

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

NEPR

Received:

Nov 23, 2022

11:01 AM

IN RE:

REVIEW OF THE PUERTO RICO  
ELECTRIC POWER AUTHORITY'S 10-  
YEAR INFRASTRUCTURE PLAN-  
DECEMBER 2020

CASE NO. NEPR-MI-2021-0002

SUBJECT: Motion to Substitute Exhibit  
Submitted to the Energy Bureau on May 9, 2022,  
Request Confidentiality of Portions of Such  
Exhibit, and Submit Supporting Memorandum of  
Law

**MOTION TO SUBSTITUTE EXHIBIT SUBMITTED TO THE ENERGY  
BUREAU ON MAY 9, 2022, REQUEST CONFIDENTIALITY OF PORTIONS OF SUCH  
EXHIBIT, AND SUBMIT SUPPORTING MEMORANDUM OF LAW**

**TO THE PUERTO RICO ENERGY BUREAU:**

COME NOW LUMA Energy, LLC<sup>1</sup>, and LUMA Energy ServCo, LLC<sup>2</sup>, (jointly referred to as “LUMA”), through the undersigned legal counsel and respectfully submit the following:

**I. Request to Substitute Exhibit that contains FEMA Approvals**

1. On May 9, 2022, LUMA submitted to this Puerto Rico Energy Bureau (“Energy Bureau”) FEMA Approvals for a transmission and distribution project, pursuant to the Energy Bureau’s Resolution and Order of August 30 and September 22, 2021. *See* LUMA’s *Motion Submitting FEMA Approval of Project and Requesting Subject Matter of this Proceeding be Expanded* (the “May 9 Motion”). Specifically, in the May 9 Motion, LUMA submitted the FEMA Approvals for the following projects: “FAASt Aguada Streetlighting (Distribution)” and the “FAASt [Maunabo Streetlighting] (Distribution)” (the “Exhibit”).

---

<sup>1</sup> Register No. 439372.

<sup>2</sup> Register No. 439373.

2. By inadvertence, the Exhibit was submitted for the record in this proceeding in unredacted form. LUMA respectfully requests the Energy Bureau to remove from the record the Exhibit. Instead, LUMA is submitting an updated version of the Exhibit **under seal of confidentiality** (the “Updated Exhibit”). LUMA is also submitting herein a redacted version of the Updated Exhibit to be uploaded in the docket in substitution of the Exhibit. *See Exhibit 1.*

3. LUMA respectfully submits that portions of the FEMA Approvals included in the Updated Exhibit are confidential for the reasons indicated in the memorandum of law included in this motion. Portions of the FEMA Approvals include confidential information in the form of critical energy infrastructure information or critical electric infrastructure information (“CEII”) that garners protection from public disclosures pursuant to federal statutes and regulations, *see e.g.*, 6 U.S.C. §§ 671-674; 18 C.F.R. §388.113 (2020), and the Bureau’s Policy on Management of Confidential Information, *see* the Energy Bureau’s Policy on Management of Confidential Information, CEPR-MI-2016-0009 (“Policy on Management of Confidential Information”), issued on August 31, 2016. *See* Section II below, wherein these portions and the basis for confidentiality are identified. The CEII pertains to safety systems and to vulnerabilities of critical system infrastructure that, if disclosed, would expose the electric power grid to attacks to the detriment of the public interest.

## **II. Memorandum of Law in Support of Request for Confidentiality.**

### **A. Applicable Laws and Regulations to Submit Information Confidentially Before the Energy Bureau.**

4. The bedrock provision on the management of confidential information filed before this Energy Bureau is Section 6.15 of Act 57-2014, known as the “Puerto Rico Energy Transformation and Relief Act.” It provides, in pertinent part, that: “[i]f any person who is required

to submit information to the [Energy Bureau] believes that the information to be submitted has any confidentiality privilege, such person may request the [Energy Bureau] to treat such information as such [...]” 22 LPRA §1054n. If the Energy Bureau determines, after appropriate evaluation, that the information should be protected, “it shall grant such protection in a manner that least affects the public interest, transparency, and the rights of the parties involved in the administrative procedure in which the allegedly confidential document is submitted.” *Id.* §1054n(a).

5. Access to confidential information shall be provided “only to the lawyers and external consultants involved in the administrative process after the execution of a confidentiality agreement.” *Id.* §1054n(b). Finally, Act 57-2014 provides that this Energy Bureau “shall keep the documents submitted for its consideration out of public reach only in exceptional cases. In these cases, the information shall be duly safeguarded and delivered exclusively to the personnel of the [Energy Bureau] who needs to know such information under nondisclosure agreements. However, the [Energy Bureau] shall direct that a non-confidential copy be furnished for public review.” *Id.* §1054n(c).

6. Relatedly, in connection with the duties of electric power service companies, Section 1.10 (i) of Act 17-2019 provides that electric power service companies shall provide the information requested by customers, except for confidential information in accordance with the Rules of Evidence of Puerto Rico.

7. Moreover, the Energy Bureau’s Policy on Management of Confidential Information details the procedures a party should follow to request that a document or portion thereof be afforded confidential treatment. In essence, the referenced Policy requires identifying confidential information and filing a memorandum of law explaining the legal basis and support for a request

to file information confidentially. *See* CEPR-MI-2016-0009, Section A, as amended by the Resolution of September 20, 2016, CEPR-MI-2016-0009. The memorandum should also include a table that identifies the confidential information, a summary of the legal basis for the confidential designation, and why each claim or designation conforms to the applicable legal basis of confidentiality. *Id.* at ¶ 3. The party who seeks confidential treatment of information filed with the Energy Bureau must also file both “redacted” or “public version” and an “unredacted” or “confidential” version of the document that contains confidential information. *Id.* at ¶ 6.

8. The Energy Bureau’s Policy on Management of Confidential Information states the following with regard to access to validated Trade Secret Information and CEII:

1. Trade Secret Information

Any document designated by the [Energy Bureau] as Validated Confidential Information because it is a trade secret under Act 80-2011 may only be accessed by the Producing Party and the [Energy Bureau], unless otherwise set forth by the [Energy Bureau] or any competent court.

2. Critical Energy Infrastructure Information (“CEII”)

The information designated by the [Energy Bureau] as Validated Confidential Information on the grounds of being CEII may be accessed by the parties’ authorized representatives only after they have executed and delivered the Nondisclosure Agreement.

Those authorized representatives who have signed the Non-Disclosure Agreement may only review the documents validated as CEII at the [Energy Bureau] or the Producing Party’s offices. During the review, the authorized representatives may not copy or disseminate the reviewed information and may bring no recording device to the viewing room.

*Id.* at § D (on Access to Validated Confidential Information).

9. Regulation No. 8543, *Regulation on Adjudicative, Notice of Noncompliance, Rate Review, and Investigation Proceedings*, also includes a provision for filing confidential information in proceedings before this Energy Bureau. To wit, Section 1.15 provides that “a person has the duty to disclose information to the [Energy Bureau] considered to be privileged pursuant to the Rules of Evidence, said person shall identify the allegedly privileged information, request the [Energy Bureau] the protection of said information, and provide supportive arguments, in writing, for a claim of information of privileged nature. The [Energy Bureau] shall evaluate the petition and, if it understands [that] the material merits protection, proceed according to [...] Article 6.15 of Act No. 57-2015, as amended.” *See also* Energy Bureau Regulation No. 9137 on *Performance Incentive Mechanisms*, § 1.13 (addressing disclosure before the Energy Bureau of Confidential Information and directing compliance with Resolution CEPR-MI-2016-0009).

**B. Request for Confidentiality.**

10. The FEMA Approvals with CEII included in **Exhibit 1** in this motion contains portions of CEII that, under relevant federal law and regulations, are protected from public disclosure. LUMA stresses that the FEMA Approvals with CEII warrant confidential treatment to protect critical infrastructure from threats that could undermine the system and negatively affect electric power services to the detriment of the interests of the public, customers, and citizens of Puerto Rico. In several proceedings, this Energy Bureau has considered and granted requests by

PREPA to submit CEII under seal of confidentiality.<sup>3</sup> In at least two proceedings on Data Security,<sup>4</sup> and Physical Security,<sup>5</sup> this Energy Bureau, *motu proprio*, has conducted proceedings confidentially, thereby recognizing the need to protect CEII from public disclosure.

11. Additionally, this Energy Bureau has granted requests by LUMA to protect CEII in connection with LUMA's System Operation Principles. *See* Resolution and Order of May 3, 2021, table 2 on page 4, Case No. NEPR-MI-2021-0001 (granting protection to CEII included in LUMA's Responses to Requests for Information). Similarly, in the proceedings on LUMA's proposed Initial Budgets and System Remediation Plan, this Energy Bureau granted confidential designation to several portions of LUMA's Initial Budgets and Responses to Requests for Information. *See* Resolution and Order of April 22, 2021, on Initial Budgets, table 2 on pages 3-4, and Resolution and Order of April 22, 2021, on Responses to Requests for Information, table 2 on pages 8-10, Case No. NEPR-MI-2021-0004; Resolution and Order of April 23, 2021, on Confidential Designation of Portions of LUMA's System Remediation Plan, table 2 on page 5, and Resolution and Order of May 6, 2021, on Confidential Designation of Portions of LUMA's

---

<sup>3</sup> *See e.g., In re Review of LUMA's System Operation Principles*, NEPR-MI-2021-0001 (Resolution and Order of May 3, 2021); *In re Review of the Puerto Rico Power Authority's System Remediation Plan*, NEPR-MI-2020-0019 (order of April 23, 2021); *In re Review of LUMA's Initial Budgets*, NEPR-MI-2021-0004 (order of April 21, 2021); *In re Implementation of Puerto Rico Electric Power Authority Integrated Resource Plan and Modified Action Plan*, NEPR MI 2020-0012 (Resolution of January 7, 2021, granting partial confidential designation of information submitted by PREPA as CEII); *In re Optimization Proceeding of Minigrad Transmission and Distribution Investments*, NEPR MI 2020-0016 (where PREPA filed documents under seal of confidentiality invoking, among others, that a filing included confidential information and CEII); *In re Review of the Puerto Rico Electric Power Authority Integrated Resource Plan*, CEPR-AP-2018-0001 (Resolution and Order of July 3, 2019 granting confidential designated and request made by PREPA that included trade secrets and CEII) *but see* Resolution and Order of February 12, 2021 reversing in part, grant of confidential designation).

<sup>4</sup> *In re Review of the Puerto Rico Electric Power Authority Data Security Plan*, NEPR-MI-2020-0017.

<sup>5</sup> *In re Review of the Puerto Rico Electric Power Authority Physical Security Plan*, NEPR-MI-2020-0018.

Responses to Requests for Information on System Remediation Plan, table 2 at pages 7-9, Case No. NEPR-MI-2020-0019.

12. As mentioned above, the Energy Bureau's Policy on Management of Confidential Information provides for the management of CEII. It directs that the parties' authorized representatives access information validated as CEII only after executing and delivering a Non-Disclosure Agreement.

13. Generally, CEII or critical infrastructure information is exempted from public disclosure because it involves assets and information which pose public security, economic, health, and safety risks. Federal Regulations on CEII, particularly, 18 C.F.R. § 388.113, state that:

Critical energy infrastructure information means specific engineering, vulnerability, or detailed design information about proposed or existing critical infrastructure that:

- (i) Relates details about the production, generation, transportation, transmission, or distribution of energy;
- (ii) Could be useful to a person in planning an attack on critical infrastructure;
- (iii) Is exempt from mandatory disclosure under the Freedom of Information Act, 5 U.S.C. 552; and
- (iv) Does not simply give the general location of the critical infrastructure.

*Id.*

14. Additionally, “[c]ritical electric infrastructure means a system or asset of the bulk-power system, whether physical or virtual, the incapacity or destruction of which would negatively affect national security, economic security, public health or safety, or any combination of such matters. *Id.* Finally, “[c]ritical infrastructure means existing and proposed systems and assets, whether physical or virtual, the incapacity or destruction of which would negatively affect security, economic security, public health or safety, or any combination of those matters.” *Id.*

15. The Critical Infrastructure Information Act of 2002, 6 U.S.C. §§ 671-674 (2020), part of the Homeland Security Act of 2002, protects critical infrastructure information (“CII”).<sup>6</sup> CII is defined as “information not customarily in the public domain and related to the security of critical infrastructure or protected systems [...]” 6 U.S.C. § 671 (3).<sup>7</sup>

---

<sup>6</sup> Regarding protection of voluntary disclosures of critical infrastructure information, 6 U.S.C. § 673, provides in pertinent part, that CII:

- (A) shall be exempt from disclosure under the Freedom of Information Act;
- (B) shall not be subject to any agency rules or judicial doctrine regarding ex parte communications with a decision-making official;
- (C) shall not, without the written consent of the person or entity submitting such information, be used directly by such agency, any other Federal, State, or local authority, or any third party, in any civil action arising under Federal or State law if such information is submitted in good faith;
- (D) shall not, without the written consent of the person or entity submitting such information, be used or disclosed by any officer or employee of the United States for purposes other than the purposes of this part, except—
  - (i) in furtherance of an investigation or the prosecution of a criminal act; or
  - (ii) when disclosure of the information would be--
    - (I) to either House of Congress, or to the extent of matter within its jurisdiction, any committee or subcommittee thereof, any joint committee thereof or subcommittee of any such joint committee; or
    - (II) to the Comptroller General, or any authorized representative of the Comptroller General, in the course of the performance of the duties of the Government Accountability Office
- (E) shall not, be provided to a State or local government or government agency; of information or records;
  - (i) be made available pursuant to any State or local law requiring disclosure of information or records;
  - (ii) otherwise be disclosed or distributed to any party by said State or local government or government agency without the written consent of the person or entity submitting such information; or
  - (iii) be used other than for the purpose of protecting critical Infrastructure or protected systems, or in furtherance of an investigation or the prosecution of a criminal act.
- (F) does not constitute a waiver of any applicable privilege or protection provided under law, such as trade secret protection.

<sup>7</sup> CII includes the following types of information:

- (A) actual, potential, or threatened interference with, attack on, compromise of, or incapacitation of critical infrastructure or protected systems by either physical or computer-based attack or other similar conduct (including the misuse of or unauthorized access to all types of communications and data transmission systems) that violates Federal, State, or local law, harms interstate commerce of the United States, or threatens public health or safety;



16. The FEMA Approvals with CEII in **Exhibit 1** qualify as CEII because these documents contain the express coordinates to power transmission and distribution facilities (18 C.F.R. § 388.113(iv)). These specific coordinates could potentially be helpful to a person planning an attack on the energy facilities listed as part of these FEMA Approvals. The information identified as confidential in this paragraph is not common knowledge and is not made publicly available. Therefore, it is respectfully submitted that, on balance, the public interest in protecting CEII weighs in favor of protecting the relevant portions of the FEMA Approvals with CEII in **Exhibit 1** from disclosure, given the nature and scope of the details included in those portions of the Exhibit.

17. Based on the above, LUMA respectfully submits that the FEMA Approvals with CEII should be designated as CEII. This designation is a reasonable and necessary measure to protect the specific location of the energy facilities listed or discussed in these FEMA Approvals in **Exhibit 1**. Given the importance of ensuring the safe and efficient operation of the generation assets and the T&D System, LUMA respectfully submits that these materials constitute CEII that should be maintained confidentially to safeguard their integrity and protect them from external threats.

---

(B)the ability of any critical infrastructure or protected system to resist such interference, compromise, or incapacitation, including any planned or past assessment, projection, or estimate of the vulnerability of critical infrastructure or a protected system, including security testing, risk evaluation thereto, risk management planning, or risk audit; or

(C)any planned or past operational problem or solution regarding critical infrastructure or protected systems, including repair, recovery, construction, insurance, or continuity, to the extent it is related to such interference, compromise, or incapacitation.

### C. Identification of Confidential Information

18. In compliance with the Energy Bureau's Policy on Management of Confidential Information, CEPR-MI-2016-0009, below, find a table summarizing the hallmarks of this request for confidential treatment.

Document	Name	Pages in which Confidential Information is Found, if applicable	Summary of Legal Basis for Confidentiality Protection, if applicable	Date Filed
Exhibit 1	FAASt Aguada Streetlighting (Distribution)	Pages 1, 3, and 9	Critical Energy Infrastructure Information, 18 C.F.R. § 388.113; 6 U.S.C. §§ 671-674.	November 23, 2022
Exhibit 1	FAASt [Maunabo Streetlighting] (Distribution)	Pages 1, 4, and 10	Critical Energy Infrastructure Information, 18 C.F.R. § 388.113; 6 U.S.C. §§ 671-674.	November 23, 2022

**WHEREFORE**, LUMA respectfully requests that the Energy Bureau **take notice** of the aforementioned; **accept** the copy of the FEMA approvals attached herein as **Exhibit 1**; and **grant** the request for confidential treatment of **Exhibit 1**.

#### **RESPECTFULLY SUBMITTED.**

We hereby certify that we filed this motion using the electronic filing system of this Energy Bureau. We will send an electronic copy of this motion to the attorneys for PREPA, Joannely Marrero-Cruz, jmarrero@diazvaz.law, and Katuska Bolaños-Lugo, kbolanos@diazvaz.law.

In San Juan, Puerto Rico, on this 23rd day of November 2022.



**DLA Piper (Puerto Rico) LLC**  
500 Calle de la Tanca, Suite 401  
San Juan, PR 00901-1969  
Tel. 787-945-9132  
Fax 939-697-6102

*/s/ Yahaira De la Rosa Algarín*  
Yahaira De la Rosa Algarín  
RUA NÚM. 18,061  
[yahaira.delarosa@us.dlapiper.com](mailto:yahaira.delarosa@us.dlapiper.com)

Exhibit 1  
*FEMA Approvals*

## Department of Homeland Security Federal Emergency Management Agency

### General Info

<b>Project #</b>	542688	<b>PW #</b>	10539	<b>Project Type</b>	Specialized	
<b>Project Category</b>	F - Utilities	<b>Applicant</b>	PR Electric Power Authority (000-UA2QU-00)			
<b>Project Title</b>	FAASt Aguada Streetlighting (Distribution)				<b>Event</b>	4339DR-PR (4339DR)
<b>Project Size</b>	Large	<b>Declaration Date</b>	9/21/2017			
<b>Activity Completion Date</b>	9/20/2027	<b>Incident Start Date</b>	9/17/2017			
<b>Process Step</b>	Obligated	<b>Incident End Date</b>	11/15/2017			

### Damage Description and Dimensions

The Disaster # 4339DR, which occurred between **09/17/2017** and **11/15/2017**, caused:

#### Damage #788183; FAASt Aguada Distribution Streetlighting

DDD for this facility codified in the 136271 - MEPA078 Puerto Rico Electrical Power Authority Island Wide FAASt Project.

#### General Facility Information:

- **Facility Type:** Power generation, transmission, and distribution facilities
- **Facility:** Aguada Distribution Streetlighting
- **Facility Description:** The Aguada municipality has a total of 6155 luminaries of which damage was estimated for 70% of these luminaries. Additional descriptions of typical components of a streetlight system are described below:
  - Pole – This can be either a standalone structure intended to house a streetlight, or a utility pole shared with other overhead utilities
  - Arm – A piece of hardware affixed to a pole to which a luminaire is mounted. The arm serves to position the streetlight over the street for optimal lighting
  - Luminaire/Light Bulb – The light emitting part of a streetlight
  - Light controller (e.g., photocell) – A hardware device affixed to the luminaire which controls the operating mode
  - Communication network – A wired or wireless system that allows the smart streetlight to communicate with other devices and the control system
  - Technology control system – A software platform that allows a remote operator to set the operating parameters for the smart streetlight or manually override the parameter if needed
- **Approx. Year Built:** 1970
- **Location Description:** Please refer to "788183-DR4339PR-FEMA Project Scope of Work - Aguada.pdf" for more details about all sites location.
- **GPS Latitude/Longitude:** REDACTED

#### General Damage Information:

- **Date Damaged:** 9/20/2017
- **Cause of Damage:** High winds & wind driven rain, caused by Cat 4 Hurricane Maria

### Final Scope

788183 **FAASt Aguada Distribution Streetlighting**

## Introduction

The purpose of this document is to submit for approval the Detailed Scope of Work (SOW) to COR3 and FEMA for the Distribution Streetlighting Aguada project (Aguada municipality) under DR-4339-PR Public Assistance. The document provides a description of the project including scope, schedule, and cost estimates as well as Environmental & Historical Preservation ("EHP") requirements and proposed 406 hazard mitigation work. LUMA Energy is seeking approval from COR3 and FEMA for project funding to repair, replace, and upgrade the eligible facilities in the municipality of Aguada.

LUMA submits this Detailed SOW pursuant to the T&D O&M Agreement between Puerto Rico. Puerto Rico Electric Power Authority ("PREPA"), the Puerto Rico Public-Private Partnerships Authority ("P3A") and LUMA Energy, and in accordance with the Consent to Federal Funding Letter issued by PREPA and P3A and provided herein as Appendix E which collectively provides the necessary consent for LUMA Energy, as agent of PREPA, to undertake work in connection with any Federal Funding requests related to the T&D System submitted to FEMA

## Facilities

This project is part of the breakdown division for the Distribution Streetlighting Program which will be impacting each of the municipalities. Characteristics were previously defined to serve the municipality of Aguada according to the priorities and findings after conducting the assessments.

Physical Address: Aguada, PR

Coordinates: Please refer to Appendix F for Coordinates.

## Project Scope of Work

Streetlight Repairs - Proposed 428 Public Assistance Scope of Work:

- A. Replacement of lighting components including photocontrols, luminaires, arms and associated hardware.
- B. Replacement of concrete octagonal streetlight poles in the same location.
- C. Replacement of aluminum streetlight poles with or without breakaway base in the same location.
- D. Replacement of concrete base (foundation) for aluminum streetlight poles in the same location.
- E. Replacement of distribution secondary wood, metal or concrete poles with associated lighting components and installation of guy wires where necessary in the same location.
- F. Construction of trenches for secondary underground circuits for streetlighting in existing trench locations.
- G. Replace aerial secondary wiring connections.

Refer to Appendix H for the location of specific scopes of works.

## Project Estimate

- A. Planning, Permits and Applications (FAASt 335168): \$3,471.85
- B. Environmental Management (FAASt 335168): \$160,168.00
- C. Project Management (FAASt 335168): \$816,689.69

D. Engineering (FAASt 335168):	\$1,817,752.72
E. Construction - Labor & Materials:	\$16,333,793.77
F. Construction - Site Management (FAASt 335168):	\$490,013.81
G. Construction - Quality Inspections (FAASt 335168):	\$816,689.69
H. Contingency	\$1,430,700.57
Total	\$21,869,280.10

**Work To Be Completed (WTBC): \$21,869,280.10**

**A&E Deduction (Global A&E FAASt 335168): -\$4,104,785.76**

**Project Total Cost: \$17,764,494.34**

Please refer to Appendix G for Cost Estimate Details.

For more information, please refer to: *542648-DR4339PR Aguada Streetlight 50000EN-SOW-0018\_Rev1.pdf*.

**Project Notes:**

1. All streetlight trench rebuilds will be performed in the same location and with the same dimensions as the existing damaged one.
2. No new trenches are considered under the project.
3. The trenches are described by LUMA Trench Standard STL-16 (attached in the project), which states that the typical trench width is 1 foot, and the typical trench depth is 3.5 feet. For this project, the typical trench was defined to have an average length of 100 feet and following a straight line between the streetlight poles.

**406 HMP Scope**

**Project number:** 542688

**Damage #788183; FAASt Aguada Distribution Streetlighting**

**Applicant:** PR Electric Power Authority (000-UA2QU-00)

**Location:** Aguada, Puerto Rico

**GPS Latitude/Longitude:** REDACTED

**Hazard Mitigation Narrative**

During the incident period from September 17, 2017, to November 15, 2017, the Commonwealth of Puerto Rico experienced hurricane-force winds, heavy rain, flooding and power outage from Hurricane Maria. The incident caused damage to the electrical system, such as the power generation plants, transmission and distribution lines, substations, communication systems, buildings, among other damages to the infrastructures owned, operated, and maintained by the Puerto Rico Electric Power Authority (PREPA).

In the Aguada Municipality, PREPA has a total of 6,655 streetlights luminaries. The Method of Repair (MOR) include the replacement of the damage lighting components including photocells, luminaires, arms, and associated hardware. Also include the replacement of the damage distribution and streetlight poles (wood, concrete, galvanized & aluminum), the replacement of the aerial secondary wiring connections, the construction of new concrete base for the aluminum streetlight poles and new trenches for the streetlighting secondary underground circuits. According to the information provided by the Applicant, due to the high velocity hurricane winds, wind-blown debris, and prolonged heavy rain, were the main cause of the damages of the facilities.

In order to minimize the damages in a future event, the Applicant is proposing as a mitigation measure, increase the strength of the poles, arms, aluminum poles breakaway bases, and foundations (concrete bases) by increasing the wind tolerance of all materials to 160mph. Note: The FEMA Accelerated Award Strategy (FAASt) MOR included the PREPA distribution standards and specifications that were based on a 90mph sustained winds for all materials. Although in PREPA Technical Communication #13-02 (August 22, 2013) a design-criteria of 145mph winds were published, the specifications for streetlighting material were never revised, and in the specification documents, the 90mph winds stayed as the requirement for procurement purposes of all streetlighting materials. The 160mph wind tolerance mitigation measure, will protect and make the affected infrastructure more resistant, stronger, and resilient to similar hazards.

#### **Hazard Mitigation Proposal (HMP) Scope of Work:**

In order to prevent or reduce future damages from similar events, the applicant proposed the following mitigation measures:

##### **Mitigation Measures (*Replacement*)**

1. To avoid damage in a future event, the Applicant is proposing as a mitigation measure, increase the strength of the poles, arms, aluminum poles breakaway bases, and foundations (concrete bases) by increasing the wind tolerance of all materials to 160mph. The FAASt MOR used PREPA distribution standards and specifications that were based on a 90mph sustained winds for all materials. Although in PREPA Technical Communication #13-02 (August 22, 2013) a design-criteria of 145mph winds were published, the specifications for streetlighting material were never revised, and in the specification documents, the 90mph winds stayed as the requirement for procurement purposes of all streetlighting materials. The above mitigation measures will protect and make the affected infrastructure more resistant, stronger, and resilient to similar hazards. Refer to Appendix J: Section VI.D.1 of the PAPPG V3.1.

Eligible Cost of PA repair Scope of Work per DI: \$14,852,015.62

Net Cost of 406 HMP per DI: \$602,900.43

Cost of 406 HMP w/factors: \$807,222.04

HMP Cost/ Benefit = (Net Cost of Hazard Mitigation/ Cost for HM Eligible PA Repair SOW) x 100 Ratio of HMP C/B = ( $\$602,900.43 / \$14,852,015.62$ ) x 100 = 4.06% (< 15% and Appendix J).

\* See Mitigation Profile Documents Tab for complete version of this HMP and supporting documents.

\* Due to GM system constraints in the Mitigation Profile Cost Tab, there may be a discrepancy in the total dollar amount of the mitigation proposal (or, the cost effectiveness statement) cited in the Cost Tab of the project(s). Whenever a difference between the Mitigation Cost Tab and the completed HMP cost occurs, the correct dollar amount of the grant proposal will default to the amount of 406 funding cited on the actual HMP document (and the Cost Summary Spreadsheet) uploaded into the Mitigation Profile Documents Tab.

\* This project Hazard Mitigation costing / soft cost / factor methodologies followed the same procedures provided in the cost estimates of the PA portion of the project.

##### **Additional PA Notes:**

1. All streetlight trench rebuilds will be performed in the same location and with the same dimensions as the existing damaged one.
2. No new trenches are considered under the project.
3. The trenches are described by LUMA Trench Standard STL-16 (attached in the project), which states that the typical trench width is 1 foot, and the typical trench depth is 3.5 feet. For this project, the typical trench was defined to have an average length of 100 feet and following a straight line between the streetlight poles.



## Cost

Code	Quantity	Unit	Total Cost	Section
3510 (Engineering And Design Services (FAASt Global A&E 335168))	1.00	Lump Sum	(\$4,104,785.76)	Uncompleted
9201 (PAAP Fixed Estimate (No Value - Tracking Purposes Only))	1.00	Lump Sum	\$0.00	Completed
9001 (Contract (FAASt Project 136271))	1.00	Lump Sum	\$21,869,280.10	Uncompleted

CRC Gross Cost \$17,764,494.34

Total 406 HMP Cost \$807,222.04

Total Insurance Reductions \$0.00

---

CRC Net Cost \$18,571,716.38

Federal Share (90.00%) \$16,714,544.75

Non-Federal Share (10.00%) \$1,857,171.63

## Award Information

### Version Information

Version #	Eligibility Status	Current Location	Bundle Number	Project Amount	Cost Share	Federal Share Obligated	Date Obligated
0	Eligible	Awarded	PA-02-PR-4339-PW-10539(11605)	\$18,571,716.38	90 %	\$16,714,544.74	4/27/2022

### Drawdown History

EMMIE Drawdown Status As of Date	Obligation Number	Expenditure Number	Expended Date	Expended Amount
No Records				

## Subgrant Conditions

- As described in Title 2 Code of Federal Regulations (C.F.R.) § 200.333, financial records, supporting documents, statistical records and all other non-Federal entity records pertinent to a Federal award must be retained for a period of three (3) years from the date of submission of the final expenditure report or, for Federal awards that are renewed quarterly or annually, from the date of the submission of the quarterly or annual financial report, respectively, as reported to the Federal awarding agency or pass-through entity in the case of a subrecipient. Federal awarding agencies and pass-through entities must not impose any other record retention requirements upon non-Federal entities. Exceptions are stated in 2 C.F.R. §200.333(a) – (f)(1) and (2). All records relative to this project are subject to examination and audit by the State, FEMA and the Comptroller General of the United States and must reflect work related to disaster-specific costs.
- In the seeking of proposals and letting of contracts for eligible work, the Applicant/Subrecipient must comply with its Local, State (provided that the procurements conform to applicable Federal law) and Federal procurement laws, regulations, and procedures as required by FEMA Policy 2 CFR Part 200, Procurement Standards, §§ 317-326.
- The Recipient must submit its certification of the subrecipient's completion of this project, the final claim for payment, and supporting documentation within 180 days from the date that the applicant completes the scope of work, or the project deadline, whichever occurs first. FEMA reimburses Large Projects (those with costs above the large project threshold) based on the actual eligible final project costs. Therefore, during the final project reconciliation (closeout), the project may be amended to reflect the reconciliation of actual eligible costs.
- When any individual item of equipment purchased with PA funding is no longer needed, or a residual inventory of unused supplies exceeding \$5,000 remains, the subrecipient must follow the disposition requirements in Title 2 Code of Federal Regulations (C.F.R.) § 200.313-314.
- The terms of the FEMA-State Agreement are incorporated by reference into this project under the Public Assistance award and the applicant must comply with all applicable laws, regulations, policy, and guidance. This includes, among others, the Robert T. Stafford Disaster Relief and Emergency Assistance Act; Title 44 of the Code of Federal Regulations; FEMA Policy No. 104-009-2, Public Assistance Program and Policy Guide; and other applicable FEMA policy and guidance.
- The DHS Standard Terms and Conditions in effect as of the declaration date of this emergency declarations or major disaster, as applicable, are incorporated by reference into this project under the Public Assistance grant, which flow down from the Recipient to subrecipients unless a particular term or condition indicates otherwise.
- The Uniform Administrative Requirements, Cost Principles, and Audit Requirements set forth at Title 2 Code of Federal Regulations (C.F.R.) Part 200 apply to this project award under the Public Assistance grant, which flow down from the Recipient to all subrecipients unless a particular section of 2 C.F.R. Part 200, the FEMA-State Agreement, or the terms and conditions of this project award indicate otherwise. See 2 C.F.R. §§ 200.101 and 110.
- The subrecipient must submit a written request through the Recipient to FEMA before it makes a change to the approved scope of work in this project. If the subrecipient commences work associated with a change before FEMA approves the change, it will jeopardize financial assistance for this project. See FEMA Policy No. 104-009-2, Public Assistance Program and Policy Guide.
- The Subrecipient provided the estimate for this PW. FEMA validated the estimate and found it to be reasonable for the work to be performed.
- Pursuant to section 312 of the Stafford Act, 42 U.S.C. 5155, FEMA is prohibited from providing financial assistance to any entity that receives assistance from another program, insurance, or any other source for the same work. The subrecipient agrees to repay all duplicated assistance to FEMA if they receive assistance for the same work from another Federal agency, insurance, or any other source. If an subrecipient receives funding from another federal program for the same purpose, it must notify FEMA through the Recipient and return any duplicated funding.

## Insurance

### Additional Information

**4/14/2022**

**GENERAL INFORMATION**

Event: DR4339-PR

Project: SP 542688

Category of Work: Cat F - Utilities

Applicant: PR Electric Power Authority

Event Type: Hurricane / Hurricane Maria

Cause of Loss: Wind / Wind Driven Rain

Incident Period: 9/17/2017 to 11/15/2017

Total Public Assistance Amount: \$18,571,716.38 (Repairs Amount \$17,764,494.34 + Mitigation Amount \$807,222.04)

**COMMERCIAL INSURANCE INFORMATION**

Does the applicant have a Commercial Policy that extends coverage for this facility: Yes

Policies Issued by: Willis Towers Watson, Multinational Insurance Company and Mapfre

Policy Numbers: Willis Towers Watson (B0804Q1966F17, B0804Q14312F17, B0804Q19673F17, B0804Q19672F17, B0804Q18529F17, B0804Q14312F17, B0804Q19674F17, B0804Q18411F17, B0804Q14310F17, B0804Q11038F17, B0804Q14507F17, B0804Q14312F17)

Mapfre Praico Insurance Company (1398178000644)

Multinational Insurance Company (88-CP-000307831-2, 88-CP-000318673-0, 88-CP000318674-0, 88-CP-000318675-0, 88-CP-000318676-0, 88-CP-000318677-0)

Policy Period: From: 5/15/2017 To: 5/15/2018

Policy Limits: \$300,000,000.00

RCV or ACV: Replacement Cost Value

Deductible Amount \$25,000,000.00 each and every occurrence property damage and 30 days each and every occurrence business interruption in respect of Named Windstorm.

Does the Applicant's Commercial Policy extend coverage for the damage described in this project: Yes

The amount of the deductible being funded in this project is \$0.00

The amount of the deductible previously funded in other projects is \$25,000,000.00

Final Insurance Settlement Status: Insurance proceeds for this project are anticipated

The amount of Anticipated Insurance Reduction applied for Project: \$0.00

**NUMBER OF DAMAGED LOCATIONS INCLUDED IN THIS PROJECT:** (1)

**Damaged Inventory (DI) #788183:**

**FAASt Aguada Distribution Streetlighting**

Location Description: Aguada, Puerto Rico

GPS Coordinates: **REDACTED**

Cause of Loss: Wind / Wind Driven Rain

SOV / Schedule #: N/A

SOV / Schedule Amount: N/A

Applicable Deductible Amount: N/A

Damage Inventory Amount: \$18,571,716.38 (Repairs Amount \$17,764,494.34 + Mitigation Amount \$807,222.04)

-

Prior Obtain and Maintain Requirement:

No prior insurance requirements were found for this facility.

-

Reduction(s):

No insurance reduction will be applied to this project. An anticipated insurance reduction of \$193,746,436.00 was applied to FAAST project # 136271 for anticipated insurance proceeds for Hurricane Maria losses. For ease of reference, please see table of insurance allocations: "PREPA Allocation Plan – All Disasters" file.

Obtain and Maintain Requirement:

No Obtain & Maintain Requirement is being mandated for the FAAst Aguada Distribution Streetlighting because facility does not meet the definition of building, equipment, contents, or vehicle.

**Insurance Proceeds Statement:**

FEMA acknowledges that the Applicant is in negotiations with their insurance carrier at the time of the FEMA insurance review and might have received partial settlements. In accordance with 44 CFR §206.250-253, in the absence of an actual settlement, anticipated insurance recoveries will be deducted from this project based on Applicant's insurance policy limits. FEMA subsequently adjusts the eligible costs based on the actual amount of insurance proceeds the Applicant receives after a final settlement.

FEMA's Recovery Policy FP 206-086-1, Public Assistance Policy on Insurance (June 29, 2015), requires applicants to take reasonable efforts to recover insurance proceeds that it is entitled to receive from its insurers. FEMA will consider final insurance settlements that may be less than the insurance policy limits when an applicant demonstrates that it has taken reasonable efforts to recover insurance proceeds that it is entitled on a case-by-case basis.

**Standard Insurance Comments**

**FEMA Policy 206-086-1**

**PART 2: Other Insurance-Related Provisions. (Sections 312 and 406(d) of the Stafford Act)**

**A. Duplication of Benefits.** FEMA cannot provide assistance for disaster-related losses that duplicate benefits available to an applicant from another source, including insurance.

1. Before FEMA approves assistance for a property, an applicant must provide FEMA with information about any actual or anticipated insurance settlement or recovery it is entitled to for that property.
2. FEMA will reduce assistance to an applicant by the amount of its actual or anticipated insurance proceeds.
3. Applicants must take reasonable efforts to recover insurance proceeds that they are entitled to receive from their insurer(s).

**Jean-Carlo Echevarria, PA Insurance Specialist, CRC Atlantic, Guaynabo, PR**

## O&M Requirements

There are no Obtain and Maintain Requirements on **FAAST Aguada Streetlighting (Distribution)**.

## 406 Mitigation

There is no additional mitigation information on **FAAST Aguada Streetlighting (Distribution)**.

## Environmental Historical Preservation

Is this project compliant with EHP laws, regulations, and executive orders?

Yes

### EHP Conditions

- Any change to the approved scope of work will require re-evaluation for compliance with NEPA and other Laws and Executive Orders.
- This review does not address all federal, state and local requirements. Acceptance of federal funding requires recipient to comply with all federal, state and local laws. Failure to obtain all appropriate federal, state and local environmental permits and clearances may jeopardize funding.
- If ground disturbing activities occur during construction, applicant will monitor ground disturbance and if any potential archaeological resources are discovered, will immediately cease construction in that area and notify the State and FEMA.
- Executive Order 11988 - Floodplains Applicant must obtain any required permits from the Planning Board prior to initiating work and comply with any conditions of the permit. All coordination (emails, letters, documented phone calls) pertaining to these activities and compliance must be provided and maintained in the Applicant's permanent files
- Resource Conservation and Recovery Act, aka Solid Waste Disposal Act (RCRA) - 1. The Applicant shall handle, manage, and dispose of all types of hazardous waste in accordance with requirements of local, state, and federal laws, regulations, and ordinances. In addition, the Applicant shall ensure that all debris is separated and disposed of in a manner consistent with the PR DNER guidelines at a permitted site or landfill. The contractor/applicant will be responsible for the proper disposition of construction debris in authorized landfills providing the name, location, coordinates and permits of the facility to the corresponding authorities. 2. Unusable equipment, debris, white goods, scrap metal any other material shall be disposed in approved manner and location. In the event significant items are discovered during the implementation or development of the project the Applicant shall handle, manage and dispose petroleum products, hazardous materials and toxic waste in accordance to the requirements of the local and federal agencies. Noncompliance with these requirements may jeopardize receipt of federal funds.
- Endangered Species Act (ESA) - USFWS Required Conservation Measures for *Epicrates inornatus*: 1. Inform all personnel about the potential presence of the PR boa and the VI boa in areas where the proposed work will be conducted. Photographs of the PR and VI Boa are to be prominently displayed at the site. The recipient must ensure that project personnel is able to correctly identify a PR or VI boa. For information on PR boa, please visit: <https://ecos.fws.gov/ecp/species/6628>. 2. Prior to any construction activity, including removal of vegetation and earth movement, the boundaries of the project area must be delineated, buffer zones, and areas to be excluded and protected, should be clearly marked in the project plan and in the field to avoid further habitat degradation into forested areas. Once areas are clearly marked, and prior to any construction activity, including site preparation, project personnel able to correctly identify a PR or VI boa must survey the areas to be cleared to ensure that no boas are present within the work area. Vehicle and equipment operation must remain on designated access roads/paths and within rights-of way. 3. If a PR boa is found within any of the working or construction areas, activities should stop in the area where the boa was found. Do not capture the boa. If boas need to be moved out of harm's way, project personnel designated by the recipient shall immediately contact the Puerto Rico Department of Natural and Environmental Resources (PRDNER) Rangers for safe capture and relocation of the animal (PRDNER phone #: 787-724-5700, 787-230-5550, 787-771-1124). If immediate relocation is not an option, project-related activities at this area must stop until the boa moves out of harm's way on its own. Activities at other

work sites, where no boas have been found after surveying the area, may continue. 4. Measures should be taken to avoid and minimize PR boa casualties by heavy machinery or motor vehicles being used on site. Any heavy machinery left on site (staging) or near potential PR boa habitat (within 50 meters of potential boa habitat), needs to be thoroughly inspected each morning before work starts to ensure that no boas have sheltered within engine compartments or other areas of the equipment. If PR boas are found within vehicles or equipment, do not capture the animal and let it move on its own or call PRDNER Rangers for safe capture and relocation of the boa (PRDNER phone #: 787-724-5700, 787-230-5550, 787-771-1124). If not possible, the animal should be left alone until it leaves the vehicle on its own. 5. PR boas may seek shelter in debris piles. Measures should be taken to avoid and minimize boa casualties associated with sheltering in debris piles as a result of project activities. Debris piles should be placed far away from forested areas. Prior to moving, disposing or shredding, debris piles should be carefully inspected for the presence of boas. If PR boas are, found within debris piles, do not capture the animal and let it move on its own or call PRDNER Rangers for safe capture and relocation of the animal. If debris piles will be left on site, we recommend they be placed in areas that will not be disturbed in the future. 6. For all boa sightings (dead or alive), personnel designated by the recipient must record the time and date of the sighting and the specific location where the boa was found. Data should also include a photo of the animal dead or alive, and site GPS coordinates, and comments on how the animal was detected and its behavior. If the PR boa was accidentally killed as part of the project actions, please include information on what conservation measures had been implemented and what actions will be taken to avoid further killings. All boa sighting reports should be sent to the USFWS Caribbean Ecological Services Field Office, Marelisa Rivera - Deputy Field Supervisor, 787- 851-7297 extension 206, 787-510-5207, marelisa\_rivera@fws.gov.

- Endangered Species Act (ESA) - USFWS Required Conservation Measures for *Caretta caretta*, (*Chelonia mydas*), (*Dermochelys coriacea*) and (*Eretmochelys imbricata*) There is potential for sea turtle nesting activity on all ocean-facing sand beaches in Puerto Rico and the US Virgin Islands, including mixed sand and gravel (shell, coral rubble) beaches. The following measures are applicable to green, loggerhead, leatherback, and hawksbill sea turtles. 10. During nesting season (March 1-November 30) a qualified sea turtle monitor shall survey each beach work area for possible sea turtle nests during the morning. Any nests found within the area will be marked or flagged in place. Outside of peak nesting season, beaches where work will occur shall be surveyed at least twice a week. If required, debris removal Construction activities on beaches shall initiate only after the sea turtle monitor has completed surveys that morning and nests are clearly marked. Surveys shall be conducted by sea turtle permit holders or trained personnel following DNER/DPNR protocols (see list of PR sea turtle groups, for USVI contact DPNR). Nests laid adjacent to the work area shall be marked by flagging with a 10-foot square roped off buffer and an unobstructed path seaward from the nest to the water. Surveys will start 45 minutes prior to any construction activity. Sea turtle monitoring groups shall have site specific information for nests in their areas and inform work crews of areas to avoid. This measure will be conducted in accordance with FEMA/USFWS/DNER-approved SOP for employee sea turtle awareness training, project site preparation, and nest season monitoring. 11. During the sea turtle nesting season, repair or replacement of structures shall occur in the same location or footprint of the previously permitted structure. If the current project footprint does not stay within previously permitted structure footprint, then the applicant must consult with USFWS. 12. Relocation of sea turtle nests to accommodate construction is not authorized. 13. All project activity shall be confined to daylight hours and shall not occur prior to 0800 AST or following the completion of all necessary marine turtle surveys and conservation activities. The sea turtle monitor shall be available via phone after the initial inspection for any coordination throughout the workday. This measure will be conducted in accordance with FEMA/USFWS/DNER-approved SOP for employee sea turtle awareness training, project site preparation, and nest season monitoring. 14. Only native plant species are authorized to be planted. Existing native dune vegetation shall be disturbed to the minimum extent necessary. For information on appropriate coastal plants see Fish and Wildlife Service BMP document, Sea Turtle Friendly Vegetation. removal of standing and live coastal vegetation (e.g. sea grapes, mangroves) that are not a hazard is unauthorized. No sea grass, sea weeds, algae nor beach sand shall be removed during beach debris removal efforts. Any vegetation planting shall be installed by hand labor and tools. Irrigation systems shall not be installed within nesting habitat. Applicant will submit a vegetation plan that confirms compliance with these requirements and submit to USFWS at: caribbean\_es@fws.gov. If a sea turtle nest is disturbed or uncovered during vegetation planting activity or project excavation, all work shall cease and the sea turtle monitor shall immediately be contacted. If a nest(s) cannot be safely avoided during construction, all activity within the affected project area shall be delayed until complete hatching and emergence of the nest. This measure will be conducted in accordance with FEMA/USFWS/DNER-approved SOP for employee sea turtle awareness training, project site preparation, and nest season monitoring. 15. Placement of fill shall not occur within 10 feet of or in any area seaward of a marked sea turtle nest. Nests shall be marked in place with a roped off 10-foot buffer. Dependent upon the fill volume and slope, distance offset from marked turtle nests may be required to be larger to avoid indirect impacts (e.g., fill slumping) to the nest. If the turtle nest cannot be avoided by this distance due to the scope of the project, all work near the nest must be postponed until completion of the sea turtle nesting season (November 30). This measure will be conducted in accordance with FEMA/USFWS/DNER-approved SOP for employee sea turtle awareness training, project site preparation, and nest season monitoring. 16. All excavations and temporary alteration of beach topography shall be contoured or leveled to the natural beach profile prior to dusk each day. This includes raking of tire ruts, filling pits or holes where debris was removed, etc. Any potential obstructions such as debris piles, equipment, etc. shall also be removed from the beach by the end of each day. Fill must be placed as landward as

practicable to establish or repair dune features. The existing or pre- disaster beach and dune profile must be considered when determining the appropriate siting of fill to provide reasonable longevity of the project. This measure will be conducted in accordance with FEMA/USFWS/DNER-approved SOP for employee sea turtle awareness training, project site preparation, and nest season monitoring.

- Endangered Species Act (ESA) - Continue USFWS Required Conservation Measures for *Caretta caretta*, (*Chelonia mydas*), (*Dermochelys coriacea*) and (*Eretmochelys imbricata*) 17. No vehicles, equipment, staging or debris should be used, parked or stored landward of the primary dune or in vegetated areas. Staging/parking/storage areas shall be located on paved surfaces as much as possible and outside of vegetated areas. Lightweight, all terrain style vehicles, with tire pressures of 10 psi or less can operate on the beach and are the preferred transportation method. However, use of heavy equipment on the beach can be allowed provided it is taken off the beach by 1600 AST local time every night using an approved and designated beach access. All driving on the beach shall be between the high-water mark and the water's edge. This measure will be conducted in accordance with FEMA/USFWS/DNER-approved SOP for employee sea turtle awareness training, project site preparation, and nest season monitoring. 18. Removal of vegetation, fence installation, construction activities, and light installation shall be limited within 50 meters from the high tide line. This measure will be conducted in accordance with FEMA/USFWS/DNER-approved SOP for employee sea turtle awareness training, project site preparation, and nest season monitoring. 19. No construction involving lights shall be used during the nesting season. For Puerto Rico and the USVI, a lighting plan utilizing sea turtle friendly lights for coastal areas is required where lights will be repaired or newly installed. Lighting plans shall be sent to USFWS at: [caribbean\\_es@fws.gov](mailto:caribbean_es@fws.gov). Once the plan is fully implemented, a lighting inspection shall be conducted by the Applicant to identify and correct any remaining problematic lights. For projects in Puerto Rico the project shall comply with Puerto Rico Law 218 of 2008, Control and Prevention of the Lighting Pollution of Puerto Rico and the PR EQB 2016 Regulation to Control and Prevent Light Contamination. 20. If an unmarked sea turtle crawl is encountered during or prior to project activity, the work crew shall not disturb the integrity of the crawl. Project personnel shall follow the crawl up the beach or into the dune and contact the qualified sea turtle monitor to inform of the location of the crawl. Care shall be taken to avoid walking or driving equipment over or near a crawl so that a potential nest is not damaged. This measure will be conducted in accordance with FEMA/USFWS/DNER-approved SOP for employee sea turtle awareness training, project site preparation, and nest season monitoring. 21. Any collision(s) with and/or injury to any sea turtle in water, occurring during the construction of a project, shall be reported immediately to DNER/DPNR and NMFS's Protected Resources Division (PRD) at (1-727-824-5312) or by email to [takereport.nmfsser@noaa.gov](mailto:takereport.nmfsser@noaa.gov) and [SAJ-RD-Enforcement@usace.army.mil](mailto:SAJ-RD-Enforcement@usace.army.mil). This measure will be conducted in accordance with FEMA/USFWS/DNER-approved SOP for employee sea turtle awareness training, project site preparation, and nest season monitoring. 22. All sea turtle sightings and incidents involving nesting sea turtles or hatchlings shall be reported to DNER/DPNR and the USFWS: Caribbean Ecological Services Field Office, P.O. Box 491, Boquerón, PR, Marelisa Rivera - Deputy Field Supervisor, 787-851-7297 extension 2016, 787- 510-5207, [marelisa\\_rivera@fws.gov](mailto:marelisa_rivera@fws.gov). This measure will be conducted in accordance with FEMA/USFWS/DNER approved SOP for employee sea turtle awareness training, project site preparation, and nest season monitoring
- Endangered Species Act (ESA) - The Applicant must provide documentation at close-out that proves completion of required Conservation Measures

## EHP Additional Info

There is no additional environmental historical preservation on **FAASt Aguada Streetlighting (Distribution)**.



## Final Reviews

### Final Review

**Reviewed By** MARTINEZ SANTIAGO, ISRAEL

**Reviewed On** 04/25/2022 2:56 PM AST

#### Review Comments

FEMA Final completed. Project ready for Recipient Final Review.

### Recipient Review

**Reviewed By** Salgado, Gabriel

**Reviewed On** 04/25/2022 3:04 PM AST

#### Review Comments

Recipient review completed. Next step: Applicant review.

## Fixed Cost Offer

As a Public Assistance (PA) Subrecipient PR Electric Power Authority (000-UA2QU-00), in accordance with Section 428 of the Robert T. Stafford Disaster Relief and Emergency Assistance Act, the Applicant agrees to accept a permanent work subaward based on a Fixed Cost Offer in the amount of \$18,571,716.38 for subaward number 10539 under Disaster # 4339. The Applicant accepts responsibility for all costs above the Fixed Cost Offer.

The Applicant understands that by participating in this pilot program they will be reimbursed for allowable costs in accordance with 2 CFR Part 200, and the reimbursement will not exceed the Fixed Cost Offer. The Applicant also understands that by agreeing to this Fixed Cost Offer, they will not receive additional funding related to the facilities or sites included in the subaward. The Applicant also acknowledges that failure to comply with the requirements of applicable laws and regulations governing assistance provided by FEMA and the PA Alternative Procedures Pilot Program Guidance (such as procurement and contracting; environmental and historic preservation compliance; and audit and financial accountability) may lead to loss of federal funding.

## Project Signatures

**Signed By** Nieves, Ezequiel

**Signed On** 04/26/2022

## Department of Homeland Security Federal Emergency Management Agency

### General Info

<b>Project #</b>	542690	<b>PW #</b>	10499	<b>Project Type</b>	Specialized
<b>Project Category</b>	F - Utilities			<b>Applicant</b>	PR Electric Power Authority (000-UA2QU-00)
<b>Project Title</b>	FAASt [Maunabo Streetlighting] (Distribution)			<b>Event</b>	4339DR-PR (4339DR)
<b>Project Size</b>	Large			<b>Declaration Date</b>	9/21/2017
<b>Activity Completion Date</b>	3/21/2019			<b>Incident Start Date</b>	9/17/2017
<b>Process Step</b>	Obligated			<b>Incident End Date</b>	11/15/2017

### Damage Description and Dimensions

The Disaster # 4339DR, which occurred between **09/17/2017** and **11/15/2017**, caused:

#### Damage #788210; FAASt Maunabo Distribution Streetlighting

DDD for this facility codified in the 136271 - MEPA078 Puerto Rico Electrical Power Authority Island Wide FAASt Project.

#### General Facility Information:

- **Facility Type:** Power generation, transmission, and distribution facilities
- **Facility:** Maunabo Distribution Streetlighting
- **Facility Description:** The Maunabo municipality has a total of 2359 luminaries of which damage was estimated for 70% of these luminaries.
  - Pole – This can be either a standalone structure intended to house a streetlight, or a utility pole shared with other overhead utilities
  - Arm – A piece of hardware affixed to a pole to which a luminaire is mounted. The arm serves to position the streetlight over the street for optimal lighting
  - Luminaire/Light Bulb – The light emitting part of a streetlight
  - Light controller (e.g., photocell) – A hardware device affixed to the luminaire which controls the operating mode
  - Communication network – A wired or wireless system that allows the smart streetlight to communicate with other devices and the control system
  - Technology control system – A software platform that allows a remote operator to set the operating parameters for the smart streetlight or manually override the parameter if needed
- **Approx. Year Built:** 1970
- **Location Description:** Please refer to "788210-DR4339PR-FEMA Project Scope of Work - Maunabo.pdf" for more details about all sites location.
- **GPS Latitude/Longitude:** REDACTED

#### General Damage Information:

- **Date Damaged:** 9/20/2017
- **Cause of Damage:** High winds & wind driven rain, caused by Cat 4 Hurricane Maria

### Final Scope

788210 **FAASt Maunabo Distribution Streetlighting**

## Introduction

The purpose of this document is to submit for approval the Detailed Scope of Work (SOW) to COR3 and FEMA for the Distribution Streetlighting Maunabo project (Maunabo municipality) under DR-4339-PR Public Assistance. The document provides a description of the project including scope, schedule, and cost estimates as well as Environmental & Historical Preservation ("EHP") requirements and proposed 406 hazard mitigation work. LUMA Energy is seeking approval from COR3 and FEMA for project funding to repair, replace, and upgrade the eligible facilities in the municipality of Maunabo.

LUMA submits this Detailed SOW pursuant to the T&D O&M Agreement between Puerto Rico. Puerto Rico Electric Power Authority ("PREPA"), the Puerto Rico Public-Private Partnerships Authority ("P3A") and LUMA Energy, and in accordance with the Consent to Federal Funding Letter issued by PREPA and P3A and provided herein as Appendix K which collectively provides the necessary consent for LUMA Energy, as agent of PREPA, to undertake work in connection with any Federal Funding requests related to the T&D System submitted to FEMA.

## Facilities

This project is part of the breakdown division for the Distribution Streetlighting Program which will be impacting each of the municipalities. Characteristics were previously defined to serve the municipality of Maunabo according to the priorities and findings after conducting the assessments.

Physical Address: Maunabo, Puerto Rico

Coordinates: Please refer to Appendix F for Coordinates.

## Project Scope of Work

Streetlight Repairs - Proposed 428 Public Assistance Scope of Work:

- A. Replacement of lighting components including photocontrols, luminaires, arms and associated hardware.
- B. Replacement of concrete octagonal streetlight poles in the same location.
- C. Replacement of aluminum streetlight poles with or without breakaway base in the same location.
- D. Replacement of concrete base (foundation) for aluminum streetlight poles in the same location.
- E. Replacement of distribution secondary wood, metal or concrete poles with associated lighting components and installation of guy wires where necessary in the same location.
- F. Construction of trenches for secondary underground circuits for streetlighting in existing trench locations.
- G. Replace aerial secondary wiring connections.

Refer to Appendix H for the location specific scopes of work.

**Project Cost Estimate**

Streetlight Repairs - Proposed 428 Public Assistance Cost Estimate:

**Project Cost Estimate**

Streetlight Repairs - Proposed 428 Public Assistance Cost Estimate:

A. Planning, Permits and Applications (FAASt 335168):	\$3,490
B. Environmental Management (FAASt 335168):	\$157,743
C. Project Management (FAASt 335168):	\$284,708
D. Engineering (FAASt 335168):	\$628,965
E. Construction - Labor & Materials:	\$5,694,155
F. Construction - Site Management (FAASt 335168):	\$170,825
G. Construction - Quality Inspections (FAASt 335168):	\$284,708
F. Contingency:	\$505,722
<b>Total</b>	<b>\$7,730,315.56</b>

<b>Work to be Completed (WTBC):</b>	<b>\$7,730,315.56</b>
<b>A&amp;E Deduction (Global A&amp;E FAASt 335168):</b>	<b>-\$1,530,438.49</b>
<b>Project Total:</b>	<b>\$6,199,877.07</b>

Please refer to PDMG provided: 542690 DR4339PR Appendix G - Cost Estimate Maunabo Municipality.xlsx

For more information, please refer to: *Detailed SOW-Distribution Streetlighting-Maunabo-V0-1.pdf*, *542690 DR4339PR 50000-EN-SOW-0015\_Rev1.pdf*

**Project Notes:**

1. All streetlight trench rebuilds will be performed in the same location and with the same dimensions as the existing damaged one.
2. No new trenches are considered under the project.
3. The trenches are described by LUMA Trench Standard STL-16 (attached in the project), which states that the typical trench width is 1 foot, and the typical trench depth is 3.5 feet. For this project, the typical trench was defined to have an average length of 100 feet and following a straight line between the streetlight poles.

## 406 HMP Scope

Project number: 542690

Damage #788210; FAASt Maunabo Distribution Streetlighting

Applicant: PR Electric Power Authority (000-UA2QU-00)

---

Location: Maunabo, Puerto Rico

GPS Latitude/Longitude: **REDACTED**

### Hazard Mitigation Narrative

During the incident period from September 17, 2017, to November 15, 2017, the Commonwealth of Puerto Rico experienced hurricane-force winds, heavy rain, flooding and power outage from Hurricane Maria. The incident caused damage to the electrical system, such as the power generation plants, transmission and distribution lines, substations, communication systems, buildings, among other damages to the infrastructures owned, operated, and maintained by the Puerto Rico Electric Power Authority (PREPA).

In the Maunabo Municipality, PREPA has a total of 2,428 streetlights luminaries. The Method of Repair (MOR) include the replacement of the damage lighting components including photocells, luminaires, arms, and associated hardware. Also include the replacement of the damage distribution and streetlight poles (wood, concrete, galvanized & aluminum), the replacement of the aerial secondary wiring connections, the construction of new concrete base for the aluminum streetlight poles and new trenches for the streetlighting secondary underground circuits. According to the information provided by the Applicant, due to the high velocity hurricane winds, wind-blown debris, and prolonged heavy rain, were the main cause of the damages of the facilities.

In order to minimize the damages in a future event, the Applicant is proposing as a mitigation measure, increase the strength of the poles, arms, aluminum poles breakaway bases, and foundations (concrete bases) by increasing the wind tolerance of all materials to 160mph. Note: The FEMA Accelerated Award Strategy (FAASt) MOR included the PREPA distribution standards and specifications that were based on a 90mph sustained winds for all materials. Although in PREPA Technical Communication #13-02 (August 22, 2013) a design-criteria of 145mph winds were published, the specifications for streetlighting material were never revised, and in the specification documents, the 90mph winds stayed as the requirement for procurement purposes of all streetlighting materials. The 160mph wind tolerance mitigation measure, will protect and make the affected infrastructure more resistant, stronger, and resilient to similar hazards.

### Hazard Mitigation Proposal (HMP) Scope of Work:

In order to prevent or reduce future damages from similar events, the applicant proposed the following mitigation measures:

#### Mitigation Measures (*Replacement*)

1. To avoid damage in a future event, the Applicant is proposing as a mitigation measure, increase the strength of the poles, arms, aluminum poles breakaway bases, and foundations (concrete bases) by increasing the wind tolerance of all materials to 160mph. The FAASt MOR used PREPA distribution standards and specifications that were based on a 90mph sustained winds for all materials. Although in PREPA Technical Communication #13-02 (August 22, 2013) a design-criteria of 145mph winds were published, the specifications for streetlighting material were never revised, and in the specification documents, the 90mph winds stayed as the requirement for procurement purposes of all streetlighting materials. The above mitigation measures will protect and make the affected infrastructure more resistant, stronger, and resilient to similar hazards. Refer to Appendix J: Section VI.D.1 of the PAPPG V3.1.

Eligible Cost of PA repair Scope of Work per DI: \$4,904,774.62

Net Cost of 406 HMP per DI: \$179,642.41

Cost of 406 HMP w/factors: **\$243,880.33**

HMP Cost/ Benefit = (Net Cost of Hazard Mitigation/ Cost for HM Eligible PA Repair SOW) x 100 Ratio of HMP C/B = (\$179,642.41/ \$4,904,774.62) x 100 = 3.66% (< 15% and Appendix J).

\* See Mitigation Profile Documents Tab for complete version of this HMP and supporting documents.

\* Due to GM system constraints in the Mitigation Profile Cost Tab, there may be a discrepancy in the total dollar amount of the mitigation proposal (or, the cost effectiveness statement) cited in the Cost Tab of the project(s). Whenever a difference between the Mitigation Cost Tab and the completed HMP cost occurs, the correct dollar amount of the grant proposal will default to the amount of 406 funding cited on the actual HMP document (and the Cost Summary Spreadsheet) uploaded into the Mitigation Profile Documents Tab.

\* This project Hazard Mitigation costing / soft cost / factor methodologies followed the same procedures provided in the cost estimates of the PA portion of the project.

Additional PA Notes:

1. All streetlight trench rebuilds will be performed in the same location and with the same dimensions as the existing damaged one.
2. No new trenches are considered under the project.
3. The trenches are described by LUMA Trench Standard STL-16 (attached in the project), which states that the typical trench width is 1 foot, and the typical trench depth is 3.5 feet. For this project, the typical trench was defined to have an average length of 100 feet and following a straight line between the streetlight poles.

## Cost

Code	Quantity	Unit	Total Cost	Section
3510 (Engineering And Design Services (FAASt Global A&E 335168))	1.00	Lump Sum	(\$1,530,438.49)	Uncompleted
9201 (PAAP Fixed Estimate (No Value - Tracking Purposes Only))	1.00	Lump Sum	\$0.00	Completed
9001 (Contract (FAASt Project 136271))	1.00	Lump Sum	\$7,730,315.56	Uncompleted

CRC Gross Cost \$6,199,877.07

Total 406 HMP Cost \$243,880.33

Total Insurance Reductions \$0.00

---

CRC Net Cost \$6,443,757.40

Federal Share (90.00%) \$5,799,381.66

Non-Federal Share (10.00%) \$644,375.74

## Award Information

### Version Information

Version #	Eligibility Status	Current Location	Bundle Number	Project Amount	Cost Share	Federal Share Obligated	Date Obligated
0	Eligible	Awarded	PA-02-PR-4339-PW-10499(11675)	\$6,443,757.40	90 %	\$5,799,381.66	5/4/2022

### Drawdown History

EMMIE Drawdown Status As of Date	Obligation Number	Expenditure Number	Expended Date	Expended Amount
No Records				



## Subgrant Conditions

- As described in Title 2 Code of Federal Regulations (C.F.R.) § 200.333, financial records, supporting documents, statistical records and all other non-Federal entity records pertinent to a Federal award must be retained for a period of three (3) years from the date of submission of the final expenditure report or, for Federal awards that are renewed quarterly or annually, from the date of the submission of the quarterly or annual financial report, respectively, as reported to the Federal awarding agency or pass-through entity in the case of a subrecipient. Federal awarding agencies and pass-through entities must not impose any other record retention requirements upon non-Federal entities. Exceptions are stated in 2 C.F.R. §200.333(a) – (f)(1) and (2). All records relative to this project are subject to examination and audit by the State, FEMA and the Comptroller General of the United States and must reflect work related to disaster-specific costs.
- In the seeking of proposals and letting of contracts for eligible work, the Applicant/Subrecipient must comply with its Local, State (provided that the procurements conform to applicable Federal law) and Federal procurement laws, regulations, and procedures as required by FEMA Policy 2 CFR Part 200, Procurement Standards, §§ 317-326.
- The Recipient must submit its certification of the subrecipient's completion of this project, the final claim for payment, and supporting documentation within 180 days from the date that the applicant completes the scope of work, or the project deadline, whichever occurs first. FEMA reimburses Large Projects (those with costs above the large project threshold) based on the actual eligible final project costs. Therefore, during the final project reconciliation (closeout), the project may be amended to reflect the reconciliation of actual eligible costs.
- When any individual item of equipment purchased with PA funding is no longer needed, or a residual inventory of unused supplies exceeding \$5,000 remains, the subrecipient must follow the disposition requirements in Title 2 Code of Federal Regulations (C.F.R.) § 200.313-314.
- The terms of the FEMA-State Agreement are incorporated by reference into this project under the Public Assistance award and the applicant must comply with all applicable laws, regulations, policy, and guidance. This includes, among others, the Robert T. Stafford Disaster Relief and Emergency Assistance Act; Title 44 of the Code of Federal Regulations; FEMA Policy No. 104-009-2, Public Assistance Program and Policy Guide; and other applicable FEMA policy and guidance.
- The DHS Standard Terms and Conditions in effect as of the declaration date of this emergency declarations or major disaster, as applicable, are incorporated by reference into this project under the Public Assistance grant, which flow down from the Recipient to subrecipients unless a particular term or condition indicates otherwise.
- The Uniform Administrative Requirements, Cost Principles, and Audit Requirements set forth at Title 2 Code of Federal Regulations (C.F.R.) Part 200 apply to this project award under the Public Assistance grant, which flow down from the Recipient to all subrecipients unless a particular section of 2 C.F.R. Part 200, the FEMA-State Agreement, or the terms and conditions of this project award indicate otherwise. See 2 C.F.R. §§ 200.101 and 110.
- The subrecipient must submit a written request through the Recipient to FEMA before it makes a change to the approved scope of work in this project. If the subrecipient commences work associated with a change before FEMA approves the change, it will jeopardize financial assistance for this project. See FEMA Policy No. 104-009-2, Public Assistance Program and Policy Guide.
- The Subrecipient provided the estimate for this PW. FEMA validated the estimate and found it to be reasonable for the work to be performed.
- Pursuant to section 312 of the Stafford Act, 42 U.S.C. 5155, FEMA is prohibited from providing financial assistance to any entity that receives assistance from another program, insurance, or any other source for the same work. The subrecipient agrees to repay all duplicated assistance to FEMA if they receive assistance for the same work from another Federal agency, insurance, or any other source. If an subrecipient receives funding from another federal program for the same purpose, it must notify FEMA through the Recipient and return any duplicated funding.

## Insurance

### Additional Information

**4/11/2022**

**GENERAL INFORMATION**

Event: DR4339-PR

Project: SP 542690

Category of Work: Cat F - Utilities

Applicant: PR Electric Power Authority

Event Type: Hurricane / Hurricane Maria

Cause of Loss: Wind / Wind Driven Rain

Incident Period: 9/17/2017 to 11/15/2017

Total Public Assistance Amount: \$6,443,757.40 (Repairs Amount \$6,199,877.07 + Mitigation Amount \$243,880.33)

**COMMERCIAL INSURANCE INFORMATION**

Does the applicant have a Commercial Policy that extends coverage for this facility: Yes

Policies Issued by: Willis Towers Watson, Multinational Insurance Company and Mapfre

Policy Numbers: Willis Towers Watson (B0804Q1966F17, B0804Q14312F17, B0804Q19673F17, B0804Q19672F17, B0804Q18529F17, B0804Q14312F17, B0804Q19674F17, B0804Q18411F17, B0804Q14310F17, B0804Q11038F17, B0804Q14507F17, B0804Q14312F17)

Mapfre Praico Insurance Company (1398178000644)

Multinational Insurance Company (88-CP-000307831-2, 88-CP-000318673-0, 88-CP000318674-0, 88-CP-000318675-0, 88-CP-000318676-0, 88-CP-000318677-0)

Policy Period: From: 5/15/2017 To: 5/15/2018

Policy Limits: \$300,000,000.00

RCV or ACV: Replacement Cost Value

Deductible Amount \$25,000,000.00 each and every occurrence property damage and 30 days each and every occurrence business interruption in respect of Named Windstorm.

Does the Applicant's Commercial Policy extend coverage for the damage described in this project: Yes

The amount of the deductible being funded in this project is \$0.00

The amount of the deductible previously funded in other projects is \$25,000,000.00

Final Insurance Settlement Status: Insurance proceeds for this project are anticipated

The amount of Anticipated Insurance Reduction applied for Project: \$0.00

**NUMBER OF DAMAGED LOCATIONS INCLUDED IN THIS PROJECT:** (1)

**Damaged Inventory (DI) #788210:**

**FAASt Maunabo Distribution Streat lighting**

Location Description: Maunabo, Puerto Rico

GPS Coordinates: **REDACTED**

Cause of Loss: Wind / Wind Driven Rain

SOV / Schedule #: N/A

SOV / Schedule Amount: N/A

Applicable Deductible Amount: N/A

Damage Inventory Amount: \$6,443,757.40 (Repairs Amount \$6,199,877.07 + Mitigation Amount \$243,880.33)

-

Prior Obtain and Maintain Requirement:

No prior insurance requirements were found for this facility.

-

Reduction(s):

No insurance reduction will be applied to this project. An anticipated insurance reduction of \$193,746,436.00 was applied to FFAST project # 136271 for anticipated insurance proceeds for Hurricane Maria losses. For ease of reference, please see table of insurance allocations: "PREPA Allocation Plan – All Disasters" file.

Obtain and Maintain Requirement:

No Obtain & Maintain Requirement is being mandated for the FFAST Maunabo Distribution Street lighting because facility does not meet the definition of building, equipment, contents, or vehicle.

**Insurance Proceeds Statement:**

FEMA acknowledges that the Applicant is in negotiations with their insurance carrier at the time of the FEMA insurance review and might have received partial settlements. In accordance with 44 CFR §206.250-253, in the absence of an actual settlement, anticipated insurance recoveries will be deducted from this project based on Applicant's insurance policy limits. FEMA subsequently adjusts the eligible costs based on the actual amount of insurance proceeds the Applicant receives after a final settlement.

FEMA's Recovery Policy FP 206-086-1, Public Assistance Policy on Insurance (June 29, 2015), requires applicants to take reasonable efforts to recover insurance proceeds that it is entitled to receive from its insurers. FEMA will consider final insurance settlements that may be less than the insurance policy limits when an applicant demonstrates that it has taken reasonable efforts to recover insurance proceeds that it is entitled on a case-by-case basis.

**Standard Insurance Comments**

**FEMA Policy 206-086-1**

**PART 2: Other Insurance-Related Provisions. (Sections 312 and 406(d) of the Stafford Act)**

**A. Duplication of Benefits.** FEMA cannot provide assistance for disaster-related losses that duplicate benefits available to an applicant from another source, including insurance.

1. Before FEMA approves assistance for a property, an applicant must provide FEMA with information about any actual or anticipated insurance settlement or recovery it is entitled to for that property.
2. FEMA will reduce assistance to an applicant by the amount of its actual or anticipated insurance proceeds.
3. Applicants must take reasonable efforts to recover insurance proceeds that they are entitled to receive from their insurer(s).

**Jean-Carlo Echevarria, PA Insurance Specialist, CRC Atlantic, Guaynabo, PR**

## O&M Requirements

There are no Obtain and Maintain Requirements on **FAAST [Maunabo Streetlighting] (Distribution)**.

## 406 Mitigation

There is no additional mitigation information on **FAAST [Maunabo Streetlighting] (Distribution)**.

## Environmental Historical Preservation

Is this project compliant with EHP laws, regulations, and executive orders?

Yes

### EHP Conditions

- Any change to the approved scope of work will require re-evaluation for compliance with NEPA and other Laws and Executive Orders.
- This review does not address all federal, state and local requirements. Acceptance of federal funding requires recipient to comply with all federal, state and local laws. Failure to obtain all appropriate federal, state and local environmental permits and clearances may jeopardize funding.
- If ground disturbing activities occur during construction, applicant will monitor ground disturbance and if any potential archaeological resources are discovered, will immediately cease construction in that area and notify the State and FEMA.
- Executive Order 11988 - Floodplains - Applicant must obtain any required permits from the Planning Board prior to initiating work and comply with any conditions of the permit. All coordination (emails, letters, documented phone calls) pertaining to these activities and compliance must be provided and maintained in the Applicant's permanent files.
- Endangered Species Act (ESA) - The Applicant must provide documentation at close-out that proves completion of required Conservation Measures.
- Endangered Species Act (ESA) - Birds The below conservation measures apply to the following species:, Puerto Rican broad-winged hawk and Puerto Rican sharp-shinned hawk 8. During breeding seasons (see below), nest surveys shall be conducted if a project occurs in a species' range. Nest searches must be conducted by qualified personnel with the appropriate DNER permits prior to start of work. If nesting activity is detected, all construction activities or human disturbance must be avoided within a 200-meter buffer to the closest nest. This avoidance strategy must be kept until fledglings successfully leave the nest permanently. Outside the nesting season, if a nest is encountered, work shall not interfere with the species until they have left the site. If nesting activity is detected, all construction activities or human disturbance must be avoided within a 200-meter buffer to the closest nest. This avoidance strategy must be kept until juvenile birds fledge the nest and are permanently gone. Nesting season: Puerto Rican broad-winged hawk (*Buteo platypterus*): December-June and Puerto Rican sharp-shinned hawk (*Accipiter striatus venator*): December-June. For all nest sightings, the Applicant must record the time and date of the sighting and the specific location where it was found. Data should also include a photo of the nest and eggs, relocation site GPS coordinates, and the time and date of the relocation. All sightings and incidental lethal take reports should be sent to the USFWS Caribbean Ecological Services Field Office, Marelisa Rivera - Deputy Field Supervisor, 787-851-7297 extension 206, 787-510-5207, marelisa\_rivera@fws.gov.
- Endangered Species Act (ESA)- Conditions for the Puerto Rican Boa 1 Inform all personnel about the potential presence of the PR boa and the VI boa in areas where the proposed work will be conducted. Photographs of the PR and VI Boa are to be prominently displayed at the site. The recipient must ensure that project personnel is able to correctly identify a PR or VI boa. For information on PR boa, please visit: <https://ecos.fws.gov/ecp/species/6628>. 2. Prior to any construction activity, including removal of vegetation and earth movement, the boundaries of the project area must be delineated, buffer zones, and areas to be excluded and protected, should be clearly marked in the project plan and in the field to avoid further habitat degradation into forested areas. Once areas are clearly marked, and prior to any construction activity, including site preparation, project personnel able to correctly identify a PR or VI boa must survey the areas to be cleared to ensure that no boas are present within the work area. Vehicle and equipment operation must remain on designated access roads/paths

and within rights-of way. 3. If a PR boa is found within any of the working or construction areas, activities should stop in the area where the boa was found. Do not capture the boa. If boas need to be moved out of harm's way, project personnel designated by the recipient shall immediately contact the Puerto Rico Department of Natural and Environmental Resources (PRDNER) Rangers for safe capture and relocation of the animal (PRDNER phone #: 787-724-5700, 787-230-5550, 787-771-1124). If immediate relocation is not an option, project-related activities at this area must stop until the boa moves out of harm's way on its own. Activities at other work sites, where no boas have been found after surveying the area, may continue. 4. Measures should be taken to avoid and minimize PR boa casualties by heavy machinery or motor vehicles being used on site. Any heavy machinery left on site (staging) or near potential PR boa habitat (within 50 meters of potential boa habitat), needs to be thoroughly inspected each morning before work starts to ensure that no boas have sheltered within engine compartments or other areas of the equipment. If PR boas are found within vehicles or equipment, do not capture the animal and let it move on its own or call PRDNER Rangers for safe capture and relocation of the boa (PRDNER phone #: 787-724-5700, 787-230-5550, 787-771-1124). If not possible, the animal should be left alone until it leaves the vehicle on its own. 5. PR boas may seek shelter in debris piles. Measures should be taken to avoid and minimize boa casualties associated with sheltering in debris piles as a result of project activities. Debris piles should be placed far away from forested areas. Prior to moving, disposing or shredding, debris piles should be carefully inspected for the presence of boas. If PR boas are found within debris piles, do not capture the animal and let it move on its own or call PRDNER Rangers for safe capture and relocation of the animal. If debris piles will be left on site, we recommend they be placed in areas that will not be disturbed in the future. 6. For all boa sightings (dead or alive), personnel designated by the recipient must record the time and date of the sighting and the specific location where the boa was found. Data should also include a photo of the animal dead or alive, and site GPS coordinates, and comments on how the animal was detected and its behavior. If the PR boa was accidentally killed as part of the project actions, please include information on what conservation measures had been implemented and what actions will be taken to avoid further killings. All boa-sighting reports should be sent to the USFWS Caribbean Ecological Services Field Office, Marelisa Rivera - Deputy Field Supervisor, 787- 851-7297 extension 206, 787-510-5207, marelisa\_rivera@fws.gov.

- Endangered Species Act (ESA) - Conservation measures for Sea Turtles USFWS Required Conservation Measures for *Caretta caretta*, (*Chelonia mydas*), (*Dermochelys coriacea*) and (*Eretmochelys imbricata*). There is potential for sea turtle nesting activity on all ocean-facing sand beaches in Puerto Rico and the US Virgin Islands, including mixed sand and gravel (shell, coral rubble) beaches. The following measures are applicable to green, loggerhead, leatherback, and hawksbill sea turtles. 10. During nesting season (March 1-November 30) a qualified sea turtle monitor shall survey each beach work area for possible sea turtle nests during the morning. Any nests found within the area will be marked or flagged in place. Outside of peak nesting season, beaches where work will occur shall be surveyed at least twice a week. If required, debris removal Construction activities on beaches shall initiate only after the sea turtle monitor has completed surveys that morning and nests are clearly marked. Surveys shall be conducted by sea turtle permit holders or trained personnel following DNER/DPNR protocols (see list of PR sea turtle groups, for USVI contact DPNR). Nests laid adjacent to the work area shall be marked by flagging with a 10-foot square roped off buffer and an unobstructed path seaward from the nest to the water. Surveys will start 45 minutes prior to any construction activity. Sea turtle monitoring groups shall have site specific information for nests in their areas and inform work crews of areas to avoid. This measure will be conducted in accordance with FEMA/USFWS/DNER-approved SOP for employee sea turtle awareness training, project site preparation, and nest season monitoring. 11. During the sea turtle nesting season, repair or replacement of structures shall occur in the same location or footprint of the previously permitted structure. If the current project footprint does not stay within previously permitted structure footprint, then the applicant must consult with USFWS. 12. Relocation of sea turtle nests to accommodate construction is not authorized. 13. All project activity shall be confined to daylight hours and shall not occur prior to 0800 AST or following the completion of all necessary marine turtle surveys and conservation activities. The sea turtle monitor shall be available via phone after the initial inspection for any coordination throughout the workday. This measure will be conducted in accordance with FEMA/USFWS/DNER-approved SOP for employee sea turtle awareness training, project site preparation, and nest season monitoring. 14. Only native plant species are authorized to be planted. Existing native dune vegetation shall be disturbed to the minimum extent necessary. For information on appropriate coastal plants see Fish and Wildlife Service BMP document, Sea Turtle Friendly Vegetation. Removal of standing and live coastal vegetation (e.g. sea grapes, mangroves) that are not a hazard is unauthorized. No sea grass, sea weeds, algae nor beach sand shall be removed during beach debris removal efforts. Any vegetation planting shall be installed by hand labor and tools. Irrigation systems shall not be installed within nesting habitat. Applicant will submit a vegetation plan that confirms compliance with these requirements and submit to USFWS at: caribbean\_es@fws.gov. If a sea turtle nest is disturbed or uncovered during vegetation planting activity or project excavation, all work shall cease, and the sea turtle monitor shall immediately be contacted. If a nest(s) cannot be safely avoided during construction, all activity within the affected project area shall be delayed until complete hatching and emergence of the nest. This measure will be conducted in accordance with FEMA/USFWS/DNER-approved SOP for employee sea turtle awareness training, project site preparation, and nest season monitoring. 15. Placement of fill shall not occur within 10 feet of or in any area seaward of a marked sea turtle nest. Nests shall be marked in place with a roped off 10-foot buffer. Dependent upon the fill volume and slope, distance offset from marked turtle nests may be required to be larger to avoid indirect impacts (e.g., fill slumping) to the nest. If the turtle nest cannot be avoided by this distance due to the scope of the project, all work near the nest must be postponed until

- completion of the sea turtle nesting season (November 30). This measure will be conducted in accordance with FEMA/USFWS/DNER-approved SOP for employee sea turtle awareness training, project site preparation, and nest season monitoring. 16. All excavations and temporary alteration of beach topography shall be contoured or leveled to the natural beach profile prior to dusk each day. This includes raking of tire ruts, filling pits or holes where debris was removed, etc. Any potential obstructions such as debris piles, equipment, etc. shall also be removed from the beach by the end of each day. Fill must be placed as landward as practicable to establish or repair dune features. The existing or pre-disaster beach and dune profile must be considered when determining the appropriate siting of fill to provide reasonable longevity of the project. This measure will be conducted in accordance with FEMA/USFWS/DNER-approved SOP for employee sea turtle awareness training, project site preparation, and nest season monitoring. 17. No vehicles, equipment, staging or debris should be used, parked or stored landward of the primary dune or in vegetated areas. Staging/parking/storage areas shall be located on paved surfaces as much as possible and outside of vegetated areas. Lightweight, all terrain style vehicles, with tire pressures of 10 psi or less can operate on the beach and are the preferred transportation method. However, use of heavy equipment on the beach can be allowed provided it is taken off the beach by 1600 AST local time every night using an approved and designated beach access. All driving on the beach shall be between the high-water mark and the water's edge. This measure will be conducted in accordance with FEMA/USFWS/DNER-approved SOP for employee sea turtle awareness training, project site preparation, and nest season monitoring. 18. Removal of vegetation, fence installation, construction activities, and light installation shall be limited within 50 meters from the high tide line. This measure will be conducted in accordance with FEMA/USFWS/DNER-approved SOP for employee sea turtle awareness training, project site preparation, and nest season monitoring. 19. No construction involving lights shall be used during the nesting season. For Puerto Rico and the USVI, a lighting plan utilizing sea turtle friendly lights for coastal areas is required where lights will be repaired or newly installed. Lighting plans shall be sent to USFWS at: [caribbean\\_es@fws.gov](mailto:caribbean_es@fws.gov). Once the plan is fully implemented, a lighting inspection shall be conducted by the Applicant to identify and correct any remaining problematic lights. For projects in Puerto Rico the project shall comply with Puerto Rico Law 218 of 2008, Control and Prevention of the Lighting Pollution of Puerto Rico and the PR EQB 2016 Regulation to Control and Prevent Light Contamination. 20. If an unmarked sea turtle crawl is encountered during or prior to project activity, the work crew shall not disturb the integrity of the crawl. Project personnel shall follow the crawl up the beach or into the dune and contact the qualified sea turtle monitor to inform of the location of the crawl. Care shall be taken to avoid walking or driving equipment over or near a crawl so that a potential nest is not damaged. This measure will be conducted in accordance with FEMA/USFWS/DNER-approved SOP for employee sea turtle awareness training, project site preparation, and nest season monitoring. 21. Any collision(s) with and/or injury to any sea turtle in water, occurring during the construction of a project, shall be reported immediately to DNER/DPNR and NMFS's Protected Resources Division (PRD) at (1-727-824-5312) or by email to [takereport.nmfs@noaa.gov](mailto:takereport.nmfs@noaa.gov) and [SAJ-RD-Enforcement@usace.army.mil](mailto:SAJ-RD-Enforcement@usace.army.mil). This measure will be conducted in accordance with FEMA/USFWS/DNER-approved SOP for employee sea turtle awareness training, project site preparation, and nest season monitoring. 22. All sea turtle sightings and incidents involving nesting sea turtles or hatchlings shall be reported to DNER/DPNR and the USFWS: Caribbean Ecological Services Field Office, P.O. Box 491, Boquerón, PR, Marelisa Rivera - Deputy Field Supervisor, 787-851-7297 extension 2016, 787-510-5207, [marelisa\\_rivera@fws.gov](mailto:marelisa_rivera@fws.gov). This measure will be conducted in accordance with FEMA/USFWS/DNER approved SOP for employee sea turtle awareness training, project site preparation, and nest season monitoring.
- Endangered Species Act (ESA)- Conservation measures for Coquí Guajón (Puerto Rican Rock Frog)
    - a. Inform all project personnel about the potential presence of the coquí guajón in areas where the proposed work will be conducted. A pre - construction meeting shall be conducted to inform all project personnel about the requirement of avoiding harm to the species. An educational poster or sign with photos or illustrations of the species should be displayed at the project site.
    - b. Project boundaries, buffer zones and areas to be excluded or protected shall be clearly marked in the project plans and in the field, prior to any construction activity, including removal of vegetation and earth movement.
    - c. Erosion and Sedimentation Control Best Management Practices (BMP's) shall be included in the project scope of work when working within or adjacent to the coquí guajón habitat (e.g. rivers, streams, drainages, ravines, big boulder areas) to avoid or minimize erosion and sedimentation. Sediment runoff from the project can adversely affect the species and its habitat by filling the caves and crevices where the species occurs and uses to lay its eggs. As water is a very important component of the species' habitat, any stream, creek, or similar body of water with the habitat characteristics indicated above may harbor the species, hence it shall be protected to the maximum extent possible.
    - d. All project associated with streams, rivers, bridges, culverts, etc., shall follow the Post-Disaster Guidance for Repair, Replacement, and Clean-up Projects in Streams and Waterways of Puerto Rico from Hurricane María. The guide is available at: <https://www.fws.gov/southeast/pdf/guidelines/post-disaster-guidance-for-projects-in-streams-and-waterways-of-puerto-rico.pdf>
  - Resource Conservation and Recovery Act, aka Solid Waste Disposal Act (RCRA) - 1. The Applicant shall handle, manage, and dispose of all types of hazardous waste in accordance with requirements of local, state, and federal laws, regulations, and ordinances. In addition, the Applicant shall ensure that all debris is separated and disposed of in a manner consistent with the PR DNER guidelines at a permitted site or landfill. The contractor/applicant will be responsible for the proper disposition of construction debris in authorized landfills providing the name, location, coordinates and permits of the facility to the corresponding authorities. 2. Unusable equipment, debris, white goods, scrap metal any other material shall be

disposed in approved manner and location. In the event significant items are discovered during the implementation or development of the project the Applicant shall handle, manage and dispose petroleum products, hazardous materials and toxic waste in accordance to the requirements of the local and federal agencies. Noncompliance with these requirements may jeopardize receipt of federal funds.

## EHP Additional Info

There is no additional environmental historical preservation on **FAASt [Maunabo Streetlighting] (Distribution)**.

## Final Reviews

### Final Review

**Reviewed By** MARTINEZ SANTIAGO, ISRAEL

**Reviewed On** 05/02/2022 3:39 PM AST

#### Review Comments

FEMA Final Review completed. Project is ready for Recipient review.

### Recipient Review

**Reviewed By** Salgado, Gabriel

**Reviewed On** 05/02/2022 3:46 PM AST

#### Review Comments

Recipient review completed. Next step: Pending Applicant review.

## Fixed Cost Offer

As a Public Assistance (PA) Subrecipient PR Electric Power Authority (000-UA2QU-00), in accordance with Section 428 of the Robert T. Stafford Disaster Relief and Emergency Assistance Act, the Applicant agrees to accept a permanent work subaward based on a Fixed Cost Offer in the amount of \$6,443,757.40 for subaward number 10499 under Disaster # 4339. The Applicant accepts responsibility for all costs above the Fixed Cost Offer.

The Applicant understands that by participating in this pilot program they will be reimbursed for allowable costs in accordance with 2 CFR Part 200, and the reimbursement will not exceed the Fixed Cost Offer. The Applicant also understands that by agreeing to this Fixed Cost Offer, they will not receive additional funding related to the facilities or sites included in the subaward. The Applicant also acknowledges that failure to comply with the requirements of applicable laws and regulations governing assistance provided by FEMA and the PA Alternative Procedures Pilot Program Guidance (such as procurement and contracting; environmental and historic preservation compliance; and audit and financial accountability) may lead to loss of federal funding.

## Project Signatures

**Signed By** Nieves, Ezequiel

**Signed On** 05/04/2022