new designee or nominee has an Unrestricted Net Worth of at least twenty-five million dollars (\$25,000,000) (or that its Ultimate Parent Company is a Qualified Sponsor) and (iii) has accepted all terms, provisions and limitations of this Agreement, effective as of the date of such termination.
- b. Resource Provider shall not have the right to assign its rights, title, or interest under this Agreement to any Affiliate of Resource Provider without the prior express written consent of PREPA, unless (i) such Affiliate agrees to be bound by the terms of this Agreement and to fully perform the obligations of Resource Provider hereunder (including Appendix B (*PREPA Signing Conditions*)), (ii) each Sponsor maintains at least the same percentage of the total equity ownership interest in such Affiliate, whether directly or indirectly, as Equity it owns, directly or indirectly, in Resource Provider at the time of such assignment, and (iii) Resource Provider or a Sponsor owns, directly or indirectly, no less than fifty-one percent (51%) of the total equity in such Affiliate. Resource Provider shall notify PREPA of Resource Provider's intention to assign this Agreement at least thirty (30) Days in advance of any such assignment.

c. In the event that Resource Provider solicits PREPA's consent to effect an assignment under Section 19.1 (*Restriction on Assignment*) to a Person in which Resource Provider or Sponsor owns less than fifty percent (50%) of the issued and outstanding shares and voting rights on or after the Commercial Operation Date, PREPA acknowledges and agrees that it would view such consent solicitation as reasonable to the extent that (x) the proposed assignee: (1) satisfies the requirements of a Qualified Transferee, (2) is or has arranged for a Qualified Operator to operate, maintain and repair the GSDS, and (3) agrees to be bound by the terms of this Agreement and to fully perform the obligations of Resource Provider hereunder and (y) no Default by Resource Provider exists at the time of such solicitation.

# 19.4 Restrictions on Equity Transfers

- Resource Provider shall ensure that Sponsor does not assign, sell or transfer (whether a. directly or indirectly) to any other Person any part of its ownership interests in Resource Provider (an "Equity Transfer") at any time prior to the Commercial Operation Date without the prior express written consent of PREPA. On or after the Commercial Operation Date, Resource Provider (i) may permit Sponsor to effectuate an Equity Transfer of up to forty-nine percent (49%) of the issued and outstanding shares and voting rights in Resource Provider without PREPA consent and (ii) shall ensure that Sponsor does not effectuate an Equity Transfer of more than forty-nine percent (49%) of the issued and outstanding shares and voting rights in Resource Provider at any time without the prior express written consent of PREPA, which consent PREPA shall not unreasonably withhold, condition or delay. In the event that Resource Provider solicits PREPA's consent to effect an Equity Transfer of more than forty-nine percent (49%) of the issued and outstanding shares and voting rights in Resource Provider to any Person on or after the Commercial Operation Date, PREPA acknowledges and agrees that it would view such consent solicitation as reasonable to the extent that (A) the proposed transferee: (i) satisfies the requirements of a Qualified Transferee, and (ii) is or has arranged for a Qualified Operator to operate, maintain and repair the GSDS, and (B) no Default by Resource Provider exists at the time of such solicitation:
- b. Notwithstanding the foregoing, a Sponsor may, without PREPA's consent:
  - create a security interest in its direct or indirect ownership interest in Resource Provider in favor of the Project Lenders, and PREPA hereby approves any Equity Transfer thereof resulting from the enforcement of such security interests in accordance with the financing documents of the Project Lenders;
  - 2. (i) effect an Equity Transfer solely in connection with a financing transaction involving Tax Credits under Section 48 of the U.S. Internal Revenue Code, provided that such transfer does not result in the Control of Resource Provider or the Project being transferred to a third party other than such Sponsor (directly or indirectly) or Resource Provider, as applicable; and (ii) thereafter, effect an Equity Transfer back to Resource Provider or such Sponsor (directly or indirectly), as applicable, pursuant to the terms of such financing transaction entered into prior to the Commercial Operation Date involving Tax Credits under Section 48 of the U.S. Internal Revenue Code;
  - 3. effect an Equity Transfer to a Qualified Transferee, provided that such Equity Transfer does not result in a transfer of more than forty-nine percent (49%) of the

- issued and outstanding shares and voting rights in Resource Provider to any Person other than a Sponsor or a Wholly-Owned Affiliate of a Sponsor; or
- 4. effect an Equity Transfer to a Wholly-Owned Affiliate of a Sponsor,
- 5. provided that, in the case of items (3) and (4) of paragraph (b) of this Section 19.4, if such Person does not have an Unrestricted Net Worth of at least twenty-five million dollars (\$25,000,000), and the Equity Transfer would otherwise result (upon expiration of the applicable cure period) in a Payment Guarantee Cross-Default for Resource Provider's failure to provide and maintain a Payment Guarantee from a Permitted Guarantor, a Permitted Guarantor shall have agreed to guarantee the payment obligations of Resource Provider pursuant to a replacement Payment Guarantee executed and delivered to PREPA concurrently with such Equity Transfer (and the prior Payment Guarantee shall thereafter be of no further force or effect).
- c. If Resource Provider intends to effect an Equity Transfer, then it shall notify PREPA of such intention at least thirty (30) Days in advance of the intended date of such transfer. The failure of PREPA to respond to any request by Resource Provider for consent to transfer pursuant to this Section 19.4, shall not be deemed or construed as an acceptance or consent to such proposed transfer. PREPA acknowledges and agrees that the identity and existence of such third party, and the potential transfer, shall be kept confidential in accordance with Section 12.9 (Confidentiality); and if requested by Resource Provider, PREPA shall enter into a confidentiality agreement with respect to the same, in a form reasonably acceptable to PREPA, provided that Resource Provider shall reimburse PREPA for its documented out-of-pocket costs of negotiating and executing such agreement. To the extent required hereunder for the applicable Equity Transfer, prior to PREPA's consent to such Equity Transfer, Resource Provider shall cause the proposed new owner of such equity to provide to PREPA reasonable evidence that such new owner satisfies the requirements of a Qualified Transferee. In each case, Resource Provider shall obtain any regulatory approvals required in respect of such transfer and ensure such transfer otherwise complies with Applicable Law.

#### 19.5 Restrictions on Asset Transfers

- a. Resource Provider shall not sell or transfer, directly or indirectly, the GSDS, any portion of the GSDS or substantially all of its assets either (i) at any time prior to the Commercial Operation Date, or (ii) for any such sale or transfer occurring on or after the Commercial Operation Date, without PREPA's prior express written consent, which consent PREPA shall not unreasonably withhold, condition or delay. The foregoing prohibition shall not apply to any sale or transfer (1) to a Wholly-Owned Affiliate of Sponsor, (2) that forms part of a foreclosure on any mortgage, lien, pledge, charge or other encumbrance granted to the Project Lenders under any non-recourse project financing related exclusively to such assets and such lenders or their agent have entered into a direct agreement with PREPA in respect of the collateral assignment of this Agreement, or (3) is made to any Person that takes assignment of the Agreement pursuant to a permitted assignment under Section 19.3 (Resource Provider's Right to Assign).
- b. If Resource Provider intends to sell the GSDS, or any portion of the GSDS, in a manner that requires PREPA's consent under the first sentence of paragraph (a) of this Section 19.5, then it shall notify PREPA of its intention to sell at least thirty (30) Days in advance

of the intended date of such sale. PREPA shall not unreasonably withhold, condition or delay its consent to any such sale or transfer, provided that the failure of PREPA to respond to any request by Resource Provider for consent to such a sale or transfer shall not be deemed or construed as an acceptance or consent to such proposed sale or transfer. Prior to PREPA's consent to any such asset transfer, Resource Provider shall cause the proposed new owner to provide PREPA with reasonable evidence that such new owner is a Qualified Transferee. In each case, (1) Resource Provider shall obtain any regulatory approvals required in respect of such transfer and ensure such transfer otherwise complies with Applicable Law, and (2) if requested by PREPA, the Parties and such new owner shall enter into an agreement under which (A) Resource Provider assigns and transfers all of its rights and obligations under this Agreement to such new owner, and (B) such new owner expressly assumes all liabilities of Resource Provider arising under this Agreement prior to the date of such assignment.

#### 20. **NOTICES**

# 20.1 General.

All notices and other communications hereunder shall be in writing, other than Dispatch Notices, curtailment or disconnect orders, which may be oral and immediately confirmed via e-mail, and shall be deemed duly given upon receipt after being delivered by hand or sent by e-mail with read receipt confirmation, registered or certified mail, return receipt requested, postage prepaid or by recognized overnight courier service, addressed as follows:

#### IF TO RESOURCE PROVIDER:

Sunrun PR Operations LLC 225 Bush Street, Suite 1400 San Francisco, CA 94104 Attention: Scott Peattie

E-mail: scott.peattie@sunrun.com

#### IF TO PREPA:

Puerto Rico Electric Power Authority 1110 Ponce de León Avenue, Office #808 San Juan, Puerto Rico Attention: Deputy Director of Operations Office

E-mail: mary.zapata@prepa.com

with a copy to, for so long as LUMA Energy LLC and LUMA Energy ServCo LLC collectively serve as the "Operator" under the OMA:

LUMA Energy, LLC Juan Ruiz Velez Building, Office 04-015 1110 Ponce de León Avenue San Juan, Puerto Rico Attention: Brian Walsh

E-mail: brian.walshe@lumapr.com

# 20.2 Change of Address or Persons.

Either Party hereto may change, by notice as above provided, the Persons or addresses to which such notices are sent.

### 21. **DISPUTE RESOLUTION**

# 21.1 <u>Scope of the Dispute Resolution Provisions</u>

Except as otherwise expressly provided in this Agreement, the Parties shall resolve any dispute arising out of, relating to or in connection with this Agreement, including the existence, interpretation, breach, termination or validity of this Agreement (a "**Dispute**") in accordance with the procedures set forth in this Article 21, which shall constitute the sole and exclusive procedures for the resolution of each such Dispute (the "**Dispute Resolution Procedure**").

### 21.2 <u>Commencement of the Dispute Resolution Procedure</u>

- a. If a Dispute arises, then either Party may initiate the Dispute Resolution Procedure by giving a written notice of the Dispute to the other Party (each, a "**Dispute Notice**").
- b. The delivery of a Dispute Notice pursuant to this Section 21.2 shall toll any limitation period imposed by either this Agreement or Applicable Law in respect of a Dispute.

### 21.3 Negotiation

- a. Upon receipt of a Dispute Notice from a Party, each Party shall nominate a member of its respective senior management, who shall have decision-making authority on behalf of such Party (each, a "Designated Person"), and shall cause its Designated Person to promptly meet and negotiate in good faith with the other Designated Person and attempt to resolve the Dispute within thirty (30) Days after the date of the delivery of the Dispute Notice, or such longer period as the Designated Persons may otherwise agree (the "Negotiation Period").
- b. If the Dispute remains unresolved at the end of the Negotiation Period, then (i) if the Parties agree, the Parties may refer the Dispute for technical review in proceedings before an Independent Expert in accordance with Section 21.4 (*Technical Recommendation*) such Dispute (a "**Technical Dispute**") or (ii) either Party may refer the Dispute to arbitration pursuant to Section 21.5 (*Arbitration*).

### 21.4 <u>Technical Recommendation</u>

a. If the Parties agree that a Dispute qualifies as a Technical Dispute, then the Parties shall refer such Dispute to the Independent Expert for a recommended resolution (a "Technical Recommendation") by providing to the Independent Expert a written notice, specifying the matter for determination. The Parties shall conduct hearings before the Independent Expert in San Juan, Puerto Rico, unless otherwise agreed in writing by the Parties. Within thirty (30) Days of the engagement of the Independent Expert for a Technical Dispute (or such longer period of time as the Parties may mutually agree upon in writing), the Parties shall require that the Independent Expert conducts a hearing; provided that the Parties may agree in writing to waive the hearing and have the Independent Expert issue the Technical Recommendation on the basis of written submissions alone. The Parties shall require that

- the Independent Expert render a written recommendation on the Technical Dispute as soon as practicable after the close of the hearing but, in any case, no later than fifteen (15) Days after the close of the hearing. The Parties will share equally in paying the costs of the Independent Expert.
- b. The Parties may resolve the Technical Dispute based on the Technical Recommendation or any mutually agreed modification thereof. If the Parties cannot resolve the Technical Dispute following the issuance of the Technical Recommendation, then either Party may submit the matter for final determination by arbitration in accordance with Section 21.5 (*Arbitration*).

### 21.5 Arbitration

- a. Either Party may initiate mandatory binding arbitration by providing written notice of a demand thereof administered in accordance with the Regulation on Mediation and Arbitration Procedures of the Puerto Rico Energy Commission as supplemented by the Arbitration Rules of the International Chamber of Commerce then in effect (collectively, the "Arbitration Rules"), before a panel of three (3) neutral arbitrators (each, an "Arbitrator" and collectively, the "Tribunal"). To be qualified as an Arbitrator, the Parties shall select each candidate from PREB's list of arbitrators (as supplemented by the list of arbitrators available from the International Chamber of Commerce). Each Arbitrator shall be impartial and independent of either Party and the other Arbitrators, and not employed by any of the Parties in a prior matter.
- b. Notwithstanding the rules and procedures that would otherwise apply to the arbitration, and unless the Parties agree to a different arrangement, the place of the arbitration will be in San Juan, Puerto Rico.
- c. Subject to Article 11 (*Liability*), the Tribunal will have the authority to grant any form of equitable or legal relief a Party might recover in a court action. Each of the Parties (the "**First Party**") acknowledge and agree that (i) the other Party would suffer irreparable damage in the event that the First Party fails to perform certain provisions of this Agreement in accordance with the terms of the Agreement, (ii) monetary damages will not provide a sufficient remedy for any breach of these provisions of this Agreement by the first Party, and (iii) the other Party shall be entitled, without the requirement of posting a bond or other security, to specific performance and injunctive or other equitable relief as a remedy for a breach of this Agreement by the First Party.
- d. Either Party may enter judgment on the award in any court having jurisdiction.
- e. The Tribunal shall have discretion to allocate any portion of the costs of the arbitration (other than each Party's individual attorneys' fees and costs related to the Party's participation in the arbitration, which fees and costs will be borne by such Party), including the fees of the Tribunal and any expert witnesses, against the Party that the Tribunal determines did not prevail. Until the Tribunal renders such award, however, the Parties will share equally in paying the costs of the arbitration. Notwithstanding the foregoing, any costs incurred by a Party in seeking judicial enforcement of any written decision of the Tribunal shall be chargeable to, and borne exclusively by, the Party against whom such court order is successfully obtained.

f. At the conclusion of the arbitration hearing, the Tribunal shall prepare in writing and provide to each Party a decision setting forth factual findings, legal analysis, and the reasons on which the Tribunal's decision is based.

### 22. MISCELLANEOUS PROVISIONS

# 22.1 Waiver & Amendment

This Agreement, including the appendices hereto, may be amended or waived only by written agreement between the Parties. A waiver of any Default shall extend only to the particular Default waived and shall not limit or otherwise affect any rights that either Party may have with respect to any other or future Default. The Parties acknowledge and agree that any amendments to the economic or technical terms of this Agreement, or the scope of the VPP, require PREB approval.

# 22.2 Strict Performance

The failure of either Party to insist in any one or more instances upon strict performance of any provisions of this Agreement, or to take advantage of any of its rights hereunder, shall not be construed as a waiver of any such provisions or the relinquishment of any such right or any other right hereunder, which shall remain in full force and effect, unless agreed in writing between the Parties.

# 22.3 No Third-Party Beneficiaries

The Parties intend this Agreement solely for the benefit of themselves and, solely to the extent rights thereto are provided in this Agreement, for the benefit of the Project Lenders as third-party beneficiaries. Nothing in this Agreement shall be construed to create any duty to, or standard of care with reference to, or any liability to, any Person not a Party to this Agreement.

# 22.4 Resource Provider Certification Requirement

The Parties acknowledge that Resource Provider has submitted the certification titled "Contractor Certification Requirement" required in accordance with the Contract Review Policy of the FOMB, effective as of November 6, 2017 and amended on October 30, 2020, signed by Resource Provider's Executive Director (or another official with an equivalent position or authority to issue such certifications). The Parties have attached a signed copy of the "Contractor Certification Requirement" as Appendix P (Form of FOMB Certification) to this Agreement.

# 22.5 No Sharing of Benefit

No officer, employee, or agent of Resource Provider or PREPA or municipal governments shall be entitled to any share or part of this Agreement or to any benefit that may arise therefrom that would be in violation of any Applicable Law of the Commonwealth of Puerto Rico or policy of PREPA.

# 22.6 No Association, Joint Venture, or Partnership

This Agreement shall not be interpreted or construed to create an association, joint venture, or partnership between the Parties or to impose any partnership obligation or liability upon either Party. Neither Party shall have any right, power or authority to enter into any agreement or undertaking for, or act on behalf of, or to act as, or be an agent or representative of, or to otherwise bind, the other Party.

# 22.7 Successors

This Agreement shall inure to the benefit of and be binding upon Resource Provider and PREPA and their respective successors and assigns.

### 22.8 Complete Agreement & Conflicts

The Parties intend this Agreement as the final expression of their agreement and also as a complete and exclusive statement of the terms of their agreement with respect to the subject matter hereof that supersedes all prior written and oral understandings between the Parties with respect thereto. In the event of any conflict between this Agreement and any other Project documents, this Agreement shall prevail.

# 22.9 Severability

If any provision hereof shall be held invalid, illegal, or unenforceable by the holding of an arbitral authority convened pursuant to Article 21 (*Dispute Resolution*), such holding shall not invalidate or render unenforceable any other provision hereof.

### 22.10 Anticorruption & Antibribery

Resource Provider certifies as of the Closing Date that, to its actual knowledge, it does not receive payment or benefit of any nature for services rendered regularly through an appointment to a Governmental Authority of Puerto Rico.

### 22.11 No Economic Interest

Resource Provider represents, warrants and certifies as of the Closing Date, to its actual knowledge, that no public employee has any personal or economic interest in this Agreement.

### 22.12 Code of Ethics

Resource Provider agrees to comply with the provisions of Act of June 18, 2002, No. 84, as amended, which establishes a Code of Ethics for the Contractors, Suppliers and Economic Incentive Applicants of the Executive Agencies of the Commonwealth of Puerto Rico.

### 22.13 Independent Contractor

Resource Provider shall be considered as an independent contractor, for all material purposes under this Agreement, and all Persons engaged or contracted by Resource Provider for the performance of its obligations herein, shall be considered as its employees or agents or those of its subcontractors, and not as employees or agents of PREPA.

# 22.14 Counterparts

This Agreement may be executed in any number of counterparts with the same effect as if both Parties hereto had signed the same document. All counterparts shall be construed together and shall constitute one instrument.

# 22.15 Governing Law

This Agreement shall be governed by, construed, and enforced in accordance with the Laws of the Commonwealth of Puerto Rico without regard to any contrary result required under applicable conflicts of laws rules. The Parties herein agree that all Disputes arising hereunder shall be resolved pursuant to Article 21 (*Dispute Resolution*).

[SIGNATURES APPEAR ON THE FOLLOWING PAGE.]

**IN WITNESS WHEREOF**, the Parties hereto have agreed to execute this Agreement in San Juan, Puerto Rico, as of the Agreement Date.

| PUERTO RICO ELECTRIC POWER<br>AUTHORITY                          | Sunrun PR Operations LLC |  |
|--|--------------------------|--|
|  |                          |  |
| Josué A. Colón Ortiz Executive Director Tax ID Number: 660433747 | Jeanna Steele            |  |
|  | Authorized Person        |  |
|  | Tax ID Number: 384084619 |  |

### APPENDIX A

#### **HOLIDAYS**

PREPA recognizes the following holidays and observes all holidays that fall on a Sunday on the following Business Day:

<u>DAY</u> <u>CELEBRATION</u>

January 1 New Year's Day

January 6 Three Kings Day/Epiphany

3<sup>rd</sup> Monday in January Martin Luther King

3<sup>rd</sup> Monday in February Presidents and Illustrious Puerto Ricans Day

March 2 American Citizenship Day

March 22 Emancipation Day

Friday of Holy Week Good Friday

Sunday of Holy Week Easter Sunday

2<sup>nd</sup> Sunday in May Mothers' Day

Last Monday in May Memorial Day

3<sup>rd</sup> Sunday in June Fathers' Day

June 19 Juneteenth National Independence Day

July 4 Independence Day

July 25 Puerto Rico Constitution Day

1<sup>st</sup> Monday in September Labor Day

2<sup>nd</sup> Monday in October Columbus Day

November 19 Discovery of Puerto Rico

November 11 Veterans Day

4<sup>th</sup> Thursday in November Thanksgiving Day

December 24 Christmas Eve

December 25 Christmas Day

#### APPENDIX B

### PREPA SIGNING CONDITIONS

- 1. Together with the signing of this Agreement by PREPA, Resource Provider shall provide:
  - a. an original certificate of tax status and compliance from the Commonwealth of Puerto Rico for the five (5) previous years, confirming that it does not owe Taxes to the Commonwealth of Puerto Rico or is paying such Taxes by an installment plan in full compliance with its terms;
  - b. an income tax return filing certificate issued by the Treasury Department of Puerto Rico, Area of Internal Revenues assuring that Resource Provider has filed its Income Tax Return for the last five (5) years (obtained by using the Request for Copy and/or Certification of Income Tax Returns Form issued by the Treasury Department of Puerto Rico);
  - c. a certificate of debt issued by the Treasury Department of Puerto Rico, Area of Internal Revenues;
  - d. a certificate issued by the Municipal Revenues Collection Center assuring that Resource Provider does not owe any Taxes to such governmental agency;
  - e. a certificate issued by the Department of Labor and Human Resources of Puerto Rico, evidencing that Resource Provider has paid to the Department of Labor and Human Resources of Puerto Rico, if applicable, its employees' contributions, in accordance with the Puerto Rico Employment Security Act (unemployment, temporary disability or sickness or social security for chauffeurs) or is paying such contributions by an installment plan in full compliance with its terms;
  - f. a certificate issued by the Child Support Administration (ASUME) evidencing that Resource Provider has complied with the retention, if applicable, that an employer must do:
  - g. a sworn and notarized statement, as of the Agreement Date, evidencing compliance with Article 3.3 Act 2-2018, as amended, known as the Anti-Corruption Code for a New Puerto Rico of the Commonwealth of Puerto Rico, as amended, in the form set forth in Appendix O (Form of Sworn Statement);
  - h. a certification, as of the Agreement Date, that, to its actual knowledge, no public employee has any personal or economic interest in this Agreement, under Section 22.11 (*No Economic Interest*);
  - i. a certification, as of the Agreement Date, that, to its actual knowledge, it does not receive payment or benefit of any nature for services rendered regularly through an appointment to a Governmental Authority of Puerto Rico, under Section 22.10 (*Anticorruption & Antibribery*);
  - j. if any of the previously required certifications show a debt, and Resource Provider has requested a review or adjustment of this debt, a certification that Resource Provider has made such request at the Agreement Date; and if PREPA denies the requested review or adjustment and such determination is final, proof of payment of this debt to PREPA or

- confirmation that Resource Provider accepts that PREPA shall offset the owed amount from the corresponding payments;
- k. evidence of Resource Provider's ability to provide Equity equal to at least thirty percent (30%) of the forecasted costs to develop the GSDS, by the forecasted date on which Resource Provider will first draw down on funds for such development under the financing documents with the Project Lenders; and
- 1. a preliminary design of the VPP consistent with Prudent Electrical Practices and the MTRs.
- 2. Prior to the signing of this Agreement by PREPA:
  - a. Resource Provider shall have provided the certification set forth in Appendix P (*Form of FOMB Certification*);
  - b. PREB and P3A shall have approved the execution version of this Agreement; and
  - c. FOMB shall have (i) approved the execution version of this Agreement, and (ii) recognized that Resource Provider's costs and obligations owed to Resource Provider arising under this Agreement are administrative expenses and entitled to priority treatment within the meaning of section 5.3 of the Bankruptcy Code, as made applicable by section 301(a) of PROMESA.

### APPENDIX C

#### CONDITIONS PRECEDENT

#### PART 1 - RESOURCE PROVIDER CONDITIONS

As conditions precedent to the Closing Date, Resource Provider shall deliver the following documents to PREPA in form and substance satisfactory to PREPA:

- a. the Performance Security;
- b. certified true and correct copy of insurance certificates or cover notes evidencing the insurance coverages required pursuant to Article 18 (*Insurance*), which have entered into full force and effect, and PREPA having approved thereof in writing, which approval PREPA shall not unreasonably withhold or delay;
- c. a certificate, signed by a duly-authorized representative of Resource Provider, in the form set forth in Appendix W (*Form of Warranty Compliance Certificate*);
- d. a legal opinion prepared by Resource Provider's external counsel, confirming the warranty made by Resource Provider in item (4), paragraph (a) of Section 12.3 (*Resource Provider Representations & Warranties*);
- e. the Payment Guarantee; and
- f. appointment of Service of Process Agent.

#### **PART 2 - PREPA CONDITIONS**

PREPA shall satisfy the following as conditions precedent to the Closing Date:

- a. the appointment by PREPA of the Consulting Technical Expert in accordance with Section 3.1 (*Consulting Technical Expert*);
- b. evidence of filing of this Agreement with the Puerto Rico Controller; and
- c. delivery of a legal opinion prepared by its external counsel in a form reasonably acceptable to Resource Provider, confirming the warranty made by PREPA in paragraph (b) of Section 12.5 (*PREPA Representations & Warranties*).

#### **PART 3 - OTHER CONDITIONS**

As conditions precedent to the Closing Date, the following events shall have occurred or apply:

- a. the execution and delivery of the Trademark License Agreement by the Parties;
- b. the absence of any Legal Challenge;
- c. the issuance by PREPA of a Best Interests Determination; and
- d. PREPA's and PREB's approval of the Approved Form.

# APPENDIX D

# MILESTONE SCHEDULE

| Milestones                | Time for Completion / Occurrence*                                   | Resource Provider Delay<br>Liquidated Damages (USD<br>Per Day of Delay) |
|---------------------------|---|---|
| 40% Guaranteed Capability | 365 Days after PREB issues a resolution approving the Approved Form | N/A   |
| 80% Guaranteed Capability | 480 Days after PREB issues a resolution approving the Approved Form | N/A   |
| Initial Integration       | 540 Days after Closing Date   | N/A   |
| Commercial Operation      | Guaranteed Commercial Operation Date                                | \$7,000   |

# Grid Services Agreement - PREPA and Sunrun PR Operations LLC

# APPENDIX E

# NOT USED

## APPENDIX F

#### **COMPENSATION**

## 1. Data Collection

For each Billing Period "n", PREPA shall remit to Resource Provider a payment for Grid Services provided to PREPA, in arrears calculated in accordance with Section 2 (*Monthly Payment*) of this Appendix F (the "**Monthly Payment**" or "**MP**"). The Parties shall calculate the Demand Reduction Payment and the Demand Build Payment forming part of the Monthly Payment on a portfolio level basis using data collected by Resource Provider and monitored by PREPA. To derive portfolio level data, Resource Provider shall:

- a. collect Participant Resource data from each Participant Site; and
- b. aggregate all such data to the portfolio level.

PREPA reserves the right to audit Resource Provider's data at the Participant Resource and portfolio level.

## 2. Monthly Payment

The Parties shall calculate the Monthly Payment for Billing Period "n" as follows:

$$MP_n = (DRP_n + DBP_n) \times PRA_n - ADJ_n$$

#### where:

**MP**<sub>n</sub> = Monthly Payment for Billing Period "n", expressed in dollars;

**DRP**<sub>n</sub> = Demand Reduction Payment for Billing Period "n", as determined in accordance with Section 3 (*Demand Reduction Payment*) of this Appendix F;

**DBP**<sub>n</sub> = Demand Build Payment for Billing Period "n", as determined in accordance with Section 5 (*Demand Build Payment*) of this Appendix F;

**PRA**<sub>n</sub> = PREPA Risk Adjustment for Billing Period "n", determined pursuant Section 7 (*PREPA Risk Adjustment*) of this Appendix F;

 $ADJ_n$  = other credits or amounts to which PREPA has a right under this Agreement; and

**n** = such Billing Period.

Resource Provider acknowledges and agrees that the Monthly Payment represents the all-in payment for the Grid Services of the VPP, including all Ancillary Services, any applicable Green Credits and costs to Resource Provider of complying with this Agreement.

# 3. Demand Reduction Payment

For each Billing Period, the Parties shall calculate the Demand Reduction Payment (the "**DRP**") as follows:

$$DRP_n = DR\$_n \times DRA_n$$

where:

**DRP**<sub>n</sub> = Demand Reduction Payment for Billing Period "n", expressed in dollars;

**DR**\$<sub>n</sub> = Demand Reduction Price for Billing Period "n", as determined in accordance with Section 4 (*Demand Reduction Price*) of this Appendix F; and

 $DRA_n$  = Average Capability for Demand Reduction Service during Billing Period "n", expressed in kW, and calculated as follows:

$$\mathbf{DRA_n} = \frac{\sum_{i=1}^k CDR_i}{k}$$

where:

i = the relevant Time Interval;

k = number of Time Intervals that elapsed during Billing Period "n"; and

 $CDR_i = min [FC_i, AC_i]$ 

where:

FC<sub>i</sub> = the Forecasted Capability for Demand Reduction Service during Time Interval "i"; and

 $AC_i$  = the actual Capability for Demand Reduction Service during Time Interval "i", calculated by using the following formula:

$$AC = \sum_{y=1}^{z} [CC_{y} \times RA_{y}]$$

where:

CC<sub>y</sub> = the Committed Capacity of Participant Resource "y", based upon the Operating Characteristics, made available by the GSDS for Demand Reduction Service during Time

Interval "i" in accordance with Appendix H (*Grid Services*);

RA<sub>y</sub> = availability of Participant Resource "y" during Time Interval "i", expressed as a decimal not to exceed 1.0:<sup>2</sup>

number of Participant Resources comprising the VPP actually capable of providing Demand Reduction Service during Time Interval "i", not to exceed the number of such resources so certified in accordance with Section 3(b)(iii) of Appendix M; and

y = the relevant Participant Resource.

#### 4. Demand Reduction Price

For each Billing Period during an Agreement Year, the "**Demand Reduction Price**" or "**DR\$**" for such Billing Period shall equal \$4.50 \$/kW-Month.

Z

## 5. Demand Build Payment

For each Billing Period, the Parties shall calculate the Demand Build Payment (the "DBP") as follows:

$$DBP_n = DB$$
\$ x  $DBA_n$ 

where:

**DBP**<sub>n</sub> = Demand Build Payment for Billing Period "n", expressed in dollars;

**DB\$** = Demand Build Price for Billing Period "n", as determined in accordance with Section 6 (*Demand Build Price*) of this Appendix F; and

**DBA**<sub>n</sub> = Average Capability for Demand Build Service during Billing Period "n", expressed in kW, and calculated as follows:

$$\mathbf{DBA_n} = \frac{\sum_{i=1}^{k} CDB_i}{k}$$

Note: A fully operational Participant Resource would receive the value of "1.0." An inoperable Participant Resource would receive the value of "0.0." Resource Provider shall adjust the value to reflect the equivalent portion of such Committed Capacity made available during the relevant Time Interval.

#### where:

i = the relevant Time Interval;

k = number of Time Intervals that elapsed during Billing Period "n";

and

 $CDB_i = min [FC_i, AC_i]$ 

where:

 $FC_i \quad = \quad \quad the \ \, Forecasted \ \, Capability \ \, for \ \, Demand \ \, Build$ 

Service during Time Interval "i"; and

AC<sub>i</sub> = the actual Capability for Demand Build Service during Time Interval "i", calculated by using the following formula:

$$AC = \sum_{y=1}^{z} [CC_{y} \times RA_{y}]$$

where:

 $CC_y$  = the Committed Capacity of

Participant Resource "y", based upon the Operating Characteristics, made available by the GSDS for Demand Build Service during Time Interval "i" in accordance with Appendix H

(Grid Services);

RA<sub>y</sub> = availability of Participant

Resource "y" during Time Interval "i", expressed as a

decimal not to exceed 1.0;<sup>3</sup>

z = number of Participant Resources comprising the VPP actually

capable of providing Demand Build Service during Time Interval "i", not to exceed the number of such resources so

certified in accordance with

Note: A fully operational Participant Resource would receive the value of "1.0." An inoperable Participant Resource would receive the value of "0.0." Resource Provider shall adjust the value to reflect the equivalent portion of such Committed Capacity made available during the relevant Time Interval.

Section 3(b)(iii) of Appendix M; and

y = the relevant Participant Resource.

## 6. Demand Build Price

For each Billing Period during an Agreement Year, the "**Demand Build Price**" or "**DB**\$" for such Billing Period shall equal \$4.50 \$/kW-Month.

# 7. PREPA Risk Adjustment

The Parties shall calculate the PREPA Risk Adjustment ("PRA") for Billing Period "n" as follows:

$$PRA_n = \left(\frac{BPHRS_n - (GSEHRS_n + PFMHRS_n + IPHRS_n)}{BPHRS_n}\right)$$

**PRA**<sub>n</sub> = PREPA Risk Adjustment for the Billing Period;

**BPHRS**<sub>n</sub> = total number of hours in the Grid Services Windows occurring during the Billing Period;

 $\begin{aligned} \textbf{GSEHRS}_n = & \text{the duration (in hours) of any Grid System Event (other than a Force Majeure affecting PREPA) occurring during any Grid Services Window in the Billing Period, provided that the number of GSEHRS in the Billing Period, when added to the number of GSEHRS in the preceding Billing Periods for the Year, shall not exceed the Grid System Waiting Period, and any such excess GSEHRS shall not be included in the calculation of GSEHRS_n; \end{aligned}$ 

 $\begin{aligned} \textbf{PFMHRS}_n = & \text{duration (in hours) of any Force Majeure affecting PREPA occurring during any} \\ & \text{Grid Services Window in the Billing Period provided that the number of PFMHRS} \\ & \text{in the Billing Period, when added to the number of PFMHRS in the preceding} \\ & \text{Billing Periods for the Year, shall not exceed the Force Majeure Waiting Period, and} \\ & \text{any such excess PFMHRS shall not be included in the calculation of PFMHRS}_n; and \end{aligned}$ 

**IPHRSn** = duration (in hours) of any event occurring during any Grid Services Window in the Billing Period in respect of which Resource Provider has recovered insurance proceeds from any insurance policy that Resource Provider obtains (or would have recovered had it obtained and maintained each insurance policy that this Agreement requires Resource Provider to obtain and maintain) in respect of PREPA Risk Events, including business interruption insurance in accordance with paragraph (g) of Section 18.1 (Resource Provider Requirements).

Resource Provider acknowledges and agrees that the Demand Reduction Payments and Demand Build Payments shall not apply in respect of an hour Billing Period in respect of which Resource Provider may recover insurance proceeds from any insurance policy that Resource Provider obtains (or would recover or have obtained had it complied with this Agreement) in respect of PREPA Risk

# Grid Services Agreement - PREPA and Sunrun PR Operations LLC

Events, including business interruption insurance in accordance with paragraph (g) of Section 18.1 (*Resource Provider Requirements*).

# APPENDIX G

# **GUARANTEED CAPABILITY**

| <b>Guaranteed Capability</b> | 17,000 kW |
|------------------------------|-----------|
|                              | 1         |

|                     |         | Demand Reduction Service   |
|---------------------|---------|----------------------------|
|                     | Quarter | Guaranteed Capability (kW) |
|                     | 1       | 17,000 kW                  |
| A amagnant Vaan 1   | 2       | 17,000 kW                  |
| Agreement Year 1    | 3       | 17,000 kW                  |
|                     | 4       | 17,000 kW                  |
|                     | 1       | 17,000 kW                  |
| Each Agreement Year | 2       | 17,000 kW                  |
| Thereafter          | 3       | 17,000 kW                  |
|                     | 4       | 17,000 kW                  |

|                     |         | Demand Build Service       |
|---------------------|---------|----------------------------|
|                     | Quarter | Guaranteed Capability (kW) |
|                     | 1       | 17,000 kW                  |
| A graamant Vaar 1   | 2       | 17,000 kW                  |
| Agreement Year 1    | 3       | 17,000 kW                  |
|                     | 4       | 17,000 kW                  |
|                     | 1       | 17,000 kW                  |
| Each Agreement Year | 2       | 17,000 kW                  |
| Thereafter          | 3       | 17,000 kW                  |
|                     | 4       | 17,000 kW                  |

## **APPENDIX H**

## **GRID SERVICES**

#### 1. Additional Definitions

Capitalized terms used throughout this Appendix H have the meaning set forth in the Agreement, unless otherwise defined herein. This Appendix H also uses the following defined terms:

- a. "**Delivered Capability**" means, for each Grid Service made available by Resource Provider during any Time Interval, the level of Capability of such Grid Service delivered by Resource Provider to PREPA during such Time Interval; and
- b. "**Requested Capability**" means, for any Time Interval during a GS Event, the Capability requested for such Time Interval in the Dispatch Notice applicable to such GS Event.

# 2. Capability

- a. Each Participant Resource may comprise any combination of Renewable Energy Resources, Energy Storage Resources, and Demand Response Resources, provided that Resource Provider must include Energy Storage Resources among the Participant Resources that it utilizes in its VPP. Resource Provider shall ensure that the net AC power output of each Participant Resource at its Interconnection Point is limited to 1 MW.
- b. Resource Provider shall provide regular reports to PREPA on the first day of each Billing Period that identify (i) the aggregate Capability of the VPP, (ii) each Participant Resource, its Committed Capacity and operational status, and (iii) the Participant Resources that have enrolled or unenrolled from the VPP during the prior Billing Period (including notifying PREPA of changes to the operational status of any C&I Participants).

## 3. Service Requirements

## a. VPP and Participant Resources

A VPP must have the following operating characteristics and technical capabilities:

- i. Demand Build Service
  - 1. For this service (the "**Demand Build Service**"), Resource Provider shall provide the Capability to increase load presented to the Grid System or reduce the quantity of Energy delivered by the VPP into the Grid System, all in accordance with this Appendix H and the MTRs.
  - 2. Resource Provider shall provide Demand Build Service for a four (4) hour block during the system mid-day renewable generation peak, as specified under paragraph (d) (*Availability Requirement*) of this Section 3 of this Appendix H.

#### ii. Demand Reduction Service

- 1. For this service (the "**Demand Reduction Service**"), Resource Provider shall provide the Capability to reduce load presented to the Grid System or increase the quantity of Energy delivered by the VPP into the Grid System, in accordance with this Appendix H and the MTRs.
- 2. Resource Provider shall provide Demand Reduction Service for a four (4) hour block during evening peaking periods, as specified under paragraph (d) (*Availability Requirement*) of this Section 3 of this Appendix H.
- iii. Resource Provider must ensure that the equipment that controls and monitors Participant Resources remains operational throughout the time period during which PREPA requires Grid Services. The polling rate of monitored equipment may not fall below a rate necessary to demonstrate compliance with this Agreement.

## b. Response Timeline

Resource Provider shall act in response to a Dispatch Notice as specified below.

- i. Demand Build Service: PREPA will issue a Dispatch Notice in respect of a Demand Build Service at least eight (8) hours, but no earlier than twenty-four (24) hours, prior to the anticipated start of the GS Event. Resource Provider's Participant Resource portfolio shall ramp up to the Forecasted Capability for the Demand Build Service in the thirty (30) minutes preceding the start of the GS Event at the Ramp Rate, and must achieve the Forecasted Capability by the start of the GS Event. Following the GS Event, Resource Provider may return to its normal operating state in the thirty (30) minutes after the end of GS Event or after receiving a command from PREPA's system operations department, in each case, at the Ramp Rate.
- ii. Demand Reduction Service: PREPA will issue a Dispatch Notice in respect of a Demand Reduction Service at least thirty (30) minutes, but no earlier than twenty-four (24) hours, prior to the start time of the GS Event. Resource Provider's Participant Resource portfolio must include the Forecasted Capability for the Demand Reduction Service within two (2) minutes from the start time of the GS Event. Following the GS Event, Resource Provider may return to its normal operating state in the thirty (30) minutes after the end of GS Event or after receiving a command from PREPA's system operations department, in each case, at the Ramp Rate.

## c. Event Duration

i. *Demand Build Service*: Resource Provider shall provide Demand Build Service for four (4) hours, or such shorter period as PREPA may specify by Dispatch Notice, during specified timeframes.

ii. *Demand Reduction Service*: Resource Provider shall provide Demand Reduction Service for up to four (4) hours, or such shorter period as PREPA may specify by Dispatch Notice, during specified timeframes. Duration will be at the discretion of PREPA's system operations department at the time of the Dispatch.

## d. Availability Requirement

Resource Provider shall make its Participant Resource portfolio available to provide Grid Services for specified demand build and reduction periods, and shall prohibit the provision of such services outside of such periods. Resource Provider shall reflect the following periods in the Operational Forecast.

- i. *Demand Build Service*: 10:00 14:00 (Puerto Rico time)
- ii. Demand Reduction Service: 18:00 22:00 (Puerto Rico time)

Once per Quarter, PREPA shall have the right to shift the four (4) hour build and reduction periods by up to one (1) hour earlier or later to account for seasonal variations. PREPA shall notify Resource Provider in writing of such shift no later than ten (10) Business Days prior to its effectiveness.

## e. <u>Periods of No Availability</u>

If a Scheduled Outage, Scheduled Derating, Non-Scheduled Outage, Non-Scheduled Derating or Emergency occurs, Resource Provider shall update its Operational Forecast to identify the period(s) during which Grid Services and/or the VPP will be unavailable.

## 4. Dispatch/Control Requirements

PREPA shall issue and Resource Provider shall receive Dispatch Notices in accordance with Section 7.1 (*Dispatching*), this Appendix H and the Operating Procedures.

## 5. Forecasting Requirements

- a. Resource Provider shall separately forecast Demand Reduction Service and Demand Build Service in the Operational Forecast.
- b. Resource Provider shall comply with the other forecasting requirements set out in Section 6.9 (Operational Forecasts) and Appendix V (Operational Forecast).

#### 6. Performance Factor Calculation

- a. The Parties will track the Performance Factor for informational and verification purposes.
- b. The Parties will base the Performance Factor for each GS Event on the percentage of Delivered Capability compared to the Forecasted Capability.
- c. The Parties will average data used for Delivered Capability and Forecasted Capability for the purpose of establishing the Performance Factor over one Time Interval.
- d. The ramp-in and ramp-out periods of any GS Event will not affect the Performance Factor calculation for the GS Event.

e. Performance Factor Calculation during GS Event "e":

$$PFe = \frac{\sum_{i=1}^{n} (1 - \left| 1 - \frac{DCi}{FCi} \right|)^{2}}{n}$$

where:

**PFe** = Performance Factor during GS Event "e" (*i.e.*, Demand Reduction Service/Demand Build Service);

**DC**<sub>i</sub> = Delivered Capability, expressed in kW, for Time Interval "i";

**FC**<sub>i</sub> = Forecasted Capability, expressed in kW, for Time Interval "i";

i = the relevant Time Interval; and

**n** = number of Time Intervals in GS Event "e".

## 7. Communications and Control

a. <u>Protocol/Specification</u>

i. The integration will be based on REST API between the Resource Provider and PREPA with the detailed specifications to be mutually agreed upon between the Parties.

ii. The integration will include signals and data transmitted between the two (2) Parties.

b. Data

The list of data made available may include the following:

i. Forecasted Dispatch Capacity (in MW)

ii. Available Dispatch Capacity (in MW)

iii. State of the aggregated energy (in MWh)

iv. Time interval stamp

The list is subject to change upon mutual agreement between Resource Provider and PREPA.

# c. Signal

The integration will include REST API endpoints for:

- i. Telemetry
- ii. Dispatch
- iii. Forecasting
- iv. Enrollment

## 8. Testing

Refer to Appendix M (Data, Integration and Testing Protocol), for information regarding testing requirements.

## 9. Maximum Number of Dispatches Called per Agreement Year

Resource Provider shall ensure that the VPP remains available to be dispatched for Demand Build Service and Demand Reduction Service on consecutive days, with no weekly or monthly limitation, subject to the annual cap of two hundred sixty (260) Grid Services Periods per year.

In the event that the first and last Agreement Years of the Supply Period are for less than twelve (12) Months, the maximum Grid Services Periods called for such Agreement Years may be prorated based on Commercial Operation Date and the Termination Date, at PREPA's discretion.

## **APPENDIX I**

#### **PROGRESS REVIEW**

## 1. Scope

The Consulting Technical Expert shall make comments and recommendations to Resource Provider in respect of:

- a. any aspect of the design of the GSDS;
- b. the aggregation of Qualified Resources; and
- c. the operation of the GSDS.

# 2. Reviews and Inspections

- a. For the design of the GSDS or any required report, Resource Provider shall submit an electronic copy of such document requested by the Consulting Technical Expert. Resource Provider shall deliver all electronic copies requested for review by email to the address specified in such request in a readily accessible format agreed with the Consulting Technical Expert. The Consulting Technical Expert may provide comments on selected documents and shall designate comments in accordance with Section 3 (*Designations and Subsequent Actions*) of this Appendix I.
- b. For works under paragraph (c) of Section 1 (*Scope*) of this Appendix I, Resource Provider shall take all reasonable measures to allow the Consulting Technical Expert to undertake inspections as required. The Consulting Technical Expert shall submit a report to Resource Provider within forty-eight (48) hours after completion of an inspection activity. This report shall contain comments designated in accordance with Section 3 (*Designations and Subsequent Actions*) of this Appendix I.
- c. For the operation of the GSDS, Resource Provider shall take all reasonable measures to allow the Consulting Technical Expert to undertake inspections as required. The Consulting Technical Expert shall submit a report within twenty-one (21) Days after completion of an inspection. This report shall contain comments designated in accordance with Section 3 (*Designations and Subsequent Actions*) of this Appendix I.

## 3. Designations and Subsequent Actions

The designations of the relevant documents shall fall into one of the following categories:

a. "Reviewed/Inspected and accepted", meaning that the document, particular works or operation of the relevant component conform to the requirements of this Agreement. Such designation shall not relieve Resource Provider from any of its obligations or responsibilities under this Agreement or bind PREPA in respect of such document, particular works or operation of the relevant project component. If Consulting Technical Expert makes any comments under this designation, such comments shall take the form of suggestions for alternative design or operational procedures which may result in reduced cost or contribute to ease of operation. Resource Provider shall have no obligation to adopt or respond to any such comments made under this designation.

- b. "Reviewed/Inspected with comments", meaning the comments constitute a form of requests for further details or clarifications on the basis that the relevant document, works or operation of the relevant component does not appear to conform with the requirements of this Agreement. Such identified issues shall be deemed to have been considered non-compliant by PREPA's Consulting Technical Expert on that basis until such time as Resource Provider provides the required details and clarifications in a sufficiently satisfactory manner for the Consulting Technical Expert to reach a final decision. Following receipt and review of the requested details and clarifications, the Consulting Technical Expert shall then designate such matter as either "Reviewed/Inspected and accepted" or "Reviewed/Inspected and rejected as non-compliant" as may be appropriate.
- c. "Reviewed/Inspected and rejected as non-compliant", meaning the comments constitute the rejection by the Consulting Technical Expert of the documents, works or operation of the relevant component of the GSDS or the Participant Resources on the basis that it does not comply with this Agreement, in which event the Consulting Technical Expert shall provide a statement setting out in adequate detail the reasons for such designation.

## **APPENDIX J**

## **OPERATING CHARACTERISTICS**

## 1. GSDS

- a. The design, development, deployment, maintenance, and operation of the GSDS shall meet the information technology and information assurance standards, based on the NIST Cybersecurity Framework and 800-53 standards, set forth in Section 6.13 (*Information Security*) and the Operating Procedures.
- b. The GSDS shall have an operational life equal to at least the Term of this Agreement.
- c. The GSDS shall comply with the network and communication requirements set forth in Appendix U (*Metering*) and Appendix M (*Data, Integration and Testing Protocol*). The GSDS shall be capable of sending telemetry data to the Grid System, receiving dispatch signals from the Grid System, and responding with appropriate Grid Services within the response requirements set forth in this Agreement.

## 2. DEMAND REDUCTION AND DEMAND BUILD

| Normal Operation Parameters – Demand Reduc | ction   |
|--|---|
| Dispatch hours                             | 6 PM to 10 PM, Atlantic (UTC-4), subject to adjustment in accordance with paragraph (d) of Section 3 (Service Requirements) of Appendix H (Grid Services) |
| Dispatch duration                          | Up to 4 hours   |
| Energy Resource requirement*               | Minimum 20% energy capacity per asset   |
| Resource Provider Notification             | 30 minutes  |
| Normal Operation Parameters – Demand Build |   |
| Demand Build hours                         | 10 AM to 2 PM, Atlantic (UTC-4), subject to adjustment in accordance with paragraph (d) of Section 3 (Service Requirements) of Appendix H (Grid Services) |
| Demand Build duration                      | Up to 4 hours   |
| Energy Resource requirement*               | Minimum 20% energy capacity per asset   |
| Resource Provider Notification             | 8 hours prior to event  |

<sup>\*</sup>Guaranteed Capability excludes Energy Resource requirement, which provides a reserve for customer backup.

#### APPENDIX K

## MINIMUM TECHNICAL REQUIREMENTS

Resource Provider shall comply, and ensure that the VPP complies, with the following minimum technical requirements (the "MTRs") at all times during the Supply Period, provided that in the event of any conflict or overlapping provision between the terms and conditions of this Appendix K and the requirements of [the Regulation to Interconnect Generators to the Distribution System of the Puerto Rico Electric Power Authority and to Participate in the Net Metering Programs, Regulation No. 8915], the provisions of such regulation shall prevail. Appendix CC (*Exceptions to Technical Appendices*) identifies particular MTRs that do not apply or only apply if Resource Provider enrolls C&I Participants in the VPP. The capitalized terms used throughout this Appendix K have the meaning set forth in the Agreement, unless otherwise defined herein.

## 1. General, Procedural and Reporting Requirements

- a. Each Participant Resource that qualifies as an Energy Storage Resource or Renewable Energy Resource shall comply with the requirements of (i) PREPA Regulation 8915 (Reglamento Para Interconectar Generadores con el Sistema de Distribución Eléctrica de la Autoridad de Energia Eléctrica), as such Regulation may be modified or superseded from time to time by direction of the Energy Bureau, (ii) IEEE Standard 1547, as it may be revised and supplemented from time to time, and (iii) such regulations addressing the interconnection of generation and microgrid resources to the Distribution System as the Energy Bureau may adopt from time to time.
- b. Each Participant Resource must be installed in the same location, building or structure according to current established NEC guidelines.
- c. The capacity of each Participant Resource shall not exceed 1 MW-AC, measured at its point of interconnection with the Distribution System. The capacity of a Participant Resource located at individual residences shall not exceed 25 kW-AC.
- d. Each Participant Resource shall interconnect with the Distribution System at 13.2 kV or less.
- e. Each Participant Resource shall interconnect with the Distribution System via an interconnection transformer. A Participant cannot interconnect its Participant Resource directly to the Distribution System.
- f. A Participant Resource cannot be enrolled in more than one VPP and may not participate in or be compensated through any distributed generation or demand response programs administered by the T&D Operator while simultaneously providing capacity, energy or demand response as part of a VPP.
- g. Resource Provider must comply with either (i) the "Expedited Process", or (ii) the "Non-Expedited Process", in each case as outlined in PREPA Regulation 8915, as such Regulation may be modified or superseded from time to time by direction of the Energy Bureau, when interconnecting a Participant Resource to the Distribution System.

- h. The Office of Permit Management ("**OGPe**") and Public Energy Policy Program ("**PEPP**") shall approve equipment which forms any part of a generation system utilized as part of a Participant Resource.
- i. For each Participant Resource that qualifies as a Renewable Energy Resource, Resource Provider shall obtain a certificate from PEPP confirming that the point of interconnection of such resource with the Distribution System complies with IEEE 1547, UL 1741, and other Applicable Standards.
- j. Resource Provider shall submit a list of all equipment and systems utilized as part of a Participant Resource or the GSDS to the T&D Operator for confirmation that such equipment and systems comply with the Applicable Standards. If Resource Provider proposes a system which the T&D Operator has not placed on its list of approved systems, then Resource Provider shall deliver the proposed systems manufacturer's manual to T&D Operator for evaluation.
- k. All Participant Resources that qualify as an Energy Storage Resource or a Renewable Energy Resource must have completed the T&D Operator's interconnection request process for distributed generation and have received a T&D Operator Project Number and CC&B number.
- 1. Resource Provider must provide the T&D Operator Project Number and CC&B number for all Participant Resources that qualify as Energy Storage Resources or Renewable Energy Resources. Resource Provider shall keep a list of all Participant Resources up to date, including the latitude and longitude coordinates, MW-AC rating, type of resource and (where such information may be obtained from the T&D Operator) the feeder number of the feeder serving such resources, and shall deliver such list to the T&D Operator monthly.
- m. Resource Provider shall comply with all requests from the T&D Operator for additional protection systems or upgrades if the T&D Operator determines, as contemplated by PREPA Regulation 8915, Section V.B.10, that a Participant Resource may cause damage to the Distribution System or the Transmission System.
- n. If either Resource Provider or a Participant becomes aware that a Participant Resource fails to comply with these MTRs, Resource Provider shall promptly notify the T&D Operator and PREPA of such non-compliance and submit a corrective action plan.

## 2. Voltage Operating Performance (Abnormal and Ride Through (VRT))

a. Each Participant Resource shall comply with the abnormal voltage trip requirements specified in PREPA Regulation 8915, as such regulation may be modified from time to time. Resource Provider shall ensure that each Participant programs such requirements in the inverter or the protective equipment prior to testing of such resource. The T&D Operator may require other disconnection times or voltage ranges as established in IEEE 1547, subject to the then-applicable requirements of PREPA Regulation 8915.

b. Each Participant Resource shall comply with the requirements for abnormal operating performance established in PREPA Regulation 8915, as such regulation may be modified from time to time and, to the extent not inconsistent with such Regulation, IEEE 1547-2018. The T&D Operator may require other VRT requirements (Cat II or Cat III) as established in IEEE 1547, subject to the then-applicable requirements of PREPA Regulation 8915.

# 3. Voltage Regulation

- a. Before Resource Provider makes available voltage regulation from a Participant Resource, Resource Provider shall submit to the T&D Operator a complete and detailed description of the voltage regulation strategy for such resource for approval in accordance with IEEE 1547.
- b. Each Participant Resource shall comply with the determined voltage regulation requirements specified in IEEE 1547.
- c. Participant Resources shall not cause other interconnected customers' nominal voltage to fall outside of the requirements specified in ANSI C84.1, Range A. Resource Provider shall maintain voltage of each Participant Resource at a maximum of 126 V-AC or minimum of 114 V-AC on a 120 V-AC base at the meter or inverter, using a Volt/VAR schedule or, if Resource Provider cannot maintain such voltage in accordance with such schedule, Resource Provider shall utilize a Volt/Watt curtailment schedule. Volt/VAR should not adjust PF below 0.90. If the T&D Operator adjusts the upper operating voltage of the feeder serving any Participant Resource, Resource Provider shall change the voltage management of such resource to comply with such adjustment.

## 4. Reactive Power Capability and Minimum Power Factor Requirements

- a. Before Resource Provider makes available reactive power capabilities from a Participant Resource, Resource Provider shall submit a complete and detailed description of the reactive power capability strategy for T&D Operator's approval in accordance with IEEE 1547.
- b. Each Participant Resource shall comply with the determined reactive power capability and minimum power factor requirements specified in IEEE 1547.
- c. Each Participant Resource shall provide the capabilities of the following mutually exclusive modes of reactive power control functions and shall be capable of activating each of these modes one at a time:
  - i. constant power factor mode;
  - ii. voltage-reactive power mode;
  - iii. active power-reactive power mode (optional); and
  - iv. constant reactive power mode.

d. Resource Provider shall ensure that each Participant Resource operates in constant power factor mode with unity power factor as the default mode unless specified otherwise by the T&D Operator.

# 5. Ramp Rate Control

For each Time Interval within a GS Event, Resource Provider shall increase or decrease the Capability of the VPP at the following rate (the "Ramp Rate") within the capability of the VPP:

- a. The rates for ramp up and ramp down shall be similar, so control is not biased in one direction.
- b. The Ramp Rate may vary but should be gradual and cannot exceed a maximum of 1.7 MW per minute.
- c. Prior to commencement of any Time Interval of such GS Event, a rate not to exceed 1.7 MW per minute of the Requested Capability for such Time Interval. The minimum rate shall equal the Requested Capability divided by the duration of the Time Interval. The VPP shall start ramping up or down at any given rate between the minimum and the maximum no later than the requested capability divided by ramp rate, prior to any Time Interval of such GS Event.
- d. Upon the expiration of the last Time Interval during such GS Event, a rate not to exceed 1.7 MW per minute in ramping down or discontinue dispatching. The duration cannot exceed requested capability divided by maximum ramp rate.

# 6. Power Quality Requirements

As provided in PREPA Regulation 8915:

- a. Resource Provider shall ensure that each Participant Resource meets all electrical signal requirements specified in IEEE 519, IEEE 1453, IEEE 1159, IEEE 1547, UL 1741, and other Applicable Standards.
- b. Resource Provider shall ensure that the integration of Participant Resources into the Distribution System will not cause any power quality degradation including, but not limited to, voltage imbalance and regulation, harmonic distortion, flicker, voltage sags, interruptions, ferro-resonance and transient phenomena. If any such events arise, Resource Provider shall disconnect the Participant Resource from the Distribution System.
- c. If a Participant Resource sources electric power from the Distribution System for start-up, then Resource Provider shall ensure that such sourcing does not cause voltage drops on the primary side of the interconnection greater than three percent (3%) as specified in PREPA Regulation 8915.
- d. Resource Provider shall comply with the T&D Operator's specification for the configuration of the primary and secondary windings of a three-phase interconnection transformer to ensure that a Participant Resource does not degrade the power quality of the Distribution System.
- e. Resource Provider shall make the modifications necessary to rectify, and pay the cost to mitigate, any Participant Resource performance issues that may adversely affect power quality.

- f. In cases where a Participant Resource includes an induction generator, Resource Provider shall provide reactive power compensation at start-up to control abrupt voltage changes. Reactive power compensation must include technologies that guarantee the avoidance of discontinuities and maintain continuous control of reactive power.
- g. Resource Provider shall ensure that (i) the voltage and current injections with harmonics from such resource do not increase the thermal heating in transformers or reactors, or cause any failures, overloading, or equipment malfunctions, resonant voltages, among others, on the Distribution System, and (ii) such resource does not interfere with telecommunication or signal system circuits.
- h. Resource Provider shall supply evidence of effective grounding as described in IEEE 1547.
- i. For Participant Resources using synchronous generators, induction generators and wind turbine generators, Resource Provider shall perform power quality studies (harmonic distortion, voltage imbalance, voltage flicker, etc.) at the point of interconnection of such resources and at the point of interconnection with the Distribution System.

# 7. Frequency Response/Regulation

Each Participant Resource shall comply with all applicable frequency response requirements specified in IEEE 1547.

# 8. Frequency Operating Performance (Abnormal & Ride-Through (FRT))

a. Each Participant Resource shall comply with the abnormal frequency trip requirements specified in PREPA Regulation 8915 and set forth in Table 3 below. Resource Provider shall ensure that such requirements are programmed in the inverter or the protective equipment serving each Participant Resource prior to the testing of such resource. The T&D Operator may require other disconnection times or frequency ranges, as established in IEEE 1547.

| Table 3. Disconnections I | Due to Frequenc | y Variations in the . | Distribution System |
|---------------------------|-----------------|-----------------------|---------------------|
|                           |                 |                       |                     |

| Function         | Frequency (Hz)      | Clearing Time (s) |
|------------------|---------------------|-------------------|
| Underfrequency 1 | 57.5 ≤ f < 59.2     | 300               |
| Underfrequency 2 | f < 57.5            | 10                |
| Over-frequency 1 | $60.5 < f \le 61.5$ | 300               |
| Over-frequency 2 | f > 61.5            | 10                |

b. Each Participant Resource shall be designed to provide frequency disturbance ride-through functions without exceeding such resource's capabilities. Table 4 shows the requirements for Participant Resource rate of change of frequency (ROCOF) with abnormal operating performance as established in IEEE 1547. The Category that will be applicable to a specific Participant Resource shall be established based on interconnection studies the T&D

Operator will perform with respect to each VPP that is a party to a Grid Services Agreement, and will be specified in each executed Grid Services Agreement.

Table 4. Frequency Ride-Through Requirements

| Category I | Category II | Category III |
|------------|-------------|--------------|
| 0.5 Hz/s   | 2.0 Hz/s    | 3.0 Hz/s     |

#### 9. Short Circuit Studies

- a. For Participant Resources with a capacity of 500 kW-AC or more, Resource Provider shall submit to the T&D Operator a short circuit study in accordance with PREPA Regulation 8915, which as that Regulation requires shall include at a minimum:
  - i. three-phase and phase-to-ground fault coordination studies at different points of the Participant Resource installation, beginning at the point of interconnection and finishing at the inverter location;
  - ii. two case study scenarios: (i) the Participant Resource disconnected from (but serviced by) the Distribution System, and (ii) the Participant Resource interconnected with the Distribution System; and
  - iii. to facilitate the foregoing study, PREPA shall coordinate with the T&D Operator to provide the Resource Provider with the system's equivalent impedance at the point of interconnection.
- b. As provided in PREPA Regulation 8915, the short-circuit study report shall include, at a minimum, the following:
  - i. short-circuit current input for each inverter;
  - ii. the total sum of short-circuit current inputs for all the inverters;
  - iii. the short-circuit current input duration for the inverters; and
  - iv. three-phase and phase-to-ground fault current short circuit simulation values for the case of the Participant Resource disconnected with its only input from the Distribution System as well as the case where the Participant Resource interconnects with the Distribution System at the minimum following locations:
    - 1. Point of interconnection;
    - 2. Secondary side of the transformer at the customers substation;
    - 3. Secondary side of the transformer interconnection;
    - 4. Point of interconnection of the Participant Resource and its inverters; and
    - 5. Where there is any change in voltage level within the Participant Resource installation.

# 10. Anti-Islanding

- a. Resource Provider shall ensure that a Participant Resource does not energize a deenergized Distribution System circuit. If an electric island situation arises, then Resource Provider shall disconnect such resource from the Distribution System in less than two (2) seconds in accordance with PREPA Regulation 8915 and IEEE 1547.
- b. Resource Provider shall ensure that each Participant Resource complies with all other antiislanding requirements specified in IEEE 1547.
- c. For Participant Resources with capacity of 250 kW-AC or more, Resource Provider shall ensure that all protection and control relaying devices relating to such resource must have the ability to send and receive the Direct Transfer Trip (DTT) function. For Participant Resources with capacity of less than 250 kW-AC, Resource Provider shall have the option to require the capacity to send and receive DTT signals if the required interconnection or similar studies indicate that this functionality is required to maintain the safety and reliability of the Distribution System.

# 11. Power Management

- a. Resource Provider shall ensure that each Participant Resource incorporates adequate technology (communicating technology and the corresponding control equipment) and complies with the T&D Operator's power management requirements (ramp rate limits, output limits, curtailment) as established in or pursuant to the applicable Grid Services Agreement.
- b. For Participant Resources with capacity of 250 kW-AC or more connected to the Distribution System at 13.2 kV and for Participant Resources with capacity of 100 kW-AC or more connected to the Distribution System at voltages below 13.2 kV (8.32 kV, 7.2 kV or 4.16 kV), Supervisory Control and Data Acquisition (SCADA) systems must be installed.

## 12. Protection and Control Equipment

As provided in PREPA Regulation 8915:

- a. Protection and control requirements for the interconnection of Participant Resources to the Distribution System shall include, but are not limited to:
  - i. the disconnection of a Participant Resource when not operating in parallel with the Distribution System;
  - ii. the protection of the Distribution System against any adverse effects caused by Participant Resource interconnection that may occasionally occur, including T&D Operator electrical system faults and transient overvoltage;
  - iii. protection of Participant Resources against damage caused by the T&D Operator or the Distribution System, especially operations such as automatic reclose; and

- iv. the integration of general protection practices and security during the design of such resource that safeguards life, the T&D Operator's and Participant Resource's infrastructure and other equipment protection.
- b. Resource Provider shall ensure that each Participant Resource complies with the Applicable Standards, including but not limited to IEEE 1547, IEEE 519, and IEEE/ANSI C37.90. Equipment with inverter-based technology must be certified according to UL 1741.
- c. For Participant Resources with capacity of 500 kW-AC or more, Resource Provider shall (i) install microprocessor-based relay protection technology in such resource, and (ii) ensure that the programable settings comply with the Applicable Standards, including but not limited to IEEE 1547.
- d. For Participant Resources with capacity of 500 kW-AC or more, the circuit design associated with the relay, at a minimum, must include the following:
  - i. make, model and characteristics of the relay protection;
  - ii. relay inputs and outputs (I/O) connections;
  - iii. current and voltage transformer connections associated with the relay protection. This equipment must comply with ANSI/IEEE C57.13 standards;
  - iv. current transformer (CT) and voltage transformer (VT) classification and turns ratio, which must be classified for used in system protection schemes;
  - v. interconnection transformer voltages (primary and secondary), minimum and maximum capacity, winding connection configurations (primary and secondary) and impedance (including the capacity at which it was measured);
  - vi. primary (high side) transformer fuse ratings, to include fuse characteristics and coordination studies;
  - vii. a dedicated Participant Resource interrupter to protect against electrical disturbances. The circuit associated with the interrupter shall include independent electrical system protection; and
  - viii. operating voltage source for the relay that ensures proper protection activation in such electrical disturbances on the system.
- e. For Participant Resources with capacity of 500 kW-AC or more, Resource Provider shall submit a short circuit study and other protection coordination studies with all protection system settings installed and relay input and output control logic equations programmed. A licensed professional electrical engineer shall evaluate, approve and sign the reports for these studies and include any necessary notes to explain the test results and prove they are satisfactory. The report shall also include any as left adjustments and calibration certification.
- f. For Participant Resources with capacity of 500 kW-AC or more, the short circuit study results shall form a base to determine necessary adjustments of the existing different

Protection and Control Equipment to be installed as part of a Participant Resource. The adjustments selected shall provide effective and adequate protection of the Participant Resource installation as well as the Distribution System in accordance with PREPA Regulation 8915 and the Applicable Standards.

- g. For Participant Resources with capacity of 500 kW-AC or more, the protection coordination study shall include two cases: (i) protection against three-phase and phase-to-phase faults, and (ii) protection against phase-to-ground faults. The reports of the protection study shall include the following:
  - i. adjustments and characteristics of all protection devices installed from the point of interconnection to the Participant Resource inverters. These devices shall include, but not be limited to, the moulded-case circuit breakers, relays, and fuses. In the case of the fuses, manufacturer information and ratings shall be included.;
  - ii. time-current curves of all the relays and fuses studied; and
  - iii. time of operation of each device or protection function.
- h. The minimum functions required for interconnection protection of a Participant Resource with capacity of 500 kW-AC or more which include synchronous generators, induction generators, or wind turbines with the Distribution System are as follows:
  - i. 59 Overvoltage;
  - ii. 27 Undervoltage;
  - iii. For detection of phase-to-ground faults on delta systems, the relay can have the following functions:
    - 1. 59N or 59G Neutral or ground overvoltage; and
    - 2. 27/59 Phase undervoltage and overvoltage;
  - iv. 810 / 81U Over-frequency/Underfrequency;
  - v. 25 Synch Check;
  - vi. 32 Watts and VARs directional power;
  - vii. 46 Negative sequence current; and
  - viii. 50/51 Instantaneous/ Time-delay overcurrent.
- i. The minimum functions required for interconnection protection of a Participant Resource with capacity of 500 kW-AC or more which include inverter-based technologies with the Distribution System are as follows:
  - i. 59 Overvoltage;
  - ii. 27 Undervoltage;

- iii. For detection of phase-to-ground faults on delta systems, the relay can have the following functions:
  - 1. 59N or 59G Neutral or ground overvoltage; and
  - 2. 27/59 Phase undervoltage and overvoltage;
- iv. 810/81U Over-frequency/Underfrequency;
- v. 32 Watts and VARs directional power; and
- vi. 50/51 Instantaneous/ Time-delay overcurrent.
- j. For Participant Resources with capacity of less than 500 kW-AC, the T&D Operator will accept the protection functions integrated with inverters so long as the T&D Operator has approved them before installation and they include the minimum protection functions required for overvoltage, undervoltage, over-frequency, underfrequency, and short circuit current. Resource Provider shall comply with any requirements to install additional equipment the T&D Operator deems necessary.
- k. The Protection and Control Equipment for each Participant Resource shall have the capability to detect electrical disturbances that occur on the Distribution System. A Participant Resource must disconnect from the distribution circuit as soon as the disturbance occurs, before the first reclosing operation on the circuit. Once disconnected from the Distribution System, the Participant Resource shall measure voltage and frequency at the point of interconnection. The Participant Resource may reconnect once the voltage and frequency remain stable for at least five minutes. The inverter must be programmed to disconnect a Participant Resource system according to the variations of voltage and frequency criteria specified above.
- Inverter-based Participant Resource systems of up to 300 kW-AC do not require the installation of an external manual switch. All Participant Resource systems shall have the means of disconnecting from the AC voltage side of the inverter. An external manual switch is required on Participant Resources with a capacity greater than 300 kW-AC. See PREPA Regulation 8915 for additional requirements for the manual switch.

#### APPENDIX L

#### **OPERATING PROCEDURES**

This Appendix compiles the operational, maintenance and associated testing required to satisfy the requirements of Article 7 (*Dispatching Obligations*) and otherwise assist the Parties, in coordination with the T&D Operator, in the operation, performance, and continuing inspections and testing of the VPP. Appendix CC (*Exceptions to Technical Appendices*) identifies particular requirements that do not apply or only apply if Resource Provider enrolls C&I Participants in the VPP.

These Operating Procedures are not intended to modify either Party's responsibilities as outlined in the remainder of this Agreement.

Subject to Section 3.8 (*Protocols & Procedures*) of this Agreement, the T&D Operator may request a revision of these Operating Procedures on an annual basis.

#### 1. General

#### a. Definitions

Capitalized terms used throughout this Appendix L have the meaning set forth in the Agreement, unless otherwise defined herein. This Appendix L also uses the following terms:

- i. "Curtailment Level" has the meaning set forth in clause (iii), paragraph (h) of Section 4 (*Procedure*) of Procedure V (*Monitoring and Enforcement of MTRs*).
- ii. "Curtailment Event Log" means a record of any curtailment event, regardless of cause, which is in the form attached in Appendix L-1 (*Curtailment During Emergencies or Force Majeure*).
- iii. "TOC" means the Transmission Operations Center operated by the T&D Operator.
- iv. "EMS" has the meaning set forth in clause (ii), paragraph (b) of Section 4 (*Procedure*) of Procedure I (*Aggregation and Dispatch of Power*).
- v. "MTRs Corrective Action Report" has the meaning set forth in item (2), clause (vi), paragraph (h) of Section 4 (*Procedure*) of Procedure V (*Monitoring and Enforcement of MTRs*).
- vi. "MTRs Non-compliance Report" has the meaning set forth in letter (b) item (1), clause (vi), paragraph (h) of Section 4 (*Procedure*) of Procedure V (*Monitoring and Enforcement of MTRs*).
- vii. "Opt-in/Opt-out" means the commitment of a Participant Resource to participate in, or the removal of a Participant Resource from participation in, a VPP's provision of Grid Services at any specified time.
- viii. **"VPP Operator"** has the meaning set forth in paragraph (c) of Section 1 (*General*) of this Operating Procedures.

ix. **"VPP Status Report**" means the report to be delivered by Resource Provider to the TOC substantially in the form set out in Appendix L-1-3 (*VPP Status Report*).

# b. Qualified Operator

Resource Provider shall appoint one or more qualified individuals with at least two years of VPP operating skills, knowledge, and experience to act as Resource Provider's representative with respect to VPP operations or another qualified and experienced operator reasonably acceptable to PREPA. The Resource Provider shall identify one such representative in a written notice to T&D Operator (the "VPP Operator") to serve as the single point of contact for all VPP operations. The VPP Operator shall be primarily responsible for all communications with the T&D Operator regarding VPP operations and activities including the following:

- i. VPP operating status;
- ii. Aggregation, scheduling, and dispatch of the Participant Resources;
- iii. VPP and Participant Resources readiness and delivery status;
- iv. Documentation and reporting;
- v. Maintenance and inspections progress; and
- vi. Emergencies, outages, and deratings.

The VPP Operator shall be present at all meetings between the T&D Operator and Resource Provider related to VPP operations.

# c. Operating Conditions

The T&D Operator and Resource Provider shall agree on the additional operating procedures applicable to VPP operations as contemplated by Section 3.8 (*Protocols & Procedures*) of this Agreement. These additional procedures shall include, but shall not be limited to, provisions addressing the operational status of Participant Resources, the Optin/Opt-out event status for Participant Resources, the online/offline/error status for Participant Resources, the number of available Participant Resources, measurement accuracy and resolution, the sampling and recording rate, granularity levels, and equipment readiness.

## d. Communication Protocol

The following provisions shall apply to the operational communications between the T&D Operator and Resource Provider:

- i. All written correspondence shall be sent by email or mail depending upon the urgency of the communication.
- ii. Day-to-day communications will be mainly done by the use of landline phone, cell phone, email or other form of electronic communication.

- iii. Either Resource Provider or T&D Operator can request a meeting at any time considered necessary to discuss any topic related, among others, to Resource Provider's operations, the Grid System, and accounting issues. Meeting dates, times, and places will be arranged by agreement of the parties. The party requesting the meeting should provide in advance an agenda of the proposed meeting, shall be responsible for preparing and distributing the meeting notes, and shall track any action/open items resulting from the meeting.
- iv. Communications shall be executed in the presence of, and in the case of written communications shall be copied to, the VPP Operator.
- v. Upon request, Resource Provider must provide T&D Operator with documents and information required for normal operations.

#### PROCEDURE I

## AGGREGATION AND DISPATCH OF POWER

## 1. Objective

This procedure is intended to facilitate the dispatch of power from the VPP and coordination between the T&D Operator and Resource Provider.

# 2. Scope of Procedure

This procedure includes guidelines in relation to the following:

- a. Aggregation of power from Participant Resources;
- b. Aggregated power monitoring (monitoring mode);
- c. Dispatch of power;
- d. Voltage scheduling;
- e. Voltage regulation;
- f. Dispatching and/or curtailment during T&D Operator/Resource Provider declared Emergency conditions; and
- g. Reporting on the status of VPP readiness.

## 3. Responsibilities

In accordance with Section 6 (*Operation of the GSDS*) and Section 7 (*Dispatching Obligations*) of this Agreement, the Parties agree, for the purposes of power aggregation, operations, and dispatching of the power from the VPP, that:

a. Resource Provider's personnel will contact the following T&D Operator TOC personnel:

| Company      | Title          | Phone | Email |
|--------------|----------------|-------|-------|
| T&D Operator | Shift Engineer |       |       |
| T&D Operator | Senior Shift   |       |       |

b. T&D Operator Dispatch Center personnel will contact the following Resource Provider personnel:

| Company                             | Title | Phone | Cellphone | Email |
|-------------------------------------|-------|-------|-----------|-------|
| Resource Provider (primary contact) |       |       |           |       |
| Resource Provider (backup contact)  |       |       |           |       |

## 4. Procedure

# a. General

- i. Resource Provider will make the following data available to the T&D Operator in real time or as soon as it is available, through the SCADA system and other means:
  - 1. the actual dispatch capacity of aggregated Participant Resources through established and approved interconnection protocols (in MW and MVAR);
  - 2. the available dispatch capacity of aggregated Participant Resources through established and approved interconnection protocols (in MW);
  - 3. the state of the aggregated power and energy;
  - 4. the VPP disconnect status, and active ramp rates (UP and DOWN) (MW/min);
  - 5. the VPP curtailment setpoint and "ENABLE/DISABLE" control point;
  - 6. the real time voltage at each Interconnection Point (in kV); and
  - 7. any other signals and/or data agreed between Resource Provider and T&D Operator.
- ii. T&D Operator reserves the right to curtail Grid Services provided by the VPP if the Resource Provider fails to comply with the MTRs applicable to VPP operations. T&D Operator shall have no liability to Resource Provider in connection with any such curtailment (including any payment liability or liability in respect of waiting time).
- iii. Before commencing VPP-related work activities that may create a risk of a Non-Scheduled Outage or Non-Scheduled Derating, Resource Provider shall first coordinate with the TOC and obtain clearance by phone or email for such activities.
- iv. All communications regarding the status of the VPP between Resource Provider and T&D Operator personnel shall be confirmed by email or any other means of acceptable communication to the corresponding representatives as soon as possible.

- v. Resource Provider must comply with any directions given by the T&D Operator regarding VPP operations, aggregation, and dispatching.
- vi. Resource Provider shall undertake periodic audits of the operations of its VPP at a frequency and in a manner approved by T&D Operator and provide the results to T&D Operator for review and approval. Resource Provider shall use an independent expert approved by T&D Operator to conduct audits under this clause.

# b. <u>Dispatch and Aggregation</u>

- i. Resource Provider shall operate the VPP to comply with Article 7 (*Dispatching Obligations*) of the Agreement.
- ii. Resource Provider shall ensure that the GSDS integrates controllers that are compatible with the systems used in the TOC and T&D Operator's Energy Management System ("EMS") and, when available, T&D Operator's Distributed Energy Resource Management System ("DERMS") to automate the dispatching and aggregation based on TOC anticipated operation and the conditions of the Grid System. The TOC shall coordinate with Resource Provider and control dispatch in accordance with each Dispatch Notice.
- iii. Resource Provider shall not make a quantity of power available from the Participant Resource in excess of the lesser of 1 MW or Dmax as defined in Section 4 (*Procedure*) of Procedure V (*Monitoring and Enforcement of MTRs*). T&D Operator will monitor any violation of such limitation, and if any such violation occurs during normal operating conditions, T&D Operator shall notify Resource Provider of any such dispatch limit violation, and any excess power dispatched from the VPP shall not be counted for billing purposes in accordance with the Agreement.
- iv. T&D Operator may require Resource Provider to curtail the amount of power (i.e., MW) being dispatched from the VPP to the extent expressly authorized by, and in accordance with, the terms of the Agreement.
- v. Other than during the occurrence of any permitted outage hour, Resource Provider shall have the following obligations:
  - 1. If, during any Grid Services Window, the TOC requires Demand Build Service or Demand Reduction Service from the VPP, as applicable to such window, then Resource Provider shall provide in accordance with a Dispatch Notice the quantity of dispatched power (expressed in MW) that is available at the time of such request and for a duration that is determined based on the aggregated energy available at the time of such request.
  - 2. During the Grid Services Windows, Resource Provider shall make the VPP available for dispatch of Demand Build Service or Demand Reduction Services by T&D Operator in accordance with requirements specified in the MTRs and corresponding time periods set out in this Agreement.

vi. While in operating mode, the optimal operation of the VPP shall be subject to T&D Operator guidelines and the EMS or DERMS, as applicable, taking into consideration the technical characteristics and limitations of the VPP.

# c. <u>Dispatch During T&D Operator Declared Emergency Conditions</u>

If T&D Operator declares an emergency, the TOC may curtail the power received from a VPP, from a Participant Resource at an Interconnection Point, or from a group of Participant Resources located in a particular area or served by a specific feeder or substation. Without limiting the generality of the foregoing, T&D Operator's control centers may require Resource Provider personnel to increase or decrease the dispatching of power in a manner such that safe and reliable load levels and voltages on the Grid System are maintained, which shall in all cases be consistent with Prudent Utility Practices. T&D Operator and Resource Provider shall keep detailed records of each curtailment event, determine the time required to put the VPP, a Participant Resource or a group of Participant Resources back in service and, if the event duration exceeds any waiting period under the Agreement, notify applicable parties as necessary. Set out in Appendix L-1 (Curtailment During Emergencies or Force Majeure) of this Operating Procedure are proformas for recording this information. The Parties shall reconcile these records for each event, in accordance with the guidance set forth in Appendix L-1 (Curtailment During Emergencies or Force Majeure) of this Operating Procedure.

## d. <u>VPP Status Report</u>

- i. Resource Provider shall provide to the TOC daily, before 5:00 am (Puerto Rico time), a VPP status report in electronic form. The proforma for this status report is included as Appendix L-1-3 (*VPP Status Report*) of this Operating Procedure.
- ii. Resource Provider shall immediately notify the TOC if, after delivery of the status report, there is any pertinent change in the VPP's status.

#### APPENDIX L-1

#### CURTAILMENT DURING EMERGENCIES OR FORCE MAJEURE

## 1. Curtailment Events

Curtailment (changes of the scheduled dispatch of the VPP) due to an Emergency, whether resulting from a Grid System Event or Force Majeure, shall be governed by the following protocol:

- a. If T&D Operator declares an Emergency or an event or circumstance of Force Majeure occurs, T&D Operator may curtail the dispatch of Grid Services from the VPP.
- b. T&D Operator shall provide Resource Provider with written notice, as soon as practicable after the occurrence of an Emergency or any other event or circumstance of Force Majeure, with particulars of the event and its estimated duration.
- c. If T&D Operator has curtailed the VPP due to an Emergency or Force Majeure, the TOC shall notify Resource Provider when the VPP is able to dispatch fully to the Grid System. Prior to dispatch, Resource Provider shall: (i) confirm with T&D Operator that the VPP is able to dispatch to the Grid System (including the date and time the VPP is available to dispatch); and (ii) notify T&D Operator of the readiness and availability of the VPP in compliance with the MTRs.
- d. Resource Provider shall keep a detailed record of each curtailment event caused by an Emergency or Force Majeure and, after the Commercial Operation Date, shall notify T&D Operator if the aggregate duration of these events exceeds any applicable waiting period for an Agreement Year, including any applicable Grid System waiting period or Force Majeure waiting period as defined in the Agreement.
- e. Included in Appendix L-1-1 (Form of Force Majeure Event Log) and Appendix L-1-2 (Form of Grid System Event Log) are the forms ("Curtailment Event Log") that Resource Provider shall complete and submit to T&D Operator in accordance with Section 2 of this Appendix L-1 for each curtailment event caused by an Emergency or Force Majeure. The parties shall reconcile these records for each event in accordance with Section 2 of this Appendix L-1.

## 2. Completion Procedure for Curtailment Event Logs

Within forty-eight (48) hours following the conclusion of any event of curtailment, Resource Provider shall: (i) complete an entry in the relevant Curtailment Event Log; and (ii) submit the Curtailment Event Log to T&D Operator. The information recorded in the Curtailment and Event Log shall include the following:

- a. the incident number and type of incident leading to curtailment;
- b. the event start and end dates, duration, and curtailment percentage, whether the start time shall be the time when the VPP is unavailable, or when curtailment begins, and whether the end time shall be the time the VPP is placed in service (inclusive of the typical time for start-up) or when the curtailment ends;
- c. the cause of the incident;

- d. the corrective measures taken by T&D Operator or Resource Provider in response to the incident;
- e. any additional relevant details regarding the incident;
- f. the date and time the VPP is available to deliver power and the available capacity of the VPP that can be dispatched in compliance with the MTRs; and
- g. allocation of time towards any applicable waiting period for the event under consideration and any time that exceeds the applicable waiting periods as defined in the Agreement.

Within forty-eight (48) hours after receipt of the Curtailment Event Log from Resource Provider, T&D Operator shall either acknowledge the Curtailment Event Log by countersigning the entry and returning it to Resource Provider or otherwise raise any issue for resolution regarding the Curtailment Event Log with Resource Provider.

## 3. Completion Procedure

Resource Provider's shift supervisor shall complete the following sections of the attached proforma to facilitate communications with the T&D Operator Shift Engineers relating to the VPP's status:

- a. date of the report;
- b. status of the VPP:
- c. status of the control system for the VPP (voltage regulation and control, frequency response, etc.);
- d. status of the Participant Resources or components of such Participant Resources that are required to provide the full amount of Demand Build or Demand Reduction service of which the Participant Resource is capable;
- e. status of the SCADA or system that is in place for demand side management;
- f. status of any other equipment deemed necessary for the normal operation of the VPP in accordance with the relevant equipment specifications;
- g. summary of the operating conditions of the VPP, including the information specified in item (i) of paragraph (a) of Section 4 (*Procedure*) of Procedure I (*Aggregation and Dispatch of Power*); and
- h. causes of any restrictions of which Resource Provider is aware to active or reactive loading of Participant Resources or groups of Participant Resources.

# APPENDIX L-1-1

# FORM OF FORCE MAJEURE EVENT LOG

|                                |   | CURTAII                                  | LMENT EVE   | NT LOG                |                         |               |
|--------------------------------|---|--|---|-----------------------|-------------------------|---------------|
|                                |   | Pe                                       | r Force Majeu   | re                    |                         |               |
| Incident No.:                  |   |  |   |                       |                         |               |
|                                | Event Start Date                                | Event Start Time                         | Event End Date  | Event End<br>Time     | Duration (hh:mm:ss)     | Curtailment % |
|                                | Bate  | Time                                     | Date  | Time                  | (1111.111111.55)        | 70            |
|                                | LL  |  |   | I                     | l                       | I             |
| Cause of<br>Incident:          |   |  |   |                       |                         |               |
| Corrective<br>Measures:        |   |  |   |                       |                         |               |
| Additional<br>Details:         |   |  |   |                       |                         |               |
|                                |   | ctrical Power                            | Dispatch  |                       | % of Capacity:          |               |
| VPP Capable (<br>from (mm/dd/y |   |  | 7   | ng Period             |                         |               |
|                                |   |  | Dispatch<br>Iajeure Waitin                                      | ng Period Agreement Y | Capacity:               |               |
|                                | y, hh:mm:ss:)                                   | Force M                                  | Iajeure Waiti   |                       | Capacity:               |               |
|                                | Aggregate H Agreement                           | Force Mours under cur<br>Year            | <b>Iajeure Waiti</b><br>tailment for                            |                       | Capacity:               |               |
|                                | Aggregate H Agreement Y Time exceed             | Force Mours under cur<br>Year            | <b>Iajeure Waiti</b><br>tailment for                            |                       | Capacity:               |               |
|                                | Aggregate H Agreement Y Time exceed             | Force Mours under cur<br>Year            | Tajeure Waiting tailment for tried for                          |                       | Capacity:               |               |
|                                | Aggregate H Agreement Y Time exceed             | Force Mours under cur<br>Year            | Tajeure Waiting tailment for tried for                          |                       | Capacity:               |               |
|                                | Aggregate H Agreement Y Time exceed Agreement Y | Force Moder curyear ling waiting peryear | Tajeure Waiting  Tailment for riod for Incidents                |                       | Capacity:               |               |
|                                | Aggregate H Agreement Y Time exceed Agreement Y | Force Moder curyear ling waiting peryear | Tajeure Waiting tailment for riod for Incidents Grid Services A | Agreement             | Capacity:  Year to Date |               |

# **APPENDIX L-1-2**

# FORM OF GRID SYSTEM EVENT LOG

| Incident No:  Event Start Date  Cause of Incident:  Corrective Measures:  Additional Details: | Event Start Time    | Event End Date              | Event End Time | Duration<br>(hh:mm:ss) | Curtailment % |
|---|---------------------|-----------------------------|----------------|------------------------|---------------|
| Cause of Incident:  Corrective Measures:  Additional  |                     | Event End Date              | End            |                        |               |
| Cause of Incident:  Corrective Measures:  Additional  |                     | Event End Date              | End            |                        |               |
| Cause of Incident:  Corrective Measures:  Additional  |                     | Event End Date              | End            |                        |               |
| Cause of Incident:  Corrective Measures:  Additional  |                     | Event End Date              |                |                        |               |
| Cause of Incident:  Corrective Measures:  Additional  |                     |                             | Time           |                        |               |
| Corrective Measures:  Additional  |                     |                             |                |                        |               |
| Corrective Measures:  Additional  |                     |                             |                |                        |               |
| Corrective Measures:  Additional  |                     |                             |                |                        |               |
| Corrective Measures:  Additional  |                     |                             |                |                        |               |
| Measures:  Additional   |                     |                             |                |                        |               |
| Measures:  Additional   |                     |                             |                |                        |               |
|   |                     |                             |                |                        |               |
|   |                     |                             |                |                        |               |
| Details:  |                     |                             |                |                        |               |
|   |                     |                             |                |                        |               |
|   |                     |                             |                |                        |               |
|   |                     |                             |                |                        |               |
| VPP Capable to Deliver Ele  |                     | •                           | 0.7            |                        |               |
| Dispatch from (mm/dd/y  | y, hh:mm:ss)        |                             | %              | of Capacity:           |               |
|   |                     |                             |                | Ī                      |               |
|   | Grid System         | Waiting Period <sup>1</sup> | [              |                        |               |
|   |                     | Year to I                   | Date           |                        |               |
| Aggreg  | ate Hours under     |                             |                |                        |               |
| curtailme   | nt for Agreement    |                             |                |                        |               |
|   | Year                |                             |                |                        |               |
| Time exce   | eding Grid System   |                             |                |                        |               |
| Waiting Pe  | riod for Agreement  |                             |                |                        |               |
|   | Year                |                             |                |                        |               |
|   | Inc                 | eidents                     |                |                        |               |
|   |                     |                             |                |                        |               |
|   | 1.6. 1. 4. 6        | .10                         |                |                        |               |
|   |                     |                             | Recorded I     | by:                    |               |
| Grid Syste  |                     |                             |                |                        |               |
|   |                     |                             | Record Da      | te:                    |               |
|   |                     |                             | Confirmed      | by T&D Operator        | r:            |
|   |                     |                             |                | ion Date:              |               |
|   |                     |                             | Comminati      | ion Date               |               |
| Agreemen  | s defined in the Gr | rid Services                |                | by:                    |               |

# **APPENDIX L-1-3**

# VPP STATUS REPORT

| [Resource Provider Company Name]           |        |       |          |  |  |  |
|--|--------|-------|----------|--|--|--|
| Date/Time Submitted: Submitted by (Print): |        |       |          |  |  |  |
| Equipment                                  | Status | Value | Comments |  |  |  |
| Control System                             |        |       |          |  |  |  |
| Communications                             |        |       |          |  |  |  |
| SCADA                                      |        |       |          |  |  |  |
| VPP Baseline                               |        |       |          |  |  |  |
| VPP Flex up                                |        |       |          |  |  |  |
| VPP Flex down                              |        |       |          |  |  |  |
| Participant Resources                      |        |       |          |  |  |  |
| Energy Dispatching System                  |        |       |          |  |  |  |
| VPP Capability                             |        |       |          |  |  |  |
| Protection System                          |        |       |          |  |  |  |
| Supervisor in charge: [Name]               | Pł     | none: |          |  |  |  |

#### PROCEDURE II

## SCHEDULING OF DISPATCHING

## 1. Objective

This procedure is intended to facilitate the scheduling of dispatching between T&D Operator and Resource Provider.

## 2. Scope of Procedure

For each Day during the Supply Period, Resource Provider shall provide to T&D Operator daily before 5:00 am (Puerto Rico time), a written, accurate estimate for that Day of the GSDS Availability as defined in Article 3 (*Pre-Operation Period*) of the Agreement, and other notices required by this procedure.

## 3. Responsibilities

In accordance with Article 7 (*Dispatching Obligations*) of the Agreement, the Parties agree to the following for the purposes of scheduling the dispatch of the VPP.

a. T&D Operator personnel will contact the following Resource Provider personnel and utilize Appendix L-2 (*Dispatching Schedule File Format*) to provide the dispatching schedule:

| Company              | Title                 | Name | Phone | E-mail |
|----------------------|-----------------------|------|-------|--------|
| Resource<br>Provider | Operations<br>Manager |      |       |        |
| Resource<br>Provider | Plant Manager         |      |       |        |

b. Resource Provider personnel will contact the following T&D Operator personnel:

| Company      | Title                                    | Name | Phone | Email |
|--------------|--|------|-------|-------|
| T&D Operator | Director, System<br>Operations<br>(DSO)  |      |       |       |
| T&D Operator | Manager,<br>Control Center<br>Operations |      |       |       |
| T&D Operator | Shift Engineer (SE)                      |      |       |       |
| T&D Operator | Senior Shift<br>Engineer (SSE)           |      |       |       |

#### 4. Procedure

## a. <u>VPP Next Month – Hourly Dispatching Schedule</u>

Between Days fifteen (15) and twenty (20) of each Month, T&D Operator will provide Resource Provider an estimated hourly schedule for the dispatching of the VPP for the immediately following Month, including an estimate of the total amount of Demand Build service and Demand Reduction Service to be dispatched in MWh during that Month. T&D Operator will provide these estimates to Resource Provider for planning purposes only and, during the operation of the VPP, the estimated hourly schedule is subject to automatic and instantaneous change by T&D Operator.

## b. <u>Startup/Shutdown Notifications</u>

During normal Grid System operating conditions, Resource Provider shall use commercially reasonable efforts to provide T&D Operator with twenty-four (24) hours' advanced notice to either start up or shut down the VPP. These notices must be given orally and confirmed by email. Resource Provider shall provide a checklist for startup/shut down activities to be performed for T&D Operator's review and approval.

Consistent with paragraph (b) of Section 6.3 (*Non-Scheduled Outages & Deratings*) of the Agreement, Resource Provider shall use commercially reasonable efforts to notify T&D Operator of any Non-Scheduled Outage or Non-Scheduled Derating no later than 5:00 pm (Puerto Rico time) on the third (3<sup>rd</sup>) Business Day prior to the Day that such Non-Scheduled Outage or Non-Scheduled Derating will occur.

In the event of an unexpected Non-Scheduled Outage or Non-Scheduled Derating, Resource Provider shall provide notice of the same to T&D Operator by telephone as soon as reasonably practicable and, in all cases, no more than fifteen (15) minutes following the occurrence of such Non-Scheduled Outage or Non-Scheduled Derating. Resource Provider shall, as soon as reasonably practicable thereafter, provide T&D Operator with a notice that includes the following:

- i. the event or condition causing the Non-Scheduled Outage or Non-Scheduled Derating;
- ii. the date and time of such event or condition;
- iii. the expected end date and time of such event or condition;
- iv. for Non-Scheduled Deratings, the available Capability during such event or condition; and
- v. any other information reasonably requested by T&D Operator.

#### APPENDIX L-2

## DISPATCHING SCHEDULE FILE FORMAT

Dispatching schedules should be provided in ASCII space delimited format, as shown in the example below, and in a text format. The information shall include hourly dispatching; it shall also include the average and peak amount of power that is to be dispatched. A typical dispatch scheduling format is shown below, however, the Resource Provider can provide dispatch report that meets the intent of the format.

**Example:** Assume the net MW profile changes from 70 MW to 0 MW in twenty-four (24) hours. The data for the next twenty-four (24) hours will be generated in a format consistent with the following:

## NAM ZZZZZZZZ

## SNT YYYYMMDD 010000 0

| MWP YYYYMMDD 010000 0 70.000 | 70.000  | 70.000  |
|------------------------------|---------|---------|
| MWP YYYYMMDD 020000 0 00.000 | 00.000  | 00.000  |
| MWP YYYYMMDD 030000 0 00.000 | 00.000  | 00.000  |
| MWP YYYYMMDD 040000 0 00.000 | 00.000  | 00.000  |
| MWP YYYYMMDD 050000 0 00.000 | 00.000  | 00.000  |
| MWP YYYYMMDD 060000 0 00.000 | 00.000  | 00.000  |
| MWP YYYYMMDD 070000 0 00.000 | 00.000  | 00.000  |
| MWP YYYYMMDD 080000 0 60.000 | -60.000 | -60.000 |
| MWP YYYYMMDD 090000 0 50.000 | -50.000 | -50.000 |
| MWP YYYYMMDD 100000 0 70.000 | -70.000 | -70.000 |
| MWP YYYYMMDD 110000 0 60.000 | -60.000 | -60.000 |
| MWP YYYYMMDD 120000 0 50.000 | -50.000 | -50.000 |
| MWP YYYYMMDD 130000 0 70.000 | -70.000 | -70.000 |
| MWP YYYYMMDD 140000 0 60.000 | -60.000 | -60.000 |

Grid Services Agreement - PREPA and Sunrun PR Operations LLC

| MWP YYYYMMDD 150000 0 00. | .000 | 00.000 | 00.000 |
|---------------------------|------|--------|--------|
| MWP YYYYMMDD 160000 0 00. | .000 | 00.000 | 00.000 |
| MWP YYYYMMDD 170000 0 70. | .000 | 70.000 | 70.000 |
| MWP YYYYMMDD 180000 0 60. | .000 | 60.000 | 60.000 |
| MWP YYYYMMDD 190000 0 50. | .000 | 50.000 | 50.000 |
| MWP YYYYMMDD 200000 0 70. | .000 | 70.000 | 70.000 |
| MWP YYYYMMDD 210000 0 60. | .000 | 60.000 | 60.000 |
| MWP YYYYMMDD 220000 0 00. | .000 | 00.000 | 00.000 |
| MWP YYYYMMDD 230000 0 00. | .000 | 00.000 | 00.000 |
| MWP YYYYMMDD 240000 0 00. | .000 | 00.000 | 00.000 |

The first record in the file contains the VPP name. The second record in the file contains the date and time the file was created. The third record contains the hourly amount of power dispatched. The fourth record contains the average megawatt output of power dispatched from the VPP in MW. The fifth record in the file contains the peak megawatt output of power from the VPP in MW. If, within the 24-hour period, there are additional changes to the MW profile (such as mid-hour curtailments), a record should be written for every inflection point of the MW curve.

#### PROCEDURE III

## SCHEDULED/NON-SCHEDULED OUTAGES AND DERATINGS

# 1. Objective

This procedure is intended to facilitate the coordination and management of Scheduled Outages, Non-Scheduled Outages, Scheduled Deratings, and Non-Scheduled Deratings of the VPP between T&D Operator and Resource Provider.

## 2. Scope of Procedure

These procedures apply in relation to the following notifications:

- a. Scheduled Outages;
- b. Non-Scheduled Outages;
- c. Scheduled Deratings; and
- d. Non-Scheduled Deratings.

## 3. Responsibilities

In accordance with Article 6 (*Operation of the GSDS*) of the Agreement, for the purposes of Scheduled Outages, Non-Scheduled Outages, Scheduled Deratings and Non-Scheduled Deratings:

a. Resource Provider's personnel will contact the following T&D Operator personnel:

| Company      | Title                                    | Name | Phone | E-mail |
|--------------|--|------|-------|--------|
| T&D Operator | Manager,<br>Control Center<br>Operations |      |       |        |
| T&D Operator | Director System<br>Operations            |      |       |        |
| T&D Operator | Shift Engineer (SE)                      |      |       |        |

b. T&D Operator personnel will contact the following Resource Provider personnel:

| Company              | Title                 | Name | Phone | Email |
|----------------------|-----------------------|------|-------|-------|
| Resource<br>Provider | Plant Manager         |      |       |       |
| Resource<br>Provider | Operations<br>Manager |      |       |       |

## 4. Procedure

#### a. General

In accordance with Article 6 (*Operation of the GSDS*) of the Agreement, if the VPP has a Scheduled Outage, Non-Scheduled Outage, Scheduled Derating or Non-Scheduled Derating and such Outage or Derating occurs or would occur coincidentally with a T&D Operator-declared Emergency, then at T&D Operator's request, Resource Provider shall use commercially reasonable efforts, consistent with T&D Operator's System Operating Principles ("SOP") and Prudent Utility Practices, to reschedule (with T&D Operator's approval) the Outage or Derating or, if such event has already commenced, expedite the completion thereof.

## b. <u>Scheduled Outages or Scheduled Deratings</u>

- i. Resource Provider shall submit to T&D Operator a Scheduled Maintenance and Testing Program for each Year in accordance with Section 6.2 (*Scheduled Maintenance*) of the Agreement.
- ii. Resource Provider shall submit the proposed Scheduled Maintenance and Testing Program using the form attached as Appendix L-3 (*Scheduled Outages or Scheduled Deratings*) to this Procedure and will include the following information:
  - 1. the date and time of commencement of each Scheduled Outage or Scheduled Derating;
  - 2. the available capacity of the VPP during the Scheduled Outage or Scheduled Derating (if any), including, with respect to a Scheduled Derating, the Grid Services available during such event;
  - 3. details of the maintenance activities to be completed during the Scheduled Outage or Scheduled Derating; and
  - 4. the expected duration of the Scheduled Outage or Scheduled Derating and approximate time to restore the VPP to full operation.
- iii. The T&D Operator shall consider and approve the draft Scheduled Maintenance Program in accordance with Section 6.2 (*Scheduled Maintenance*) of the Agreement. The parties may amend the Scheduled Maintenance Program in accordance with Section 6.2 (*Scheduled Maintenance*) of the Agreement.
- iv. During any Scheduled Outage or Scheduled Derating, the following protocol shall apply:
  - 1. If Resource Provider has reason to believe that the duration of the Scheduled Outage or Scheduled Derating will exceed the planned duration, Resource Provider will notify T&D Operator as soon as possible as to the cause of such delays and the additional time required to complete the Scheduled Outage or Schedule Derating. In such event, Resource Provider will use reasonable efforts to return the VPP to operation in the shortest possible time following the end of the originally Scheduled Outage or Scheduled Derating period.

- 2. Resource Provider may notify T&D Operator if the work related to the Scheduled Outage or the Scheduled Derating requested by Resource Provider is completed before the expiry of the planned duration for such Scheduled Outage or Scheduled Derating. Upon receipt of such notice, T&D Operator will use commercially reasonable efforts to return the VPP to operation in the shortest possible time. For the purposes of calculating the Permitted Outage Hours, the Scheduled Outage or Scheduled Derating, as applicable, will continue until the first to occur of: (i) the return by T&D Operator of the VPP to operation; and (ii) the expiry of the planned duration for such Scheduled Outage or Scheduled Derating.
- v. Resource Provider shall undertake audits of its compliance with the Maintenance Program from time to time and report the results of those audits to T&D operator for review.

## c. <u>Non-Scheduled Outages or Non-Scheduled Deratings</u>

- i. In accordance with paragraph (b) of Section 6.3 (*Non-Scheduled Outages & Deratings*) of the Agreement, Resource Provider shall use reasonable efforts to notify and coordinate all Non-Scheduled Outages or Non-Scheduled Deratings with T&D Operator's Operations Subdivision Head at least twenty-four (24) hours in advance of any such Outage or Derating. Such notifications shall be documented using the form attached as Appendix L-4 (*Non-Scheduled Outages or Non-Scheduled Deratings*) to this Operating Procedure.
- ii. Resource Provider shall use reasonable efforts to coordinate Non-Scheduled Outages or Non-Scheduled Deratings to occur during times when the VPP is not projected to be dispatched, during Scheduled Outages or Scheduled Deratings, or such other times as will minimize any adverse effect on the operation of the Grid System.
- iii. In case of troubleshooting activities to be performed for a period of time and to correct the performance of the VPP, Resource Provider shall provide a notification to T&D Operator with the duration of the activity and details of the activities to be completed.

## d. Inspections: Including Spare Parts, Hardware and Software

To minimize the potential impact of any Non-Scheduled Outage or Non-Scheduled Derating, Resource Provider shall ensure that regular inspections are carried out throughout the VPP's lifecycle in accordance with Appendix M (*Data, Integration and Testing Protocol*) of the Agreement and that Resource Provider maintains at the designated location, or has access to, hardware, software, and sufficient spare parts and components for the VPP in accordance with the manufacturer's recommendation or prudent utility practices.

#### APPENDIX L-3

## SCHEDULED OUTAGES OR SCHEDULED DERATINGS

- a. At the times required in accordance with Section 6.2 (*Scheduled Maintenance*) of the Agreement, Resource Provider shall submit to the TOC (signed and submitted by Resource Provider's plant manager) a proposed Scheduled Maintenance and Testing Program, in the form set forth below, that includes the following.
  - i. For each Scheduled Outage:
    - 1. the date and time of the commencement of such Scheduled Outage—being the point in time when the VPP is no longer available for dispatching;
    - 2. the expected duration of such Scheduled Outage from the date and time of curtailment of the VPP to the date and time when the VPP is once again available for dispatching; and
    - 3. details of the reasons for the Scheduled Outage and a reference to any supplementary information.
  - ii. For each Scheduled Derating:
    - 1. the date and time of commencement of each Scheduled Derating, being the point in time when the VPP has reduced capacity to provide electrical power;
    - 2. the expected duration of such Scheduled Derating from the date and time when the VPP has reduced capacity to provide the energy until such time as the capacity of the VPP is fully restored; and
    - 3. details of the reasons for the Scheduled Derating and a reference to any supplementary information.
- b. T&D Operator shall acknowledge receipt of the proposed Scheduled Maintenance Program and return it to Resource Provider. T&D Operator's signature only indicates acknowledgement of the receipt of the form; it does not indicate acceptance of the proposed schedule for Scheduled Outages or Scheduled Deratings. T&D Operator will indicate its acceptance of all or any of the proposed dates and/or propose alternate dates in writing to Resource Provider in accordance with the Agreement and the procedures set out in paragraph (b) of Section 4 (*Procedure*) of Procedure III (*Scheduled/Non-Scheduled Outages and Deratings*).
- c. If there is any delay in the completion of any Scheduled Outage or Scheduled Derating, Resource Provider shall notify T&D Operator of the delay, with such notice to include the following information:
  - i. revised Scheduled Outage or Scheduled Derating completion date and time; and
  - ii. referenced, attached information outlining the cause/causes of the delay.

Form of L-3 Notice

| Date and Time of      | Date and Time of | Scheduled Outage | Expected Duration |
|-----------------------|------------------|------------------|-------------------|
| Received by T&D Open  | rator:           |                  |                   |
| Submitted by Resource | Provider:        |                  |                   |
| Date/Time Submitted:_ |                  |                  |                   |

| Date and Time of | Date and Time of | Scheduled Outage              | <b>Expected Duration</b> |
|------------------|------------------|-------------------------------|--------------------------|
| Reception of     | Commencement of  | or Scheduled                  | of Scheduled             |
| Completed        | Scheduled Outage | Derating Details <sup>1</sup> | Outage or                |
| Appendix L-3 by  | or Scheduled     |                               | Scheduled Derating       |
| T&D Operator     | Derating         |                               | J                        |
|                  |                  |                               |                          |
|                  |                  |                               |                          |

Note 1: Provide summary of reason for Scheduled Outage or Scheduled Derating and work to be done to address the cause of the Scheduled Outage or Scheduled Derating.

#### APPENDIX L-4

## NON-SCHEDULED OUTAGES OR NON-SCHEDULED DERATINGS

- a. Resource Provider shall complete the following sections of the form of L-4 Notice below and email it to the T&D Operator's Operation Subdivision Head (submitted and signed by Resource Provider's plant manager or operations manager). Resource Provider shall use reasonable efforts to notify T&D Operator of any Non-Scheduled Outages or Non-Scheduled Deratings, with the information required below, at least twenty-four (24) hours in advance.
  - i. With respect to a Non-Scheduled Outage, the information shall include the following:
    - 1. the date and time of the commencement of the Non-Scheduled Outage, being the point in time when the VPP is curtailed;
    - 2. a summary of the cause of the Non-Scheduled Outage; and
    - 3. the expected duration of the Non-Scheduled Outage in hours from the date and time of curtailment to the date and time the VPP is once again available for dispatching
  - ii. With respect to a Non-Scheduled Derating, the information shall include the following:
    - 1. the date and time of the commencement of the Non-Scheduled Derating, being the point in time when the VPP has reduced capacity for dispatching;
    - 2. a summary of the cause of the Non-Scheduled Derating; and
    - 3. the expected duration of the Non-Scheduled Derating in hours from the date and time of the reduction in capacity to the date and time the capacity of the VPP is restored.
- b. Resource Provider shall revise the date and time notified in accordance with paragraph (a) above, as circumstances require, through regular communication with T&D Operator.

# Form of L-4 Notice

| Date/Time Submitted:            |  |
|---------------------------------|--|
| Submitted by Resource Provider: |  |

| Date and Time of<br>Reception of<br>Appendix L-4 by<br>T&D Operator | Date and Time of<br>Commencement of<br>Non-Scheduled<br>Outage or Non-<br>Scheduled Derating | Non-Scheduled<br>Outage or Non-<br>Scheduled Derating<br>Details <sup>1</sup> | Expected Duration<br>of Non-Scheduled<br>Outage or Non-<br>Scheduled Derating |
|---|--|---|---|
|   |  |   |   |

Note 1: Provide summary of reason for Non-Scheduled Outage or Non-Scheduled Derating and work to be done to address the cause of the Non-Scheduled Outage or Non-Scheduled Derating.

## **PROCEDURE IV**

## COMMUNICATIONS REGARDING THE GRID SYSTEM

# 1. Objective

This Operating Procedure is intended to facilitate communications between T&D Operator and Resource Provider regarding the status of the Grid System.

## 2. Scope of Procedure

This procedure encompasses communications between T&D Operator and Resource Provider relating to the following:

- a. notifications for start-up of the VPP;
- b. any Grid System Event;
- c. all related equipment maintenance and inspections;
- d. at-risk situations;
- e. protection settings; and
- f. certification of tests and inspections of electric and protection equipment.

## 3. Responsibilities

In accordance with Article 6 (*Operation of the GSDS*) of the Agreement, the parties agree to the following:

- a. For the purpose of communications regarding the interface of the VPP and the Grid System, Resource Provider's personnel shall contact the following T&D Operator personnel:
  - i. For operations coordination:

| Company      | Title                                 | Name | Phone | E-mail |
|--------------|---------------------------------------|------|-------|--------|
| T&D Operator | Shift Engineer (SE)                   |      |       |        |
| T&D Operator | Senior Shift<br>Engineer (SSE)        |      |       |        |
| T&D Operator | Manager,<br>Control Center<br>Support |      |       |        |

ii. For outages or clearances relating to the Grid System:

| Company      | Title                                   | Name | Phone | E-mail |
|--------------|---|------|-------|--------|
| T&D Operator | Supervisor,<br>Outage Planning<br>(SOP) |      |       |        |
| T&D Operator | Shift Engineer (SE)                     |      |       |        |

# iii. For relay settings:

| Company      | Title                                     | Name | Phone | E-mail |
|--------------|---|------|-------|--------|
| T&D Operator | Manager,<br>Energy<br>Management<br>(MEM) |      |       |        |

b. For the purpose of communications regarding the Grid System, T&D Operator personnel will contact the following Resource Provider personnel:

| Company              | Title                | Name | Phone | Email |
|----------------------|----------------------|------|-------|-------|
| Resource<br>Provider | Shift Supervisor     |      |       |       |
| Resource<br>Provider | Plant Manager        |      |       |       |
| Resource<br>Provider | Operation<br>Manager |      |       |       |

## 4. Procedure

- a. <u>T&D Operator Notifications Required for VPP Activation of Participant Resources</u>
  - i. Resource Provider's shift supervisor shall notify the TOC Shift Engineers of when Resource Provider will be in a position to activate the VPP.
  - ii. T&D Operator will confirm to Resource Provider when the VPP is ready for activation.
  - iii. The Parties will follow this procedure each time the VPP is curtailed or removed from service.

# b. <u>Grid System Outages</u>

T&D Operator shall immediately notify Resource Provider of any planned Grid System outages that could directly affect the dispatching of the VPP and, if applicable, how much Resource Provider's dispatching should be limited, which shall in all cases be in accordance with Article 6 (*Operation of the GSDS*) and Article 7 (*Dispatching Obligations*) of this Agreement.

## c. Emergency Situations Requiring a Reduction in Dispatching

- i. T&D Operator Shift Engineers may take control of the VPP or shall notify Resource Provider's shift supervisor as soon as possible of any potential line overloads or Emergencies that require a curtailment of the VPP, including how much dispatching should be reduced, which shall in all cases be in accordance with Article 6 (*Operation of the GSDS*) and Article 7 (*Dispatching Obligations*) of this Agreement.
- ii. Resource Provider's personnel shall, as soon as possible, notify the T&D Operator Shift Engineers of any Emergency situations at Resource Provider's site that may have a direct impact upon the dispatching of the VPP. Resource Provider shall use all reasonable efforts to minimize the impact of any Emergency situation on the dispatching of the VPP.

## d. Equipment Maintenance & Inspection Practices at the Interconnection Points

Resource Provider shall not undertake any maintenance activity on any equipment located at the Interconnection Points that directly interface with the Grid System without first: (i) confirming with T&D Operator that the required steps have been taken and are acceptable to T&D Operator and (ii) obtaining concurrence from T&D Operator's ESO Coordination and Control Supervisor permitting the necessary steps to be executed at the Interconnection Points.

## e. At-Risk Situations

Resource Provider shall coordinate and obtain approval from T&D Operator Shift Engineers before commencing any work in the Interconnection Points regardless of whether they are controlled and operated by Resource Provider or T&D Operator.

## f. Relay Settings

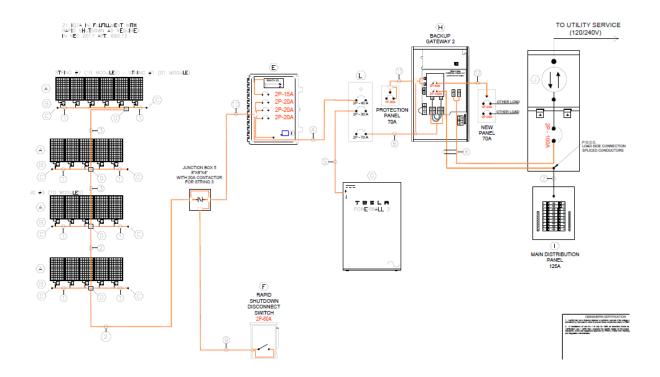
Resource Provider shall not change the relay settings of its protection systems that may have an impact on the Grid System without first coordinating with T&D Operator and obtaining a prior written authorization from T&D Operator's Manager, Energy Management ("MEM"). T&D Operator shall procure that T&D Operator's MEM shall provide such written authorization in a reasonable time upon receipt of a request from Resource Provider, provided that Resource Provider has submitted all the required documentation in a timely manner. Resource Provider shall bear all reasonable costs and expenses incurred by T&D Operator in relation to any change to the relay settings requested by Resource Provider, including the cost of any modifications to the Grid System involving replacement relays or upgrades.

## **APPENDIX L-5**

# RESOURCE PROVIDER'S VPP INTERCONNECTION, SCHEMATICS AND ONE-

# LINE DIAGRAM

Resource Provider's VPP schematic and Participant Resource example interconnection diagram, schematics, and one-line diagram are to be attached here:



#### PROCEDURE V

## MONITORING AND ENFORCEMENT OF MTRS

# 1. Objective

The following Procedure is only applicable to the Participant Resources of C&I Participants and intended to facilitate the communications between T&D Operator and Resource Provider in relation to the management of compliance with the MTRs.

## 2. Scope of Procedure

The scope of the Procedure describes the following:

- a. Information requirements.
- b. Monitoring and noncompliance management relating to the MTRs/
- c. Penalties calculation and application relating to the MTRs.

## 3. Responsibilities

a. In relation to the management of the MTRs, Resource Provider personnel will contact the following T&D Operator personnel:

| Company      | Title                                     | Name | Phone | E-mail |
|--------------|---|------|-------|--------|
| T&D Operator | Shift Supervisor (SE)                     |      |       |        |
| T&D Operator | Manager,<br>Energy<br>Management<br>(MEM) |      |       |        |

b. In relation to the management of the MTRs, T&D Operator personnel will contact the following Resource Provider personnel:

| Company              | Title                | Name | Phone | Email |
|----------------------|----------------------|------|-------|-------|
| Resource<br>Provider | Plant Manager        |      |       |       |
| Resource<br>Provider | Operation<br>Manager |      |       |       |

## 4. Procedure

## a. Frequency Control and Regulation Requirement

Resource Provider shall be responsible to ensure that the Participant Resource is designed, constructed, installed, and operated and maintained so that it fully complies with the requirements of IEEE 1547.

i. Frequency Response and Regulation Requirements

Resource Provider shall be responsible for ensuring that the Participant Resource is designed, constructed, installed, and operated and maintained so that it is capable of complying with the following requirements relating to frequency response and regulation:

- 1. The Participant Resource shall comply with frequency response ("**FR**") requirements in accordance with the MTRs. The batteries and auxiliary systems incorporated into the Participant Resources shall be designed such that the FR function shall not be limited by the dispatching process.
- 2. The Participant Resource shall be able to simultaneously comply with both the FR and ramp up/down pre-selected configuration while the Participant Resource is dispatching power to/from the grid.
- 3. The Participant Resource will be utilized to support the Grid System during downward and upward frequency events. The Participant Resource will be used on a continuous basis for regulation against frequency deviations. The regulation function shall be active as long as there is energy available. During periods of time when the amount of dispatchable power available through the Participant Resource is equal to the maximum dispatchable power, such that the Participant Resource cannot handle more power, the Participant Resource will be utilized to support the system during upward frequency events.
- 4. The FR function shall be active at all times when the Participant Resource is dispatching power considering the minimum charge value of the Participant Resource, and the Participant Resource shall respond to frequency deviations (movement) via frequency regulation as long as the frequency is beyond the dead-band defined by T&D Operator and in accordance with the MTRs.
- 5. The Participant Resource will provide measurement information as described in Paragraph 4. a. ii., through the Remote Terminal Unit ("RTU"), including the amount of energy remaining to support the FR function and the state of capacity of the Participant Resource. The dispatching process shall not affect the ramp rate limit requirement (configured by T&D Operator) or the frequency regulation of the Grid System and shall not create dispatching cycle oscillations.

# ii. Frequency Regulation and Ramp Rate Configuration-Related Measurements

Resource Provider shall ensure that the Participant Resource is capable of providing the following frequency regulation and ramp rate configuration-related measurement signals to T&D Operator:

- 1. AC power output of the Participant Resource.
- 2. AC power output of each Participant Resource at an Interconnection Point.
- 3. The Participant Resource's frequency response MW participation.
- 4. The state of charge management MW participation.
- 5. The frequency used for frequency response calculation.
- 6. The state of capacity of the Participant Resource.
- 7. The Participant Resource's enable status.
- 8. The Participant Resource's limited status.
- 9. The state of capacity in the Participant Resource for frequency regulation.
- 10. Any additional signal that may be requested by T&D Operator.

Resource Provider must ensure that these signals are provided by the Participant Resource to the T&D Operator SCADA system with a sampling rate of no less than two seconds and such that such signals can be stored by the T&D Operator's SCADA system, with a standard sampling rate of two seconds. These signals will be used, as described in the following sections, to monitor the frequency response and ramp rate limit (configured by T&D Operator) requirements. More signals may be required depending in the specific Participant Resource design, and the final Participant Resource schematics and electrical one-line diagram of the Participant Resource shall be provided as soon as they are available. For clarification, for purposes of compliance and monitoring of the technical requirements of the Participant Resource (including relating to dispatching of the Participant Resource), all physical measurements which will be provided by measurement equipment shall be made at a point or points to be specified by agreement of the Resource Provider and T&D Operator.

## iii. Rapid Spinning Reserve and Fast Frequency Response

T&D Operator shall monitor rapid spinning reserve using data obtained from SCADA or other systems it utilizes. T&D Operator shall evaluate parameters, including accuracy, response time, overshoot, and active power contribution, based on parameters configurated by T&D Operator according to the MTRs. If the Participant Resource is in violation of the MTRs, the MTRs noncompliance management procedure will apply per paragraph (h) of Section 4 (*Procedure*) of this Procedure V. In addition to regular monitoring, T&D Operator may require

Resource Provider to conduct periodic tests to demonstrate the Participant Resource's compliance with specific voltage regulation system requirements.

b. Frequency Response/Regulation Requirement Compliance Monitoring

Frequency response will be monitored on a daily basis, by the following procedure:

i. The required response of the Participant Resource to frequency deviations will be computed based on the frequency bias formula, with a 5% droop characteristic or other specified droop characteristic between 1% and 5%, as follows:

$$f_b = NCF / (Droop \% * f_{nom}) MW/Hz$$

where:

 $f_b$  = Frequency bias in MW/Hz

 $NCF = D^{max}$  of the Participant Resource in MW

*Droop* % = 5% in pu or other specified droop between 1% and 5%

 $f_{nom}$  = System nominal frequency = 60Hz

For example, for a Participant Resource with a D<sup>max</sup> of 20 MW: ("**Dmax**" means the maximum dispatch capacity):

$$f_b = 20 / (.05*60) = 6.667 \text{ MW/Hz}$$

ii. The frequency response of the Participant Resource shall always be in opposition to the direction of the system frequency deviation.

$$f dev = absolute \ value \ (fsys - 60) \ (in Hz)$$

where:

fsys = Actual system frequency in Hz

 $f \, dev =$  Frequency deviation from the nominal system frequency in Hz

iii. The frequency bias will be applied to (multiplied by) the frequency deviation beyond the dead band. This result ("FRF") establishes the increase or decrease in active power required from the Participant Resource and measured in response to the system frequency deviation at a point or points to be specified by agreement of the Resource Provider and T&D Operator.

$$FRF = (fb) (fdev - dband)$$

where:

FRF = Frequency response of the Participant Resource in MW (increase or decrease in active power required in response to the system frequency deviation)

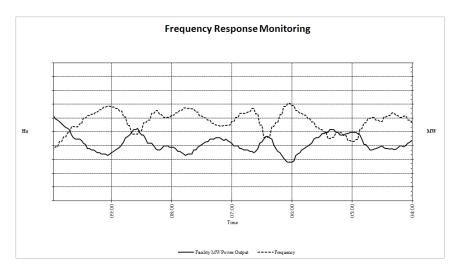
fdev = Frequency deviation from the system nominal frequency (in Hz) or the absolute value of the difference between the actual system frequency and 60 Hz

dband = Deadband in Hz (frequency deviation from nominal value)

fb = Frequency bias in MW/Hz

For example, for a dead band of 0.01 Hz and an increase in frequency deviation of 0.11 Hz, the power output of a Participant Resource with 20 MW Dmax, measured at a point or points to be specified by agreement of the Resource Provider and T&D Operator, is required to decrease by 0.667 MW. On the other hand, if the frequency decreases with a frequency deviation of 0.31 Hz, a 2-MW increase in active power output, measured at a point or points to be specified by agreement of the Resource Provider and T&D Operator, is required.

The following chart illustrates graphically a representative performance of a Participant Resource in the context of the frequency response and regulation requirement. The dotted line represents the system frequency, and the solid line represents the Participant Resource's active power output in response to the corresponding system frequency deviations, as measured at a point or points to be specified by agreement of the Resource Provider and T&D Operator:



## c. Configurable Ramp Rate Limit Requirement Compliance and Compliance Monitoring

- i. T&D Operator will apply the following exceptions to the ramp rate limit: (i) The rates of change in active power, caused by the need to meet frequency response requirements, as measured at a point or points to be specified by agreement of the Resource Provider and T&D Operator will not be considered as noncompliance with the ramp rate limit; and (ii) The ramp rate limit will be monitored on a daily basis, independently of the frequency response, and any marginal noncompliance will be disregarded, in accordance with the following procedure:
- ii. The ramp in MW per scan of the Participant Resource is defined as:

$$\mathbf{P}_{sf} = \mathbf{P}_{s} - \mathbf{P}_{f}$$

$$\mathbf{R}_{s} = |\mathbf{P}_{sf} - \mathbf{P}_{sf-1}|$$

where:

*Psf* = present MW power output (i.e., actual dispatch) of the Participant Resource measured at a point or points to be specified by agreement of the Resource Provider and T&D Operator with the frequency response MW participation removed

*Ps* = present MW power output of the Participant Resource measured at a point or points to be specified by agreement of the Resource Provider and T&D Operator

Pf = frequency response MW participation

Rs = absolute value of ramp in MW per scan

*Psf-1* = MW power output of the Participant Resource measured a point or points to be specified by agreement of the Resource Provider and T&D Operator, with the frequency response storage MW participation removed, one scan before, which is two seconds previous Psf

iii. The ramp rate for each scan will be calculated according to the following formula and expressed as a percentage of the Dmax per minute (30 scans):

$$RR = \frac{Rs \times 30}{P_F} \times 100$$

where:

RR = Ramp rate in % of  $D^{max}$  per minute

Rs = Ramp in MW per scan

 $PF = D^{max}$  in  $MW_{AC}$ 

As an example, if the required ramp rate is 10%, T&D Operator will apply an additional 10% tolerance to exclude scans which are marginally in noncompliance.

iv. If the Participant Resource is noncompliant with the MTRs, the MTRs noncompliance management procedure of paragraph (h) of Section 4 (*Procedure*) of this Procedure V will apply. T&D Operator shall base the proposed curtailment in accordance with paragraph (h) of Section 4 (*Procedure*) of this Procedure V on the maximum insufficiency or worst scan during the noncompliance event period.

d. Voltage Ride-Through (VRT) Requirement Compliance Monitoring

T&D Operator shall monitor voltage ride-through ("VRT") using data obtained from the SCADA and/or systems it utilizes for management of demand and relevant data provided by the Resource Provider. After system events or disturbances such as voltage events or faults, T&D Operator will evaluate the performance of the Participant Resource according to the MTRs. T&D Operator will use system data and data obtained from the Participant Resource for the compliance evaluation. If T&D Operator determines that the Participant Resource is noncompliant, the MTRs noncompliance management procedures set out in Paragraph 4.8 will apply.

# e. <u>Voltage Regulation and Fast Dynamic Reactive Power Reserve Requirement Compliance</u> <u>Monitoring</u>

T&D Operator shall monitor the voltage regulation system and fast dynamic reactive power reserve using data obtained from SCADA and/or systems it utilizes for management of demand and relevant data provided by the Resource Provider. T&D Operator shall evaluate data for voltage regulation accuracy, overshoot, and reactive power contribution based on voltage set point and voltage droop according to the MTRs. If T&D Operator determines that the Participant Resource is in violation of the MTRs, the MTRs noncompliance management procedures set out paragraph (h) of Section 4 (*Procedure*) of this Procedure V will apply. In addition to regular monitoring, T&D Operator may require Resource Provider to perform periodic tests to evaluate compliance with specific voltage regulation system requirements.

# f. Reactive Power Capability and Minimum Power Factor Requirement Compliance Monitoring

T&D Operator shall monitor the reactive power capability and minimum power factor requirement of the Participant Resource using data obtained from SCADA and/or systems which T&D Operator utilizes for management of demand and relevant data provided by the Resource Provider. Resource Provider shall submit a detailed plan to demonstrate reactive power capability strategy to T&D Operator in accordance with IEEE 1547. If T&D Operator determines that the Participant Resource is in violation of the MTRs, the MTRs noncompliance management procedures set out in paragraph (h) of Section 4 (*Procedure*) of this Procedure V will apply. In addition to regular monitoring, T&D Operator may require Resource Provider to perform periodic tests to evaluate compliance with the reactive power capability and minimum power factor requirement of the Participant Resource.

## g. Frequency Ride-Through (FRT) Requirement Compliance Monitoring

T&D Operator shall monitor frequency ride-through ("FRT") using parameters data obtained from SCADA and/or systems it utilizes for management of demand and relevant data provided by the Resource Provider. T&D Operator will evaluate this data after system events or disturbances, such as frequency events or faults, according to the MTRs. If the Participant Resource is in violation of the MTRs, the MTRs noncompliance management procedure set out in item (vi) paragraph (h) of Section 4 (*Procedure*) of this Procedure V will apply.

## h. MTRs Non-Compliance Management Procedure

- i. In accordance with the Agreement, T&D Operator shall have no liability in connection with any curtailment of the Participant Resource by the T&D Operator resulting from any noncompliance of the Participant Resource with the MTRs (including any payment liability or liability in respect of waiting time).
- ii. T&D Operator shall monitor the performance of the Participant Resource to verify its compliance with the MTRs, in accordance with paragraph (a) through (g) of Section 4 (*Procedure*) of this Procedure V.

- iii. If T&D Operator determines that the Participant Resource is noncompliant with the MTRs, T&D Operator may curtail the Participant Resource to such an extent and for such a duration as is consistent with Prudent Utility Practices (the "Curtailment Level").
- iv. For MTRs noncompliance events that do not depend upon the Participant Resource's power output and for which curtailment is not an effective remedy (such as, but not limited to, frequency response, voltage regulation, frequency ridethrough, voltage ride-through or upward ramps, rapid spinning reserve), T&D Operator may curtail the Participant Resource's active power output to 0 MW to such an extent and for such a duration as is consistent with Prudent Utility Practices.
- v. Scheduled Deratings and Non-Scheduled Deratings may affect how the Participant Resource responds to the requirements specified in the MTRs. If a Scheduled Derating or a Non-Scheduled Derating may affect compliance with the MTRs, Resource Provider shall ensure that the auto-curtailment implementation of the Participant Resource shall respond to this situation; Resource Provider will indicate the level of curtailment, if any, expected to keep the Participant Resource in full compliance with the MTRs during the Scheduled Derating or the Non-Scheduled Derating in the proforma submitted as a part of the proposed Scheduled Maintenance Program in Appendix L-3 (Scheduled Outages or Scheduled Deratings) and the proforma submitted as a part of the notice of Non-Scheduled Derating in Appendix L-4 (Non-Scheduled Outages or Non-Scheduled Deratings).
- vi. The following procedure shall apply for capacity noncompliance events:
  - 1. T&D Operator shall provide to Resource Provider a written notification, via email, of the MTRs noncompliance event or events, including the corresponding events data and/or graphs, curtailment level, and noncompliance operational and/or test conditions as follows:
    - a) If the MTRs noncompliance event or events are severe, which means an event where the curtailment level is greater than 10% of Dmax, or events where curtailment level is less than or equal to 10% of Dmax but occur daily for two consecutive days, then T&D Operator may apply a curtailment of the Participant Resource prior to the written notification, and T&D Operator shall provide the verbal notification as soon as practical.
    - b) Resource Provider shall have 48 hours from receipt of T&D Operator's written notification to review the notification and provide a written report to T&D Operator via email that shall include the causes of the Participant Resource noncompliance, proposed corrective actions, and the approximate time it will take to bring the VPP back to a compliant state and submit the "MTRs Non-compliance Report." Should Resource Provider reasonably require additional time to prepare the MTRs Non-compliance Report, then Resource Provider shall notify T&D Operator within the initial 48 hours of the need for an extension and T&D Operator may provide an extension of up to 96 additional hours to provide

the written report. The Parties acknowledge that, for MTRs noncompliance events (as described above), T&D Operator may apply a curtailment of the Participant Resource prior to T&D Operator's written notice or Resource Provider's preparation of the MTRs Non-compliance Report.

- 2. If corrective actions are required, Resource Provider shall perform the corrective actions; when the actions are completed, Resource Provider shall provide T&D Operator a written report ("MTRs Corrective Action Report") indicating the corrective actions taken, including documentation reasonably required to demonstrate the corrective actions were completed. If no corrective actions are required, for example, due to an incorrect MTRs compliance calculation, Resource Provider shall indicate as such in the MTRs Non-compliance Report including documentation reasonably required to support this position. If any curtailment had been previously applied for the noncompliance event, T&D Operator shall fully lift the curtailment as soon as practical, but in the case that no corrective action is required, in no event more than one hundred twenty (120) hours from the receipt of the MTRs Corrective Action Report or the MTRs Noncompliance Report.
- 3. If corrective actions are taken, T&D Operator will monitor the Participant Resource for a test period that shall be sufficient to allow the Participant Resource to be exposed to the noncompliance test conditions after the corrective actions are completed. The test period will begin after T&D Operator's receipt and evaluation of the MTRs Corrective Action Report and will end after the Participant Resource is exposed to the noncompliance test conditions.
  - a) If the Participant Resource fails to comply with the previously failed MTRs under the noncompliance test conditions, the Participant Resource will be curtailed to the Curtailment Level. Resource Provider shall provide T&D Operator a further MTRs Non-compliance Report and procedures in items (2 and (3), clause (vi), paragraph (h) of Section 4 (*Procedure*) of this Procedure V shall be repeated.
  - b) If the Participant Resource complies with the previously failed MTRs under the noncompliance test conditions, regular monitoring shall resume.

If, after additional corrective measures are taken, the Participant Resource fails to comply with the previously failed MTRs under the noncompliance test conditions one additional time consecutively (for a total of two consecutive failures), the T&D Operator may file written notice of default pursuant to paragraph (f) of Section 16.1 (*Definition*) of the Agreement after the third failure.

i. Resource Provider shall coordinate with T&D Operator rights to use or have access to those parts of the VPP and Participant Resources that are interconnected or interface with the T&D System for the purpose of ensuring the proper conduct of operations.

# j. Loss of Primary and Secondary Protection at an Interconnection Point

Whenever Resource Provider or T&D Operator determines that both primary and secondary protections between Participant Resources governed by PREPA Regulation 8915 and the Grid System at the relevant Interconnection Point are not in service or operating, such Participant Resources may be disconnected as applicable. Resource Provider and T&D Operator shall coordinate promptly and prudently to restore the affected primary and secondary protections in accordance with Prudent Utility Practices. When at least one (1) of either primary or secondary protection has been restored, the Participant Resource will be activated in a manner described in Procedure I (Aggregation and Dispatch of Power). Resource Provider is responsible for both primary and secondary protections, therefore T&D Operator shall not have any liability associated with such events.

# k. <u>Voltage Scheduling</u>

The voltage schedule shall be consistent with the Participant Resource design and the MTRs, and shall be based on the normally expected operating conditions for the Participant Resource and the reactive power capabilities of the Participant Resource as specified in Section 4 of the MTRs. The voltage schedule is effectively +/-5% (0.95–1.05 per unit) of the nominal voltage at each Interconnection Point.

## l. Voltage Regulation

- i. The TOC will adjust the Participant Resource voltage regulation setpoint through remote control, provided that T&D Operator shall not require the Participant Resource to operate beyond its required minimum design limits as specified in the MTRs.
- T&D Operator will notify Resource Provider of the corresponding voltage droop setting of the Participant Resource or any change to this setting as defined in the MTRs.
- iii. T&D Operator will monitor the response compliance of the Participant Resource. If any violation of the MTRs occurs, this Procedure V will apply.

#### PROCEDURE VI

## **EMERGENCY COMMUNICATIONS**

## 1. Objective

The following Procedure is intended to facilitate communications between T&D Operator and Resource Provider during Emergency situations.

# 2. Scope of Procedure

The scope of the Procedure describes the following:

- a. A T&D Operator declared Emergency.
- b. A Resource Provider declared Emergency.
- c. Guidelines for recovery from a widespread electrical blackout.
- d. Loss of primary and secondary protection at Interconnection Points.
- e. Disturbance analysis reporting.

## 3. Responsibilities

In accordance with Article 6 (*Operation of the GSDS*) and Article 7 (*Dispatching Obligations*) of the Agreement, the parties agree, for the purposes of emergency communications, that:

a. Resource Provider's personnel will contact the following TOC personnel:

| Company      | Title                         | Name | Phone | E-mail |
|--------------|-------------------------------|------|-------|--------|
| T&D Operator | Shift Engineer (SE)           |      |       |        |
| T&D Operator | Senior Shift<br>Engineer SSE) |      |       |        |

b. The T&D Operator Dispatch Center will contact the following Resource Provider personnel:

| Company                                      | Title                 | Name | Phone | Email |
|--|-----------------------|------|-------|-------|
| Resource<br>Provider<br>(primary<br>contact) | Plant Manager         |      |       |       |
| Resource<br>Provider                         | Operations<br>Manager |      |       |       |

| (secondary |  |  |
|------------|--|--|
| contact)   |  |  |

#### 4. Procedure

## a. <u>T&D Operator Declared Emergency</u>

- i. Consistent with Section 6.4 (*Emergencies*) of the Agreement, if an Emergency is declared by T&D Operator, T&D Operator's Shift Engineers will take exclusive control of dispatching the VPP for the duration of such Emergency and then shall notify Resource Provider's personnel. Without limiting the generality of the foregoing, T&D Operator's control centers may require Resource Provider's personnel to delay synchronization of Participant Resources or raise or lower dispatch of power from the VPP to maintain safe and reliable load levels and voltages on the Grid System, which shall in all cases be in accordance with the VPP design, relevant VPP permits and Prudent Utility Practices.
- ii. T&D Operator shall maintain the record for such an Emergency.
- iii. T&D Operator shall, as soon as practicable after the occurrence of the Emergency, submit to Resource Provider a report describing the causes for such action.

# b. Resource Provider Declared Emergency

If, for the safeguarding of equipment, plant and/or personnel, Resource Provider needs to take equipment and/or VPP components out of service and the result of such action is a material reduction in the dispatching of the VPP or an Outage, Resource Provider shall notify the T&D Operator Shift Engineers as soon as possible (prior to the event if possible). Resource Provider shall use best efforts to maintain the net electrical output or dispatching capabilities of the VPP during such situations but in all cases shall keep T&D Operator informed as to the status of the Emergency. Resource Provider shall, as soon as practicable after the occurrence of the Emergency, submit to T&D Operator a report for the causes for such action.

## c. Procedures for Recovery from a Local or Widespread Electric Blackout

- i. After a Grid System blackout which results in a curtailment of the VPP, T&D Operator shall inform Resource Provider when it can resume providing services to the Grid System, in the manner described in Procedure I (*Aggregation and Dispatch of Power*).
- ii. After a system disturbance resulting in a temporary outage at an Interconnection Point, T&D Operator shall inform Resource Provider when it can resume providing services to the Grid System, in the manner described in Procedure I (Aggregation and Dispatch of Power).

## d. Procedures for Recovery from Force Majeure

i. After an event or circumstance of Force Majeure which results in a shutdown or curtailment of the VPP, T&D Operator may request Resource Provider to provide a technical assessment of the condition of the VPP, groups of Participant Resources

or individual Participant Resources to interconnect with the Grid System. Resource Provider must include in this technical assessment the findings of any visual inspections, assessment of damages, and respective corrective actions as well as the electrical testing of the VPP, relevant Participant Resources and their equipment as recommended by the manufacturers of such equipment if requested by T&D Operator. Resource Provider shall submit all this information to T&D Operator for T&D Operator's evaluation prior to any interconnection authorization of the VPP or notification of availability of the VPP to resume provision of Grid Services.

ii. As soon as practicable after receipt of the information provided by Resource Provider, T&D Operator shall authorize the VPP to resume operations, provided that it is reasonable and safe to do so in accordance with Prudent Utility Practices.

# e. <u>Disturbance Analysis Reporting</u>

- i. When an internal incident occurs within the VPP, including its connection appurtenances, which results in any consequence or disturbance to the Grid System, Resource Provider shall provide T&D Operator, within approximately two hours of the start of the event, with details, initially orally via phone, of the cause of the event determined from the relay panel (if applicable). A disturbance analysis report shall be submitted, via email, by Resource Provider to T&D Operator within twenty-four (24) hours of the aforesaid incident, and if applicable, the report shall include information describing the sequence of events downloaded from the relays. Resource Provider shall submit the report using the form set out in Appendix L-6 (*Disturbance Analysis Report*) of this procedure. During the forty-eight (48) hours following conclusion of the incident, Resource Provider shall use reasonable efforts to submit a final report including all details of such mentioned incident in a written letter to the T&D Operator's Head of the Electric System Operation Division.
- ii. If the disturbance results in a forced curtailment of the VPP by T&D Operator from the Grid System, or if an accident or any undesired or unexpected result is reflected in the Grid System, Resource Provider's personnel shall analyze the event and submit to T&D Operator a report in respect of such disturbance. The report shall include, but not be limited to, a description of the sequence of the detected events, the interconnection devices operated, all the protections activated (correctly or not) and the consequences arising from the incident.

## **APPENDIX L-6**

# DISTURBANCE ANALYSIS REPORT

The disturbance analysis report shall be used as the basis for reporting disturbances to the Grid System caused by an incident internal to Resource Provider's VPP, as outlined in paragraph (f) of Section 4 (*Procedure*) of Procedure VI (*Emergency Communications*).

Resource Provider will obtain and retain any additional data required to support the analysis of the system disturbance by Resource Provider for possible future discussions with T&D Operator.

| <b>Incident Reference Number:</b> |                  |                |            |
|-----------------------------------|------------------|----------------|------------|
| Date of Incident:                 |                  |                |            |
| Time of Incident:                 |                  | <del>-</del>   |            |
| Plant Involved in Incident:       |                  | -              |            |
| Pre-Incident Details:             | System Frequency | System Voltage | Plant Load |
|                                   |                  |                |            |
| Post-Incident Details:            | System Frequency | System Voltage | Plant Load |
|                                   |                  |                |            |
| Details of Incident:              |                  |                |            |
|                                   |                  |                |            |
| Relays Operated:                  |                  |                |            |
|                                   |                  |                |            |
|                                   |                  |                |            |
| Alarms Initiated:                 |                  |                |            |
|                                   |                  |                |            |

Grid Services Agreement - PREPA and Sunrun PR Operations LLC

| Cause of Incident:          |       |
|-----------------------------|-------|
|                             |       |
|                             |       |
|                             |       |
|                             |       |
|                             |       |
| Consequences:               |       |
|                             |       |
|                             |       |
|                             |       |
|                             |       |
|                             |       |
| <b>Corrective Measures:</b> |       |
|                             |       |
|                             |       |
|                             |       |
|                             |       |
|                             |       |
| Report Submitted By:        |       |
|                             |       |
| Report Submitted Date:      | Time: |

#### APPENDIX M

## DATA, INTEGRATION AND TESTING PROTOCOL

This Appendix sets out PREPA's standard protocols for testing and commissioning the VPP. Appendix CC (*Exceptions to Technical Appendices*) identifies particular protocols that do not apply or only apply if Resource Provider enrolls C&I Participants in the VPP.

The Testing Protocol is intended to assist the Parties, in coordination with the T&D Operator, in the commissioning and annual testing of the VPP operated by Resource Provider. It is not intended to modify either Party's responsibilities as outlined in this Agreement.

Subject to Section 3.8 (*Protocols & Procedures*) of this Agreement, the T&D Operator may request a revision of the Testing Protocol on an annual basis.

Capitalized terms used throughout this Appendix M have the meaning set forth in this Agreement, unless otherwise defined herein.

#### 1. General

#### a. Overview

The Testing Protocol provides the technical requirements and acceptance criteria for carrying out the functional and Performance Tests required for the commissioning and normal operation of VPP. These tests include but are not limited to: (i) commissioning and Performance Tests; (ii) annual testing; and (iii) communication and reporting tests. The Resource Provider shall ensure that the results of these tests are acceptable and meet the acceptance criteria. The test results will be provided to the T&D Operator for review and acceptance.

The testing specified in this Testing Protocol includes functional tests in support of commissioning, routine testing to be performed over the VPP's design life, periodic Performance Tests, annual tests, and inspection procedures and other tests that may be necessary to ensure that all VPP systems are functioning satisfactorily. Specifically, the Testing Protocol specifies the following:

- i. the requirements and acceptance criteria for carrying out the integration and qualification tests for the Participant Resources;
- ii. the requirements and acceptance criteria governing the performance and capability tests for the VPP;
- iii. the requirements for Performance Testing procedures to assess impacts of VPP operation on the Grid System and on Participant Resources;
- iv. the requirements and acceptance criteria for carrying out demonstration and orchestration trials during VPP commissioning. Orchestration trials will assess the coordination of various Participant Resources across many separate locations and

their ability to function together in a manner comparable to a traditional power plant;

- v. the requirements for annual and return to service tests for the VPP;
- vi. the requirements for factory and site acceptance tests for equipment used to integrate Participant Resources into the VPP; and
- vii. the requirements for T&D Operator acceptance tests for VPP integration.

Resource Provider shall: (i) perform all tests in accordance with this Testing Protocol, utilizing personnel qualified to perform the required testing; (ii) review the results of the tests to confirm whether the VPP or component thereof pass(es) the applicable test; and (iii) provide the results to T&D Operator for review and acceptance. Resource Provider shall provide the test methodology and schedule to T&D Operator where advised. Resource Provider shall specify to PREPA and T&D Operator in writing such other tests as it considers necessary to ensure VPP performance and capability.

Resource Provider shall ensure that all tests are performed in a grid-tied configuration and that the equipment configuration during testing is managed the same way as expected during Commercial Operation. Additionally, Resource Provider shall monitor the GSDS and the Participant Resources using internal instrument transformers, external instrument transformers, metering functionalities, and application programming interfaces ("APIs") to monitor and record voltages, currents, and power.

Resource Provider shall submit to T&D Operator, for evaluation and approval, all Performance Test reports certified by an experienced and duly qualified independent company with specialized expertise in network communications equipment and software, evidencing that the VPP satisfies each of the MTRs, the requirements set forth in PREPA Regulation 8915 (as it may be amended from time to time) ("**Regulation 8915**") and the Performance Guarantees specified in the Agreement.

In the event of any conflict between the terms and conditions of this Testing Protocol and the Agreement, the terms and conditions of the Agreement shall prevail. The Resource Provider acknowledges and agrees that: (i) its compliance with this Testing Protocol does not relieve Resource Provider from any liability that it has under the Agreement; and (ii) T&D Operator shall not be liable to Resource Provider or any other person by reason of its review or approval of this Testing Protocol and/or the Testing Plan (as defined in Paragraph (b) of Section 2 (*Commissioning and Performance Test*) of this Testing Protocol).

#### b. VPP Testing Representative

Resource Provider shall appoint an individual with the appropriate VPP testing skills, knowledge, and experience to act as Resource Provider's representative with respect to VPP testing (the "VPP Testing Representative"). The VPP Testing Representative shall serve as the single point of contact for all VPP testing activities for the Resource Provider. The VPP Testing Representative shall be primarily responsible for all communication with T&D Operator regarding Resource Provider's VPP testing activities, including but not limited to:

## i. testing status;

- ii. the certification of and submission of checklists;
- iii. progress and schedule; and
- iv. documentation status.

The VPP Testing Representative shall be present at all meetings between T&D Operator and Resource Provider related to VPP testing.

#### c. Test Conditions

T&D Operator and Resource Provider shall mutually agree on the test conditions applicable to Performance Tests, which shall include but not be limited to the:

- i. pre-test operational status of resources;
- ii. state of charge accuracy;
- iii. pre-test energy levels;
- iv. resources Opt-in/Opt-out event status;
- v. resources online/offline/error status;
- vi. power factor;
- vii. time and duration of testing;
- viii. number of available resources;
- ix. measurement accuracy and resolution;
- x. sampling and recording rate;
- xi. granularity levels; and
- xii. equipment necessary to perform the tests.

In cases where the details of the testing requirements are to be established by Resource Provider, Resource Provider shall provide a detailed Test Plan for T&D Operator's review and approval prior to commencing any testing.

## d. Documentation and Reporting

T&D Operator and Resource Provider shall mutually agree on the type and format of testing deliverables. The deliverables shall include certification, factory acceptance tests ("FATs"), site acceptance tests ("SATs"), user acceptance tests ("UATs"), testing schedules, test reports, inspection reports, timelines, manuals, checklists, and data samples.

Resource Provider shall record and document all test and measurement results. At a minimum, the VPP testing reports shall include:

- i. an index listing all VPP equipment being tested;
- ii. a basic overview of each testing activity; and
- iii. summary of tests performed for each VPP testing activity.

#### e. Communications Protocol

Resource Provider shall not undertake any testing or perform any testing and interconnection-related activities on the VPP or Participant Resource systems and equipment that directly interface with the T&D System (e.g., Participant Resources, typically those installed at commercial and industrial facilities, that are subject to the requirements of Regulation 8915) without first: (i) confirming with the T&D Operator the required steps needed for the proposed test or activity; and (ii) obtaining written concurrence from the T&D Operator's Energy Systems Operations ("ESO") coordination and control supervisor permitting each testing or interconnection action to be executed at any Interconnection Point. This provision does not apply to residential Participant Resources.

## 2. Commissioning and Performance Test

## a. Objective

The objective of the commissioning and Performance Tests is to verify that: (i) the VPP can accept and deliver Energy, power, and Ancillary Services in accordance with the operating characteristics as delineated in Appendix J (*Operating Characteristics*) of the Agreement; (ii) the VPP meets the Guaranteed Capability and Performance Guarantees as stipulated in Appendix G (*Guaranteed Capability*) and Appendix N (*Performance Guarantees*), respectively; and (iii) the VPP complies with the requirements of Regulation 89815 and each of the MTRs as specified in Appendix K (*Minimum Technical Requirements*).

## b. Procedures

Resource Provider shall prepare and provide to T&D Operator a draft testing plan for the planned Performance Tests, including detailed test procedures and the methodology to govern the required testing, for the T&D Operator's review no later than one hundred eighty (180) Days prior to the projected VPP initial synchronization date. This draft testing plan shall incorporate the requirements set forth in Regulation 8915, the MTRs and the standards incorporated or referenced therein. The T&D Operator and Resource Provider shall mutually agree to any adjustments or additions to the draft testing plan for the Performance Tests, taking into consideration the requirements of Regulation 8915, the MTRs, Prudent Utility Practices and any applicable manufacturer's recommendations, and shall otherwise cooperate to finalize the testing plan for the Performance Tests within ninety (90) Days after the T&D Operator receives the draft Performance Testing plan from Resource Provider (such finalized testing plan being the "Testing Plan"). Resource Provider shall perform: (i) self-administered testing that may support the qualification process; and (ii) T&D Operator-administered testing, officially recorded and documented, made available to the T&D Operator for review and acceptance.

The T&D Operator's approval of the Testing Plan shall not make the T&D Operator responsible in any way for any damage to the VPP resulting from the performance by Resource Provider of any Performance Tests in accordance with the Testing Plan.

#### c. Timing for Conduct of Performance Tests

#### i. Prior to Commercial Operation Date

Resource Provider shall schedule and complete all required Performance Tests for the VPP. Resource Provider shall use commercially reasonable efforts to undertake such activities in sufficient time to achieve the Commercial Operation Date by the Guaranteed Commercial Operation Date, and the T&D Operator shall reasonably cooperate with Resource Provider to meet such deadline.

Resource Provider shall provide the T&D Operator reasonable prior notice (and, in any event, at least thirty (30) Days prior notice) of Resource Provider's testing schedule to complete the Performance Tests and shall allow T&D Operator representatives to witness all Performance Tests. Resource Provider shall coordinate with the T&D Operator to determine the desired start date for the Performance Tests and to ensure that the conduct of the Performance Tests does not interfere with the operation and stability of the T&D System. Resource Provider shall perform the Performance Tests under this Testing Protocol in accordance with the Testing Plan and shall demonstrate that the VPP satisfies the MTRs during such testing.

#### ii. After Commercial Operation Date

- 1. during each Agreement Year of the Supply Period, T&D Operator may request Resource Provider to perform up to two Performance Tests in accordance with Section 6.8 (Supply Period Performance Tests) of the Agreement; and
- 2. Resource Provider may request to perform an additional Performance Test in accordance with Section 6.8 (*Supply Period Performance Tests*) of the Agreement.

#### 3. Performance Tests

#### a. Overview

Resource Provider shall perform tests on individual Participant Resources (where applicable) and on the VPP as a whole (which includes the GSDS making Grid Services available to PREPA through the aggregation of one or more Participant Resources forming the VPP) in order to (i) show compliance with the requirements of Regulation 8915, the MTRs, readiness of integration, security of communications, and qualification of the relevant Participant Resources to join the VPP and (ii) evaluate the performance of the VPP in terms of platform functionality, including the functionality of remote controls and capability to deliver Grid Services to the T&D System. T&D Operator shall also evaluate the interfaces between the VPP and supervisory control and data acquisition ("SCADA") system, GSDS, and the T&D Operator's Energy Management System ("EMS") or, once

available, to the T&D Operator's DERMS or resulting from modifications of existing systems or installation of other control systems, in terms of fitness or readiness.

Resource Provider shall also use the Performance Tests to assess the impact of VPP operation on individual Participant Resource operations, understand conflicts between operations of Participant Resources as directed by the VPP and Participant Resources' normal operation, and study the impact on the T&D System in cases where the VPP is controlling part of the low-voltage network in a specific area. Resource Provider shall conduct periodic testing to remove uncertainties and increase awareness of the condition of the VPP, and will conduct a demonstration and orchestration trial as an additional test to practice and witness long-term operations of the VPP prior to COD.

## b. <u>Participant Resource Testing Procedures</u>

The procedures in this section discuss testing of the individual Participant Resources already installed and commissioned or to be installed and commissioned where required by Regulation 8915 with respect to condition and performance within the VPP. They describe a sequence of activities to be performed prior to VPP testing, including collection of technical documentation and test reports (e.g., FAT reports, SAT reports), physical inspection, communications verification, integration testing, MTR compliance, and qualification testing.

#### i. Factory Acceptance Tests

The Resource Provider shall provide to the T&D Operator major equipment manufacturer formal test result reports and official documentation of the FAT to demonstrate Participant Resource equipment performance, including but not limited to design compliance tests, type tests, and/or factory routine hardware and software tests.

The Resource Provider may satisfy design capability tests that comply with industry standards by submission of the proper certification; however, the T&D Operator reserves the right to direct the Resource Provider to perform on site any tests pertinent to VPP or Participant Resources and required by Regulation 8915 or otherwise by the Agreement.

The Resource Provider shall submit to T&D Operator the test results report and official documentation (i.e., hardware and software related documentation as applicable) at least ninety (90) Days prior to the projected date of the VPP commissioning test.

The T&D Operator reserves the right to witness virtually or in person the FAT of any major equipment employed by Resource Provider or furnished by Resource Provider to Participants at the manufacturers' facilities. Resource Provider, the relevant Participant, and the T&D Operator shall coordinate the schedule to witness a FAT ahead of its execution. The Resource Provider shall submit to T&D Operator the tentative dates for the FAT as soon as possible following commencement of VPP development or of selection of major equipment to be furnished to Participants.

Additionally, the Resource Provider shall provide documentation of the corresponding manufacturer's official test reports which demonstrate or certify system hardware and software functionality and conformance with applicable industry guideline and standards. The Resource Provider shall demonstrate compliance with the requirements of Regulation 8915 and as described in the MTRs during the VPP commissioning tests.

#### ii. Integration Testing

The Resource Provider shall ensure that Participant Resource integration into the VPP is completed successfully by performing a number of sequential activities, including the following:

- 1. physical inspection of the Participant Resource integration system on site, for which Resource Provider shall provide an inspection checklist to T&D Operator for review and records;
- 2. remote power set-point control testing to verify ability to control remotely, by which Resource Provider shall ensure that each Participant Resource can take direct active and/or reactive power control requests;
- 3. T&D Operator acceptance tests by Resource Provider to certify completion of successful integration, the reports of which Resource Provider shall provide to T&D Operator; and
- 4. (optional) functionality tests assigning the individual Participant Resource a specific task/control signal and for different VPP control modes. Resource Provider shall create a checklist with recommended control modes for each Participant Resource and provide a report with functionality test results to T&D Operator for review and approval.

The Resource Provider shall develop and provide to T&D Operator all necessary documentation to support testing activities, including high-level design drawings, single-line diagrams, and integration drawings.

If the integration tests establish that the VPP fails to comply with the MTRs, then the Resource Provider shall: (i) take corrective actions to improve the performance of the VPP or, to the extent necessary, individual Participant Resources incorporated into the VPP; and (ii) repeat the integration tests to establish that the VPP satisfies the MTRs and other Minimum Acceptance Criteria set out in this Testing Protocol.

Within forty-eight (48) hours following the successful completion of the integration tests and satisfaction of all other criteria, Resource Provider shall provide the test results, inspection checklists, and user acceptance tests ("UATs") to T&D Operator for review and approval.

## iii. Qualification Testing

The Resource Provider shall provide a certification for each Participant Resource of the ability of such Participant Resource to provide specific services to T&D Operator. As a basis for this certification, Resource Provider shall test and verify the ability of Participant Resources to provide specific services to the T&D Operator, including:

- 1. Demand Build Service;
- 2. Demand Reduction Service;
- 3. system reserve;
- 4. frequency and voltage regulation;
- 5. demand response;
- 6. active/reactive power; and
- 7. Ramp Rate control.

A Participant Resource offering any of these services shall have the following operating characteristics and technical capabilities:

- 1. being controlled and monitored by the GSDS;
- 2. achieving at least the MTRs for Ramp Rates (MW/minute);
- 3. service capacity not exceeding the maximum Ramp Rate (MW/minute) times 10 minutes (regulation);
- 4. service capacity dispatchable on a continuous basis for at least 60 minutes;
- 5. ability to reach promised capacity within the design limitation of VPP and acceptable to T&D Operator;
- 6. full range of movement within the amount of service capability offered without manual intervention (regulation);
- 7. ability to follow the specified dispatch cycles and/or interval time frames (regulation);
- 8. service capacity dispatchable on a continuous basis for the requested duration without any manual intervention;
- 9. ability to achieve high accuracy and a power response error with respect to the requested setpoint;
- 10. ability to respond to the request with an acceptable time agreed upon by T&D Operator; and

11. power adjustments not exceeding any performance criteria specified in the MTRs.

The Resource Provider shall define a test strategy and/or methodology for the Grid Services and the test conditions and provide it to T&D Operator for review and approval. Resource Provider shall perform the tests as quickly as reasonably possible without compromising the ability of the VPP to perform its intended function. The qualification testing shall be performed after all the hardware, communication, and integration systems are operational, all errors and technical issues are resolved, and the compliance testing has been performed.

If the qualification tests establish that a VPP or group of Participant Resources incorporated into the VPP fails to comply with the MTRs, then the Resource Provider shall: (i) take corrective actions to improve the performance of the VPP or group of Participant Resources; and (ii) repeat the qualification tests to establish that the Participant Resource or group of Participant Resource satisfies the MTRs and other Minimum Acceptance Criteria set out in this Testing Protocol.

Within forty-eight (48) hours following the successful completion of the qualification tests and satisfaction of all other criteria, Resource Provider shall provide the test results to T&D Operator. T&D Operator shall issue a qualification certification for each Participant Resource or group of Participant Resources upon qualification approval. T&D Operator certification for Grid Services qualification is required for each group of Participant Resources to participate in the VPP.

iv. Site Acceptance Tests (only applicable to Participant Resources of C&I Participants)

The SATs are usually performed on site before VPP or individual Participant Resource commissioning. Such SATs include, but are not limited to, verification of all communications, redundancies, the synchronization with the Global Positioning System ("GPS"), the correct operation of servers and operator stations, where applicable, and the fail-safe behavior of the system.

Resource Provider shall have independent SATs performed by an appropriately certified party and provide all required equipment necessary to perform the independent SATs. Additionally, Resource Provider shall collect SAT reports for all Participant Resources and provide them for the T&D Operator for review and recordkeeping. Resource Provider shall ensure that all independent SATs are performed in accordance with original equipment manufacturer ("OEM") recommendations, as well as standards published by UL, IEC and IEEE, the MTRs and other Applicable Standards.

For each Participant Resource, Resource Provider shall obtain a certificate confirming that the point of interconnection of such resource with the distribution system complies with the requirements of IEEE 1547, UL 1741, and other Applicable Standards.

The Resource Provider shall submit to T&D Operator the test results report and official documentation at least ninety (90) Days prior to the VPP Performance Test or individual Participant Resource Performance Test, as applicable.

The T&D Operator reserves the right to witness, virtually or in person, the SAT at individual Participant Resource facilities. Resource Provider, the relevant Participant, and T&D Operator shall coordinate the schedule to witness the SAT ahead of its execution. The Resource Provider shall submit to T&D Operator the tentative dates for the SAT as soon as possible following commencement of VPP development or of individual Participant Resource project development.

v. Physical Inspection (only applicable to Participant Resources of C&I Participants)

C&I Participants whose Participant Resources will be subject to the requirements of Regulation 8915 and Resource Provider shall provide a pre-inspection checklist to T&D Operator that includes:

- 1. a requirement for all personnel to wear proper PPE at all times during any testing or while on site at the industrial and, if applicable, at the commercial facilities (PPE requirements shall be based on the latest arc flash study);
- 2. verification that all protection equipment, controls, and relaying are loaded with proper settings;
- 3. verification of proper stenciling of equipment as compared to IFC schematics and wiring diagrams;
- 4. verification that safety grounds have been removed prior to energization; and
- 5. confirmation that a safety walkdown and job brief has been performed.

Resource Provider shall provide an inspection checklist and certification of inspections of the electric and protection equipment, integration, and communications equipment to T&D Operator prior to commencement of the Performance Tests.

vi. Communications Verification (only applicable to Participant Resources of C&I Participants)

The Resource Provider shall ensure that Participant Resource communication protocols and integration systems incorporated in installations at individual Participant Resources comply with the procedural and reporting requirements as set forth in Section 1 (*General, Procedural and Reporting Requirements*) Appendix K (*Minimum Technical Requirements*). At a minimum, Resource Provider shall demonstrate the functionality of communication facilities required to integrate the VPP with the T&D System and to transmit control signals from the Participant Resource to the Resource Provider and from the GSDS to the T&D Operator's EMS or DERMS, as applicable.

Resource Provider shall provide to T&D Operator a checklist and any other available documentation showing each Participant Resource installation's compatibility with the applicable standards and protocols prior to commencement of the Performance Tests.

## vii. Compliance Testing (only applicable to Participant Resources of C&I Participants)

The Resource Provider shall provide to T&D Operator a checklist showing compliance of typical Participant Resource equipment installations with the requirements of Regulation 8915 and Appendix K (*Minimum Technical Requirements*). The checklist and the tests to be performed include, but are not limited to, the following:

## 1. Voltage Regulation Test

Resource Provider shall submit to T&D Operator a complete and detailed description of the voltage regulation test strategy for each Participant Resource or group of Participant Resources for approval in accordance with IEEE 1547. In addition, Resource Provider shall ensure that it has at all times the ability to maintain voltage of each Participant Resource according to the MTRs and to follow T&D Operator adjustments.

## 2. Reactive Power Capability and Minimum Power Factor Test

Resource Provider shall submit to T&D Operator a complete and detailed description of the reactive power capability test strategy for each Participant Resource or group of Participant Resources for approval in accordance with IEEE 1547. Each Participant Resource shall comply with the determined reactive power capability and minimum power factor requirements specified in IEEE 1547. Resource Provider shall ensure that each Participant Resource provides the capabilities of mutually exclusive modes of reactive power control functions listed in the MTRs.

## 3. Frequency Response and Frequency Regulation Test

Resource Provider shall test and verify that each Participant Resource complies with all applicable frequency response requirements as specified in IEEE 1547.

#### 4. Ramp Rate Control Tests

Resource Provider shall test and verify that the Ramp Rate control of each Participant Resource subject to the requirements of Regulation 8915 allows for a smooth transition from one output level to another. Additionally, Resource Provider shall test and report the rate of change of power supplied by the VPP during specified circumstances and as specified in the MTRs. Resource Provider shall furthermore test and ensure that the VPP and each Participant Resource subject to the requirements of Regulation 8915 complies with all the Demand Build and Demand Reduction service timeframes and response time periods and with the Ramp Rate of change requirements as specified in IEEE 1547.

T&D Operator and Resource Provider shall mutually agree on which ramp rate control tests are essential to satisfy the MTRs for the VPP. Resource Provider shall provide T&D Operator for its review and approval the

methodology to perform these tests and meet the applicable compliance requirements.

The Resource Provider shall ensure that each Participant Resource complies with abnormal voltage trip requirements and voltage ride-through ("VRT") requirements specified in the MTRs, IEEE 1547, and Regulation 8915. The Resource Provider shall ensure that each Participant Resource also complies with abnormal frequency trip requirements and frequency ride-through ("FRT") requirements specified in the MTRs, IEEE 1547, and Regulation 8915.

If the compliance tests establish that the VPP fails to comply with the requirements of Regulation 8915 or the MTRs, then the Resource Provider shall: (i) take corrective actions to improve the performance of the VPP or, to the extent necessary, individual Participant Resources incorporated into the VPP; and (ii) repeat the compliance tests to establish that the VPP satisfies the requirements of Regulation 8915, the MTRs and other Minimum Acceptance Criteria set out in this Testing Protocol.

Following the successful completion of the ramp rate control compliance tests and satisfaction of all other criteria, Resource Provider shall provide the test results to T&D Operator for review and approval. The results will be provided to T&D Operator not more than forty-eight (48) hours following the completion of the testing.

viii. Testing of an Interconnection Point (only applicable to Participant Resources of C&I Participants)

In respect of the commissioning and testing of the Interconnection Point, where required by Regulation 8915 or where otherwise applicable:

- 1. The T&D Operator shall test and commission its facilities at the Interconnection Point in accordance with a separate testing and commissioning agreement to be entered into between the T&D Operator and the Resource Provider; and
- 2. Resource Provider shall test and commission Resource Provider's (or Participant's) facilities at the Interconnection Point in accordance with Section 2 (*Commissioning and Performance Test*) of this Testing Protocol.

#### c. VPP Testing Procedures

The procedures in this section address testing of the VPP with respect to its functionality as a platform, capability to provide Grid Services, and performance during Grid Services Periods. They describe a sequence of activities to be performed before VPP commissioning, including GSDS platform functionality assessment, communication systems testing, baseline definition and availability checking, and performance and capability verification. In addition, the testing of the integration to SCADA systems is described, along with the interface between the GSDS and the EMS or, when available, the DERMS. Finally, and in order to ensure reliable and consistent data exchange and storing

across all these different platforms, several testing procedures are introduced in regard to metering, telemetry and data logging.

## i. VPP Platform Functionality Testing

Resource Provider shall request training sessions for T&D Operator personnel to familiarize them with the GSDS software platform and with topics that include the user interface, features, parameters, identification of individual Participant Resources and of individual assets controlled by the GSDS, control modes, and control event creation. Resource Provider shall test and verify the features and functionality of the GSDS platform as per technical specifications and user documentation provided to the Resource Provider by the GSDS platform vendor.

The Resource Provider shall require its GSDS vendor to provide access to the GSDS platform graphical user interface ("GUI") as well as to non-GUI control interfaces such as GraphQL and PostreSQL tools. The Resource Provider shall further require its GSDS vendor to enable the creation and utilization of simulated assets and simulated control signals (e.g., AGC). Resource Provider shall test each control mode and a variety of simulated resources to create the VPP. Resource Provider shall also provide examples of VPP operations to T&D Operator prior to activating individual Participant Resource assets. The purpose of this test is to identify potential software bugs, control logic errors, and the limits of the GSDS software platform.

The Resource Provider shall develop and provide, or shall require its GSDS vendor to develop and provide, to T&D Operator all documentation necessary to support testing activities, including user manuals with examples and definitions. Resource Provider shall provide a study report to T&D Operator identifying potential limitations prior to the commencement of actual Performance Tests.

#### ii. Protection and Control Equipment Testing

Resource Provider shall ensure proper construction, configuration, securitization, operation, and maintenance of all equipment related to the VPP, including protection and control equipment, internal breakers, relays, switches, sensors, meters, and other monitoring devices and synchronizing equipment installed by or for each Participant Resource, to ensure compliance with the standards of reliability, quality, and safety as required by the Agreement, Prudent Utility Practices, the Operating Characteristics, permits, Applicable Laws, Applicable Standards and the MTRs. Resource Provider shall be responsible for the installation, setting, and testing of all protection and control equipment related to the operation of the VPP.

Resource Provider shall provide T&D Operator for its review and approval the methodology Resource Provider proposes to use to perform these tests and to establish satisfaction of the requirements of the MTRs. Resource Provider shall provide the test results, inspection checklists, UATs, or other applicable documentation to T&D Operator for review and approval at least seven (7) Days prior to commencement of the testing.

## iii. Communications & Interoperability Testing

Resource Provider shall ensure that the VPP's communication protocols and integration systems are compatible with globally used accreditation schemata and comply with industry standards, which include ISO 17025, ISO 17065, IEC 61850, IEC 61870, IEC 60870, TCP/IP, SNTP/NTP, TLS, VPN, IEC 62351, IEC 62443, Modbus, DNP3, Profibus, OpenADR, and ethernet or other applicable protocols and standards, to validate conformance, interoperability, and security.

Resource Provider shall also verify that the VPP complies with the network and communication requirements set forth in Appendix U (*Metering*) of the Agreement.

Resource Provider shall test and verify that the VPP is capable of sending telemetry data to the Grid System, T&D Operator's EMS and, when available, the DERMS, receiving dispatch signals from the Grid System and, when available, the DERMS, and responding with appropriate Grid Services within the response requirements set forth in the Agreement.

Resource Provider shall test communication systems for quantification of parameters, including packet loss, time delays, status, signal mismatch, and response errors, and provide a report to T&D Operator with the test results and reasonable supporting documentation. The communications under test include:

- 1. GSDS Participant Resource communications,
- 2. GSDS T&D communications.
- 3. GSDS EMS and, when available, DERMS communications,
- 4. GSDS market communications, and
- 5. telecommunications and access to internet.

Resource Provider shall also test and ensure interoperability between equipment from different manufacturers employed in its VPP and Participant Resources.

Resource Provider shall provide to T&D Operator a checklist and any other available documentation showing the GSDS's compatibility with the applicable standards and protocols at least seven (7) Days prior to commencement of the Performance Tests.

#### iv. Performance & Capability Testing

Resource Provider shall ensure that each Participant Resource limits the net AC power output at each Participant Resource Interconnection Point to one (1) megawatt as measured at such point. Resource Provider shall implement and test a threshold control function that satisfies such requirement.

Resource Provider shall also test the capability to increase load presented to the Grid System or reduce the quantity of Energy delivered by the GSDS into the Grid System from one or more Participant Resources. Resource Provider shall test the provision of Demand Build service for a four-hour block during system mid-day renewable generation peak and repeat the test for ten (10) consecutive Days.

Furthermore, Resource Provider shall test the capability to reduce load presented to the Grid System or increase the quantity of energy delivered by the GSDS into the Grid System from one or more Participant Resources. The Resource Provider shall test the provision of Demand Reduction service for a four-hour block during evening peaking periods and repeat the test for ten (10) consecutive Days.

Resource Provider shall also test and configure the Ramp Rate (increase and decrease in kW/minute) of the Participant Resources in advance of an anticipated start of a Grid System event according to T&D Operator's requirements. The Resource Provider shall test and verify the ability of the VPP to ramp up in the thirty (30) minutes preceding the start of the Demand Build service event, ramp down within two minutes from the start of a Demand Reduction service event, and provide the services for a duration of four hours. Resource Provider shall repeat the test for ten (10) consecutive Days.

Resource Provider shall test the response time between initiation of an action or control event and the time at which the GSDS and Participant Resources are advised of the event through the GSDS platform and the response of the VPP as reflected in the T&D Operator's SCADA system. The response time shall not exceed the interval of two (2) seconds currently supported by T&D Operator's SCADA system or such lesser time interval as may be supported by T&D Operator's SCADA system in the future.

Resource Provider shall test and report if the estimated Guaranteed Capability (or Minimum Acceptance Capability) can be achieved or exceeded in respect of the first Agreement Year and for each Grid Service.

Resource Provider shall provide the test methodology and Test Plan to the T&D Operator for review and approval at least seven (7) Days prior to commencement of the testing.

If the performance and capability tests establish that the VPP fails to comply with the MTRs and other requirements set out in the Agreement, then Resource Provider shall: (i) take corrective actions to improve the performance of the VPP; and (ii) repeat the performance and capability tests to establish that the VPP satisfies the MTRs and other Minimum Acceptance Criteria set out in this Testing Protocol.

Following the successful completion of the performance and capability tests and satisfaction of all other criteria, Resource Provider shall provide the test results to T&D Operator for review and approval. The results will be provided to T&D Operator within forty-eight (48) hours of the completion of the testing.

## v. Baseline Definition & Availability Testing

Resource Provider shall define a method for calculating the baseline for the VPP. The Resource Provider shall operate the VPP to provide the services below and above this baseline. This process helps in measuring the actual response of the VPP.

Resource Provider shall test and provide average daily VPP availability characteristics and profiles based on real-time availability of the VPP. For purposes of this provision, "availability" is the power capacity available over and above the normal day to day baseline operation of the VPP considering DER load, solar irradiation, site export limits, and energy storage state of charge where applicable, stated in terms of percentage of capacity when fully charged and in terms of MW actually available at full charge. The actual availability shall be provided for periods of four (4) hours as specified in the Agreement.

Resource Provider shall monitor the VPP without initiating any Grid Services and provide a report to T&D Operator with a description of the method for calculating the baseline, and a comparison with other relevant methods, at least seven (7) Days prior to commencement of the Performance Tests. Resource Provider shall include estimations of average daily VPP availability characteristics and profiles in the same report.

#### vi. Qualification Testing

Resource Provider shall provide a certification showing qualification of the VPP to provide specific services to the T&D Operator. Resource Provider shall test and verify the VPP's ability to provide specific services to the T&D Operator, including:

- 1. system reserve (following, contingency, primary and tertiary);
- 2. regulation (secondary);
- 3. demand response (DR);
- 4. active/reactive power control;
- 5. Ramp Rate control;
- 6. threshold control; and
- 7. power factor control.

A VPP offering these services shall have the following operating characteristics and technical capabilities:

- 1. capable of being controlled and monitored by the GSDS;
- 2. capable of achieving at least the MTRs for Ramp Rates (MW/minute);

- 3. service capacity not exceeding the maximum Ramp Rate (MW/minute) times ten (10) minutes (regulation);
- 4. service capacity dispatchable on a continuous basis for at least sixty (60) minutes, depending on the type of service;
- 5. service capacity available at least sixty (60) minutes before dispatch;
- 6. ability to reach promised capacity within the design limitation of the VPP and acceptable to T&D Operator;
- 7. ability to maintain the promised service capacity for at least sixty (60) minutes before Dispatch (reserve);
- 8. full range of movement within the amount of service capability offered without manual intervention (regulation);
- 9. compliance with automatic centralized response requirements (regulation);
- 10. ability to follow the specified Dispatch cycles and/or interval time frames (regulation);
- 11. service capacity dispatchable on a continuous basis for the requested duration without any manual intervention;
- 12. ability to achieve high accuracy and a power response error with respect to the requested setpoint;
- 13. ability to respond to the request with an acceptable time agreed upon by T&D Operator;
- 14. power adjustments not exceeding any performance criteria specified in the MTRs, and
- 15. ability to offer the threshold control service continuously without any manual intervention (threshold control).

Resource Provider shall define a test strategy and/or methodology for the services and the test conditions and provide it to T&D Operator for review and approval. After receiving T&D Operator's approval, Resource Provider shall perform the tests as quickly as reasonably possible without compromising the ability of the VPP to perform its intended function. The qualification testing shall be performed after all the hardware, communication, and integration systems are operational, all errors and technical issues are resolved, and the performance and capability testing has been performed.

If the qualification tests establish that the VPP fails to comply with the MTRs, then Resource Provider shall: (i) take corrective actions to improve the performance of the VPP; and (ii) repeat the qualification tests to establish that the VPP satisfies the MTRs and other Minimum Acceptance Criteria set out in this Testing Protocol.

Following the successful completion of the qualification tests and satisfaction of all other criteria, Resource Provider shall provide the test results to T&D Operator. The results will be provided to T&D Operator not later than forty-eight (48) hours following the completion of the testing.

#### vii. SCADA Functional Testing

Resource Provider shall provide a checklist to the T&D Operator confirming successful integration of the VPP into the SCADA system. Essentially, the GSDS platform is directing the SCADA system, allowing access to Resource Provider by activating a VPP operational mode. Small-size Participant Resources usually integrate through a gateway or via API and are not visible in the SCADA system. Larger-size Participant Resources, including those governed by Regulation 8915, are visible to the T&D Operator through its SCADA system and can also integrate through a gateway or via API, but in this case, the SCADA system takes the role of the supervisor, being able to allow control signals from the GSDS. Resource Provider, in coordination with the GSDS vendor and the SCADA system vendor, shall develop this VPP operation mode for systems with capacity above certain levels integrated to the main SCADA system.

Resource Provider shall establish reliable and robust communications between the GSDS and the SCADA system by performing a sequence of tests to confirm successful signal exchange and integration. The method of signal exchange shall be based on industry standard protocols. Resource Provider shall develop and provide a test methodology to T&D Operator for review and approval at least seven (7) Days prior to commencement of the testing. Resource Provider's SCADA integration testing activities shall include.

- 1. developing a SCADA pre-functional checklist in coordination with T&D Operator;
- 2. submitting the SCADA points list to T&D Operator for review and inclusion in its records:
- 3. visually inspecting and verifying that all SCADA and communicationsrelated devices are in proper operation with T&D Operator-approved networking addresses and configuration;
- 4. performing point-to-point testing with the GSDS and SCADA system to validate both read and write functions;
- 5. verifying that the SCADA system remains operational even when GSDS service delivery is impacted by a system fault or warning; and
- 6. submitting copies of SCADA point-to-point pre-functional test sheets to T&D Operator for review and approval.

The GSDS SCADA integration shall be designed to ensure that all functions are performed under normal operating conditions and within the system performance requirements. The Resource Provider shall test all functions of the VPP, which include operator functions, controls, calculations, save-of-data entry, alarm

systems, events recording, data logging, and archiving and forward applications, if applicable.

If the SCADA integration tests establish that the GSDS–SCADA integration fails to comply with the MTRs, then Resource Provider shall: (i) take corrective actions to improve the performance of the GSDS–SCADA integration, if necessary, in collaboration with the SCADA system vendor; and (ii) repeat the SCADA integration tests to establish that the GSDS–SCADA integration satisfies the MTRs and other Minimum Acceptance Criteria set out in this Testing Protocol.

Resource Provider shall develop and provide to T&D Operator all necessary documentation to support testing activities, including high-level design drawings, single-line diagrams, and integration drawings. Following the successful completion of the SCADA integration tests and satisfaction of all other criteria, Resource Provider shall provide the test results, inspection checklists, and UATs to T&D Operator for review and approval. The results will be provided to T&D Operator not later than forty-eight (48) hours following the completion of the testing.

#### viii. GSDS-DERMS Interface Testing

In accordance with the Agreement, T&D Operator agrees to allow the GSDS to connect with the EMS and, when available, the DERMS, and for data exchanges between the GSDS and the EMS and, when available, the DERMS. Prior to GSDS deployment, Resource Provider shall test the interface between the GSDS and the EMS and, when available, the DERMS and verify successful integration. Resource Provider shall inform T&D Operator about the date and duration of the interface test at least seven (7) Days prior to testing. T&D Operator shall have the right to witness the interface testing.

The Resource Provider shall test, verify, and validate that the exchange of data occurs reliably and consistently and that the GSDS and the EMS and, when available, the DERMS properly produce and consume the data and data files. Resource Provider shall provide a checklist and a test methodology to T&D Operator for review and approval at least seven (7) Days prior to commencement of the testing.

If the interface tests establish that the GSDS-EMS/DERMS interface fails to comply with the MTRs, then Resource Provider shall: (i) take corrective actions to improve the performance of the GSDS-EMS/DERMS interface; and (ii) repeat the interface tests to establish that the GSDS-EMS/DERMS interface satisfies the MTRs and other Minimum Acceptance Criteria set out in this Testing Protocol.

Following the successful completion of the interface tests and satisfaction of all other criteria, Resource Provider shall provide the test results to T&D Operator for review and approval. The results will be provided to T&D Operator not later than forty-eight (48) hours following the completion of the testing.

#### ix. Metering, Telemetry, and Data Logging

Resource Provider shall test and verify that metering facilities and equipment provided and/or integrated into its VPP conform to the electrical service and metering requirements applicable to each Participant Resource. Resource Provider shall test and ensure that the meters and metering equipment for each Participant Resource meet the MTRs, the requirements set forth in Appendix U (*Metering*) and T&D Operator's specifications and are able to record usage and production in five-minute intervals with an accuracy requirement of  $\pm 0.2\%$  at unity power factor and at  $\pm 0.5\%$  at 50% power factor when being read remotely by a remote meter reading system approved by T&D Operator.

Resource Provider shall also test and verify that the logging and storing of historical and real-time data generated in the operation of its VPP and individual Participant Resources occurs reliably and consistently and shall validate the functionality of the data management system, center, server, storage facility, or database, where applicable, according to the requirements set forth in Appendix U (*Metering*) and T&D Operator's requirements and specifications. Resource Provider shall optimize the sample points stored without compromising data quality and integrity.

In accordance with the Agreement and the requirements set forth in Appendix U (*Metering*), metering equipment shall be tested by Resource Provider prior to or during installation. Resource Provider shall provide documentation and self-certification to T&D Operator showing the accuracy of the metering equipment installed. Additionally, Resource Provider shall define a Test Plan for the testing of metering equipment at or prior to installation, and shall monitor a reasonable percentage of the installed metering equipment to verify the metering equipment's accuracy and performance. The Test Plan shall document Resource Provider's testing, calibration, and maintenance procedures of installed metering equipment. The Test Plan shall be delivered to T&D Operator for review at least 7 Days prior to commencement of VPP commissioning, and the plan must be approved by T&D Operator prior to start of Grid Services delivery.

Resource Provider shall provide to T&D Operator a checklist and any other available documentation showing performance of the VPP's metering, telemetry, and data logging equipment in accordance with T&D Operator's requirements and Prudent Utility Practices prior to commencement of the Performance Tests.

#### d. VPP Performance Testing

The procedures in this section discuss analyzing (through actual testing) the VPP's or identifiable group of Participant Resources' impact on the Grid System (e.g., low-voltage substation or distribution feeder) in order to identify thermal and voltage constraints. In addition, a number of tests are recommended to quantify the conflicts between Participant Resource-level operations (normal day to day operation of Participant Resources) and VPP-level operations (Grid Services requests).

## i. Grid Impact Testing

Resource Provider shall perform the tests necessary to assess the impact of Grid Services Periods on the T&D System (e.g., low-voltage substation or distribution feeder) and identify network areas with grid constraints, such as thermal and voltage constraints, in accordance with Regulation 8915. These tests will also help to observe the impact on substation transformer demand and voltages through operation of the VPP or specific groups of Participant Resources. Resource Provider shall define a test method for assessing the VPP's grid impact which shall assume the performance of a number of tests equal to the number of defined scenarios. Resource Provider shall test and verify that the integration of VPP into the T&D System will not cause any power quality degradation, including voltage imbalance and regulation, harmonic distortion, flicker, voltage sags, interruptions, ferro-resonance, and transient phenomena.

Resource Provider shall identify resources required to perform the test and inform T&D Operator of the date and duration of the test at least seven (7) Days prior to testing.

Resource Provider shall provide a study report to T&D Operator defining the test methodology and quantifying grid impact and identifying potential constraints and limitations at least forty-eight (48) hours prior to VPP COD and the commercial deployment of the GSDS.

## ii. Operations Conflict Testing

Resource Provider shall perform a number of tests to assess the impact of Grid Services Periods on normal day-to-day Participant Resource and VPP operation. These tests will help establish clear boundaries on the frequency and volume of Grid Services Periods in which they can participate, and technical constraints on the Participant Resources such as power and energy export limits. Typically, Participant Resources in a VPP will respond to large but also small contingency events, even for only a few seconds (e.g., frequency response). Over a long period of time and depending on the frequency and volume of these responses, this will have a financial and technical impact on Participant Resources. It is therefore meaningful to track and assess the impact on underlying Participant Resource operating modes (e.g., self-consumption).

A conflict between Participant Resource power quality response modes (Volt-Var and Volt-Watt) and the Grid Services in which they participate may also occur, as high voltage levels are observed across groups of Participant Resources. In general, high voltages limit the operational power band in which the Participant Resources are able to operate (Volt-Watt mode) and, in some cases, will trigger reactive power response from the inverters, further limiting the active power capability (Volt-Var mode). Especially for sites that are experiencing high voltage at the start of a Grid Services Period, the site voltage could rise over a certain threshold causing the Participant Resources to disconnect entirely, jeopardizing the integrity and performance of the VPP. It is likely that Participant Resources located close to the distribution transformer serving their feeder will experience more frequent disconnections than those located at the end of the feeder.

Resource Provider shall define a test method for assessing the Participant Resource impact which shall assume the performance of a number of tests equal to the number of defined scenarios (e.g., "brought-forward" export and forgone self-consumption).

Resource Provider shall identify resources required to perform the test and inform T&D Operator of the date and duration of the test at least seven (7) Days prior to testing.

Resource Provider shall provide a study report to T&D Operator defining the test methodology and quantifying the impact of VPP operation on individual Participant Resource performance and identifying potential conflicts at least forty-eight (48) hours prior to VPP COD and the commercial deployment of the GSDS.

#### e. <u>Periodic Testing</u>

In accordance with Article 6 (*Operation of the GSDS*) of the Agreement, at the T&D Operator's request, Resource Provider shall provide certifications of tests and inspections of the electric and protection equipment which may impact the Grid System. The T&D Operator shall have the right to visit and visually monitor Resource Provider's GSDS facilities during operation and testing.

At the T&D Operator's request, Resource Provider shall periodically test and assess the integration and communication systems, controls logic, and data management system and closely monitor the performance of the VPP to requested setpoints to identify potential malfunction of hardware components in the system, software functionality errors, loss of data, communication gaps, mismatches between system responses, and program specification.

According to the Agreement, Resource Provider shall not carry out any modifications to the VPP that will, or may reasonably be expected to, impair the VPP's compliance with the MTRs, alter its operating characteristics, or expand or limit its ability to provide the Grid Services on the basis of the contemplated approved design, in each case without T&D Operator's prior written consent. With T&D Operator's approval, any upgrade to the GSDS software platform, integration hardware systems, or aggregated capacity of the VPP shall be in accordance with this Testing Protocol. The Resource Provider shall set the VPP to "opt-out," and Resource Provider shall limit any operation until the testing procedure is completed.

#### f. Demonstration & Orchestration Trials

The purpose of the demonstration and orchestration trial is to ensure that the VPP can safely operate autonomously and uninterrupted over a continuous 10-Day period without any failure or communication drop-off.

Resource Provider shall undertake a 10-Day orchestration trial to demonstrate the VPP's ability to provide services to the T&D Operator (e.g., peak load reduction, energy export, energy import, emergency, frequency, and voltage regulation). During this trial, Resource Provider shall demonstrate full remote monitoring and control capability from the VPP monitoring/control center.

The T&D Operator reserves the right to assign representatives to witness, virtually or in person, the demonstration and orchestration trials.

Resource Provider shall develop a final report with all necessary documentation and information regarding the trial results and provide it to the T&D Operator for review and approval at least seven (7) Days prior to commencement of the testing. The results will be provided to T&D Operator not more than forty-eight (48) hours following the completion of the testing.

#### 4. Annual & Return to Service Tests

#### a. Overview

The objective of the annual tests is to verify, on an annual basis, the VPP's capability to comply with the MTRs. Resource Provider shall perform the tests within thirty (30) Days of the established annual testing date and provide a report to the T&D Operator with the test results and reasonable supporting documentation within forty-five (45) Days of the conduct of the test.

The purpose of the return to service tests is to ensure the proper functioning of the VPP after any repair or modification of the VPP that may affect its compliance with the MTRs or the Agreement. If Resource Provider repairs or modifies the VPP in any way that might affect its compliance with the MTRs or the Agreement, Resource Provider shall perform the appropriate annual tests as soon as the new equipment is installed or any repair/improvements are completed and prior to returning the VPP to service. The return to service tests shall apply after restoration of the VPP following an emergency, scheduled or unscheduled outage and scheduled or unscheduled derating and extreme weather events (e.g., hurricanes, tropical storms, tornado, heat wave, etc.).

Resource Provider will identify and analyze critical parameters over time to assess the VPP and Participant Resource equipment performance, degradation, and overall health of the VPP. If performance of the VPP deviates from acceptable norms or does not meet the acceptance criteria, prompt preventive and/or corrective actions shall be planned and conducted to repair or service the VPP equipment or Participant Resource equipment and, where trend data shows, degrading performance or condition, Resource Provider will take actions to prevent failures that can potentially result in Non-Scheduled Outages or Non-Scheduled Deratings:

#### b. Annual & Return-to-Service Tests

Prior to commencement of the annual tests, Resource Provider shall provide a preinspection checklist to the T&D Operator that includes:

- i. a requirement for all personnel to wear proper PPE at all times during any testing or while on site at industrial facilities and, if applicable, at commercial facilities subject to the requirements of Regulation 8915 (the PPE requirements shall be based on the latest arc flash study),
- ii. verification that all protection equipment, controls, and relaying are loaded with proper settings,

- iii. verification of proper stenciling of equipment as compared to IFC schematics and wiring diagrams,
- iv. verification that safety grounds have been removed prior to energization, and
- v. confirmation that a safety walkdown and job brief has been performed.

Resource Provider shall perform the following tests annually and as required prior to returning the GSDS to service:

- vi. VPP Platform Functionality Test Resource Provider shall test and verify the GSDS's platform readiness to deliver the expected functions as specified in the user manual. Details of the expected tests are set out in Section 3 (*Performance Tests*) of this Testing Protocol.
- vii. Protection and Control Equipment Test Resource Provider shall test all protection and control equipment related to the VPP and ensure proper configuration and operation. Details of the expected tests are set out in Section 3 (*Performance Tests*) of this Testing Protocol.
- viii. Communications and Interoperability Test The Resource Provider shall test and verify that the GSDS can send telemetry data to the Grid System, receive dispatch signals from the Grid System, and respond with appropriate Grid Services in accordance with the response requirements set forth in the Agreement. Details of the expected tests are set out in Section 3 (*Performance Tests*) of this Testing Protocol.
- ix. Performance and Capability Tests Resource Provider shall test and verify the VPP's capability to provide Demand Build and Demand Reduction services and ensure proper configuration of the Ramp Rate control according to the requirements set out in the MTRs. The Resource Provider shall demonstrate the capability of the VPP to comply with the MTRs for Ramp Rate control. If the test results show that the VPP's performance does not meet the requirements in the MTRs, Resource Provider shall take any required corrective action and repeat the tests. Details of the expected tests are set out in Section 3 (*Performance Tests*) of this Testing Protocol.
- x. Baseline Definition and Availability Test Resource Provider shall test and calculate the VPP's baseline and availability characteristics. Details of the expected tests are set out in Section 3 (*Performance Tests*) of this Testing Protocol.
- xi. Qualification Test Resource Provider shall test and qualify the VPP's ability to provide specific services to the T&D Operator. Details of the expected tests are set out in Section 3 (*Performance Tests*) of this Testing Protocol.
- xii. SCADA Integration Test Resource Provider shall test and ensure successful integration with the SCADA system. Details of the expected tests are set out in Section 3 (*Performance Tests*) of this Testing Protocol.

- xiii. GSDS-DERMS Interface Test Resource Provider shall test, verify, and validate that the exchange of data occurs reliably and consistently between the GSDS and DERMS. If the test results show that the interface does not meet the requirements, then the Resource Provider shall take any required corrective action and repeat the tests. Details of the expected tests are set out in Section 3 (*Performance Tests*) of this Testing Protocol.
- xiv. Metering, Telemetry, and Data Logging Test Resource Provider shall test and verify that the logging and storing of historical and real time data occurs reliably and consistently. Details of the expected tests are set out in Section 3 (*Performance Tests*) of this Testing Protocol.
- xv. VPP Performance Test Resource Provider shall test and analyze the VPP's impact to the grid (e.g., distribution system or nearest medium-/low-voltage transformer), the VPP operations' impact on the performance of individual Participant Resources, and conflicts between VPP operation and Participant Resource normal day-to-day operation. Details of the expected tests are set out in Section 3 (*Performance Tests*) of this Testing Protocol.
- xvi. Demonstration and Orchestration Trial Resource Provider shall undertake a 10-Day orchestration trial to demonstrate the VPP's ability to provide services to the T&D Operator. Details of the expected tests are set out in Section 3 (*Performance Tests*) of this Testing Protocol.

#### APPENDIX N

#### PERFORMANCE GUARANTEES

Capitalized terms used throughout this Appendix N have the meaning set forth in the Agreement, unless otherwise defined herein.

#### 1. GSDS Availability

## a. Guaranteed Availability

Resource Provider guarantees to make the GSDS available for Dispatch by PREPA for at least ninety-five (95%) of the minutes in each Billing Period during the Supply Period ("Guaranteed Availability"). The Parties shall calculate the availability of the GSDS during a Billing Period (the "GSDS Availability") as follows:

$$GSA = \frac{AGS}{TBP}$$

where:

GSA = GSDS Availability for such Billing Period, expressed as a decimal;

AGS = number of minutes in such Billing Period that the GSDS remains available for Dispatch and scheduling of Grid Services (i.e., operational with no component or element that makes up the GSDS either individually or collectively preventing or hindering PREPA's ability to schedule or dispatch Grid Services) determined by tracking online and offline status of Resource Provider's GSDS as represented by their virtual end node in PREPA's DERMS; and

TBP = the total number of minutes in such Billing Period (other than during a Scheduled Outage or Scheduled Derating).

GSDS Availability calculation shall begin on the Commercial Operation Date.

## b. <u>Availability Liquidated Damages</u>

If the GSDS Availability falls below the Guaranteed Availability during a Billing Period, then Resource Provider shall pay PREPA liquidated damages for such Billing Period (the "Availability Liquidated Damages") equal to:

$$ALD = (GA - GSDS Av) \times GC \times \left(RER - \frac{GS\$}{\left(30.33 \frac{Days}{Month} \times 8 \frac{hours}{Day}\right)}\right) \times 242.64 \text{ hours}$$

where:

**ALD** = Availability Liquidated Damages, expressed in \$;

**GA** = Guaranteed Availability, expressed as its decimal equivalent;

**GSDS Av** = GSDS Availability, expressed as a decimal;

GC = aggregate Guaranteed Capability for Demand Reduction Service and

Demand Build Service applicable to such Billing Period, expressed in kW;

**RER** = replacement energy rate of \$0.170/kWh; and

**GS**\$ = the quotient of (i) the sum of the Demand Reduction Price and the Demand

Build Price applicable to such Billing Period divided by (ii) two (2),

expressed in \$/kW-Month.

## 2. Capability

#### a. Guaranteed Capability

For each Billing Period of each Agreement Year of the Supply Period, Resource Provider guarantees to make available to PREPA a Capability for each Grid Service equal to the Guaranteed Capability for such Grid Service during each Billing Period of such Agreement Year.

## b. <u>Capability Liquidated Damages</u>

If, for any Billing Period "n" during an Agreement Year, the Capability of the Demand Reduction Service or the Demand Build Service, as determined in accordance with the factors DRA<sub>n</sub> and DBA<sub>n</sub> in paragraph 3 (*Demand Reduction Payment*) of Appendix F (*Compensation*) and paragraph 5 (*Demand Build Payment*) of Appendix F (*Compensation*) respectively, falls below the respective Guaranteed Capability applicable to the relevant Quarter of such Agreement Year, then Resource Provider shall pay PREPA liquidated damages (the "Capability Liquidated Damages") equal to:

For Demand Build Service:

$$CLD(DBS) = \left( TOP - \left( \frac{DB\$}{\left( 30.33 \frac{Days}{Month} \times 8 \frac{hours}{Day} \right)} \right) \right) \times (GC(DBS) - DBA) \times 242.64 \text{ hours}$$

where:

TOP = PREPA's average take-or-pay liability under existing renewable PPOAs

equal to \$0.168/kWh;

DB\$ = Demand Build Price applicable to Agreement Year 1, expressed in \$/kW-

Month:

GC(DBS) = Guaranteed Capability for Demand Build Service applicable to the Quarter

in which such Billing Period occurred, expressed in kW; and

DBA = DBA<sub>n</sub> applicable to Billing Period "n", as determined under paragraph 5 (*Demand Build Payment*) of Appendix F (*Compensation*); and

For Demand Reduction Service:

$$CLD(DRS) = (RER - \left(\frac{DR\$}{\left(30.33 \frac{Days}{Month} \times 8 \frac{hours}{Day}\right)}\right) \times (GC(DRS) - DRA) \times 242.64 \text{ hours}$$

where:

RER = replacement energy rate of \$0.170/kWh;

DR\$ = Demand Reduction Price applicable to Agreement Year 1, expressed in

\$/kW-Month;

GC(DRS) = Guaranteed Capability for Demand Reduction Service applicable to the

Quarter in which such Billing Period occurred, expressed in kW; and

DRA = DRA<sub>n</sub> applicable to Billing Period "n", as determined under paragraph 3

(Demand Reduction Payment) of Appendix F (Compensation).

#### **APPENDIX O**

#### FORM OF SWORN STATEMENT

#### **SWORN STATEMENT**

Comes now, [●] organized and existing under the laws of [●], with employer identification number [●], represented in this act by [Representative's Name], of legal age, [Civil Status] and resident in [dwelling] and under the most Solemn oath declares the following:

- 1. That my name and other personal circumstances are the aforementioned.
- 2. That I hold the position of [Title] in the aforementioned company.
- 3. That the undersigned or [Company Name], its president, vice-president, directors, executive director, members of its board of directors, board of directors, nor any of its officials or person performing equivalent functions for the [Company Name]; or its subsidiaries or alter egos:
  - a. Have not pled guilty to, or have not been convicted of, to any of the crimes enumerated in the Article 6.8 of Act 8-2017, as amended, known as the Act for the Administration and Transformation of Human Resources in the Government of Puerto Rico or any of the crimes included in Act 2-2018.
  - b. Have not pled guilty or have not been convicted in Puerto Rico or United States Federal court for under Articles 4.2, 4.3 or 5.7 of Act 1-2012, as amended, known as the Organic Act of the Office of Government Ethics of Puerto Rico, any of the crimes listed in Articles 250 through 266 of Act 146-2012, as amended, known as the Puerto Rico Penal Code, any of the crimes typified in Act 2-2018, known as the Anti-Corruption Code for a New Puerto Rico or any other felony that involves the misuse of public funds or property, including but not limited to the crimes mentioned in Article 6.8 of Act 8-2017, as amended, known as the Act for the Administration and Transformation of Human Resources in the Government of Puerto Rico.
- 4. The undersigned expressly recognizes that the conviction in Puerto Rico or United States Federal court for under Articles 4.2, 4.3 or 5.7 of Act 1-2012, as amended, known as the Organic Act of the Office of Government Ethics of Puerto Rico, any of the crimes listed in Articles 250 through 266 of Act 146-2012, as amended, known as the Puerto Rico Penal Code, any of the crimes typified in Act 2-2018, known as the Anti-Corruption Code for a New Puerto Rico or any other felony that involves the misuse of public funds or property, including but not limited to the crimes mentioned in Article 6.8 of Act 8-2017, as amended, known as the Act for the Administration and Transformation of Human Resources in the Government of Puerto Rico will result in automatic termination of any contract in the Government of Puerto Rico.
- 5. That this statement complies with Act 8-2017, as amended, and Act 2-2018.

| IN WITNESS WHEREOF, I affirm and day of, 2 | sign the herein document in, this, this,  |
|--|---|
| Affidavit No                               | Representative's Signature  |
|  | , whose personal circumstances is personally known, or have identified by means of, this day of, 20 |
|  | Notary Public   |
|  | Seal  |

#### **APPENDIX P**

#### FORM OF FOMB CERTIFICATION

## CONTRACTOR CERTIFICATION REQUIREMENT

Resource Provider shall provide the following certification to FOMB and the Commonwealth's Contracting Government Entity, signed by its Chief Executive Officer (or equivalent highest rank officer):

Unless the context otherwise requires, capitalized terms have the meanings defined in the Grid Services Agreement dated [•] (the "Agreement"). For purposes of this certification, (i) the term "Agreement" is inclusive of any amendments, modifications or extensions, (ii) the "owner" shall mean all Persons with an ownership or membership interest, as the case may be, equal to or greater than ten percent (10%) in the Resource Provider; and (iii) the term "principals" shall mean any Person that has full authority to act on behalf of Resource Provider.

1. Resource Provider's subcontractor(s) in connection with the Agreement (including any amendments, modifications or extensions) is (are) the following:

(Name of individual or firm, including names of principals and owners of the Resource Provider)

(Principal terms and conditions of the contractual relation and role of the subcontractor)

(Amount of proposed contract payable to each subcontractor)

2. Neither Resource Provider nor any of its owners (including any Person or entity with more than a ten percent (10%) ownership interest in Resource Provider), partners, directors, officials or employees, has agreed to share or give a percentage of Resource Provider's compensation under the Agreement to, or otherwise compensate, any third party, whether directly or indirectly, in connection with the procurement, negotiation, execution or performance of the contract, except as follows:

(Name of individual or firm, including names of principals and owners of the Resource Provider)

(Principal terms and conditions of the compensation sharing arrangement and consideration for such benefit)

- 3. To the best knowledge of the signatory (after due investigation), no Person has unduly intervened in the procurement, negotiation or execution of the contract, for its own benefit or that of a third Person, in contravention of Applicable Law.
- 4. To the best knowledge of the signatory (after due investigation), no Person has: (i) offered, paid, or promised to pay money to; (ii) offered, given or promised to give anything of value to; or (iii) otherwise influenced any public official or employee with the purpose of securing any advantages, privileges or favors for the benefit of such Person in connection with the Agreement (such as the execution of a subcontract with Resource Provider, beneficial treatment under the contract, or the written or unwritten promise of a gift, favor, or other monetary or non-monetary benefit).

#### Grid Services Agreement - PREPA and Sunrun PR Operations LLC

- 5. Neither Resource Provider, nor any of its owners, partners, directors, officials or employees or, to the best of its knowledge (after due investigation), its representatives or sub-contractors, has required, directly or indirectly, from third Persons to take any action with the purpose of influencing any public official or employee in connection with the procurement, negotiation or execution of the contract, in contravention of Applicable Law.
- 6. Any incorrect, incomplete or false statement made by Resource Provider's representative as part of this certification shall cause the nullity of the proposed contract and Resource Provider must reimburse immediately to the Commonwealth any amounts, payments or benefits received from the Commonwealth under the Agreement.

The above certifications are hereby signed under penalty of perjury by the [Chief Executive Officer (or equivalent highest rank officer)] in the following form:

"I hereby certify under penalty of perjury that the foregoing is complete, true and correct."

By:
Date:
Signature:

[•] [NTD: Insert contract number and title.]

Date: [●]

Agreement:

## APPENDIX Q

## FORM OF CONDITIONS PRECEDENT CERTIFICATE

## CONDITIONS PRECEDENT CERTIFICATE

| From:                    | Puerto Rico Electric Powe        | Puerto Rico Electric Power Authority ("PREPA")  |  |  |  |  |
|--------------------------|----------------------------------|---|--|--|--|--|
| То:                      | [●] ("Resource Provider"         | [●] ("Resource Provider")   |  |  |  |  |
| Unless the               |                                  | dated [•] between PREPA and Resource Provider (the "GSA"). bitalized terms used in this Condition Precedent Certificate shall GSA.  |  |  |  |  |
| Conditions certifies and | Precedent under the GSA, incl    | onfirms to PREPA that Resource Provider has satisfied all of its luding mutual conditions. By signature below, PREPA likewise or that PREPA has satisfied all of its Conditions Precedent under |  |  |  |  |
| We hereby                | certify that the Closing Date of | ecurred on [●].   |  |  |  |  |
| Very tru                 | ily yours,                       | Acknowledged and agreed,  |  |  |  |  |
| [•]<br>as Resor          | urce Provider                    | Puerto Rico Electric Power Authority as PREPA   |  |  |  |  |
| [•]                      |                                  | [•]   |  |  |  |  |

## APPENDIX R

## FORM OF COMMERCIAL OPERATION DATE CERTIFICATE

## COMMERCIAL OPERATION DATE CERTIFICATE

| COMMERCIAL OF ENATION DATE CERTIFICATE |  |   |  |  |  |
|--|--|---|--|--|--|
|  |  | Date: [•  |  |  |  |
| From:                                  | [●] ("Resource Provider")  |   |  |  |  |
| To:                                    | Puerto Rico Electric Power A   | Authority ("PREPA")   |  |  |  |
| Unless                                 | 9  | tween PREPA and Resource Provider dated [•] (the "GSA") alized terms used in this certificate shall have the meanings   |  |  |  |
| We here                                | eby certify that:  |   |  |  |  |
|  | installation and testing of the GSDS available Capability on a sustained b Services (or, to the extent that the Provider has credited PREPA for all (iii) such Capability of the GSDS a satisfies the Other Minimum Accept | formance Tests, (i) Resource Provider has completed the in accordance with this Agreement, (ii) the GSDS can make asis that meets or exceeds the Guaranteed Capability for Gric Guaranteed Capability exceeds such Capability, Resource Liquidated Damages required by the GSA in respect thereof) meets or exceeds the Minimum Acceptance Capability and ance Criteria, and (iv) the GSDS can Dispatch Grid Services ous basis, in each case, in accordance with Prudent Utility |  |  |  |
| b.                                     |  | arce Provider has obtained, and maintains in force, all material Permits required for the yment and operation of the GSDS and Participant Resources; and  |  |  |  |
| c.                                     | the GSDS complies in all material respects with Applicable Law.  |   |  |  |  |
| The Cor                                | mmercial Operation Date occurred on [  | [●].  |  |  |  |
| Very                                   | y truly yours,   | Acknowledged and agreed,  |  |  |  |
| [●]<br>as R                            | esource Provider   | <b>Puerto Rico Electric Power Authority</b> as PREPA  |  |  |  |
|  |  |   |  |  |  |

[•]

<u>[•]</u>

#### APPENDIX S

#### FORM OF PERFORMANCE SECURITY

#### IRREVOCABLE STANDBY LETTER OF CREDIT

[Bank's Name, and Address of Issuing Branch or Office]

**Beneficiary:** PUERTO RICO ELECTRIC POWER AUTHORITY

Reference No.: [●]

Address: [●] Attn:[●]

**Date of Issuance:** [●]

#### *PREPA*- [•] *Grid Services Agreement* – Performance Security No. [•]

We understand that [•] (the "Applicant") has entered into a contract with you, Beneficiary, dated [•] (as amended, the "Agreement"), which requires a Performance Security in the form and amount of this irrevocable standby letter of credit ("Letter of Credit").

At the request of the Applicant, we [name of Bank], hereby issue this Letter of Credit and irrevocably undertake to pay you any sum or sums not exceeding in total an amount of [•] United States Dollars (USD [•]) in each case upon receipt by us of your first demand in writing at the Place of Presentation listed below in person, by registered or certified mail or by international overnight courier service, substantially in the form attached as Annex A hereto (signed by your authorized representative and appropriately completed) ("Demand"), without your needing to prove or to show grounds for your Demand or the sum specified therein. We shall remit all payment(s) under this Letter of Credit into a bank account of your choice and discretion as specified in your Demand. You may make one or more Demands under this Letter of Credit. Partial drawings are permitted.

Any Demand made by Beneficiary in accordance herewith shall be conclusive evidence that the sum stated in such Demand is properly due and payable to Beneficiary under this Letter of Credit. We shall have no right and shall not be under any duty or responsibility to enquire into the reason or circumstances of any Demand made by Beneficiary or the respective rights and/or obligations and/or liabilities of Beneficiary and the Applicant under the Agreement. Any discrepancy between the explicit terms hereof and the Rules (defined below) shall be read in favor of the terms set forth in this Letter of Credit.

Place of Presentation [insert address of Bank branch where Beneficiary presents a Demand].

We shall, within five (5) business days after receipt of any Demand served from time to time by Beneficiary, pay to Beneficiary in immediately available funds the lesser of: (a) the amount specified in the Demand; and (b) the then applicable amount remaining on the Letter of Credit. If a Demand made by Beneficiary hereunder does not, in any instance, conform to the terms and conditions of this Letter of Credit, then we shall give Beneficiary, within two (2) business days after receipt of such Demand, notice that such Demand was not effected in accordance with the terms and conditions of this Letter of Credit, stating the reason therefore. Upon being notified that a Demand was not made in conformity with this Letter of Credit, Beneficiary may attempt to correct such non-conforming Demand. Our obligations under this Letter of Credit are primary and not by way of surety or guarantee.

By:

**Authorized Signatory** 

[This Letter of Credit shall enter into force and effect upon expiry of Performance Security No. [•], dated [●] and issued by [●].] [NTD: Insert this language if this is a replacement Letter of Credit.]

This Letter of Credit shall expire on [date] but such expiration date shall be automatically extended for a period of one (1) year on [prior date] ("Expiry Date"), and on each successive expiration date

| thereafter, unless at least one hundred twenty (120) calendar days before the then current Expiry Date we notify both Beneficiary and Applicant that we have decided not to extend this Letter of Credit beyond the then current Expiry Date. Any such notice shall be delivered by registered or certified mail, or by FedEx both to:   |
|--|
| Beneficiary at:  |
| [•]  |
| And to Applicant at:   |
| [•]  |
| In the event Beneficiary and Applicant are so notified by us pursuant to the immediately preceding sentence, Beneficiary may draw any amount or the entire amount available under this Letter of Credit by Beneficiary's presentment, at the Place of Presentation, of a drawing certificate duly signed in substantially the form of Annex A attached hereto appropriately completed. In no event shall the Expiry Date of this Letter of Credit be subject to automatic extension beyond sixty (60) calendar days after the expiration of the Agreement term, and any pending automatic one-year extension shall be ineffective beyond such date. The Expiry Date does not affect our liability to make payment of any demand received prior to the Expiry Date. |
| This Letter of Credit is subject to ICC International Standby Practices 1998 (ISP 98), International Chamber of Commerce Publication No. 590 (the " <i>Rules</i> "). For matters not addressed by the Rules, the laws of the Commonwealth of Puerto Rico shall govern this Letter of Credit and the parties shall construe this Letter of Credit in accordance with such laws. In the event of a conflict between the terms of this Letter of Credit and the Rules, ICC Publication No. 758, the terms of this Letter of Credit shall prevail.   |
| The courts of the United States Federal Courts in the Commonwealth of Puerto Rico shall have exclusive jurisdiction in respect of all disputes arising out of this Letter of Credit (including, without limitation, the enforceability of this Letter of Credit).  |
|  |

#### ANNEX A - FORM OF DRAWING CERTIFICATE

[Letterhead of Beneficiary]

[Name of Issuing Bank]

**Date:** [●]

## [Insert Work Description] – Performance Security No. [•]

We refer to the above-captioned irrevocable standby letter of credit, with reference number [•] ("Letter of Credit"). Unless the context otherwise requires, capitalized terms used herein shall have the meanings ascribed to them in the Letter of Credit or the Agreement. We hereby inform you that:

- 1. there is a COD Termination Event, or a Default (as defined in the Agreement) by Applicant or the owing by Applicant to Beneficiary has occurred under the Agreement for penalties or any other liabilities, damages, losses, costs or expenses arising out of or relating to a breach of any obligation under the Agreement by Applicant, such as Default or otherwise, or the Agreement provides that Beneficiary may draw on the Letter of Credit, entitling us to call upon the Letter of Credit; or
- 2. Applicant failed to commence or carry out work required to rectify any defect and/or damage during the Defects Liability Period in accordance with the Agreement; or
- 3. applicant owes Beneficiary Liquidated Damages under and in accordance with the Agreement; or
- 4. you no longer meet the requirements of a Qualified Bank (as defined below) and twenty-one (21) calendar days or more have elapsed since the date on which you no longer met such requirements, and the Applicant has not delivered to Beneficiary a replacement letter of credit that is substantially identical to the Letter of Credit, meeting the requirements of the Agreement. "Qualified Bank" means a national bank, national association, commercial bank or other financial institution registered in the United States, having a branch located within Puerto Rico or the contiguous United States, and otherwise acceptable to Beneficiary that has a long-term issuer rating of at least (i) if headquartered within Puerto Rico, then "B+" by Standard & Poor's Ratings Services, "B1" by Moody's Investors Services Inc., or "B+" by Fitch Ratings Inc. or (ii) if headquartered outside of Puerto Rico, then "A-" by Standard & Poor's Ratings Services, "A3" by Moody's Investors Services Inc., or "A-" by Fitch Ratings Inc., or in each case if the relevant rating agencies cease to engage in business or rate the obligations in question, then an equivalent rating from another internationally recognized rating agency selected by Applicant with the written consent of Beneficiary; provided that, if such financial institution's ratings satisfy such minimum ratings, no other credit rating agency shall have placed such financial institution on credit watch with negative implications; or
- 5. twenty-one (21) or less calendar days remain before the current Expiry Date, the Applicant's obligation to maintain the Letter of Credit under the Agreement extends beyond such Expiry Date, and the Applicant has not delivered to Beneficiary a replacement Letter of Credit substantially identical to the Letter of Credit and meeting the requirements of the Agreement.

This letter serves as our demand for payment under the Letter of Credit. We request that you immediately pay the sum of  $[\bullet]$  into the bank account below:

# Grid Services Agreement - PREPA and Sunrun PR Operations LLC

|                     | <b>Account Name:</b>   | [•]      |
|---------------------|------------------------|----------|
|                     | Account Number:        | [•]      |
|                     | Bank Name:             | [•]      |
|                     | Bank Address:          | [•]      |
|                     | Swift Code:            | [•]      |
| Yours very to       | ruly,                  |          |
| [The Puerto         | Rico Electric Power Au | thority] |
|                     |                        |          |
|                     |                        |          |
| By:<br>Authorized S | Signatory              |          |

#### APPENDIX T

#### FORM OF DIRECT AGREEMENT

#### **DIRECT AGREEMENT**

THIS DIRECT AGREEMENT ("**Direct Agreement**") dated [●], is entered into among: (i) the Puerto Rico Electric Power Authority, a public corporation and governmental instrumentality of the Commonwealth of Puerto Rico, created by an Act of 23 May 1941, No. 83, as amended (the "**Consenting Party**"), (ii) [●] (together with its successors, designees and permitted assigns in such capacity, the "**Administrative Agent**") and (iii) [●], a corporation organized and existing under the laws of [●] (the "**Assignor**"). All capitalized terms used herein and not otherwise defined in this Direct Agreement shall have the respective meanings set forth in the Assigned Agreement (as defined below). The principles of interpretation and construction set forth in the Assigned Agreement shall apply to, and are hereby incorporated by reference as if fully set out in, this Direct Agreement, *mutatis mutandis* and as if any references to "this Agreement" and "Party" in such provisions were references to, respectively, "this Direct Agreement" and "the parties hereto".

#### RECITALS

#### **WHEREAS:**

- (A) the Assignor (as seller and Resource Provider) and Consenting Party (as buyer) have entered into that certain Grid Services Agreement, dated as of [●] (as amended, restated or supplemented, the "Assigned Agreement"), pursuant to which the Assignor will (i) design, development, permit, deploy, operate and maintain a Grid Service Delivery System, which aggregates a network of [●] kW distributed energy resources, and (ii) provide grid services exclusively to the Consenting Party, and the Consenting Party will pay for the grid services from the Grid Service Delivery System designed and operated by the Assignor;
- (B) Pursuant to Section 19.3 (*Resource Provider's Right to Assign*) of the Assigned Agreement, the Consenting Party has agreed to use commercially reasonable efforts to cooperate with any financing efforts of the Assignor, and the Assignor may assign its rights to payment under the Assigned Agreement to Project Lenders as security for its obligations to any such lender in connection with any financing of the development and construction of the GSDS;
- (C) [The Assignor has entered into that certain [Credit Agreement], dated as of [●] (as amended, restated or supplemented, the "Credit Agreement"), among Project Lenders from time to time party thereto (together with the Administrative Agent, each, a "Secured Party", and, collectively, the "Secured Parties") and the Administrative Agent, pursuant to which such Project Lenders will make loans to the Assignor to, among other things, finance the construction of the GSDS; and
- (D) The Assignor has entered into that certain Security Agreement, dated as of [●] (as amended, restated or supplemented, the "Security Agreement"), among the Assignor, the other subsidiary guarantors from time to time party thereto and the Administrative Agent, pursuant to which each of the Assignor and such subsidiary guarantors have granted to the Administrative Agent, for the ratable benefit of the Secured Parties, a security interest in certain property as collateral security for the prompt and complete payment and performance when due of such entities' obligations under the Credit Agreement.]

NOW, THEREFORE, for good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the parties hereto agree as follows:

#### 1. NOTICE OF ASSIGNMENT

The Assignor hereby gives notice to the Consenting Party that pursuant to the Security Agreement, the Assignor has pledged and assigned to the Administrative Agent, for the benefit of the Secured Parties, and granted to the Administrative Agent a security interest in, all of the Assignor's right, title and interest in, to and under the Assigned Agreement pursuant to the Security Agreement (the "Assigned Interest"), as collateral security for the obligations of the Assignor under the Credit Agreement.

## 2. PAYMENTS UNDER THE ASSIGNED AGREEMENT

## 2.1 <u>Billing Arrangements</u>

The Consenting Party agrees that, unless and until it has been notified in writing by the Administrative Agent that the Security Agreement has been terminated, the Consenting Party will pay all amounts payable by it under the Assigned Agreement directly to the Assignor at such account as may be specified in a written notice delivered by the Administrative Agent and the Assignor to the Consenting Party. The Assignor authorizes and acknowledges the foregoing and agrees that any payment made consistent with this Section 2.1 shall be treated for all purposes as a payment made directly to the Assignor under the terms of the Assigned Agreement.

## 2.2 <u>No Set-Off Except as Provided Under Assigned Agreement</u>

The Consenting Party agrees that in making payments in respect of the Assigned Agreement, it will not offset any amounts owed to it by the Assignor except as provided under the Assigned Agreement.

#### 3. RIGHTS OF ADMINISTRATIVE AGENT

#### 3.1 Exercise of the Assignor's Rights and Remedies

If the Administrative Agent provides written notice to the Consenting Party that an event of default has occurred under the Credit Agreement and that the Administrative Agent desires to exercise its rights and remedies pursuant to the Security Agreement, the Administrative Agent or any Substitute Provider (as defined below) shall be entitled to exercise any and all rights of the Assignor under the Assigned Agreement in accordance with the terms of this Direct Agreement and the Assigned Agreement. The Consenting Party agrees to accept such exercise by the Administrative Agent or any Substitute Provider and continue its performance under the Assigned Agreement in accordance with the terms thereof.

#### 3.2 Right to Cure

Upon the occurrence of an event of default by the Assignor under the Assigned Agreement, or upon the occurrence or non-occurrence of any other event or condition which would enable the Consenting Party to terminate its obligations under the Assigned Agreement (herein called a "default"), the Consenting Party will not terminate its obligations under the Assigned Agreement until it first gives to the Administrative Agent (i) the written notice required to be given to Assignor by the Assigned Agreement specifying the nature of the default giving rise to such right (and in the

case of a payment default, specifying the amount thereof); and (ii) the opportunity to cure such default for a period of (A) thirty (30) days, in the case of a payment default, and (B) ninety (90) days in the case of a non-payment default, provided that PREPA may agree, acting reasonably, to extend such ninety (90) day cure period if the Administrative Agent has commenced and is diligently pursuing appropriate action to cure such default and continues to perform all other obligations under the Assigned Agreement (unless performed by the Assignor). The Lenders' cure period set out in this Section 3.2 may be coincident, in whole or in part, with the applicable cure period under the Assigned Agreement, with such cure period to commence on the date that the Consenting Party provides notice of the default to the Administrative Agent in accordance with this Section 3.2.

#### 3.3 No Liability

Except during any period in which the Administrative Agent or any Secured Party (or any of their respective designees or assignees) constitutes a Substitute Provider, the Consenting Party acknowledges and agrees that neither the Administrative Agent nor any Secured Party (or any of their respective designees or assignees) shall have any liability or obligation under the Assigned Agreement as a result of this Direct Agreement except to the extent of their respective interest in the Assigned Agreement, the Credit Agreement or the Security Agreement, nor shall the Administrative Agent or any Secured Party (or any of their respective designees or assignees) be obligated or required to perform any of the Assignor's obligations under the Assigned Agreement or to take any action to collect or enforce any claim for payment assigned under the Security Agreement. No curing of any defaults under the Assigned Agreement shall be construed as an assumption by the Administrative Agent or any Secured Party (or any of their respective designees or assignees) of any of the obligations, covenants or agreements of the Assignor under the Assigned Agreement.

# 3.4 Substitution: Transfer

- The Consenting Party agrees that, notwithstanding anything to the contrary in the Assigned a. Agreement, if the Administrative Agent shall notify the Consenting Party in writing that an Event of Default (as defined in the Credit Agreement) has occurred and is continuing under the Credit Agreement and that the Administrative Agent desires to exercise its rights and remedies pursuant to the Security Agreement, then a Substitute Provider may be substituted for the Assignor under the Assigned Agreement. In such event, the Consenting Party will continue to perform its obligations under the Assigned Agreement in favor of the Substitute Provider, subject, in any event, to all of the Consenting Party's rights and remedies thereunder, but recognizing that the Substitute Provider's obligations under the Assigned Agreement shall be limited to the Substitute Provider's interest in the VPP and all revenues and proceeds derived therefrom. In the event that the Substitute Provider succeeds to the Assignor's interest under the Assigned Agreement, whether by foreclosure or otherwise, the Substitute Provider shall not be liable for curing or performing or be required to perform or cause to be performed any of the defaults under the Assigned Agreement that were, by their nature, incapable of being cured or performed.
- b. If the Assigned Agreement is rejected or terminated by a trustee or debtor-in-possession in any bankruptcy or insolvency proceeding involving the Assignor, and if within ninety (90) days after such rejection or termination the Administrative Agent shall so request, a Substitute Provider and the Consenting Party will promptly execute a new agreement that shall be for the balance of the remaining term under the Assigned Agreement (before giving effect to such rejection or termination) and shall contain the same agreements, terms and

conditions as the Assigned Agreement. If the approval of any such trustee or debtor in possession or any regulatory approval is necessary in order for the Consenting Party to enter into or perform under any such new agreement, the Consenting Party shall cooperate with the Administrative Agent or Substitute Provider in obtaining such approvals.

"Substitute Provider" means, in respect of any assignment, transfer or sale permitted hereunder (each a "transfer") any person, including the Administrative Agent, any Secured Party, or the Administrative Agent's or any Secured Party's designee or assignee, if the transfer is made to the Administrative Agent or a Secured Party, or any purchaser of the Assigned Interest in a foreclosure sale or otherwise, who: (i) is at least as creditworthy (taking into account any credit support provided by such person) as the Assignor on the date of such transfer, (ii) is properly licensed or otherwise authorized to perform the Assignor's obligations under the Assigned Agreement, is a counterparty with whom the Consenting Party is not prohibited from transacting under the regulatory regime thenapplicable to the Assigned Agreement, and has provided the certifications and documentation required by Appendix B (PREPA Signing Conditions) of the Assigned Agreement, but construing references to Resource Provider therein as references to such new provider; (iii) meets the Consenting Party's internal credit policies as reasonably and consistently applied solely with respect to the maximum potential credit exposure of the Consenting Party to such person (it being understood that the determination of the amount of such credit exposure shall take into account the then current creditworthiness of such person and any collateral or guaranties posted for the benefit of such person), and otherwise has a tangible net worth of at least twenty-five million dollars (\$25,000,000) (or its direct or indirect parent has a tangible net worth of at least seventy-five million dollars (\$75,000,000); (iv) has provided, to the extent requested, all documentation and other information required by bank regulatory authorities under applicable "know your customer" and anti-money laundering rules and regulations (including, without limitation, the Patriot Act, rules and regulations of the Office of Foreign Assets Control and other similar client identification policies and procedures) as well as all documentation required by the Assigned Agreement (including as signing conditions) and Puerto Rico law; (v) has not formally threatened in writing or commenced any litigation proceeding against the Consenting Party and is not subject of any formal written threat of litigation issued or of any litigation proceeding initiated by the Consenting Party; (vi) is or has engaged, in the Consenting Party's sole discretion, a Qualified Operator to develop, construct, test, commission, operate, maintain and repair a project similar to the one contemplated by the Assigned Agreement, to deliver energy to the Consenting Party from such a project and otherwise fulfil the Assignor's obligations under the Assigned Agreement.

#### 4. REPRESENTATIONS

The Consenting Party represents that:

- a. The Consenting Party is a Puerto Rico public corporation and governmental instrumentality of the Commonwealth of Puerto Rico, duly organized, validly existing and in good standing under the laws of the Commonwealth of Puerto Rico and is duly qualified to conduct its business, to own its properties, and to execute and deliver, and to perform its obligations under, this Direct Agreement.
- b. The execution, delivery and performance by the Consenting Party of this Direct Agreement have been duly authorized by all necessary corporate action and do not and will not (i) require any consent or approval of any Governmental Authority or the board of directors,

members or partners (or equivalent persons), as the case may be, of the Consenting Party which has not been obtained, (ii) violate any provision of any law, rule, regulation, order, writ, judgment, injunction, decree, determination or award presently in effect having applicability to the Consenting Party, or (iii) violate or result in a breach of or constitute a default under, or require a consent that has not been obtained under or result in the creation of a lien under, its certificate of incorporation or by-laws or any indenture or loan or credit agreement or any other material agreement, lease or instrument to which the Consenting Party is a party or by which it or its properties may be bound or affected.

- c. This Direct Agreement has been duly executed and delivered by the Consenting Party and constitutes the legal, valid and binding obligation of the Consenting Party enforceable against it in accordance with its terms, except as enforceability may be limited by general principles of equity and by applicable bankruptcy, insolvency, reorganization, moratorium or other similar laws affecting the rights of creditors generally. This Direct Agreement is in full force and effect.
- d. No authorization, approval, consent, permit or other action by, or registration or filing with, any governmental authority or any other entity is necessary for or in connection with the execution or delivery by the Consenting Party of, or the performance by the Consenting Party of any of its obligations under this Direct Agreement, other than those which have been duly obtained or made and are final and non-appealable and in full force and effect as of the date hereof.
- e. No litigation, action, suit, adverse proceeding or investigation before or by any arbitrator or government authority is pending or, to the best knowledge of the Consenting Party, threatened in writing against the Consenting Party or against any of its properties or revenues (i) with respect to this Direct Agreement or any of the transactions contemplated hereby or thereby; or (ii) which, individually or in the aggregate, could reasonably be expected to have a material adverse effect on the ability of the Consenting Party to perform its obligations under this Direct Agreement.

#### 5. RESERVATION OF RIGHTS

The parties hereto agree that notwithstanding the terms of Sections 1 and 2 above, each of the Consenting Party and the Assignor reserves any and all rights and remedies (including those relating to set-off, counterclaim, deduction or retention) it may have under the Assigned Agreement or applicable law. The rights reserved by each of the Consenting Party and the Assignor under the Assigned Agreement and applicable law are cumulative and not exclusive of any rights it may have under the Assigned Agreement and/or applicable law.

#### 6. MISCELLANEOUS

# 6.1 Notices

All notices and other communications hereunder shall be in writing and delivered to the applicable recipient pursuant to this Section 6.1: (i) if to the Consenting Party or to the Assignor, in accordance with the Assigned Agreement; (ii) if to the Administrative Agent, [•] or (iii) to such other address or facsimile number as any party may designate by notice given to all parties hereto pursuant to this Section 6.1. Delivery of notices and communications sent pursuant to this Section 6.1 shall be effective upon receipt.

# 6.2 Governing Law

THIS DIRECT AGREEMENT AND ALL QUESTIONS REGARDING ITS VALIDITY, INTERPRETATION, PERFORMANCE AND/OR ENFORCEMENT SHALL BE GOVERNED BY AND CONSTRUED IN ACCORDANCE WITH THE INTERNAL LAWS OF THE COMMONWEALTH OF PUERTO RICO WITHOUT REGARD TO ANY CONFLICT-OF-LAW PRINCIPLES OF SUCH COMMONWEALTH OR OTHER JURISDICTION TO THE CONTRARY. JURISDICTION AND VENUE OF ANY SUIT OR ACTION TO ENFORCE THIS DIRECT AGREEMENT SHALL REST SOLELY IN THE UNITED STATES FEDERAL COURTS IN THE COMMONWEALTH OF PUERTO RICO AND EACH OF THE PARTIES HERETO HEREBY SUBMITS TO THE PERSONAL JURISDICTION OF SUCH COURTS FOR THE PURPOSE OF RESOLVING ANY AND ALL MATTERS ARISING UNDER OR IN RESPECT OF THIS DIRECT AGREEMENT AND AGREES THAT PERSONAL SERVICE UPON EACH SUCH PARTY MAY BE MADE BY DELIVERY THEREOF TO SUCH PARTY AT THE ADDRESS SPECIFIED HEREIN.

# 6.3 Waiver of Jury Trial

EACH OF THE PARTIES HEREBY IRREVOCABLY WAIVES, TO THE FULLEST EXTENT PERMITTED BY APPLICABLE LAW, ANY AND ALL RIGHT TO TRIAL BY JURY IN ANY LEGAL PROCEEDING ARISING OUT OF OR RELATING TO THIS DIRECT AGREEMENT OR THE TRANSACTIONS CONTEMPLATED HEREBY.

# 6.4 <u>Counterparts</u>

This Direct Agreement may be executed by any number of, and on separate, counterparts, each of which when so executed and delivered shall be an original, but all of which shall together constitute one and the same instrument. A facsimile or .pdf copy of a counterpart signature page shall serve as the functional equivalent of a manually executed copy for all purposes.

#### 6.5 Headings Descriptive

The headings of the several sections and subsections of this Direct Agreement are inserted for convenience only and shall not in any way affect the meaning or construction of any provision of this Direct Agreement.

#### 6.6 Severability

In case any provision in or obligation under this Direct Agreement shall be invalid, illegal or unenforceable in any jurisdiction, the validity, legality and enforceability of the remaining provisions or obligations, or of such provision or obligation in any other jurisdiction, shall not in any way be affected or impaired thereby.

# 6.7 Amendment

Neither this Direct Agreement nor any of the terms hereof may be terminated, amended, supplemented, waived or modified except by an instrument in writing signed by each party hereto.

# 6.8 Successors and Assigns

This Direct Agreement shall be binding upon the successors and assigns of the Consenting Party and inure, together with the rights and remedies of the Assignor and the Administrative Agent, to the benefit of the Assignor and the Administrative Agent.

[SIGNATURES APPEAR ON THE FOLLOWING PAGE.]

IN WITNESS WHEREOF, the parties hereto have caused this Direct Agreement to be duly executed and delivered by their proper and duly authorized officers as of the day and year above written.

# PUERTO RICO ELECTRIC POWER AUTHORITY

| by |        |  |
|----|--------|--|
|    | Name:  |  |
|    | Title: |  |

Grid Services Agreement - PREPA and Sunrun PR Operations LLC

| [●] as A | dministrative Agent |
|----------|---------------------|
| by       |                     |
|          |                     |
|          | Name:               |
|          | Title:              |

#### **APPENDIX U**

#### **METERING**

#### 1. Purpose

The purpose of this Appendix U is to establish metering requirements for Resource Providers which offer Grid Services to PREPA using Participant Resources. Any metering equipment placed into service or returned to service shall meet the provisions set forth in this Appendix U.

#### 2. Metering Requirements

#### 2.1 Data Interval Requirements

Resource Provider shall monitor, collect, and report data each Month during the Supply Period for each Time Interval during such Month. This may be accomplished in one of two (2) ways:

- 1. Resource Provider can install a metering device on each enrolled and enabled device; or
- 2. Resource Provider can install a whole house/whole building metering device for each Participant Site.

# 2.2 Applicability

These requirements apply to all residential Participants and any C&I Participants which do not have interval meters already installed.

For C&I Participants with interval data: if a C&I Participant has a 15-minute interval meter installed, PREPA shall upgrade it to a 5-minute interval meter.

Resource Provider must conform to Applicable Laws (including tariff requirements).

#### 2.3 <u>Validity</u>

Upon PREPA's implementation of a next generation metering system, including installation or upgrade of a Participant meter, a telecommunications network and a corresponding Meter Data Management System (MDMS), the metering requirements described herein will no longer be applicable. Upon that event, PREPA will install and operate advanced meters for all Participants. PREPA will assume responsibility for the calibration of the advanced meters and assume responsibility for meter data management. At that time, a Resource Provider may interface with PREPA's meters.

# 3. Metering Accuracy Specifications

The performance of Resource Provider's metering equipment shall be deemed acceptable when the percent registration is not less than 98% nor more than 102% of true value at full load. This is effectively an accuracy requirement of  $\pm 2\%$ .

# 4. Testing and Test Plan

Metering equipment shall be tested by Resource Provider prior to or during installation. Resource Provider shall provide documentation and self-certification to PREPA showing the accuracy of metering equipment installed by Resource Provider. In addition, Resource Provider shall define a test plan, designed to test metering equipment at or prior to installation, and monitor a reasonable percentage of the installed metering equipment to verify the metering equipment's accuracy and performance during the Term. Resource Provider shall have flexibility to define the test plan so that it is appropriate for the type of metering equipment used by Resource Provider. The test plan shall document Resource Provider's test, calibration and maintenance procedures of Resource Provider-installed metering equipment. The test plan shall be delivered to PREPA for review and the plan must be approved by PREPA prior to the Commercial Operation Date, which approval PREPA shall not unreasonably withhold.

# 5. Regular Reporting of Metered Data

Resource Provider shall meter, record and make available through media acceptable to PREPA, acting reasonably, (i) Participant Resource consumption of energy received from the Grid System and (ii) Participant Resource availability and deliveries of energy into the Grid System, in a manner which can be systematically validated to PREPA's satisfaction. The making available of such data shall include, from the Commercial Operation Date, real-time visibility of VPP availability through an API, web dashboard or other means to facilitate ongoing monitoring and dispatch of the VPP for (i) Demand Reduction Service, (ii) Demand Build Service, and (iii) economic dispatch, as well as training in such API or dashboard as necessary.

Resource Provider shall also provide PREPA (and T&D Operator) with the aggregated VPP data and individual Participant Site data (identified by gateway serial number or other unique customer number) timestamped for each Time Interval of each Month during the Supply Period with all necessary datapoints to, on a monthly basis, calculate and verify the values in the invoice corresponding to such month. On an annual basis upon request, Resource Provider shall provide a separate data report from the respective OEM(s) for the VPP fleet that allows PREPA (and T&D Operator) to validate Resource Provider's monthly data or agree to another reasonable means to validate such monthly data once PREPA has finalized the technical specifications and requirements of the DERMS.

#### APPENDIX V

#### **OPERATIONAL FORECAST**

The Operational Forecast shall describe Resource Provider's Forecasted Capability of each Grid Service up to the Guaranteed Capability for each Time Interval within a Grid Services Window of the forecast period. Resource Provider shall make the Operational Forecast available to the DERMS via API in accordance with the following attributes:

| Attributes            | Demand Build Service | Demand Reduction<br>Service |
|-----------------------|----------------------|-----------------------------|
| Forecasted Capability | kW and kWh           | kW and kWh                  |
| Forecast Period       | Min 4 Days           | Min 4 Days                  |
| Data Resolution       | 15 Minute            | 15 Minute                   |
| (Time Interval)       |                      |                             |
| Update Timing         | 1am/1pm              | 1am/1pm                     |
| Update Frequency      | 12 hours             | 12 hours                    |

**Table 1 - Operational Forecast Attributes** 

PREPA may change the values in Table 1, and may specify the fields included in the file to be transferred from the Resource Provider to DERMS with the aggregated Forecasted Capability, from time to time in its sole discretion.

The Operational Forecast shall use the following file pattern:

File Type = \*.csv

Suggested Pattern: <ResourceProviderName><GridService><FileCreateDateTime>.csv

One Operational Forecast file will be submitted per Grid Service (Demand Build Service, Demand Reduction Service) at the intervals specified in Table 1.

The Operational Forecast shall be updated within fifteen (15) minutes to reflect the activation or reservation of Capability and the impact of the activation or reservation on any other Capability.

Any change to the Participant Resource(s) that results in a change to the Capability that PREPA may activate or reserve that was provided in the previous update of the Operational Forecast shall result in an updated Operational Forecast that shall be updated to PREPA within fifteen (15) minutes of the change.

If Resource Provider is unable to provide Capability for any reason for a period of less than four (4) hours, Resource Provider shall update its Operational Forecast within fifteen (15) minutes to identify the period(s) during which Capability will be unavailable.

Resource Provider shall forecast Demand Build Service and Demand Reduction Services for their respective Grid Services Windows. Time Intervals outside such windows shall be identified with zero.

If the failure to make the Operational Forecast available to PREPA is the result of Force Majeure, Resource Provider shall notify PREPA as soon as practicable via telephone.

# APPENDIX W

# FORM OF WARRANTY COMPLIANCE CERTIFICATE

# WARRANTY COMPLIANCE CERTIFICATE

| Date: [●]          |   |
|--------------------|---|
| Agreement:         | [•] [Insert contract number and title.]   |
| To:                | Puerto Rico Electric Power Authority ("PREPA")  |
| From:              | [●] ("Resource Provider")   |
| Unless the cont    | Grid Services Agreement dated [•] between PREPA and Resource Provider (the "GSA"). ext otherwise requires, capitalized terms used in this Warranty Compliance Certificate shall ngs ascribed to them in the GSA.  |
| (Representation    | ed the representations and warranties made by Resource Provider under Article 12 as, Warranties, & Covenants), and, on behalf of Resource Provider, confirm and certify to h and correctness of such representations and warranties on the date hereof. |
| Very truly y       | ours,   |
| [●]<br>as Resource | Provider  |
| [•]                |   |

# APPENDIX X

# **CUSTOMER SERVICE REQUIREMENTS**

Resource Provider must provide customer service related to Participant and/or PREPA initiated trouble calls, repairs and other field services related to installed devices. PREPA may transfer Participant calls and/or requests to Resource Provider, and Resource Provider must respond accordingly.

| Call Center Requirements   | <ul> <li>Service Level: &gt;78% of calls answered within 30 seconds</li> <li>Average Speed of Answer: &lt;60 seconds</li> <li>Force Busy: &lt;1% of total inbound calls</li> <li>First call resolution: &gt;70% of calls are resolved on the first call</li> </ul>  |
|--|---|
| Virtual Enterprise Network ("VEN")/ Participant Gateway Installation | Resource Provider will provide all labor, materials, transportation and other services necessary to install and provision Participant premise devices. Provisioning will include verification of VTN-to-VEN communication and successful operation of the VEN during a test.                                      |
| Field Device Support   | Resource Provider will maintain an in-state, dispatchable, on-site support capability to manage maintenance and repair issues related to Participant premise devices.   |
| Scheduling Participant site visit                                    | Resource Provider will manage scheduling/ rescheduling Participant visits.  |
| Service Requests by PREPA or<br>Participant                          | Resource Provider will respond via phone or email to field service requests initiated by a Participant or by PREPA within 24 hours of request.  |
| Supervision  | Resource Provider will provide sufficient supervision of its installer to ensure quality installation performance.  |
| Field Service Personnel  | Resource Provider will provide training, safety and background check, and drug screen requirements for field service personnel. Installers will, at a minimum, be a journeyman electrician working under the supervision of a licensed electrical contractor. (Installers licensed in Puerto Rico are preferred.) |
| Testing equipment  | Resource Provider will provide its own tools and equipment for pre- and post-installation testing. Equipment must meet relevant certifications.   |
| Installation completion  | Resource Provider will manage the workforce and installation process for all allocated VENs until installation is complete.   |
| Emergency repairs  | Resource Provider will handle any Emergency repairs encountered during the installation process as soon as practicable and in any event within 24 hours of repairs being required.  |
| Quality control  | Resource Provider shall have log records of all Participant transactions during the term of the contract.   |

# Grid Services Agreement - PREPA and Sunrun PR Operations LLC

| Installer workflow supporting data | Resource Provider will provide each installer with only the Participant data associated with a single Day's work for that installer, and to ensure that Participant data is not retained by the installer after the end of that Day. |
|------------------------------------|--|
| Insurance Requirements             | Resource Provider will be subject to insurance requirements, including automobile liability, general liability, and worker's compensation.   |

#### **APPENDIX Y**

#### PARTICIPANT SERVICE AGREEMENT REQUIREMENTS

The Participant Service Agreement ("**PSA**") between a Resource Provider and a Participant setting forth the terms and conditions by which a Participant may enroll with a Resource Provider to participate in the provision of Grid Services to PREPA shall, at a minimum, include in substance the following:

- 1. <u>Term</u>: (a) The term of the PSA, including the start and end dates of the Participant's enrollment with Resource Provider; and (b) the term of the Grid Services Agreement between Resource Provider and PREPA.
- 2. <u>Payment</u>: All estimated payment amounts, including all incentives, due from Resource Provider to the Participant during the term, together with the type and frequency of such payments. Resource Provider must also indicate that Resource Provider will report incentive payments as Participant income where such reporting is required by law.
- 3. <u>Charges</u>: All recurring and nonrecurring charges due from the Participant to Resource Provider during the term, including the types, frequency and amounts of such charges.
- 4. <u>Grid Services Period Notification</u>: The frequency, duration, and criteria under which the Participant's Qualified Resource(s) may be engaged in response to a Grid Services Period.
- 5. <u>Equipment</u>: The equipment that Resource Provider will site at the Participant's service location in order to engage the Participant's Qualified Resource(s), together with the ownership status of all such equipment.
- 6. <u>Appointment of Resource Provider as Participant's Agent</u>: The legal appointment by the Participant of Resource Provider as the agent of the Participant for the purpose of delivering the Grid Services from the Participant's Qualified Resource(s) to PREPA pursuant to the terms of the Grid Services Agreement between Resource Provider and PREPA.
- 7. <u>Access by PREPA or the T&D System Operator</u>: PREPA or the T&D System Operator shall be afforded access to Participant premises to install, replace or service meters or remedy unsafe conditions involving equipment installed by or for Resource Provider.
- 8. <u>Service Address</u>: The physical residence or business address serviced by PREPA where the Participant's Qualified Resource(s) is/are located and the Participant is a primary account holder of record.
- 9. <u>Participant E-mail Address</u>: If available, Resource Provider shall collect and pass on to PREPA the Participant's e-mail address.
- 10. <u>Participant Data</u>: The types of Participant data that will be accessed by Resource Provider, how it may use the data, and with whom Resource Provider may share the data, together with all information security and privacy policies enacted by Resource Provider that apply to such data.
- 11. <u>Consent and Release</u>: A separate consent and release, to be duly executed by the Participant, granting PREPA the right, without restriction, to use all Participant data produced as a result of the Participant's enrollment with Resource Provider for all legal purposes.

- 12. <u>Penalties for Non-Performance</u>: Any penalties for non-performance, underperformance, or overperformance and a description of how penalties will be calculated.
- 13. <u>Cancellation</u>: A grace period during which the Participant may cancel its enrollment without any penalties. The grace period must terminate prior to Resource Provider notifying PREPA of the Participant's enrollment.
- 14. <u>Early Termination by Participant</u>: The process by which the Participant may terminate its enrollment with Resource Provider prior to the end of the term, and any penalties that may apply against the Participant for such early termination.
- 15. <u>Events of Termination</u>: Any specific event by a party that may result in a termination of the PSA by the other party.
- 16. <u>Warranties</u>: All warranties that Resource Provider will provide to the Participant, as well as all warranties that Resource Provider explicitly disclaims and will not provide to the Participant.
- 17. <u>Force Majeure</u>: The conditions under which a party's performance may be excused due to the existence of a force majeure.
- 18. <u>Dispute Resolution</u>: The Participant's options should a dispute arise between Resource Provider and the Participant.
- 19. <u>Insurance</u>: The types and levels of insurance that each party must have in place throughout the term.
- 20. <u>Indemnity</u>: The Resource Provider will indemnify the Participant against all claims flowing from a breach of Resource Provider's representations under the PSA.
- 21. <u>Damages</u>: Any limitations on Resource Provider's liability for damages that may arise under the PSA.
- 22. <u>Authority to Sign</u>: The Participant's affirmative representation that it possesses the full right and authority to execute the PSA on behalf of the Participant and that it is the rightful account holder of the underlying electricity account with PREPA.
- 23. <u>Notices</u>: Resource Provider's contact information for all purposes related to the PSA and the Participant's enrollment with Resource Provider.

#### APPENDIX Z

#### FORM OF TRADEMARK LICENSE AGREEMENT

THIS TRADEMARK LICENSE AGREEMENT ("Agreement") is made and entered into as of [●] ("Effective Date"), by and between the PUERTO RICO ELECTRIC POWER AUTHORITY (including any successor thereto, "PREPA"), a public corporation and governmental instrumentality of the Commonwealth of Puerto Rico, created by Act of May 2, 1941, No. 83, as amended, employer identification number [●], represented in this act by its Executive Director, Mr. Josué A. Colón Ortiz, of legal age, married, engineer and resident of Caguas, Puerto Rico; and [●] ("Licensee"), a [●] corporation, authorized to do business in Puerto Rico, employer identification number [●], with its principal office at [●], and represented in this act by its [●], [Mr./Ms.] [●], of legal age, [married], and a resident of [●], is authorized to sign this Agreement on behalf of the Licensee as certified by the Resolution dated [●]. PREPA and Licensee are herein individually referred to as a "Party" and collectively referred to as "Parties."

WHEREAS Licensee provides certain grid services to PREPA pursuant to the Grid Services Agreement between PREPA and Licensee dated [●] (the "GSA"). Unless the context otherwise requires, capitalized terms used in this Agreement shall have the meanings ascribed to them in the GSA.

**WHEREAS** PREPA is an operating electric public utility, and owns and/or controls certain trademarks and other intellectual property related thereto.

**WHEREAS** Licensee wishes to use certain trademarks and other intellectual property of PREPA as identified herein for the purpose of marketing and administering certain grid services for use by PREPA.

**NOW, THEREFORE**, in consideration of the mutual covenants and agreements set forth herein, the parties hereby agree as follows:

- 1. <u>Grant</u>. PREPA hereby grants, and Licensee hereby accepts, a limited, non-exclusive, non-transferable, non-sublicensable, royalty-free, revocable license to use during the Term the PREPA owned names, trademarks and logos set forth on Attachment A (*PREPA Trademarks*) to this Agreement (the "**PREPA Trademarks**") solely in direct connection with the production and distribution of marketing material, Participant enrollment forms, and Participant engagement portals related to the Grid Services provided by Licensee to PREPA in Puerto Rico pursuant to the GSA. Licensee shall co-brand certain media using the PREPA Trademarks in accordance with the following requirements:
- (a) Licensee shall co-brand all marketing material of any form created by Licensee in relation to this Agreement and each Participant Service Agreement with PREPA Trademarks as approved in writing by PREPA, which approval PREPA shall not unreasonably withhold. If Licensee makes any changes, modifications or revisions to such approved marketing materials, then Licensee shall request additional approval from PREPA in accordance with this Section 1.
- (b) Licensee shall co-brand the online Participant engagement portal developed by Licensee in relation to this Agreement and each Participant Service Agreement with PREPA Trademarks as approved in writing by PREPA, which approval PREPA shall not unreasonably withhold. If Licensee makes any changes, modifications or revisions to such to the online Participant engagement portal, then Licensee shall request additional approval from PREPA in accordance with this Section 1.
- (c) Licensee shall not use PREPA Trademarks either as a standalone or as part of a co-branding effort on any materials other than as described in this Section 1. Without limiting the generality

of the foregoing sentence, Licensee shall ensure that none of its employees' uniforms, equipment, or vehicles use PREPA Trademarks.

- (d) Licensee shall not change any co-branded materials in paragraphs (a) or (b) of this Section 1 (i) in a way that would degrade, detract from or interfere with PREPA's branding, or (ii) to introduce any new third party branding on such materials,
- Restriction of Use/Ownership. Licensee agrees that (a) it shall use the PREPA Trademarks solely in direct connection with the production and distribution of marketing material, Participant enrollment forms, and Participant engagement portals related to the Grid Services provided by Licensee to PREPA in Puerto Rico pursuant to the GSA and in accordance with all of the terms and conditions set forth herein and (b) the PREPA Trademarks shall be exhibited and displayed in the exact form provided by PREPA and attached as Attachment A (*PREPA Trademarks*) to this Agreement. All right, title and interest in and to the PREPA Trademarks, including all associated goodwill, or in any copyright or other proprietary right now existing or hereinafter created pursuant to this Agreement, shall remain vested in PREPA subject only to the rights of use granted in this Agreement. Notwithstanding the foregoing, in the event that a Licensee is deemed to own any rights in the PREPA Trademarks, Licensee hereby assigns, such rights to PREPA. Consistent with the terms of this Agreement, Licensee shall perform all lawful acts and execute such instruments as PREPA may reasonably request to confirm, evidence, maintain or protect PREPA's rights in, to and under the PREPA Trademarks.

# 3. Quality Control.

- (a) Licensee agrees to maintain and preserve the quality of the PREPA Trademarks and to use the PREPA Trademarks only in good faith and in a dignified manner consistent with such use of the PREPA Trademarks prior to the Effective Date and in accordance with the terms of this Agreement. In addition, Licensee shall ensure that all products and services provided by Licensee under the PREPA Trademarks will be of sufficiently high quality to protect the PREPA Trademarks and the goodwill symbolized thereby. Licensee shall not by any act or omission use or permit use of the PREPA Trademarks in any manner that tarnishes, degrades, disparages, or reflects adversely on PREPA or its business or reputation or that would be detrimental to the PREPA Trademarks or their associated goodwill.
- (b) Each Licensee agrees to use the PREPA Trademarks only in accordance with such quality standards as may be reasonably established by PREPA and communicated to such Licensee from time to time in writing, or as may be agreed to by PREPA and Licensee from time to time in writing. Licensee shall obtain PREPA's prior written approval of any material change in the style and manner in which any PREPA Trademark is proposed to be used by such Licensee and shall use the PREPA Trademarks only in a style and manner commensurate with the standards and reputation for quality associated with the PREPA Trademarks. Licensee agrees not to register or attempt to register in any jurisdiction any trademark or service mark that is confusingly similar to any of the PREPA Trademarks or which would reasonably be expected to result in dilution of any of the PREPA Trademarks.
- (c) Licensee shall permit PREPA or its duly authorized representative, upon reasonable notice, to inspect and review all business locations and materials of Licensee and any and all uses of the PREPA Trademarks by Licensee for the purposes of assuring use of the PREPA Trademarks in a manner consistent with this Agreement and that the products and services associated with the PREPA Trademarks meet PREPA's quality standards as contemplated hereby. Upon request by PREPA, a Licensee will furnish to PREPA representative samples of all advertising and promotional materials in any media that are used in connection with the PREPA Trademarks. Licensee will make all changes to such materials that PREPA reasonably requests to comply with this Section 3 or to preserve the validity of, or PREPA's rights in, the PREPA Trademarks.

- 4. <u>Governing Law.</u> This Agreement shall be governed by, construed and enforced in accordance with the laws of the Commonwealth of Puerto Rico without regard to any contrary result required under applicable conflicts of laws rules. The Parties herein agree that all Disputes arising hereunder shall be resolved pursuant to Section 5 (*Dispute Resolution*).
- 5. <u>Dispute Resolution</u>. If a dispute arises between the Parties regarding the application, interpretation, enforceability, validity, performance, or breach of this Agreement or matters arising therefrom or relating thereto, whether sounding in contract, tort, unfair competition, law, equity or any other legal form (a "**Dispute**"), then such Dispute shall be resolved solely by either the agreement of the Parties, or in a proceeding before PREB. In the event of a Dispute under this Agreement, the disputing Party may promptly provide written notice of the Dispute (a "**Dispute Notice**") to the other Party. Following delivery of the Dispute Notice, the Parties shall nominate a member of its respective senior management, who shall have decision-making authority on behalf of such Party, and such senior management members shall promptly meet and seek to achieve settlement, if possible, by negotiation and mutual agreement. If the Dispute is not resolved within forty-five (45) Days after the Dispute Notice is received by the recipient Party (or such longer period of time as may be mutually agreed by the Parties in writing), then either Party may submit the Dispute for final determination to PREB.
- 6. <u>Disclaimer</u>. The PREPA Trademarks and the license granted hereunder are provided on an "as is" basis, without warranty of any kind, express or implied, including without limitation, warranties of merchantability, fitness for a particular purpose, non-infringement or other warranties, conditions, guarantees or representations, whether express or implied.
- 7. <u>Assignment</u>. Licensee may not assign this Agreement, in whole or in part, without the prior written consent of PREPA. Any assignment in contravention of this Section 7 (*Assignment*) shall be deemed null and void.

### 8. Infringement; Prosecution.

- (a) Licensee agrees to notify PREPA promptly after it becomes aware of any actual or threatened infringement, imitation, dilution, misappropriation or other unauthorized use or conduct in derogation ("**Infringement**") of any of the PREPA Trademarks. PREPA shall have the sole and exclusive right to bring any action to remedy or seek redress in respect of any Infringement (or to refrain from taking any action in its sole discretion), and Licensee shall cooperate with PREPA in same. All damages or other compensation of any kind recovered in such action shall be for the account of PREPA.
- (b) PREPA shall have sole and exclusive control and discretion over all matters relating to the prosecution and maintenance of the PREPA Trademarks. Licensee shall cooperate in good faith with PREPA for the purpose of securing, preserving and protecting PREPA's rights in and to the PREPA Trademarks. At the request of PREPA, Licensee shall execute and deliver to PREPA any and all documents and do all other acts and things which are reasonably requested by PREPA to make fully effective or to implement the provisions of this Agreement relating to the prosecution and maintenance of the PREPA Trademarks.
- 9. <u>Indemnification</u>. Licensee shall jointly and severally, indemnify and hold harmless PREPA and each of its Indemnitees from and against any and all Claims arising out of: (a) any breach by Licensee of any term or condition of this Agreement or the use of the PREPA Trademarks, and (b) any allegation by a third party arising from, relating to, or resulting from, the use of the PREPA Trademarks or the

manufacture, marketing, sale or use of any products or services bearing the PREPA Trademarks sold or serviced by, or on behalf of, Licensee.

- 10. <u>Term and Termination</u>. This Agreement shall commence on the date hereof and shall remain in effect for the Term, unless earlier terminated pursuant to this Section 10. PREPA shall have the right to terminate this Agreement at any time, with or without cause, immediately upon notice to Licensee. Upon termination of this Agreement, Licensee shall immediately cease using or displaying the PREPA Trademarks.
- 11. <u>Publicity</u>. Except as otherwise expressly set forth in this Agreement, neither Party shall use any name, trademark or logo of the other Party or its Affiliates, or otherwise refer to, the other Party or any of its Affiliates, in any press releases, publicity, marketing or promotional materials, unless specifically authorized in advance and in writing by such Party, in its sole and absolute discretion.
- 12. <u>Waiver & Amendment</u>. This Agreement, including the attachments hereto, may be amended or waived only by written agreement between the Parties. A waiver of any default or breach of this Agreement shall extend only to the particular default or breached waived and shall not limit or otherwise affect any rights that either Party may have with respect to any other or future default or breach.
- 13. <u>Strict Performance</u>. The failure of either Party to insist in any one or more instances upon strict performance of any provisions of this Agreement, or to take advantage of any of its rights hereunder, shall not be construed as a waiver of any such provisions or the relinquishment of any such right or any other right hereunder, which shall remain in full force and effect, unless such waiver is in a written agreement between the Parties.
- 14. <u>No Third-Party Beneficiaries</u>. This Agreement is intended solely for the benefit of the Parties hereto. Nothing in this Agreement shall be construed to create any duty to, or standard of care with reference to, or any liability to, any Person not a Party to this Agreement.
- 15. <u>No Sharing of Benefit</u>. No officer, employee, or agent of Licensee or PREPA or municipal governments shall be entitled to any share or part of this Agreement or to any benefit that may arise therefrom that would be in violation of any Applicable Law of the Commonwealth of Puerto Rico or policy of PREPA.
- No Association, Joint Venture, or Partnership. This Agreement shall not be interpreted or construed to create an association, joint venture, or partnership between the Parties or to impose any partnership obligation or liability upon either Party. Neither Party shall have any right, power or authority to enter into any agreement or undertaking for, or act on behalf of, or to act as, or be an agent or representative of, or to otherwise bind, the other Party.
- 17. <u>Successors</u>. This Agreement shall inure to the benefit of and be binding upon Licensee and PREPA and their respective successors and assigns.
- 17. <u>Complete Agreement</u>. The Parties intend this Agreement as the final expression of their agreement and is intended also as a complete and exclusive statement of the terms of their agreement with respect to the subject matter hereof and supersedes all prior written and oral understandings between the Parties with respect thereto.
- 18. <u>Severability</u>. If any provision hereof shall be held invalid, illegal or unenforceable pursuant to Section 5 (*Dispute Resolution*), such holding shall not invalidate or render unenforceable any other provision hereof.

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19. <u>Counterparts</u>. This Agreement may be executed in any number of counterparts with the same effect as if both Parties hereto had signed the same document. All counterparts shall be construed together and shall constitute one instrument.

**IN WITNESS WHEREOF**, the parties have caused this Agreement to be executed as of the day and year first written above.

| PUERTO RICO ELECTRIC POWER<br>AUTHORITY | [•]          |  |
|---|--------------|--|
| Josué A. Colón Ortiz                    | By:<br>Name: |  |
| Executive Director                      | Title:       |  |
| Tax ID Number: 660433747                |              |  |

# ATTACHMENT A

#### **PREPA Trademarks**

Below is the initial list of PREPA owned names, trademarks and logos that comprise the "PREPA Trademarks" licensed to Licensee pursuant to the Agreement. PREPA will provide to Licensee a copy of the PREPA Trademarks in USB format. PREPA, in its sole discretion, may update this Attachment A (*PREPA Trademarks*) at any time, upon notice to Licensee, by removing or adding additional PREPA owned names, trademarks and logos to the list of PREPA Trademarks for the purposes of this Agreement.

- 1. Puerto Rico Electric Power Authority
- 2. PREPA

3.



#### APPENDIX AA

#### REPORTING

#### **Monthly Invoice Report ("MIR")**

The MIR shall be submitted per Grid Service and shall consist of multiple \*.CSV files containing the following information in a format prescribed by PREPA.

- a. Monthly Operational Forecast in Time Intervals
- b. Guaranteed Capability for Billing Period
- c. Event Performance Factors for each event in the Billing Period
- d. Monthly Performance Factor (Average of performance factors in the Billing Period)
- e. Number of GS Events per Billing Period

Upon request from PREPA, Resource Provider may also be required to deliver the following data:

- 1. all data (on an aggregated level) used for the calculation of performance factors for the Billing Period, including demand values preceding events (as applicable); and
- 2. end device data and associated baseline calculations from all Participant Resources used for the calculation of any performance factors.

# **Participant Capability Report (PCR)**

The PCR is submitted as a \*.CSV file and reports the following information on a per Participant basis:

- a. Account number
- b. Contract number
- c. Meter number
- d. Participant schedule
- e. Enabled capability [kW] (per Grid Service)
- f. Energy delivered (kWh) (for Capability)
- g. End-use

# **Data Formats**

# **Data-End Use**

End Use Data shall be presented in the following format. All Participants should be included in the same file.

| Resource Provider ID | Assigned by PREPA           |
|----------------------|-----------------------------|
| Contract account     | From Participant bill       |
| Meter ID             | From Participant bill       |
| Date                 | Date of read, MM/DD/YYYY    |
| Time                 | Time of read, military time |
| Туре                 | Type of end use:            |
| Value                | kW or kWh                   |
| Actual read          | real                        |

#### **MIR-Forecast**

For the Monthly Invoice Report (MIR) – forecast shall be presented in the following format. All Grid Services should be included in the same file.

| Resource Provider ID | Assigned by PREPA             |
|----------------------|-------------------------------|
| Grid Service         | Cap-Build, Cap-Red, Ancillary |
| Date                 | MM/DD/YYYY                    |
| Time                 | Military time                 |
| Value                | kW or kWh                     |
| Forecast             |                               |

# **MIR-Event Performance Factor**

The Monthly Invoice Report (MIR) – Event Performance Factor shall be presented in the following format. All Grid Services should be included in the same file.

| Resource Provider ID | Assigned by PREPA             |
|----------------------|-------------------------------|
| Grid Service         | Cap-Build, Cap-Red, Ancillary |
| Event date           | MM/DD/YYYY                    |
| Event start time     | Military time                 |
| Event end time       | Military time                 |
| Performance Factor   |                               |

# **MIR- Event Date and Time**

The Monthly Invoice Report (MIR) – Event Date and Time shall be presented in the following format. All Grid Services should be included in the same file.

| Grid Service     | Cap-Build, Cap-Red, Ancillary |
|------------------|-------------------------------|
| Event date       | MM/DD/YYYY                    |
| Event start time | Military time                 |
| Event end time   | Military time                 |

# **PCR- Grid Service and Event**

The Participant Capability Report (PCR) shall be presented in the following format, by Grid Service and by event. All Grid Services should be included in the same file.

| Resource Provider ID | Assigned by PREPA             |
|----------------------|-------------------------------|
| Contract account     | From Participant bill         |
| Meter number         | From Participant bill         |
| Participant schedule | R,G,J,P,DS                    |
| Grid Service         | Cap-Build, Cap-Red, Ancillary |
| Value                | kW or kWh                     |
| Enabled capability   | Es                            |

#### APPENDIX BB

#### FORM OF PAYMENT GUARANTEE

THIS PAYMENT GUARANTEE AGREEMENT (the "Payment Guarantee"), is entered into as of [●] day of [●], by SunRun Inc., a corporation organized and existing under the laws of Delaware with its principal office at [●] (the "Guarantor"), in favor of PUERTO RICO ELECTRIC POWER AUTHORITY, a public corporation and governmental instrumentality of the Commonwealth of Puerto Rico, created by Act of May 2, 1941, No. 83, as amended, with its principal office at 1110 Ponce de León Avenue, Office #808, San Juan, Puerto Rico (together with any successor or permitted assign under the GSA (as defined below), the "Beneficiary");

#### WHEREAS:

- A. [•], a [type of entity] organized and existing under the laws of [jurisdiction] (the "Company") has entered into the Grid Services Agreement, dated [•], with the Beneficiary (as amended, the "GSA");
- B. (i) the GSA obligates the Company to deliver this Payment Guarantee to the Beneficiary as one of the conditions precedent for its effectiveness, and (ii) the Guarantor has agreed to execute and deliver this Payment Guarantee; and
- C. the Guarantor (i) holds a direct or indirect ownership interest of [●] percent ([●]%) of the Company on the date hereof, and (ii) expects as an affiliate of the Company to derive commercial benefits from the GSA as a result of such ownership interest;

**NOW, THEREFORE**, in consideration of the premises and mutual agreements contained herein, and for other good and valuable consideration, the receipt and sufficiency of which the Guarantor hereby acknowledges, the Guarantor and the Beneficiary (each, a "**Party**" and collectively, the "**Parties**") hereby agree as follows:

#### 1. **DEFINITIONS**

#### 1.1 General

In this Payment Guarantee:

"Banking Day" means any day other than a Saturday, a Sunday or any other day on which Applicable Law authorizes, or requires, commercial banks in New York City to be closed.

"Beneficiary" has the meaning set out in the preamble of this Payment Guarantee.

"Company" has the meaning set out in the Recital (A) of this Payment Guarantee.

"GSA" has the meaning set forth in Recital (A) of this Payment Guarantee.

"Guaranteed Obligations" has the meaning set forth in Section 3.1 (General).

"Guarantor" has the meaning set out in the preamble of this Payment Guarantee.

"Insolvency Event" means any bankruptcy, insolvency, reorganization, arrangement, readjustment, composition, liquidation or similar proceeding with respect to a Party or the Company, any respective properties or creditors of a Party or the Company, or any action taken by any trustee or receiver of a Party or the Company or by any court in any such proceeding.

"Payment Guarantee" has the meaning set forth in the preamble of this Payment Guarantee.

"Service of Process Agent" has the meaning set forth in paragraph (d) of Section 4.2 (Dispute Resolution).

"**Term**" has the meaning set forth in Section 4.7 (*Term*).

"Unrestricted Net Worth" means, with respect to the Guarantor, the sum of (i) the subscribed and paid-up equity (including additional paid-in capital), and (ii) the Unrestricted Retained Earnings, in each case of the Guarantor.

"Unrestricted Net Worth Requirement" means, with respect to any Person, that such Person has an Unrestricted Net Worth of at least [•].<sup>4</sup>

"Unrestricted Retained Earnings" means, with respect to the Guarantor, the amount of accumulated profits and gains realized out of the normal and continuous operations of the Guarantor after deducting distributions to stockholders and transfers to capital stock or other accounts, and which is (i) not appropriated by its board of the Guarantor for corporate expansion projects or programs; (ii) not covered by a restriction for dividend declaration under a loan agreement; (iii) not required to be retained under special circumstances binding on the Guarantor such as when there is a need for a special reserve for probable contingences; and (iv) not otherwise covered by any other legal restriction (which refers to any injunction, judgement, or order issued by any judicial authority) on the ability of the Guarantor to distribute or otherwise apply its equity.

### 1.2 Other Defined Terms

The capitalized terms "Applicable Law", "Closing Date", "Commercial Operation Date", "Default", "Person" and "PREB" shall have the meanings set forth in the GSA.

#### 2. GUARANTOR'S REPRESENTATIONS & COVENANTS

#### 2.1 Representations

The Guarantor makes the following representations to the Beneficiary as of the date hereof:

- a. the Guarantor has been duly organized and is validly existing and in good standing under the Applicable Laws of [jurisdiction], has full legal right, power and authority to enter into, and carry out the terms and provisions of, this Payment Guarantee, and by proper corporate action has duly authorized the execution, delivery and performance of this Payment Guarantee;
- b. the execution and delivery of, and performance of its obligations under, this Payment Guarantee by the Guarantor will not conflict with, or constitute on the part of the Guarantor

Note: Insert amount equal to the greater of (A) thirty percent (30%) of the estimated costs of the Company's proposed project, and (B) \$75 million.

a breach of or default under, its relevant organizational documents or any indenture or other material agreement or instrument to which the Guarantor is a party or by which it or its properties are bound or any order, law, rule or regulation of any court or governmental agency or body having jurisdiction over the Guarantor or any of its activities or properties;

- c. this Payment Guarantee has been duly authorized, executed and delivered by the Guarantor and constitutes the valid and legally binding obligation of the Guarantor, enforceable against the Guarantor in accordance with its terms, except to the extent that applicable bankruptcy, insolvency, reorganization, moratorium or other Applicable Laws affecting the enforcement of creditors' rights generally and general equitable principles may limit enforceability of this Payment Guarantee;
- d. the Guarantor does not require a notice to, authorization, approval, consent or order of, or registration or filing with, any court or governmental agency or body having jurisdiction over the Guarantor or any of its activities or properties for the execution, delivery and performance of this Payment Guarantee; and
- e. the Guarantor (i) holds a direct or indirect ownership interest of [●] percent ([●]%) of the Company, and (ii) satisfies the Unrestricted Net Worth Requirement.

#### 2.2 Covenants

During the Term, the Guarantor undertakes to:

- a. (i) satisfy the Unrestricted Net Worth Requirement on a continuous basis at all times, and (ii) prior to the expiration of the first quarter of each calendar year during the Term, deliver to Beneficiary a certified true and correct copy of audited financial statements, Form 10-Ks or similar types of audited annual reports for the previous calendar year, evidencing that the Guarantor satisfied the Unrestricted Net Worth Requirement for such previous calendar year;
- b. hold and maintain a direct or indirect ownership interest of at least twenty-five percent (25%) of the Company; and
- c. maintain its existence, and not dissolve, sell or otherwise dispose of all or substantially all of its assets and will not consolidate with or merge into another corporation or permit one or more other corporations to consolidate with or merge into it.

# 3. PAYMENT GUARANTEE

#### 3.1 General

The Guarantor absolutely, unconditionally and irrevocably guarantees to the Beneficiary, as primary obligor and not merely as surety, the full and prompt payment by the Company of all of the Company's payment obligations under the GSA to the Beneficiary when and as due (whether by required prepayment, declaration, acceleration, demand or otherwise) arising during the period that commences on the Closing Date and expires on the Commercial Operation Date, including, without limitation, payment obligations in respect of any Default under the GSA by the Company, and including all fees, costs, and expenses. (collectively, the "Guaranteed Obligations"). This Payment Guarantee constitutes a continuing guaranty of payment and not of collection.

# 3.2 <u>Indemnity</u>

As an independent and primary obligation, the Guarantor shall indemnify, defend and hold harmless the Beneficiary against any and all losses, damages, costs, expenses and liabilities (including legal fees and expenses) suffered by the Beneficiary or which the Beneficiary may incur, to the extent that a judicial authority declares any of the Guaranteed Obligations as illegal, invalid, void or unenforceable by reason of an Insolvency Event or any other reason.

# 3.3 Maximum Liability

Notwithstanding any other provision of this Payment Guarantee, the maximum aggregate liability of the Guarantor arising under this Payment Guarantee shall never exceed the maximum aggregate liability of the Company under the GSA plus costs, fees and expenses, including without limitation all attorneys' fees, which may be incurred by the Beneficiary in enforcing or attempting to enforce this Payment Guarantee as provided in Section 3.7 (*Costs*). The Guarantor shall be entitled to all contractual defenses, limitations and exclusions available to the Company under the GSA but not any defenses that may arise in the event that the Company suffers an Insolvency Event.

# 3.4 <u>Unconditional Nature of Obligations; Waivers</u>

Subject to Section 3.3 (*Maximum Liability*), the obligations of the Guarantor under this Payment Guarantee shall be absolute, irrevocable and unconditional and shall remain in full force and effect until the date on which this Payment Guarantee terminates in accordance with Section 4.7 (*Term*), and such obligations shall not be affected, modified or impaired upon the happening from time to time of any event, including without limitation any of the following events, whether or not with notice to, or the consent of, the Guarantor:

- a. The waiver, surrender, compromise, settlement, release or termination of any or all of the obligations, covenants or agreements of the Company under the GSA;
- b. The failure to give notice to the Guarantor of the occurrence of a Default under the GSA;
- c. The waiver, compromise or release of the payment, performance or observance by the Company or by the Guarantor, respectively, of any or all of the obligations, covenants or agreements of either of them contained in the GSA or this Payment Guarantee, as the case may be;
- d. The extension of the time for payment of any Guaranteed Obligations under the GSA or of the time for performance of any other of the Company's obligations arising out of the GSA;
- e. The modification, amendment, waiver or alteration (whether material or otherwise) of any obligation or representation set forth in the GSA;
- f. the taking, or the omission, of any of the actions referred to in the GSA;
- g. any failure, omission, delay or lack on the part of the Beneficiary to enforce, assert or exercise any right, power or remedy conferred on it in the GSA;
- h. the voluntary or involuntary liquidation, dissolution, sale or other disposition of all or substantially all the assets, marshalling of assets and liabilities, receivership, insolvency, bankruptcy, assignment for the benefit of creditors, reorganization, arrangement,

composition with creditors or readjustment of, or other similar proceedings affecting the Guarantor or the Company or any of the respective assets of either of them, or any allegation or contest of the validity of this Payment Guarantee in any such proceeding;

- i. any defense based upon any legal disability of the Company or, to the extent permitted by Applicable Law, any release, discharge, reduction or limitation of or with respect to any sums owing by the Company or any other liability of the Company to the Beneficiary;
- j. to the extent permitted by Applicable Law, the release or discharge by operation of law of the Guarantor from the performance or observance of any obligation contained in this Payment Guarantee;
- k. the default or failure of the Guarantor fully to perform any of its obligations set forth in this Payment Guarantee; or
- 1. the invalidity or unenforceability of the GSA or any part thereof.

This Payment Guarantee is in no way conditional or contingent upon any attempt to collect from or bring action against the Company or its assets or upon any other action, occurrence or circumstance whatsoever. The liability of the Guarantor hereunder is independent of and not in consideration of or contingent upon the liability of any other person under this or any similar instrument and the release of, or cancellation by, any party to this or a similar instrument shall not act to release or otherwise affect the liability of the Guarantor hereunder. The Guarantor hereby agrees that it shall not be necessary for the Beneficiary, and the Guarantor hereby waives any rights which the Guarantor may have to require the Beneficiary, in order to enforce the obligations of the Guarantor hereunder, first to (i) institute suit or exhaust its remedies against any the Company or any other person, (ii) enforce the Beneficiary's rights or exhaust any remedies available to the Beneficiary against any assets of the Company or (iii) resort to any other means of obtaining payment of the obligations of the Company hereunder.

The Guarantor waives and agrees not to assert

- (i) the defense of the statute of limitations in any action hereunder or for the collection of the Guaranteed Obligations;
- (ii) any defense arising by reason of any lack of corporate or other authority or any other defense of the Company or any other person;
- (iii) any rights to set-offs and counterclaims;
- (iv) without limiting the generality of the foregoing, to the fullest extent permitted by Applicable Law, any defenses or benefits that may be derived from or afforded by Applicable Law limiting the liability of or exonerating guarantors or sureties, or that may conflict with the terms of this Payment Guarantee; and
- (v) any and all notice of the acceptance of this Payment Guarantee, and any and all notice of the creation, renewal, modification, extension or accrual of the Guaranteed Obligations, or the reliance by Beneficiary upon this Payment Guarantee, or the exercise of any right, power or privilege hereunder. The Guaranteed Obligations shall conclusively be deemed to have been created, contracted, incurred and permitted to exist in reliance upon this Payment Guarantee. The Guarantor waives promptness, diligence, presentment, protest,

demand for payment, notice of default, dishonor or nonpayment and all other notices to or upon the Company, the Guarantor or any other person with respect to the Guaranteed Obligations.

If any payment by the Company to the Beneficiary is rescinded or must be returned by the Beneficiary, the obligations of the Guarantor hereunder shall be reinstated with respect to such payment. The Guarantor shall have no right to (i) raise a defense previously raised by the Company arising out of or in connection with a Guaranteed Obligation claimed hereunder and which a judicial authority has settled in the Beneficiary's favor by the dispute resolution procedures of Article 21 (*Dispute Resolution*) of the GSA, or (ii) to use a cure period previously used by the Company. The Guarantor assumes responsibility for being and remaining informed of the financial condition of the Company and of all other circumstances bearing upon the risk of nonpayment of the Guaranteed Obligations which diligent inquiry would reveal and agrees that the Beneficiary shall not have a duty to advise the Guarantor of information known to it regarding such condition or any such circumstances.

# 3.5 Proceedings Against the Guarantor

In the event of a Default in the payment of the Guaranteed Obligations when and as the same shall become due, the Beneficiary shall have the right to proceed first and directly against the Guarantor under this Payment Guarantee without proceeding against the Company or exhausting any other remedies which it may have, and the Guarantor shall pay all Guaranteed Obligations on demand.

# 3.6 <u>Subrogation</u>

Upon payment of any Guaranteed Obligation, the Guarantor shall be subrogated to the rights of the Beneficiary against the Company with respect to such Guaranteed Obligation, and the Beneficiary agrees to take at the Guarantor's expense such steps as the Guarantor may reasonably request to implement such subrogation; provided that the Beneficiary shall have no obligation to take any such steps and the Guarantor shall not enforce any right arising by way of subrogation or exercise any other right or remedy arising by reason of any performance by it of this Payment Guarantee, including, but not limited to, any contractual, statutory or common law rights of reimbursement, contribution or indemnity, whether against the Company or any other Person, until the date on which this Payment Guarantee terminates in accordance with Section 4.7 (*Term*).

# 3.7 Costs

The Guarantor agrees to pay all costs, expenses and fees, including without limitation all attorneys' fees, which may be incurred by the Beneficiary in enforcing or attempting to enforce this Payment Guarantee following any default on the part of the Guarantor hereunder, whether the same shall be enforced by suit or otherwise.

# 3.8 <u>Financial Condition of the Company</u>

The Guarantor shall not have any right to require the Beneficiary to obtain or disclose any information with respect to the financial condition or character of the Company or the ability of the Company to pay and perform the Guaranteed Obligations, any action or inaction on the part of the Beneficiary or any other Person, or any other matter, fact or occurrence whatsoever. The Guarantor hereby acknowledges that it has undertaken its own independent investigation of the financial condition of the Company and all other matters pertaining to this Payment Guarantee and further acknowledges that it is not relying in any manner upon any representation or statement of the

Beneficiary with respect thereto, and that it is now and at all times will be completely familiar with, the business, condition (financial or otherwise), operations, performance, properties, and prospects of the Company.

#### 4. MISCELLANEOUS

#### 4.1 Governing Law

This Payment Guarantee shall be governed by, and construed in accordance with, the Applicable Laws of the Commonwealth of Puerto Rico including those processes before PREB whereby PREB renders a final determination of any Dispute submitted pursuant to paragraph (a) of Section 4.2 (*Dispute Resolution*), without regard to any contrary result required under applicable conflicts of laws rules.

# 4.2 <u>Dispute Resolution</u>

If a dispute arises between the Parties regarding the application, interpretation, enforceability, validity, performance or breach of this Payment Guarantee (a "**Dispute**"), then the disputing Party may promptly provide written notice of the Dispute to the other Party and the Parties shall resolve such Dispute as follows:

- a. The Parties shall submit such Dispute to PREB for final determination.
- b. Each Party agrees that (i) a final determination of a Dispute rendered by PREB shall have a conclusive and binding effect on it, and (ii) a Party may enforce such final determination in the courts of any competent jurisdiction following completion of any recognition and enforcement process required in such jurisdiction, subject to the grounds for non-enforcement under the laws of the jurisdiction in which such Party seeks such enforcement.
- c. For the exclusive benefit of the Beneficiary, the Guarantor irrevocably agrees that the Beneficiary shall have the right to (i) resolve such Dispute but only to the extent that PREB declines to resolve such Dispute, submitted pursuant to paragraph (a) above, for any reason, and (ii) enforce a final determination by PREB in its favor, in each case in the courts of the Court of First Instance for the Commonwealth of Puerto Rico, San Juan Part. By the execution of this Agreement, the Guarantor irrevocably submits to the jurisdiction of any such court in any action, suit or proceeding relating to such Dispute or final determination. Final judgment against the Guarantor in any such action, suit or proceeding shall be conclusive and may be enforced in any other jurisdiction, by suit on the judgment, a certified or exemplified copy of which shall be conclusive evidence of the judgment, or in any other manner provided by Applicable Law.
- d. The Guarantor hereby irrevocably designates, appoints and empowers [name of service of process agent] (the "Service of Process Agent"), with offices currently located at [address within Commonwealth of Puerto Rico], as its authorized agent solely to receive for and on its behalf service of any summons, complaint or other legal process in any action, suit or proceeding the Beneficiary may bring in the Commonwealth of Puerto Rico in respect of this Payment Guarantee.
- e. As long as this Payment Guarantee remains in force, the Guarantor shall maintain a dulyappointed and authorized agent to receive for and on its behalf service of any summons, complaint or other legal process in any action, suit or proceeding that the Beneficiary may

bring in the Commonwealth of Puerto Rico, United States of America, with respect to this Payment Guarantee. The Guarantor shall keep the Beneficiary advised of the identity and location of such agent.

- f. The Guarantor also irrevocably consents, if for any reason its authorized agent for service of process of summons, complaint and other legal process in any action, suit or proceeding is not present in the Commonwealth of Puerto Rico, to the service of such process being made out of the courts of the Commonwealth of Puerto Rico located in the of the Court of First Instance for the Commonwealth of Puerto Rico, San Juan Part by mailing copies of the papers by registered mail, to the Guarantor, at its address specified pursuant to Section 4.3 (*Communications*). In such a case, the Beneficiary shall also send a copy of the process papers to the Guarantor via email.
- g. Service in the manner provided in paragraphs (d), (e) and (f) above in any action, suit or proceeding will be deemed personal service, will be accepted by the Guarantor as such and will be valid and binding upon the Guarantor for all purposes of any such action, suit or proceeding.
- h. THE GUARANTOR IRREVOCABLY WAIVES TO THE FULLEST EXTENT PERMITTED BY APPLICABLE LAW:
  - 1. ANY OBJECTION THAT IT MAY HAVE NOW OR IN THE FUTURE TO THE LAYING OF THE VENUE OF ANY ACTION, SUIT OR PROCEEDING IN ANY COURT REFERRED TO IN THIS SECTION;
  - 2. ANY CLAIM THAT ANY SUCH ACTION, SUIT OR PROCEEDING HAS BEEN BROUGHT IN AN INCONVENIENT FORUM;
  - 3. ITS RIGHT OF REMOVAL OF ANY MATTER COMMENCED BY THE BENEFICIARY IN THE COURT OF FIRST INSTANCE FOR THE COMMONWEALTH OF PUERTO RICO, SAN JUAN PART; AND
  - 4. ANY AND ALL RIGHTS TO DEMAND A TRIAL BY JURY IN ANY SUCH ACTION, SUIT OR PROCEEDING BROUGHT AGAINST THE GUARANTOR BY THE BENEFICIARY.
- i. Where (i) a dispute, claim or controversy arises out of, or in connection with, the GSA, and (ii) such dispute, claim or controversy also forms a basis for the Beneficiary to assert a claim under this Payment Guarantee, the Guarantor shall consent to any request by the Beneficiary to join such dispute as a party.

#### 4.3 Communications

Each Party shall deliver all notices and other communications relating to this Payment Guarantee in writing to the other Party, which shall be deemed duly given upon receipt after delivery by hand or sent by e-mail with read receipt confirmation, registered or certified mail, return receipt requested, postage prepaid or by recognized overnight courier service to the following addresses:

#### FOR COMMUNICATIONS DELIVERED TO GUARANTOR:

[•]

Attention: [●] E-mail: [●]

#### FOR COMMUNICATIONS DELIVERED TO BENEFICIARY:

Puerto Rico Electric Power Authority 1110 Ponce de León Avenue, Office #808 San Juan, Puerto Rico

Attention: Deputy Director of Operations Office

E-mail: mary.zapata@prepa.com

Any Party may change its address for notices by giving written notice to the other Party as set forth above.

### 4.4 <u>Banking Days</u>

Except as otherwise provided in this Payment Guarantee, if any date on which a payment is to be made, notice is to be given or other action taken hereunder is not a Banking Day, then such payment, notice or other action shall be made, given or taken on the next succeeding Banking Day in such place, and in the case of any payment, no interest shall accrue for the delay.

#### 4.5 Successors and Assigns

This Payment Guarantee shall bind the Guarantor and its successors and permitted assigns and inure to the benefit of the Beneficiary and its successors and permitted assigns. The Guarantor may not assign its obligations hereunder without the prior written consent of the Beneficiary. The Beneficiary may not assign its rights and obligations hereunder without the prior written consent of the Guarantor, except that the Beneficiary may, without any prior consent of the Guarantor, assign its right and obligations hereunder to any permitted assignee of the GSA.

### 4.6 Guarantee for Benefit of the Beneficiary; No Third-Party Beneficiaries

The Guarantor has entered into this Payment Guarantee for the benefit of the Beneficiary. Nothing contained herein shall be intended or deemed to create any right in, or to be in whole or in part for the benefit of, any Person other than the Guarantor and the Beneficiary and their respective permitted successors and assigns.

#### 4.7 <u>Term</u>

This Payment Guarantee shall enter into full force and effect on the Closing Date and terminate with no further force and effect on the date on which the Company has discharged all of the Guaranteed Obligations in full (the "**Term**"). Termination of this Payment Guarantee shall not affect the Guarantor's liability hereunder as to any Guaranteed Obligations existing or arising under the GSA prior to the effective date of such termination.

# 4.8 Amendments and Waivers

Any provision of this Payment Guarantee may be amended or waived if, but only if, the Parties execute and deliver such amendment or waiver in writing.

# 4.9 <u>Headings</u>

The article and section headings of this Payment Guarantee are for convenience only and shall not affect the construction hereof.

#### 4.10 Partial Invalidity

The invalidity of any one or more phrases, sentences, clauses or sections in this Payment Guarantee shall not affect the validity or enforceability of the remaining portions of this Payment Guarantee or any part thereof.

#### 4.11 No Waiver, Remedies

No failure or delay by the Beneficiary in exercising any right, power or privilege hereunder shall operate as a waiver thereof nor shall any single or partial exercise thereof preclude any other or further exercise thereof or the exercise of any other right, power or privilege. The remedies herein provided are cumulative and not exclusive of any remedies provided by Applicable Law.

# 4.12 <u>Execution in Several Counterparts</u>

This Payment Guarantee may be executed in any number of counterparts, each of which shall for all purposes be deemed to be an original; but such counterparts shall together constitute but one and the same instrument.

| IN WITNESS WHEREOF, the Guarantor has caused this Payment Guarantee to be executed in its name and on its behalf by its duly authorized officer as of the date first above written. |
|---|
| [ullet]   |
| as Guarantor  |
|   |
| By:   |
| Name: [●]   |
| Title: [●]  |
|   |
| ACCEPTED AND AGREED BY:   |
| PUERTO RICO ELECTRIC POWER AUTHORITY  |
| as Beneficiary  |
|   |
| By:   |
| Name: [●]   |
| Title: [●]  |

# APPENDIX CC

#### **EXCEPTIONS TO TECHNICAL APPENDICES**

Resource Provider shall not enroll C&I Participants in the VPP, unless prior to such enrollment the Parties have agreed to an amendment of this Appendix CC, and other relevant provisions of this Agreement, to accommodate such participants. Based on the assumption that no C&I Participants will be enrolled in the VPP, the following provisions shall not apply to Resource Provider for the duration of the Agreement. If Resource Provider enrolls C&I Participants in the VPP, then the following provisions shall apply to those participants.

| Global   | Section   | Exception   |
|----------|---|---|
|          | Section 8.1, Appendix K, Appendix M, and Appendix U | When used in this Agreement, the terms "meter", "metering equipment" and "metering device" may include inverter-based measurement solutions and are not limited to standalone meters. |
| Appendix | Section   | Exception   |
| L        | Procedure I, Section 2                              | Paragraph (d) voltage scheduling and (e) voltage regulation will only apply to C&I.   |
| L        | Procedure I, Section 4.a.v                          | Any directions provided by T&D Operator must comply with Appendix H as regards time periods and services provided.  |
| L        | Procedure I, Section 4.b.ii                         | Replace with "Resource provider shall ensure that the GSDS integrates in conformance with the requirements in Appendix H."  |
| L        | Procedure I, Section 4.b.v                          | Resource Provider will only make available to the T&D Operator the Grid Services required in Appendix H.  |
| L        | Procedure IV, Section 4.d                           | This section only applies to C&I Participants.  |
| L        | Procedure VI, Section 4.e                           | This section only applies to C&I Participants.  |
| М        | 1.c   | T&D Operator and Resource Provider will agree on the final testing conditions and Test Plan.  |
| M        | 1.d   | User acceptance tests ("UATs")" only apply to C&I Participants. Deliverables for  |

|   |         | factory acceptance tests ("FATs") will correspond to the interconnection process.  |
|---|---------|--|
| M | 1.e     | The restriction in this section does not apply to residential.   |
| M | 3.b     | This section only applies to C&I Participants.   |
| M | 3.c.ii  | This section only applies to C&I Participants. Residential will follow the regulated interconnection requirements.   |
| M | 3.c.vi  | Since Resource Provider will only provide<br>the Demand Build Service and Demand<br>Reduction Service, qualification testing<br>will only cover these.           |
| M | 4.b.ii  | This section only applies to C&I Participants. Residential will follow the regulated interconnection requirements.   |
| M | 4.b.vii | T&D Operator will not require annual testing of protection and control equipment as long as no change in such equipment has occurred.                            |
| M | 4.b.xi  | T&D Operator will not require annual qualification testing as long as no change in such equipment has occurred or new services has been added.                   |
| M | 4.b.xvi | T&D Operator will not require annual demonstrations and orchestration trials as long as no change in such equipment has occurred or new services has been added. |