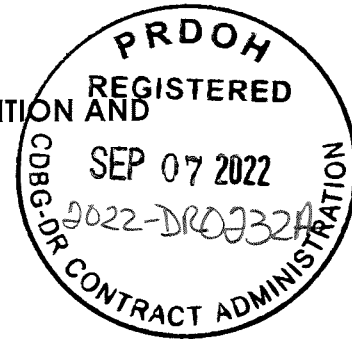




COMMUNITY DEVELOPMENT BLOCK GRANT – DISASTER RECOVERY (CDBG-DR)

**AMENDMENT A TO AGREEMENT FOR
PHOTOVOLTAIC SYSTEMS AND WATER STORAGE SYSTEMS ACQUISITION AND
INSTALLATION SERVICES
BETWEEN THE
PUERTO RICO DEPARTMENT OF HOUSING
AND
SYNERLUTION ENERGY, LLC**



This **AMENDMENT A TO AGREEMENT FOR PHOTOVOLTAIC SYSTEMS AND WATER STORAGE SYSTEMS ACQUISITION AND INSTALLATION SERVICES**, (hereinafter, "**Amendment A**") is entered into in San Juan, Puerto Rico, this 6 day of September, 2022, by and between the **PUERTO RICO DEPARTMENT OF HOUSING** (hereinafter, the "PRDOH"), a public agency created under Law No. 97 of June 10, 1972, as amended, 3 L.P.R.A. § 441 *et seq.*, known as the "**Department of Housing Governing Act**" (hereinafter, "**Organic Act**"), with principal offices at 606 Barbosa Avenue, San Juan, Puerto Rico, herein represented by Hon. William O. Rodríguez Rodríguez, of legal age, single, attorney, and resident of San Juan, Puerto Rico, in his capacity as Secretary; and **SYNERLUTION ENERGY, LLC** (hereinafter, "**Contractor**"), a limited liability company with principal offices in Rd #2 Km. 114.5 Marginal Bo. Guerrero, Isabela, Puerto Rico, herein represented by Irving Cruz Vadi, in his capacity as President, of legal age, married, and resident of Aguadilla, Puerto Rico; collectively, "the Parties".

I. RECITALS AND GENERAL INFORMATION

WHEREAS, on December 15, 2021, the Parties executed an Agreement for Photovoltaic Systems and Water Storage Systems Acquisition and Installation Services, registered as Contract No. 2022-DR0232, for a maximum amount not to exceed **TWENTY-SEVEN MILLION EIGHT HUNDRED TWENTY-SEVEN THOUSAND AND THREE HUNDRED DOLLARS AND ZERO CENTS (\$27,827,300.00)**, from **Account Numbers R02H14HER-DOH-LM /R02H 14H ER-DOH-UN 6090-01-000**, ending on December 14, 2023 (hereinafter, "**Agreement**").

WHEREAS, as per Article XLIV of the Agreement, the Agreement may be amended in writing and signed by a duly authorized representative of each party. Nonetheless, the amendment shall not invalidate the Agreement, nor release the Parties from their obligations under the Agreement.

WHEREAS, the Parties wish to amend the Agreement to modify **Exhibit C** (Scope of Work) and **Exhibit E** (Performance Requirements) to modify the "Pre-Installation Assessment and Scope of Work" task to expand its term. This Amendment A does not modify the term of the Agreement, the account or the maximum amount to be paid for allowable services during the term of the Agreement.

WHEREAS, it is the intention of the Parties that this Amendment A is not intended to affect nor does it constitute an extinctive novation of the obligations of the Parties under the Agreement, but is rather a modification and amendment of certain terms and conditions under the Agreement.

WHEREAS, the PRDOH has the legal power and authority, in accordance with its enabling statute, the Organic Act, the Federal laws, and regulations creating and allocating funds to the CDBG-DR Program, and the current Action Plan, to enter into this Amendment A.

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WHEREAS, the Contractor has duly adopted Resolution 22-03 dated July 12, 2022, authorizing the Contractor (via its Authorized Representative, Irving Cruz Vadi) to enter into this Amendment A. The Contractor has agreed to enter into this Amendment A with the PRDOH, and by signing this Amendment A, the Contractor assures PRDOH that the Contractor shall comply with all the requirements described herein.

NOW, THEREFORE, in consideration of the mutual promises and the terms and conditions set forth herein, the PRDOH and the Contractor agree to execute this Amendment A subject to the following:

TERMS AND CONDITIONS

II. SCOPE OF AMENDMENT

The Community Energy and Water Resilience Installations (**CEWRI**) Program has identified the need to amend the Agreement to **(I)** modify the timeline established in **Attachment C** (Scope of Work) to reference the timelines established in **Attachment E** (Performance Requirements), and **(II)** modify the timeline established in **Attachment E** (Performance Requirements) for the "Pre-Installation Assessment and Scope of Work" task to expand its term. Taking into consideration the nature of cases now managed by the CEWRI Program, this modification will afford the Contractor the necessary time to properly assess cases in compliance with the CEWRI Program's objectives and requirements.

III. AMENDMENTS

- A. **Attachment C** (Scope of Work) of the Agreement is being replaced by a modified **Attachment C** (Scope of Work) hereto incorporated by reference into the Agreement and made part of the Agreement. (See **Attachment I** of this Amendment A).
- B. **Attachment E** (Performance Requirements) of the Agreement is being replaced by a modified **Attachment E** (Performance Requirements) hereto incorporated by reference into the Agreement and made part of the Agreement. (See **Attachment II** of this Amendment A).
- C. On April 4, 2022, the Federal Government permanently discontinued the use of the DUNS Number as the primary means of identity identification for Federal awards government-wide and replaced it with the Unique Entity Identifier (UEI). Accordingly, the Parties agree to replace the Contractor's DUNS Numbers with the following Unique Entity Identifier:

SYNERLUTION ENERGY, LLC
Unique Entity ID: P7MVE9NHAVN7

- D. The Parties agree to include PRDOH's Unique Entity Identifier as part of the Agreement, as amended:

PRDOH
Unique Entity ID: FFMUBT6WCM1

- E. All other terms and conditions of the Agreement remain unchanged.

IV. HEADINGS

The titles to the paragraphs of this Amendment A are solely for reference purposes and the convenience of the parties and shall not be used to explain, modify, simplify, or aid in the interpretation of the provisions of this Amendment.

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V. FEDERAL FUNDING

The fulfillment of the Agreement, as amended, is based on those funds being made available to the PRDOH as the lead administrative agency for Recovery. All expenditures under the Agreement, as amended, must be made in accordance with the Agreement, as amended, the policies and procedures promulgated under the CDBG-DR Program, and any other applicable laws. Further, the CONTRACTOR acknowledges that all funds are subject to recapture and repayment for non-compliance.

VI. COMPLIANCE WITH LAW

It is the intention and understanding of the Parties hereto that each and every provision of law required to be inserted in the Agreement, as amended, should be and is inserted herein. Furthermore, it is hereby stipulated that every such provision is deemed to be inserted and if, through mistake or otherwise, any such provision is not inserted herein or is not inserted in correct form, then the Agreement, as amended, shall forthwith, upon the application of any Party, be amended by such insertion so as to comply strictly with the law and without prejudice to the rights of any Party.

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VII. SUBROGATION

The CONTRACTOR acknowledges that funds provided through the Agreement, as amended, are Federal funds administered by HUD under the CDBG-DR Program and that all funds provided by the Agreement, as amended, are subject to audit, disallowance, and repayment. Any disagreement with adverse findings may be challenged and subject to Federal regulation, however, the CONTRACTOR shall promptly return any and all funds to the PRDOH, which are found to be ineligible, unallowable, unreasonable, a duplication of benefits, or non-compensable, no matter the cause. This clause shall survive indefinitely the termination of the Agreement, as amended.

VIII. COMPTROLLER REGISTRY

The PRDOH shall remit a copy of this Amendment A to the Office of the Comptroller for registration within **fifteen (15)** days following the date of execution of this Amendment A and any subsequent amendment thereto. The services object of this Amendment A may not be invoiced or paid until this Amendment A has been registered by the PRDOH at the Comptroller's Office, pursuant to Act No. 18 of October 30, 1975, as amended by Act No. 127 of May 31, 2004.

IX. ENTIRE AGREEMENT

The Agreement and this Amendment A constitute the entire agreement among the Parties for the use of funds received under the Agreement and this Amended Agreement and it supersedes all prior or contemporaneous communications and proposals, whether electronic, oral, or written among the Parties with respect to the agreement.

X. SEVERABILITY

If any provision of this Amendment A shall operate or would prospectively operate to invalidate the Amendment in whole or in part, then such provision only shall be deemed severed and the remainder of the Amendment shall remain operative and in full effect.

XI. COUNTERPARTS

This Amendment may be executed in any number of counterparts, each of whom shall be deemed to be an original, however, all of which together shall constitute one and the same instrument. If the Amendment is not executed by the PRDOH within

thirty (30) days of execution by the other party, this Amendment A shall be null and void.

XII. COMPLIANCE WITH THE FINANCIAL OVERSIGHT AND MANAGEMENT BOARD FOR PUERTO RICO (FOMB) POLICY: REVIEW OF CONTRACTS

As part of the PRDOH contract process, and pursuant to Section 204(b)(2) of the "Puerto Rico Oversight, Management, and Economic Stability Act," 48 U.S.C. §2101, et seq., also known as "PROMESA", the Financial Oversight and Management Board for Puerto Rico (**FOMB**) requires approval of certain contracts and amendments to assure that they "promote market competition" and "are not inconsistent with the approved fiscal plan." For the approval process, the FOMB requests, among other information, the "Contractor Certification Requirement" for its evaluation. In compliance with the above, the Contractor represents and warrants that the information included in the "Contractor Certification Requirement" is complete, accurate and correct, and that any misrepresentation, inaccuracy or falseness in such Certification will render the contract null and void and Contractor will have the obligation to reimburse immediately to the Commonwealth any amounts, payments or benefits received from the Commonwealth under the proposed Amendment and original Agreement. A signed copy of the "Contractor's Certification Requirement" is included to this Amendment A as **Attachment III**.

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XIII. SURVIVAL OF TERMS AND CONDITIONS

The terms and conditions of this Agreement, as amended, related to the following subjects shall survive the termination or expiration of this Agreement, as amended,: interpretive provisions; consideration; warranties; general affirmations, federal assurances, federal and state certifications; CDBG-DR and state funding, recapture of CDBG-DR and/or state funds, overpayment of CDBG-DR and/or state funds; ownership and intellectual property, copyright; records retention methods and time requirements; inspection, monitoring and audit; confidentiality; public records; indemnification and liability; infringement of intellectual property rights; independent Contractor relationship; compliance with laws; notices; choice of law and venue; severability; dispute resolution; consolidations, merger, change of name, and dissolution. Terms and conditions that, explicitly or by their nature, evidence the Parties' intent that they should survive the termination or expiration of this Agreement, as amended, shall so survive.

IN WITNESS THEREOF, the parties hereto execute this Amendment A in the place and on the date first above written.

PUERTO RICO DEPARTMENT OF HOUSING

SYNERLUTION ENERGY, LLC

William O. Rodríguez Rodríguez
William O. Rodríguez Rodríguez (Sep 6, 2022 16:33 EDT)

Hon. William O. Rodríguez Rodríguez, Esq.
Secretary

ZC
Irving Cruz Vadi (Sep 2, 2022 14:32 EDT)

Irving Cruz Vadi
President



GOVERNMENT OF PUERTO RICO
DEPARTMENT OF HOUSING

Attachment I ATTACHMENT C

SCOPE OF WORK PV Systems, Water Storage System Acquisition, and Installation Services Community Development Block Grant – Disaster Recovery Program Puerto Rico Department of Housing CDBG-DR-IFB-2021-01 (Revised for Amendment A) (Amended)

1. Introduction

The Puerto Rico Department of Housing (**PRDOH**) is issuing this Invitation for Bids (**IFB**) to acquire Photovoltaic Systems (PV Systems), Water Storage System Systems, and Installation Services for the **Community Energy and Water Resilience Installation Program (CEWRI)** under a contract with the PRDOH. This document defines the work the Selected Bidder must perform under a contract with PRDOH. The process is designed to promote fair and open competition while seeking a cost-competitive solution.

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A detailed description of CDBG-DR Programs is included in the Action Plan approved by the U.S. Housing and Urban Development (HUD). A complete copy of the Action Plan is available at www.cdbg-dr.pr.gov/action-plan. CDBG-DR Program subject of this Scope of Work is briefly described below.

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Program Overview

The Community Energy and Water Resilience Installations Program (**CEWRI**) will provide homeowners, businesses, and/or public facilities energy and water efficiency improvements to promote resilience during emergencies with the installation of PV systems with battery back-up for critical loads and water storage system. The CEWRI program is intended to work with and complete existing CDBG-DR programs such as the Home Repair, Reconstruction, or Relocation Program (**R3**), the Social Interest Housing Program (**SIH**), and the Small and Business Incubators and Accelerators Program (**SBIA**).

This IFB is specifically intended for the equipment and installation of Photovoltaic System (PV Systems) and Water Storage System (WSS) for homes that have been repaired or reconstructed under the R3 and SIH CDBG-DR Program. We are defining homes as those involving the construction, alteration, or repair of single-family houses or apartment buildings of no more than four stories in height. Homes that do not fall under this category will not be serve under this IFB.

The PRDOH aims to contract, at its discretion and in the best interest of the program implementation, multiple firms for a term of 2 years with the option of an extension, up to one additional year. The acquisition of equipment and the required installation services will be made on an as-needed basis for the duration of the contract. No guarantee of the acquisition of any specific quantity or total dollar amount is made. The PRDOH reserves the right to increase or decrease amounts proposed on all

goods/services. The PRDOH reserves the right to add or delete goods/services. Proposed quantities represent a reasonable estimate under this contract for bidding purposes. This IFB should be considered an "all or non-basis". Bidders must provide a bid for all goods and services listed in this Scope of Work. Bidders must provide bids for equipment and installation of Photovoltaic System PV System, and Water Storage System.

The selected Bidder will be directly responsible for ensuring the accuracy, timeliness, and completion of all tasks assigned under this contract. Therefore, we encourage a careful analysis of the requirements of this document. The scope of work presented is based upon circumstances existing at the time the IFB is released. The selected Bidder must guarantee the prices of all the goods/services for the contract term. The PRDOH reserves the right to modify or delete the tasks/goods listed and, if appropriate, add additional tasks/goods before and during the term of the contract.

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The PRDOH reserves the right, without limitations, to: (i) cancel this solicitation and reissue this IFB or another version of it, if it deems that doing so is in the best interest of the Public Interest; and (ii) amend the contract(s) of the Selected Bidder to, among others, extend its original duration, as further explained in this IFB, or to extend the scale of the scope to include work under subsequent CDBG-DR action plans as related to the services requested herein, including CDBG Mitigation (CDBG MIT) funds; and (iii) to contract one or more qualified bidders or the cancellation of this IFB.

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2. Requirements

2.1. General Requirements:

- The Bidder selected to provide services regarding Photovoltaic System (PV System) must have a minimum of 5 years of experience within the renewable energy sector.
- The Bidder selected to provide services regarding Water Storage System (WSS) must have a minimum of 2 years of experience in installation of WSS.
- All equipment to be supply and installed by the selected Bidder shall be new, no reconditioned, refurbished, or otherwise used parts or components will be accepted.
- All technical support or any warranty servicing from the manufacturer shall be generated and managed by the selected Bidder once contracted by the PRDOH.
- The selected Bidder shall not provide equipment that is close to the end of life or may become unsupported by the manufacturer during the required warranty period. If any equipment becomes unsupported by the manufacturer, the Bidder will be obligated to replace the equipment with an equivalent that meets the applicable warranty period, with similar or better specifications of the original, without incurring any additional financial obligation from PRDOH.

- All prices submitted by the Bidder shall include all expenses including incidentals, taxes, delivery fees, installation fees, profits, overhead, and any other administrative fees that apply to this acquisition. The PRDOH will not cover any additional costs. Only the unit price submitted for the equipment and installation services will be taken into consideration.
- The PRDOH will not be responsible for reimbursement or expense related to per-diem, tolls, parts or labors for equipment under warranty service.

2.2. Code Compliance:

- Installation and equipment shall comply with applicable building, mechanical, fire, seismic, structural, and electrical codes, included in the Joint Regulation for the Evaluation and Grant of Permits Related to Developments, Land Use, and Business Operations (Joint Regulation), as amended. Bidders must abide by the "Joint Regulation", as amended, "Regulation No. 7796", "Regulation No. 8080," and any other State regulation that regulates the installations within this Program.
- Bidder must install solar system equipment in compliance with Puerto Rico Residential Code 2018 (PRRC), National Electric Code (NEC), Puerto Rico Electrical Power Authority (PREPA) and Permit Management Office (OGPe, for its Spanish acronym) Regulations.

2.3. Contractor Responsibilities:

2.3.1. Contractor Levels

Contractors will be divided into Levels based on their financial capacity. The Contractor must select and comply one of the following Contractor Levels.

Level 1 Contractor:

Level 1 Contractors will be those with high financial capacity which are able to perform high volume of task orders at any given time. Level 1 Contractors:

- Will have a higher financial capacity as defined in Section 6.1.8 Financial Information of the IFB;
- Will be frequently evaluated and held responsible for the performance of their team and organization, including designers, consultants, suppliers, manufacturers, and subcontractors;
- Will provide periodical status reports to PRDOH and its representatives; and
- Will attend or conduct meeting with the PRDOH and its representatives.

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Level 2 Contractor:

Level 2 Contractors will be those with moderate financial capacity which are able to perform moderate volume of task orders at any given time. Level 2 Contractors:

- Will have moderate financial capacity as defined in Section 6.1.8 Financial Information of the IFB;
- Will be frequently evaluated and held responsible for the performance of their team and organization, including designers, consultants, suppliers, manufacturers, and subcontractors;
- Will provide periodical status reports to PRDOH and its representatives; and
- Will attend or conduct meeting with the PRDOH and its representatives.

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2.3.2. General Responsibilities:

It is the responsibility of the selected Bidder to deliver quality services in compliance with the project requirements. Also, it is the responsibility of the selected Bidder to:

- Hold the correct permits and licenses necessary to conduct business in Puerto Rico and the city where the project is taking place, and the Bidder must have qualified and licensed personnel as required by the Puerto Rico government to perform PV Systems and/or WSS installations.
- The Designer for the PV Systems must be a licensed engineer in compliance with Puerto Rico's Act Number 173 of August 12, 1988, with the Renewable Solar Energy Installer (Photovoltaic) Certificate from the Public Energy Policy Program (PEPP) under the Department of Economic Development and Commerce (DDEC, for its Spanish acronym). Must have at least five (5) years of experience performing PV system design. Such designer will also be in charge of the Pre-Installation Assessment.
- PV Systems installers must be a professional with the Renewable Solar Energy Installer (Photovoltaic) Certificate from the Public Energy Policy Program (PEPP) under the Department of Economic Development and Commerce (DDEC, for its Spanish acronym).
- The Designer for the WSS must be a licensed engineer in compliance with Puerto Rico's Act Number 173 of August 12, 1988. Must have at least two (2) years of experience performing WSS design. Such designer will also be in charge of the Pre-Installation Assessment.
- Uphold a professional demeanor while on a job site.
- Coordinate with PRDOH selected Program Managers (PMs) with tasks related to this Scope of Work.

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- Coordinate with the selected PM in order to Conduct a Pre-Installation Assessment. This will provide the Designer with the necessary data to perform the design and/or to determine what remediation will be needed for the installation.
- Conduct a pre-award site visit. Assist the PMs during the applicant award process. The Bidder will be responsible for clarifying the owner any design-related clarification that might be needed.
- Perform a Pre-Installation Assessment site visit.
- Perform work after the corresponding reviews, approvals, and or notices to proceed are issued by the selected PRDOH Program Manager.
- Perform work as specified in accordance with all project requirements and all applicable laws and codes.
- Dispose of all materials in a safe manner in accordance with all local and federal regulations.
- Perform commissioning tests and correct any findings. Corrections will be paid by the Bidder, and PRDOH will not reimburse for them.
- Participate in closeout inspections and address findings.
- Work with PMs to ensure the project is completed within the project timeline and budget while minimizing disturbance.

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3. Photovoltaic System:

3.1. Pre-Installation Assessment:

The Bidder shall be responsible for the Pre-Installation Assessment of each project site where installation will be performed. A certified installer, a licensed professional engineer, and/or a licensed architect in Puerto Rico with the expertise of five years or more in the Photovoltaic system industry shall conduct the assessment. Assessment includes but is not limited to the following activities:

- Evaluate the property's roof capacity to support the PV system by completing a roof capacity checklist for home installations. The selected bidder will generate a scope of work based on the findings from the roof capacity checklist. A full evaluation shall provide information on roof load capacity, shading study, and other required studies to allow the system to function properly at the installation site. The Scope of Work generated shall detail the installation plan, on the roof of the dwelling unit to support its installation and full functionality.
- Shading Analysis: Assess if the proposed array location supports a solar resource potential of more than 75 percent of the same site's optimal solar resource potential.

- Assess the home's interior and exterior elements and determine their conditions to facilitate the installation of conduits and electrical equipment. Home interior and exterior elements may include (but is not limited to):
 - Structural, electrical, plumbing, and HVAC systems installed in the roof;
 - Main panelboard
 - Branch circuits
 - Exterior Shade Element
 - Lightning protection
 - Electrical service entry including overhead wires, electric meter, service entry conductor
 - Other relevant components
- After examining the home's roof elements and determine their condition, other considerations may include (but are not limited to) home site elements:
 - Site restrictions
 - Site accessibility
 - Yards and courts
- Structural analysis: Verify the roof's load capacity to support the equipment load, home's exterior elements, and determine their conditions. Home external elements may include (but are not limited to):
 - Roof weatherproofing and covering including asphalt shingles, wood shingles or shakes, metal roofing, cement shingles, built-up roofing, single-ply membranes, and roll roofing, among others;
 - Skylights;
 - Gutters and downspouts; and
 - Parapets and gables.

The structural analysis shall be conducted by a licensed engineer with a structural engineer degree or studies.

- Equipment Location
 - Determine the best locations for the PV System and all components as per designer and manufacturer's specification.
 - In the Pre-Installation Assessment report and Scope of Work, the selected Bidder must clearly define the location of the PV System and all components in accordance with applicable codes.

3.2. Design Service:

- Selected Bidder must design a standard photovoltaic system with battery back-up for single-family homes. System shall be capable of running critical loads, some household appliances (refrigerators, water pump, etc.), life support devices, and permit the occupants to shelter-in-place during electrical grid outages. Design should be standard, with minimal deviation to allow for

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consistency in cost across various single-family homes. The selected Bidder shall adhere to the following design guidelines:

- A licensed professional structural engineer must certify that the existing roofs are structurally sound for the installation of the PV System and that the proposed system meets code requirement and the requirement of this IFB.
- System layout shall meet local fire department, code, and ordinance requirements for roof access.
- The PV System installation shall not interfere with roof drains, water drainage, expansion joints, air intakes, existing electrical and mechanical equipment, and existing antennas.
- The system shall be directly attached to the roof unless the structural engineer deems the roof incapable of holding the PV System. If the structural integrity of the house does not support the load of the system, then, the applicant will immediately be ineligible for the PV System installation.
- Racking Structure needs to be corrosion resistant and meet applicable local building code requirements concerning rain, wind, and earthquake factors.
- All penetrations and structural connections associated with supports and conduit shall be kept to a minimum and shall be waterproof.
- All roof penetrations shall be designed and constructed in collaboration with a roofing professional or manufacturer responsible for the roof and roofing material warranty for the specific site. All roof installations and weatherproofing of penetrations shall not compromise the roof warranty, or if the roof has no warranty, accepted best practice. The roof penetration and roof connections shall be warranted for weather tightness from the installer, including parts and labor (see Section 7 in this document for warranty details). The roofing contractor shall provide a warranty letter specifying that the roofing impermeabilization warranty is still in effect after the installation of the PV System.

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3.3. Award Visit:

Refer to Section 5, Other Tasks applicable for services of PV System and Water Storage System, for additional information.

3.4. Permits

The selected Bidder shall obtain all required permits and licenses for the project. Also, the selected Bidder shall be responsible for any certification and/or notification to the applicable state agencies regarding the services to be provided to each project, including interconnection certifications and fees in accordance with the Act 17 of April 11 of 2019 ("Ley de Política Pública Energética de Puerto Rico"). All fees associated with the permits, notifications, and licenses are the responsibility of the selected Bidder.

Any additional documentation required, or corrections of deficiencies identified by PREPA or any other permitting agencies, after the certification and notification required by the Program, must be addressed and brought to a conclusion by the Bidder at no additional cost to PRDOH.

3.5. PV System Installation Service:

- Selected Bidder shall be responsible for acquiring all permits and endorsements for system installation, system operation, and system interconnection in accordance with Act 17 -2019 ("Ley de Política Pública Energética de Puerto Rico").
- Installation of PV System- selected Bidder shall supply, install, and commission the PV System. Installation costs shall be standardized to accommodate installation across various types of single-family homes. System shall only be installed at sites with at least an 75% solar access, systems shall not be installed on roofs with significant shading. If the site does not have at least an 75% solar access, then, the applicant will be ineligible for the PV System installation. Inverters and batteries shall be installed in a shaded location and shall not be exposed to direct sun light.
- Install materials following the manufacturer's requirements.
- Provide all labor, materials, tools, equipment, and services required to complete the project as specified.
- Responsible for the cost of all items required for a complete and operating system.
- The selected Bidder shall be obligated to maintain a torque log of the installations, following designers' specifications.
- No material should be installed if:
 - Materials are not compatible with existing conditions.
 - Installation of materials violates equipment warranty.
 - Installation is not to code or industry standard.
 - Such are not in compliance with the conditions established by the program, federal or state regulations or this IFB.
- The PV System installations shall follow the best installation practices described by the National Renewable Energy Laboratory (NREL) in the following documents or any other industry related document:
 - Solar Photovoltaic in Severe Weather: Cost Consideration for Storm Hardening PV Systems for Resilience
 - Solar Photovoltaic Systems in Hurricanes and Other Severe Weather

The United States Department of Energy Guidance's mentioned above are included as an attachment to this IFB.

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3.6. Commissioning

- Perform commissioning and Inspection following the International Electrotechnical Commission (IEC) standard IEC 62446, any local or state regulation, program requirements, and correct any finding. The commissioning should verify that the project is performing as per project design.
- The designer shall perform commissioning of the entire PV system. This data shall be used to confirm the proper performance of the PV system. Performance tests shall be conducted at the final commissioning/acceptance testing. A digital copy of the commissioning report must be uploaded into Canopy and/or any other PRDOH management tool. A second system re-commissioning is mandatory at the end of the first year of operation. A re-commissioning report will be provided to PRDOH after the re-commissioning has been performed. In the event of a re-commissioning test failure, the Bidder will be responsible for the corrections, repairs, and proper functioning of the system.

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3.7. Inspection

Refer to Section 5, Other Tasks applicable for services of PV System and Water Storage System, for additional information.

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3.8. Technical Specifications for PV systems:

- The program offers standard packages for PV systems and battery storage based on the following two scenarios:
 - **Scenario #1:** For dwelling units where an ENERGY STAR refrigerator that consumes 489 kWh/yr or less is present, the following package will be installed. A standard package of a required system minimum of **3kW DC¹** PV modules with a minimum Battery bank voltage of **48V²** and a required battery bank output of a minimum of **9 kWh³** with an **autonomy of 20 hours**; loads also includes one medical life support device. The required battery chemistry is Lithium-Ion.
 - **Scenario #2:** For dwelling units where a non-ENERGY STAR refrigerator that consumes 489 kWh/yr, the following package will be installed. A standard package of a required system minimum of **4.3 kW DC** PV modules with a minimum Battery bank voltage of **48V** and a required battery bank output of a minimum of **12.8 kWh** with an **autonomy of 20 hours**; loads also includes one medical life support device. The required battery chemistry is Lithium-Ion.

Both standard packages shall have the capability of supplying electricity to an itemized list of devices, appliances and lighting fixtures identified as critical loads. The system will supply electricity to the critical loads independently as a stand-alone system, with the capability of interconnecting with the grid. For the

¹ kW stands for kilowatt and DC for direct current.

² V stands for voltage.

³ kWh stands for kilowatt hour.

purpose of the CEWRI Program, the Bidder must submit to PREPA the Interconnection package. Nevertheless, the approval of the Interconnection by PREPA will not be required for the closeout of the case.

- Systems shall be capable of running critical electrical loads, some household appliances and equipment (refrigerators, lighting, water pump, etc.), life support or medical devices, and permit shelter-in-place occupants' ability during electrical grid outages. Design should be standard, with minimal deviation to allow for consistency in cost across various single-family homes. In the event of a power outage, the protected appliances, tank's water pump, medical devices, and any load connected to the PV and battery back-up system will continue to work with no disruptions.
- The selected Bidder shall perform all professional services as necessary to provide applicants with a complete design of the proposed project. The system shall be designed and engineered to maximize the solar energy resource, considering the residents' electrical demand and load patterns, proposed installation site, and available solar resource. After concurrence of a final design by PRDOH's Program Manager, the selected Bidder shall provide all necessary materials, equipment, and labor to complete the PV System installation and interconnection with the electrical grid in accordance with Act 17 of April 11 of 2019 ("Ley de Política Pública Energética de Puerto Rico").
- The selected Bidder shall also provide and install a manual transfer switch to allow for system operation in standalone mode.
- The selected Bidder shall also provide to the applicant written instructions and procedures for shutdown and start-up activities for all system components.
- Photovoltaic (PV) Modules
 - PV modules shall be a commercial off-the-shelf product, must be OGPe Certified.
 - PV modules shall have a 25-year limited warranty that modules will generate no less than 80 percent of rated output under Standard Test Conditions (STC). PV modules that do not satisfy this warranty condition shall be replaced.
 - Modules shall be through-bolted to the underlying racking; top down clamps shall not be used under any circumstances, unless the designer specify the contrary.
 - The PV system shall be physically attached to the building roof and tilted at 5 to 10 degrees to the south.
- Inverter(s)
 - Inverters shall be a commercial off-the-shelf product,
 - The inverter shall have at a minimum the following features:
 - OGPe Certification

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- UL/ETL⁴ listed
- Peak efficiency of 96 percent or higher
- Inverter shall have operational indicators of performance and have built-in data acquisition and remote monitoring.
- Warning labels shall be posted in compliance with local and federal regulations
- Operating instructions shall be posted on or near the system and on file with facilities operation and maintenance documents.
- Provide detailed instructions on how to turn of the equipment.
- The inverter shall be 120/240 V split phase.
- The inverter must provide a Pure Sine Wave.
- Electrical Wiring
 - Areas where wiring passes through ceilings, walls, or other areas of the residence shall be adequately restored, booted, sealed, and returned to their original condition.
 - It is mandatory to include a subpanel for the critical loads served by the PV with battery inverter System.
- Structural Components
 - All structural components shall be non-corrosive (preferably marine stainless steel or aluminum). All hardware shall be marine stainless steel or aluminum. All components shall be designed to obtain a minimum 20-year design life.
 - All connections shall be bolted and torqued to specified value. Under no circumstances shall clamping systems or self-tapping sheet metal screws be used to hold:
 - Underlying structural frame members together
Module frame to underlying structural frame member
- Back-Up Storage System
 - The required battery chemistry is Lithium-Ion.
 - The required battery bank voltage is 48 V.

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4. Water Storage System (WSS):

4.1. Pre-Installation Assessment

The designer shall be responsible for the Pre-Installation Assessment of the projects to be performed a service. A certified installer, a licensed professional engineer, and/or licensed architect in Puerto Rico with the expertise of five years or more in the construction industry shall conduct the assessment (except for the load analysis, which must be performed by a licensed professional structural engineer). Such task includes but is not limited to the following activities:

- Evaluate the property's roof's capacity to support the WSS system by completing a roof capacity checklist for home installations. The selected

⁴ Acronyms stand for the following respectively: Underwriters Laboratory/Electrical Testing Laboratories

bidder will generate a scope of work based on the findings from the roof capacity checklist. A full evaluation should provide information on roof load capacity and all required analysis to allow the system to function properly at the installation site. The Scope of Work generated shall detail the installation plan, either on the roof of the dwelling unit to support its installation and full functionality.

- Assess if the proposed equipment can be located on the rooftop without interfering with the other equipment mounted and/or to be mounted on it.
- Assess the home's interior and exterior elements and determine their conditions to facilitate the WSS components installation. This assessment should be included within the PV System assessment whenever possible. Home interior and exterior elements may include (but are not limited to):
 - Structural, electrical, plumbing, and Heating, Ventilation, and Air Conditioning (**HVAC**) systems installed in the roof.
 - Main panelboard
 - Any electrical conduit that might interfere with the WSS components installation.
- After examining the home's roof elements and determining their condition, home site elements shall be examined which include (but are not limited to):
 - Site restrictions
 - Site accessibility
 - Yards and courts
- Verify the roof's load capacity to support the equipment load, home's exterior elements, and determine their conditions. Home external elements may include (but are not limited to):
 - Roof weatherproofing and covering including asphalt shingles, wood shingles or shakes, metal roofing, cement shingles, built-up roofing, single-ply membranes, and roll roofing, among others.
 - Skylights
 - Gutters and downspouts
 - Parapets and gables
 - Lightning protection
 - Electrical service entry including overhead wires, electric meter, service entry conductor

4.2. Design Service:

Selected bidder must design the Water Storage System for single-family homes following the requirements stated in Section 4.6 of this Scope of Work (Technical Specifications for the Water Storage System).

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4.3. Award Visit:

Refer to Section 5, Other Tasks applicable for services of PV System and Water Storage System, for additional information.

4.4. Water Storage System Installation Services

- Selected Bidder shall be responsible for acquiring all equipment and be responsible for its installation.
- Selected Bidder shall be responsible for all permits and endorsements for system installation (as required).
- Installation of Water Storage System- Selected Bidder shall install the Water Storage System. Installation costs shall be standardized to accommodate installation across various types of single-family homes.
- Install materials following the manufacturer's requirements. The Selected Bidder must coordinate with PV system installers to make sure the water pump is connected to a PV standalone electrical system circuit (as required).
- The water pump shall not shade or otherwise obstruct to the photovoltaic modules.
- Provide all labor, materials, tools, equipment, and services required to complete the project as specified.
- Responsible for the cost of all items required for a complete and operating system.
- No materials shall be installed if:
 - Materials are not compatible with existing conditions.
 - Installation of materials violates equipment warranty.
 - Installation is not to code or industry standard.
 - Materials are not in compliance with the conditions established by the program, federal or state regulation or this IFB.

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4.5. Inspection:

Refer to Section 5, Other Tasks applicable for services of PV System and Water Storage System, for additional information.

4.6. Technical Specifications for Water Storage System: The selected Bidder shall obtain all necessary equipment, materials, design, and testing services for the installation of the WSS. The system shall:

- Provide domestic water to the home from the water storage tank using an electric water pump, controls and a diaphragm type pressurized tank to provide back-up water supply to the domestic water line. Tank should be sized to meet water needs of the home by providing an adequate level of pressure

without damaging water fixtures. The WSS shall supply each household at least two days of potable water supply during a disaster scenario.

- If the roof structure allows, the water storage tank shall store a maximum capacity of 500 Gallons per household, complete with all its necessary accessories and instrumentation for full functionality of water storage and distribution within the home during a disaster scenario. The capacity of the tank should be defined by the designer according to the household needs. The water storage tank shall be connected to the utility's main water line with a water level control valve and backflow preventer designed to prevent backflow from the water storage tank to the utility main water line. The water storage tank shall have instrumentation to monitor and control pressure and water level.
- The water storage tank shall be located on the rooftop of the home. If the structural integrity of the house does not support the load of any of the applicable water tank size options, then, the applicant will immediately be ineligible for the WSS installation.
- In case the house loses power, the electric pump should be able to work off-grid from the main electrical utility supported by the PV and battery system granted to the applicant from the CEWRI program, when applicable.
- The water storage tank shall be constructed of ultraviolet (UV) and corrosion resistant material, approved for potable water, and have the Food and Drug Administration (FDA) and the National Safety Foundation (NSF) approval.
- Other related material for complete installation should include but is not limited to:
 - Pump: ½ horsepower with pressurized tank
 - Diaphragm type pressurized tank should be sized to provide adequate pressure to meet the water demands of the home.
 - Piping: Only copper piping is authorized. Sediment filter: Should be able to filtrate 10 microns particles.
 - Sensor level: Recommended use whenever possible.
 - Install a Buoy
 - Backflow prevention system to prevent cross-connection between household water system and water main.
 - The water storage tank must be watertight and intended for potable water use.
- All water storage tanks must be specifically manufactured for potable water use in accordance with FDA food-grade specifications, NSF standards, or other nationally recognized standards for potable water. Documentation from the manufacturer stating that tanks are approved for potable water must be

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available for inspection. Water Storage tanks must be installed according to the manufacturers' specific instructions.

- All water storage tanks must be vented to allow the free flow of air into and out of the tank as the water level inside the cistern changes. The vent opening must be turned down and must be screened with a 24-mesh screen cloth to prevent the entry of insects, birds, and other animals.
- Connect to water utility main to provide continuous flow of water through the water storage tank.
- Before filling and using, the water storage tank and pressure tank must first be cleaned and disinfected.
- Disinfection of the water storage tank and pressure tank after installation is mandatory, and the selected Bidder must follow the manufacturer's recommendation for potable water systems.

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5. Other tasks applicable for services of PV System and Water Storage System:

5.1. Pre-Installation Assessment Visit, Report, and Case Work Orders

- Perform a Pre-Installation Assessment visit to each dwelling units and develop the Pre-Installation Assessment report for each case project. Submit report to the PMs for approval.
- Develop case Scope of Work for each project. Submit scope of work to the PMs for approval.

5.2. Award Visit:

The Selected Bidder will perform the following tasks during the award visit including but not limited to:

- Perform award visit with the PMs to each applicant's property to complete the Project Grant Agreement.
- Perform orientation to Applicants of the measures that are being offered and that may be installed in the unit.
- Ensure that the applicant is informed on the process, the works to be performed, and the conditions of the award prior to any work being performed.
- Assist the PMs during the applicant award process. The Bidder will be responsible for clarifying the owner any design-related clarification that might be needed.

5.3. Inspection

The Selected Bidder will visit the project site along with the PRDOH Program Manager and inspect works for overall quality standards. Upon completion of the installation, PM's Inspector will perform an inspection of the physical installation, as

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well as all paperwork submitted by the selected Bidder. Once on-site, the PM's Inspector shall ensure that all contractually agreed upon work was completed and confirm:

- That the equipment installation is in accordance with the design and installation drawings and specifications.
- That the model of the equipment installed is in accordance with the designer's specifications.
- Quality workmanship of installation.
- A brief review of findings as compared to the initial description of the site, scope of work, any change order(s) and final invoice.
- All warranties are included and active.

During the post-install site inspection, the Inspector will record any corrections to the installation that need to be made by the selected Bidder. If, during the post-installation inspection, the Program finds discrepancies between the work performed and the scope of work, installation standards and/or equipment specifications, the selected Bidder will be responsible, at the selected Bidder's expense, for bringing the installation into conformance before the selected Bidder is paid. Installation corrections, as noted during final acceptance or the post-installation inspection, shall be performed within ten (10) business days. If the selected Bidder cannot undertake corrective actions within ten (10) business days, the Selected Bidder shall deliver to the PM, in writing, reasons for the delay. PM shall determine validity and allow for a delay no longer than twenty (20) calendar days after validity is determined. Any discrepancies or disagreements between PM and selected Bidder shall be escalated to the adjudicating official within PRDOH.

5.4. Orientation and Training to Applicants

- The Selected Bidder shall perform orientation and training to the Applicants regarding operation and maintenance of the installed systems and equipment.
- Selected Bidder must deliver all applicable Operation and Maintenance Manuals of the installed systems to each Applicant receiving a system along with any other required documents.

5.5. Health and Safety:

The Selected Bidder shall observe and comply with all applicable laws, ordinances, codes, and regulations of governmental agencies, including federal, state, municipal, and local governing bodies having jurisdiction over any or all of the scope of services, including all provisions of the Occupational Safety and Health Act of 1979 as amended, and all other applicable federal, state, municipal and local safety regulations. All services performed by the Selected Bidder must be in accordance with these laws, ordinances, codes, and regulations. The Selected Bidder shall release, defend, indemnify and hold harmless the PRDOH, its officers, agents, volunteers, and employees from all damages, liability, fines,

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penalties, and consequences from any non-compliance or violation of any laws, ordinances, codes, or regulations. Additionally, the following requirements must be met:

- The Selected Bidder must develop and submit to the PMs a safety plan for approval.
- Provide a statement of how your firm will be prepared to work within the project timeline and on time, ensure conformance with quality control standards, and respond to quality control issues during and after completing the project.
- Develop, monitor, and implement health and safety policies as to ensure that projects follow health and safety laws and regulations, in order to reduce or prevent hazards, dangers, and accidents.
- All roof access points shall be securely locked at the end of each day.
- Suppose a release of hazardous materials or hazardous waste that cannot be controlled occurs connected with this contract's performance. In that case, the Selected Bidder shall immediately notify the appropriate public safety service (police, fire rescue, or emergency medical services), PRDOH Program Director, and project designees. The Selected Bidder shall not store hazardous materials or hazardous waste without proper permits.

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5.6. Damage and Disposal:

The Selected Bidder shall proceed with work in a manner that does not damage existing materials/infrastructure unless otherwise directed by Organization:

- The Selected Bidder shall document pre-existing damage to the materials/infrastructure and report any such damage to the PMs.
- The Selected Bidder shall repair at its expense damage to buildings and equipment caused by this project's work.
- The Selected Bidder shall remove all materials, equipment, and debris immediately upon completion of the project or at the end of each workday (unless the dwelling unit owner agrees to provide storage space).
- The Selected Bidder shall keep access to all areas of the dwelling unit clear.
- The Selected Bidder shall not use on-premises refuse containers for disposal of any material whatsoever without prior approval of CEWRI PMs.
- The Selected Bidder shall protect people and property from damage and debris at all times during the construction process.

5.7. Hazardous Material Clean-Up:

All surfaces and articles contaminated by hazardous materials during this work shall be cleaned in accordance with all applicable laws, codes, and ordinances and be transported safely to the appropriate destruction/servicing facilities. The

Selected Bidder shall comply with the regulations to manage hazardous waste as specified in the [applicable state code].

5.8. Reporting

The selected Bidder should be responsible for the creation and submission of the following reports to the CEWRI Program Manager:

- Pre-Installation Assessment Report
- Systems Installation Report
- Project Commissioning Report
- Pre-Inspection Package documentation in support to the requested CEWRI Inspection to ensure that current works performed merit the Final Inspection. If documentation submitted to the Program Manager does not merit a Final Inspection, the Program Manager shall deny the Final Inspection request to the PRDOH PV system and water storage system contractor and state the reasons as to why the CEWRI Inspection was denied.

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6. Warranty: Selected Bidder shall warrant all its products for the following period:

- **Ten (10) years** guarantee for the Solar Photovoltaic System Panels.
- **Twenty-five (25) years** of Linear Performance Guarantee for the Solar PV modules.
- **Ten (10) years** guarantee on Battery Bank and inverter.
- **Five (5) years** for the WSS.

Warranties shall include:

- Parts, labor, faulty material, manufacturing defects, defective items, emergency works of the systems and installation costs related to the failure of equipment under warranty (when due to equipment failure during the warranty period during the ten years of operation for PV system and five years of operation for the WSS).
- Repair or replacement of all system components for both systems, including but not limited to faulty material, manufacturing defects, during the warranty period.
- All unscheduled or emergency warranty works must be completed within (7) seven days of notification to Selected Bidder from the homeowner at no additional cost to PRDOH or the homeowner during the warranty period. If the 7-day period is not enough due to equipment shortage, the selected Bidder must provide a written explanation and a copy of the equipment's delivery documents.

- Full warranty documents for all installation shall be submitted to the Applicants and in duplicate to the CEWRI PMs firm.

After full payment for the installation, no further costs will be paid by PRDOH

7. Deliverables: The key deliverables to be provided include, but are not limited to, the following:

- Selected Bidder must submit monthly reports to CEWRI Program Manager and PRDOH. Monthly reports shall be due the fifth (5th) day of each month and shall include:
 - Copies of all notifications from CEWRI PMs
 - Inspection orders placed within previous calendar month and inspection reports, as applicable.
 - Notices to begin the design phase within the previous calendar month
 - Notices of accepted/rejected designs within previous calendar month
 - Locations of all pending and completed tasks within the previous calendar month.
 - Explanation of pending and completed design tasks within the previous calendar month.
 - Explanation of pending and completed installation tasks within the previous calendar month.
 - Copies of all payment requests sent to PM within the previous month.
 - Payment receipt notifications with the date payment was received.
- Selected Bidder must develop and submit to the PMs the following but not limited to:
 - Pre-Installation Assessment Visit and Report for each project
 - Case Scope of work for each project.
 - System Designs for each Projects
 - Systems Installation Report
 - Commissioning Report
 - All technical documentation, including Component's data sheets and listing
 - Warranties
 - Installation and operation manuals
 - As-built version of system drawings, cable lists and routing, wirings, grounding system,
 - Any other documentation required or requested by PRDOH.

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8. Delivery Schedule

- Coordinate with Applicant and CEWRI Program Manager for any pre-installation assessment visits, installation, and closeout inspections.
- Upon notice from the CEWRI PM firm, the selected Bidder shall perform the pre-installation assessment and report within the timeframe indicated in Attachment E.
- Upon notice from the CEWRI PM firm, the selected Bidder shall perform the design of the project and submission of the Interconnection Package to PREPA within the timeframe indicated in Attachment E.
- Upon notice from the CEWRI PM firm, the selected Bidder shall install the system(s), perform the commissioning of the project, and submission of the Pre-Inspection Package within the timeframe indicated in Attachment E. If the afforded timeframe is not enough due to equipment shortage, the Installer/Contractor must provide a written explanation and a copy of the equipment's delivery documents.
- Upon completion of installation, Selected Bidder shall submit the official payment request to CEWRI PM with all applicable documentation, including warranty. Warranty documentation shall be submitted in duplicate (one for PM/PRDOH and one for the homeowner/applicant) Selected Bidder is responsible for delivering warranty information to the homeowner/applicant.

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9. Terms and Conditions

The following terms and conditions are designed to state expectations relating to the project and the selected Bidder's work performed. Should the Selected Bidder deviate from these standards and guidelines, all costs and liability associated with the observed deviation will be the Selected Bidder's sole responsibility.

9.1. Interpretation of Scope of Work:

The selected Bidder is responsible for reading and fully understanding the scope of work. The design-build approach allows for continual collaboration; however, any proposed changes to the original proposal must be approved in writing by the Selected Bidder and PM through the change order process before proceeding.

9.2. Existing Conditions:

The selected Bidder is responsible for verifying the installation site's existing conditions as reported in this Invitation for Bids before construction begins.

9.3. Installation Schedule:

The selected Bidder will complete the installation within the timeline described in **Section 9**. Once the installation has begun, the selected Bidder is required to be on-site every day during regular business hours (or at a time pre-arranged with PRDOH) for the full work period until the installation is complete.

- The selected Bidder shall have all required materials in stock prior to beginning installation.
- The selected Bidder shall give the PMs an estimate of the date the installation will be completed and shall inform the PMs if the installation appears to be taking longer than the original estimate.
- Corrections as identified during final acceptance or as a result of the quality control process shall be performed within the timeframe indicated in Section 5.3 of this Scope of Work unless the problem interrupts PRDOH normal business operations or presents a health and safety threat, in which case the correction shall be made immediately. Exceptions to this rule shall be granted in circumstances beyond the control of the Selected Bidder (e.g., unforeseen existing conditions, material backorders, etc.). The selected Bidder shall notify PRDOH (verbally and in writing) that the correction will or may violate this provision.

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9.4. Communication:

The selected Bidder shall respond to information requests within two (2) business days. Response form will be determined by the request. The response may be in the following forms but not be limited to: E-mail, hardcopy, fax.

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9.5. Change Orders and Scope of Work Modification:

The contract may be increased or decreased after the proposal is accepted. Under no circumstances shall the selected Bidder deviate from the work defined in the scope of work without advance written approval from PRDOH.

9.6. Final Acceptance:

A project will not be considered complete until all project steps are completed, including quality control inspection, training, and all project deliverables.

END SCOPE OF WORK

ATTACHMENT E

PERFORMANCE REQUIREMENTS

COMMUNITY ENERGY AND WATER RESILIENCE INSTALLATIONS PROGRAM (CEWRI)

The Installer/Contractor shall provide services in accordance with the Scope of Work of this contract.

Deliverables: The key deliverables to be provided include, but are not limited to, the following:

- Installer/Contractor must submit monthly reports to CEWRI Program Manager and PRDOH. Monthly reports shall be due the fifth (5th) day of each month and shall include:
 - o Copies of all notifications from CEWRI PMs
 - o Inspection orders placed within previous calendar month and inspection reports, as applicable.
 - o Notices to begin the design phase within the previous calendar month
 - o Notices of accepted/rejected designs within previous calendar month
 - o Locations of all pending and completed tasks within the previous calendar month.
 - o Explanation of pending and completed design tasks within the previous calendar month.
 - o Explanation of pending and completed installation tasks within the previous calendar month.
 - o Copies of all payment requests sent to PM within the previous month.
 - o Payment receipt notifications with the date payment was received.
- Installer/Contractor must develop and submit to the PMs the following but not limited to:
 - o Pre-Installation Assessment Visit and Report for each project
 - o Case Scope of work for each project.
 - o System Designs for each Projects
 - o Systems Installation Report
 - o Commissioning Report
 - o All technical documentation, including Component data sheets and listing
 - o Warranties
 - o Installation and operation manuals
 - o As-built version of system drawings, cable lists and routing, wirings, grounding system,
 - o Any other documentation required or requested by PRDOH.

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Delivery Schedule

- Coordinate with Applicant and CEWRI Program Manager for any pre-installation assessment visits, installation, and closeout inspections.
- Upon notice from the CEWRI PM firm, the Installer/Contractor shall perform the pre-installation assessment and report within the timeframe indicated in the table below.
- Upon notice from the CEWRI PM firm, the Installer/Contractor shall perform the design of the project and submission of the Interconnection Package to PREPA within the timeframe indicated in the table below.
- Upon notice from the CEWRI PM firm, the Installer/Contractor shall install the system(s), perform the commissioning of the project, and submission of the Pre-Inspection Package within the timeframe indicated in the table below. If the afforded timeframe is not enough due to equipment shortage, the Installer/Contractor must provide a written explanation and a copy of the equipment's delivery documents.
- Upon completion of installation, Installer/Contractor shall submit the official payment request to CEWRI PM with all applicable documentation, including warranty. Warranty documentation shall be submitted in duplicate (one for PM/PRDOH and one for the homeowner/applicant) Installer/Contractor is responsible for delivering warranty information to the homeowner/applicant.

ATTACHMENT E

Tasks and Services	DESCRIPTION	TIMEFRAME DATES	DELIVERABLES
Pre-Installation Assessment and Scope of Work	<p>- Perform a Pre-Installation Assessment visit to each dwelling units and develop the Pre-Installation Assessment report for each case project. Submit report to the PMs for approval.</p> <p>-Develop case Scope of Work for each project. Submit scope of work to the PMs for approval.</p>	Upon notice from the CEWRI PM firm, the Installer/Contractor shall, within ten (10) working days , perform the pre-installation assessment and report.	For each Application, provide the Pre-Installation Report Form signed and sealed by the licensed professional, and provide any other document required by PRDOH.
Design Services & Permits	The Installer/Contractor must design a standard photovoltaic system with battery back-up and/or Water Storage System for single-family homes.	Upon notice from the CEWRI PM firm, the Installer/Contractor shall, within six (6) working days , perform the design of the project and submission of the Interconnection Package to PREPA.	For each assigned project, the Installer/Contractor must submit System Designs and any applicable permit for each Projects.
Installation Service & Commissioning	<p>- For each assigned project, the Installer/Contractor shall install the system(s) and perform the commissioning of the project.</p> <p>- The Installer/Contractor shall perform orientation and training to the Applicants regarding operation and maintenance of the installed systems and equipment.</p> <p>- The Installer/Contractor must deliver all applicable Operation and Maintenance Manuals of the installed systems to each Applicant receiving a system along with any other required documents.</p>	Upon notice from the CEWRI PM firm, the Installer/Contractor shall, within seven (7) working days , install the system(s), perform the commissioning of the project, and submission of the Pre-Inspection Package. If the 7-day period is not enough due to equipment shortage, the Installer/Contractor must provide a written explanation and a copy of the equipment's delivery documents.	For each assigned project, the Installer/Contractor must submit the Pre-Inspection Package, including but not limited to Systems Installation Report, Commissioning Report, all technical documentation, including components data sheets and listing, warranties, installation and operation & maintenance manuals, as-built version of system drawings, cable lists and routing, wirings, grounding system, and any other document required by PRDOH.
Award Visit	<p>-Perform award visit with the PMs to each applicant's property to complete the Project Grant Agreement.</p> <p>-Perform orientation to Applicants of the measures that are being offered and that may be installed in the unit.</p> <p>-Ensure that the applicant is informed on the process, the works to be performed, and the conditions of the award prior to any work being performed.</p> <p>- Assist the PMs during the applicant award process.</p>	- As per coordination with Applicant and CEWRI Program Manager for award visit.	For each assigned project, the Installer/Contractor must participate and assist in the Award Visit.

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ATTACHMENT E

<p>Inspections</p>	<p>For each project the Installer/Contractor will visit the project site along with the PRDOH Program Manager and inspect works for overall quality standards.</p>	<p>- As per coordination with Applicant and CEWRI Program Manager for closeout inspections.</p> <p>-Installation corrections, as noted during final acceptance or the post-installation inspection, shall be performed within ten (10) business days. If the Installer/Contractor cannot undertake corrective actions within ten (10) business days, the Installer/Contractor shall deliver to the PM, in writing, reasons for the delay.</p>	<p>For each assigned project, the Installer/Contractor must participate and assist in the Inspection Visit.</p>
<p>Reporting</p>	<p>-Periodic Reporting is required to update the Program's implementation and development status, while providing visibility of the Program's actual status to stakeholders.</p>	<p>-Installer/Contractor must submit monthly reports to CEWRI Program Manager and PRDOH. Monthly reports shall be due the fifth (5th) day of each month</p>	<p>The Installer/Contractor shall submit the following:</p> <ul style="list-style-type: none"> - Copies of all notifications from CEWRI PMs - Inspection orders placed within previous calendar month and inspection reports, as applicable. - Notices to begin the design phase within the previous calendar month - Notices of accepted/rejected designs within previous calendar month - Locations of all pending and completed tasks within the previous calendar month. - Explanation of pending and completed design tasks within the previous calendar month. - Explanation of pending and completed installation tasks within the previous calendar month. - Copies of all payment requests sent to PM within the previous month. - Payment log. - Any other document required by PRDOH.

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At PRDOH's discretion and in benefit to the Program, taking into consideration the particular circumstances of each case, timelines may be modified without the need to amend the contract.

The Installer/Contractor shall develop workplans, schedules, reports and/or any other document as may be requested by PRDOH or Representative in connection to the above timelines and performance goals. The Installer/Contractor shall submit any of such documents for review and approval as requested by the PRDOH within the specified time frame provided for such request. PRDOH reserve the rights to request any information as part of the Grantee responsibilities. The Installer/Contractor is also responsible for providing and performing all the services stated in the Scope of Work.

END OF DOCUMENT



Appendix C

Contractor Certification Requirement

Synerlution Energy, LLC

The following is hereby certified to the Oversight Board regarding the request for authorization for **Photovoltaic Systems and Water Storage Systems Acquisition and Installation Services** contract by and between the **Puerto Rico Department of Housing** and **Synerlution Energy, LLC**:

1. The expected subcontractor(s) in connection with the proposed contract¹ is (are) the following:

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2. Neither the contractor nor any of its owners², partners, directors, officials or employees, has agreed to share or give a percentage of the contractor's compensation under the contract 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:

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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 contract (such as the execution of a subcontract with contractor, beneficial treatment under the contract, or the written or unwritten promise of a gift, favor, or other monetary or non-monetary benefit).

5. Neither the contractor, nor any of its owners, partners, directors, officials, or employees or, to the best of its knowledge (after due investigation), its representatives or subcontractors, 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.

¹ As used herein, the term "contract" is inclusive of any amendments, modifications or extensions.

² For purposes of this certification, a contractor's "owner" shall mean any person or entity with more than a ten percent (10%) ownership interest in the contractor.

6. Any incorrect, incomplete or false statement made by the contractor's representative as part of this certification shall cause the nullity of the proposed contract and the contractor must reimburse immediately to the Commonwealth any amounts, payments or benefits received from the Commonwealth under the proposed contract.

N/A

"I hereby certify under penalty of perjury that the foregoing is complete, true and correct."

I hereby certify under penalty of perjury that the foregoing is complete, true and correct on this 1 day of August of 2022.

ZC

Signature

August 1, 2022

Date

ZCV
ICV

Irving Cruz Vadi

Printed Name

President

Position

WORR
WORR

AMENDMENT A_CONTRACT 2022-DR0232











rev

Final Audit Report

2022-09-06

Created:	2022-09-02
By:	Radames Comas Segarra (rcomas@vivienda.pr.gov)
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-  Document created by Radames Comas Segarra (rcomas@vivienda.pr.gov)
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-  Signer w.rodriquez@vivienda.pr.gov entered name at signing as William O. Rodríguez Rodríguez
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-  Agreement completed.
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