

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

NEPR

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IN RE:

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 Submitting Nine FEMA
Approvals of Projects, Request for Confidential
Treatment, and Supporting Memorandum of Law**

**MOTION SUBMITTING NINE FEMA APPROVALS OF PROJECTS,
REQUEST FOR CONFIDENTIAL TREATMENT AND SUPPORTING
MEMORANDUM OF LAW**

TO THE PUERTO RICO ENERGY BUREAU:

COME NOW LUMA Energy, LLC¹, and LUMA Energy ServCo, LLC², (jointly referred to as "LUMA"), through the undersigned legal counsel and respectfully submit the following:

I. Submittal of FEMA Approvals and Request for Confidentiality

1. On March 26, 2021, this Honorable Puerto Rico Energy Bureau ("Energy Bureau") issued a Resolution and Order in the instant proceeding ("March 26th Order"), ordering, in pertinent part, that the Puerto Rico Electric Power Authority ("PREPA") submit to the Energy Bureau the specific transmission and distribution projects ("T&D Projects" or "projects") to be funded with Federal Emergency Management Agency ("FEMA") funds or any other federal funds at least thirty (30) calendar days prior to submitting these projects to the Puerto Rico Central Office for Recovery, Reconstruction and Resiliency ("COR3"), FEMA or any other federal agency. *See*

¹ Register No. 439372.

² Register No. 439373.

March 26th Order on pages 18-19.³ It also directed PREPA to continue reporting to the Energy Bureau and FEMA within the next five years, the progress of all ongoing efforts related to the approval of the submitted projects not yet approved by the Energy Bureau. *See id.* at page 19.

2. On August 30, 2021, LUMA filed a *Motion Requesting Clarification of a Portion of the Energy Bureau's Resolution and Order Entered on August 20, 2021, and Submitting Updated List of Transmission and Distribution Projects and Twenty-Nine Scope of Work* ("August 30th Motion"). In the August 30th Motion, LUMA submitted twenty-nine (29) SOWs for T&D Projects for the Energy Bureau's review and approval prior to submitting them to COR3 and FEMA. The SOWs submitted by LUMA included the Distribution Pole & Conductor Replacement SOW and the 38kV Transmission Priority Poles and Structures Replacements SOW. *See* August 30th Motion and its Exhibit 1.

3. On September 22, 2021, the Energy Bureau issued a Resolution and Order ("September 22nd Order") in which it determined that most of the SOWs for T&D projects submitted by LUMA with the August 30th Motion were necessary to improve the system's reliability and approved such SOWs, which included the 38kV Transmission Priority Poles and Structures Replacements and Distribution Pole & Conductor Replacement SOWs. *See* September 22nd Order on pages 2 and 3 and Attachment A. The Energy Bureau also ordered LUMA to submit a copy of the approval by COR3 and/or FEMA of these projects containing the costs obligated for each project, within ten (10) days of receiving such approval. *See id.* on page 3.

³ The Energy Bureau thereafter determined that this directive applied to PREPA and LUMA. *See* Resolution and Order of August 20, 2021, on page 3 in the instant case.

4. In compliance with the September 22nd Order, LUMA hereby submits copies of approvals by FEMA issued on January 31, 2023⁴ of the project “681672 - FAAS^t Transmission Priority Pole Replacements –38kV Line 2300 (Transmission)”⁵ under the 38kV Transmission Priority Poles and Structures Replacements SOW and the following projects under the Distribution Pole & Conductor Replacement SOW: “682031 - FAAS^t [Distribution Pole and Conductor Repair - San Juan Group 9] (Distribution)”; “682136 - FAAS^t [Distribution Pole and Conductor Repair-Bayamon Group 9] (Distribution)”; “682178 - FAAS^t [Distribution Pole and Conductor Repair - Arecibo Group 7] (Distribution)”; “682228 - FAAS^t Distribution Pole and Conductor Repair - Ponce Group 8 (Distribution)”; “682910 - FAAS^t [Distribution Pole and Conductor Repair - Bayamón Group 7] (Distribution)”; “688096 - FAAS^t [Distribution Pole and Conductor Repair - Caguas Group 15] (Distribution)”; “688627 - FAAS^t [Distribution Pole and Conductor Repair - Arecibo Group 9] (Distribution)”; and “688774 - FAAS^t Distribution Pole and Conductor Repair - Ponce Group 9 (Distribution)”⁶. *See Exhibit 1*. The document in **Exhibit 1** states FEMA’s approvals and includes the cost obligated for each project.

5. LUMA is submitting herein a redacted public version of the FEMA approvals (**Exhibit 1**) protecting confidential information associated with Critical Energy Infrastructure Information (“CEII”). The FEMA approvals of the T&D Projects are protected from disclosure as

⁴ It is important to note that knowledge of any FEMA approval for a T&D Project is acquired once FEMA makes the information available via its grant portal. This date is available on the FEMA Grants Portal under the Initial Date Obligated column.

⁵ This project was submitted originally to the Energy Bureau as the “38 kV Transmission Priority Poles and Structures Replacements” before High Level Assessments were completed.

⁶ These T&D Projects were submitted originally to the Energy Bureau as the “Distribution Pole & Conductor Replacement”, which encompassed pole and conductor replacement projects throughout Puerto Rico but were later divided into individual projects per region.

CEII, *see, e.g.*, 6 U.S.C. §§ 671-674; 18 C.F.R. §388.113 (2020), and pursuant to the Bureau's Policy on Management of Confidential Information. *See* Energy Bureau's Policy on Management of Confidential Information, CEPR-MI-2016-0009, issued on August 31, 2016, as amended by Resolution dated September 20, 2016.

II. Memorandum of Law in Support of Request for Confidentiality

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

6. 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).

7. 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).

8. 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.

9. 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 a “redacted” or “public version” and an “unredacted” or “confidential” version of the document that contains confidential information. *Id.* at ¶ 6.

10. 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).

11. 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

12. The FEMA approvals with CEII included in **Exhibit 1** 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.⁷ In at least two proceedings on Data Security,⁸ and Physical Security,⁹ this Energy Bureau, *motu proprio*, has conducted proceedings confidentially, thereby recognizing the need to protect CEII from public disclosure.

13. 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

⁷ *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 Minigrid 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).

⁸ *In re Review of the Puerto Rico Electric Power Authority Data Security Plan*, NEPR-MI-2020-0017.

⁹ *In re Review of the Puerto Rico Electric Power Authority Physical Security Plan*, NEPR-MI-2020-0018.

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

14. 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.

15. 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.

16. 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.*

17. 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”).¹⁰ 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).¹¹

¹⁰ Regarding the 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.

¹¹ CII includes the following types of information:

18. The FEMA approvals with CEII in **Exhibit 1** qualify as CEII because each of these documents contains the express coordinates to power transmission and distribution facilities (18 C.F.R. § 388.113(iv)), and these specific coordinates could potentially be helpful to a person planning an attack on the energy facilities listed as part of this 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.

19. 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.

(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;

(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

20. 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	681672 - FAASSt Transmission Priority Pole Replacements –38kV Line 2300 (Transmission)	Pages 1, 2, 5 and 10	Critical Energy Infrastructure Information, 18 C.F.R. § 388.113; 6 U.S.C. §§ 671- 674.	February 09, 2023
Exhibit 1	682031 - FAASSt [Distribution Pole and Conductor Repair - San Juan Group 9] (Distribution)	Pages 1, 2, 6 and 11	Critical Energy Infrastructure Information, 18 C.F.R. § 388.113; 6 U.S.C. §§ 671- 674.	February 09, 2023
Exhibit 1	682136 - FAASSt [Distribution Pole and Conductor Repair-Bayamon Group 9] (Distribution)	Pages 1, 2, 6 and 12	Critical Energy Infrastructure Information, 18 C.F.R. § 388.113; 6 U.S.C. §§ 671- 674.	February 09, 2023
Exhibit 1	682178 - FAASSt [Distribution Pole and Conductor Repair - Arecibo Group 7] (Distribution)	Pages 1, 2, 6 and 11	Critical Energy Infrastructure Information, 18 C.F.R. § 388.113; 6 U.S.C. §§ 671- 674.	February 09, 2023

Document	Name	Pages in which Confidential Information is Found, if applicable	Summary of Legal Basis for Confidentiality Protection, if applicable	Date Filed
Exhibit 1	682228 - FAASSt Distribution Pole and Conductor Repair - Ponce Group 8 (Distribution)	Pages 1, 2 and 6	Critical Energy Infrastructure Information, 18 C.F.R. § 388.113; 6 U.S.C. §§ 671-674.	February 09, 2023
Exhibit 1	682910 - FAASSt [Distribution Pole and Conductor Repair - Bayamón Group 7] (Distribution)	Pages 1, 2, 6 and 12	Critical Energy Infrastructure Information, 18 C.F.R. § 388.113; 6 U.S.C. §§ 671-674.	February 09, 2023
Exhibit 1	688096 - FAASSt [Distribution Pole and Conductor Repair - Caguas Group 15] (Distribution)	Pages 1, 2, 6 and 10	Critical Energy Infrastructure Information, 18 C.F.R. § 388.113; 6 U.S.C. §§ 671-674.	February 09, 2023
Exhibit 1	688627 - FAASSt [Distribution Pole and Conductor Repair - Arecibo Group 9] (Distribution)	Pages 1, 2, 5	Critical Energy Infrastructure Information, 18 C.F.R. § 388.113; 6 U.S.C. §§ 671-674.	February 09, 2023
Exhibit 1	688774 - FAASSt Distribution Pole and Conductor Repair - Ponce Group 9 (Distribution)	Pages 1, 2, 5 and 11	Critical Energy Infrastructure Information, 18 C.F.R. § 388.113; 6 U.S.C. §§ 671-674.	February 09, 2023

WHEREFORE, LUMA respectfully requests that the Energy Bureau **take notice** of the aforementioned; **accept** the copies of the FEMA approvals attached herein as **Exhibit 1**; and **grant** the request for confidential treatment of the confidential **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 9th day of February 2023.



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Exhibit 1

FEMA Approvals

Department of Homeland Security Federal Emergency Management Agency

General Info

Project #	681672	PW #	11184	Project Type	Specialized
Project Category	F - Utilities	Applicant	PR Electric Power Authority (000-UA2QU-00)		
Project Title	FAASt Transmission Priority Pole Replacements –38kV Line 2300 (Transmission)			Event	4339DR-PR (4339DR)
Project Size	Large	Declaration Date	9/20/2017		
Activity Completion Date	9/20/2027	Incident Start Date	9/17/2017		
Process Step	Obligated	Incident End Date	11/15/2017		

Damage Description and Dimensions

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

Damage #1240740; FAASt Dos Bocas H.P. - Arecibo Sect. L2300 38kV (Transmission)

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:** 38kV Line 2300 Dos Bocas H.P. - Arecibo Sect.
- **Facility Description:** The specific facilities included in this proposed project are structures (including their foundations), framing and insulators, load break switches (manual and automated), conductors, guy wires, anchoring, grounding assemblies, and any other associated components.3 . Structures along the Line 2300 Dos Bocas H.P. - Arecibo Sect. includes single wooden poles, single concrete structures, two wooden pole structure, single steel monopoles, and steel self-support towers. Line and all its structures are accessible through roads and/or situated on private properties. Some structures are inaccessible due to challenging terrain. Some vegetation management is needed along certain portions of the line.
- **Approx. Year Built:** 1980
- **Start GPS Latitude/Longitude:** [REDACTED]
- **End 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

1240740 **FAASt Dos Bocas H.P. - Arecibo Sect. L2300 38kV (Transmission)**

Introduction

The purpose of this document is to submit for approval the detailed Scope of Work ("SOW") to COR3 and FEMA for the Transmission Priority Pole Replacement – Line 2300 Project 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. LUMA Energy is seeking approval from COR3 and FEMA for project funding to repair, restore, or replace the eligible facilities.

LUMA submits this detailed SOW pursuant to the Transmission and Distribution Operations & Maintenance Agreement between 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 F 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 Transmission and Distribution System submitted to FEMA.

Facilities

The facilities listed below are part of the 11-mile long 38 kV overhead transmission Line 2300. This line is a Near-Term rebuild priority identified by LUMA. However, these structures were identified as having System Remediation Plan (SRS) issues and were considered degraded during a High-Level Assessment (HLA). Due to the degraded condition of these structures, they will be replaced through the Transmission Priority Pole Replacement Program on an expedited basis. Later, the remainder of the line will be rebuilt, except for the structures that would already have been replaced through this project and in alignment with LUMA Codes & Standards.

LINE		FID	Coordinates		Voltage Level (kV)	TL Construction Date
L2300	Dos Bocas H.P. - Arecibo Sect.	17780877			38 kV	1961
		17780879				
		30375763				
		17781895				

Project Scope of Work

Below includes a breakdown of pole replacement by line for “Proposed 428 Public Assistance Scope of Work” and “Proposed 406 Hazard Mitigation Grant Program Scope of Work”, followed by descriptions of each work type specific to the Scope of Work for this group.

Proposed 428 Public Assistance Scope of Work:

Dos Bocas H.P. - Arecibo Sect. Structures Scope:

Remove	Quantity	Install	Quantity
50ft Wood Pole(s)	3	70ft Galvanized Steel S8 Pole	3
60ft Wood Pole(s)	1	70ft Galvanized Steel S8 Pole	1

Detail Descriptions for Planned Field Work:

Pole Replacement

- Remove existing poles, including hardware and install new poles, including hardware, in the same location. If unable to install the replacement in the same location, the pole will be installed within 10ft, within the right-of-way.
- All pole installations are to replace existing pole locations; no new locations are included in this scope of work. Refer to *Appendix J- EHP Checklist*, column C (Soil area and depth impact) for the depths of the poles to be installed.
- Drill or auger a new hole or extend the existing hole approximately 10ft depth, 40in width to meet engineering requirements for each pole.
- When pole base is required, remove the existing foundations as specified in *Appendix G- Detail Cost Estimates* and replace them with a new concrete foundation bases as per *Appendix D- Engineering Plans*. The maximum auger width used is 42in and the maximum depth drilled is 15ft.
- New guy wire/ anchors are to be installed in compliance with *Appendix D- Engineering Plans*. The maximum distance an anchor will be installed for a 70ft pole is 15ft from the base of the pole, within the right-of-way.
- Damaged structures/poles will be replaced with higher class (strength) structures/poles made of steel, concrete, or fiberglass composite.
- Damaged crossarms will be replaced with composite, galvanized, or stainless steel crossarms.
- Porcelain insulators and any other damaged insulator will be replaced with silicone rubber insulators.
- Grounding assemblies will be replaced to fulfill system grounding integrity.
- Conductor spans will be replaced between poles and re-sagged per codes and standards.
- Structure guying elements will be repaired or replaced, such as slack guy wires or pulled anchors.
- Brushing will be required in locations to gain access to the pole for replacement. Brushing refers to the removal and clearing of vegetation solely to the extent that it allows crews to conduct work. The brushing of vegetation will be limited to a 15ft radius surrounding the surface of the pole but not to exceed the width of the right-of-way for the exclusive purpose of gaining access to the pole to conduct repairs. Approximately 100 cubic yards. Please see Appendix I- EHP Checklist column G (Site Accessible), Refer to Appendix B- General Arrangement for pictures of the vegetation and Appendix L Structures Location for exact locations.
- All work for this program will be performed within the current electrical right-of-way.
- This scope of work will not affect water or sewer utility services.

Material Disposal

- PCBs, oil from the transformer and breakers, sealants, and other chemical wastes typical of a construction site are considered hazardous waste and will be disposed of by the contractor in approved facilities as per applicable local regulations. Refer to *Appendix C- Waste Management Plan*.
- The type of debris that may be found in the process of removal are luminaires, pole arms, photocells, metal scrap, wiring, concrete, steel, and wood poles, etc. The debris will be separated and taken to an approved waste disposal facility in compliance with applicable local regulations. Refer to *Appendix C- Waste Management Plan*.
- Transformers will be contained and returned to LUMA in compliance with applicable local regulations. The removal of the transformer will require testing of the existing oil for PCB levels, drain oil, and delivery to the approved waste disposal site as per Environmental Regulations. Refer to *Appendix C- Waste Management Plan*.

Access Roads

- Poles are in close proximity to the roads and are site accessible. The construction of access roads is not required for this scope of work. Refer to *Appendix I- EHP Checklist* in "Site Accessible" column

Staging Area

- All materials are stored and dispatched from the assigned LUMA's Regional Warehouse. Refer to Appendix K- Warehouse locations. No additional or temporary staging areas are required to store materials or disposal.

Fill, gravel, sand, etc.:

- Fill, Gravel, and Sand materials will be obtained from an approved supplier as referenced in Appendix A- Approved Supplier List.

List of Equipment to be used:

- Skid Steer, Excavator, Dump trucks, Manlifts, 120-Ton Motor Crane, Boom Trucks 45-ton Crane, Zoom Boom, Air compressor, Truck Digger, Water truck, Pump Truck, Concrete Vibrator, Oil Tanker, Filtering Machine and Flatbed platform.
- Vegetation will be removed utilizing machete, chainsaw, electric pruner, telescopic pole pruner, bucket truck, and/or chipper

Specific List of Permits Required:

- DTOP Endorsements & Municipality Notifications.
- Excavation and Demolition Notification in Department of Transportation and Public Works Agency - (DTOP).
- LUMA will provide proof of all permits as a Condition of FEMA Record of Environmental Considerations

Project Estimate

The estimated costs (Class 3 Accuracy +/-30%) to complete the project are captured in the table below. The cost estimate was developed utilizing preliminary Architectural and Engineering design information and may be subject to change. LUMA has allocated 10% of the project cost for the mitigation of potential known risks.

Project Cost Estimate	Total	428 Public Assistance	406 Hazard Mitigation
Planning (FAASt 335168)	\$17,513	\$17,351	\$162
Management (FAASt 335168)	\$8,907	\$8,825	\$82
Transmission Line Construction	\$173,100	\$171,499	\$1,601
General Conditions	\$24,560	\$24,333	\$227
Contingency	\$18,462	\$18,291	\$171
Total Project Cost Estimate	\$242,542	\$240,299	\$2,243
FAASt Project #681672			
Total \$216,367			
FAASt A&E #335168			
Total \$26,175			

Please refer to Appendix G for Cost Estimate Details.

428 Work to Be Completed (WTBC): \$ 240,299

428 A&E Deduction (Global A&E FAASt 335168) -\$26,175

428 Project Total Cost: \$240,299 - \$ 26,175 (Global A&E FAASt 335168) = \$ 214,124

For detailed cost estimate, please refers to document labeled: 681672-DR4339PR-Appendix G - Detailed Cost Estimate - Line 2300 Rev1.pdf

Project Notes:

1. The Applicant provided a SOW and cost estimate in Grants Manger which has been modified to follow new SOW and cost estimate. Refer to email correspondence: 681672 - SOW and Cost Modification email & concurrence email dated 12.22.2022.pdf
2. Refer to detailed SOW provided in document 681672-DR4339PR-Detailed SOW - Line 2300 Rev.2.pdf.
3. For reference documents Appendix A thru L.
4. For EHP Requirements, refer to pages 5 to 7 of the detailed SOW and reference documents: Appendix I & J.
5. This project is part of a FAASt (donor) project, [136271] MEPA078 Puerto Rico Electrical Power Authority Island Wide FAASt.
6. Architectural and Engineering (A&E) costs are deducted given previously obligated Global A&E Project for the subject FAASt PREPA work (see project: 335168 - FAASt A&E PREPA).

406 HMP Scope

Project number: 681672 FAASt Transmission Priority Pole Replacements –38kV Line 2300 (Transmission)

Damage #1240740; FAASt Dos Bocas H.P. - Arecibo Sect. L2300 38kV (Transmission).

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

Location: Arecibo, 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 “loss of power” 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).

☐ **Project [681672] FAASt Transmission Priority Pole Replacements –38kV Line 2300 (Transmission)**

The specific facilities included in this proposed project are structures (including their foundations), framing and insulators, load break switches (manual and automated), conductors, guy wires, anchoring, grounding assemblies, and any other associated components. Structures along the Line 2300 Dos Bocas H.P. - Arecibo Sect. includes single wooden poles, single concrete structures, two wooden pole structure, single steel monopoles, and steel self-support towers. Line and all its structures are accessible through roads and/or situated on private properties. Some structures are inaccessible due to challenging terrain. Some vegetation management is needed along certain portions of the line.

The Method of Repair (MOR) included the replacement of the damaged critical distribution poles (wood, concrete or galvanized), cross-arms, insulators, and all associated hardware needed for the new structure. 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 by increasing the wind tolerance to +160mph. Note: The FEMA Accelerated Award Strategy (FAASt) MOR included the PREPA distribution standards and specifications that were based on a 145mph sustained winds. However, the new PREPA Standard 2021 updates the design-criteria to a 160mph sustained winds resistant.

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 *(Supplementary)*

1. To avoid damage in a future event, the Applicant is proposing as a mitigation measure, install one guy and anchor to provide lateral support for one pole. 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.

- **[Transmission Critical Poles Replacement] 406 Mitigation Scope of Work:**

1. **Dos Bocas H.P. - Arecibo Sect. L2300 38kV (Transmission) 1 Pole.**

- Install one (1) guy anchor and hardware for 1 ea. 70 ft Galvanized steel S8 pole.

Hazard Mitigation Proposal (HMP) Cost:

Total Net Hazard Mitigation Cost (Base Cost) = \$ 1,554.00
+ HM (Applicant A&E, Management & General Conditions) = \$ 699.00
Hazard Mitigation Total Cost = \$ 2,243.00

HMP Cost-Effectiveness Calculations:

Eligible Cost of PA repair Scope of Work per DI: \$166,504.00

Net Cost of 406 HMP per DI: \$1,554.00

$HMR = (Total\ Net\ Hazard\ Mitigation\ Cost / Project\ Net\ In-Kind\ Repair\ Cost) \times 100$

$HMR = (\$1,554.00 / \$166,504.00) \times 100 = 0.93\% (< 15\%).$

* 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.

Cost

Code	Quantity	Unit	Total Cost	Section
3510 (3510 (Engineering And Design Services (FAASt Global A&E 335168)))	1.00	Lump Sum	(\$26,175.00)	Uncompleted
9201 (PAAP Fixed Estimate (No Value - Tracking Purposes Only))	1.00	Lump Sum	\$0.00	Completed
9001 (9001 (Contract (FAASt Project 136271)))	1.00	Lump Sum	\$240,299.00	Uncompleted

CRC Gross Cost \$214,124.00

Total 406 HMP Cost \$2,243.00

Total Insurance Reductions \$0.00

CRC Net Cost \$216,367.00

Federal Share (90.00%) \$194,730.30

Non-Federal Share (10.00%) \$21,636.70

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-11184(13223)	\$216,367.00	90 %	\$194,730.30	1/30/2023

Drawdown History

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

Obligation History

Version #	Date Obligated	Obligated Cost	Cost Share	IFMIS Status	IFMIS Obligation #
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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 all of its small projects and compliance with all environmental and historic preservation requirements within 180 days of the applicant's completion of its last small project, or the latest approved deadline, whichever is sooner.
- 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

12/27/2022

GENERAL INFORMATION

Event: DR4339-PR

Project: SP 681672

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: \$216,367.00 (CRC Gross Cost \$214,124.00 + Mitigation Amount \$2,243.00)

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: No

NUMBER OF DAMAGED LOCATIONS INCLUDED IN THIS PROJECT: (1)**Damaged Inventory (DI) #1240740:****FAASt Dos Bocas H.P. - Arecibo Sect. L2300 38kV (Transmission)**

Location Description: 38kV Line 2300 Dos Bocas H.P. - Arecibo Sect.

GPS Coordinates: [REDACTED]

Cause of Loss: Wind / Wind Driven Rain

SOV / Schedule #: Not insured

SOV / Schedule Amount: Not insured

Applicable Deductible Amount: N/A

Damage Inventory Amount: \$216,367.00 (CRC Gross Cost \$214,124.00 + Mitigation Amount \$2,243.00)

-

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 as coverage is not anticipated. 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.

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Obtain and Maintain Requirement:

No Obtain & Maintain Requirement is being mandated for the FFAST Dos Bocas H.P. - Arecibo Sect. L2300 38kV (Transmission) because the 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 Transmission Priority Pole Replacements –38kV Line 2300 (Transmission)**.

406 Mitigation

There is no additional mitigation information on **FAAST Transmission Priority Pole Replacements –38kV Line 2300 (Transmission)**.

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.
- Endangered Species Act (ESA) - The Applicant must provide documentation at close-out that proves completion of required Conservation Measures.
- Endangered Species Act (ESA) - Conditions only apply for damage#1240740 for the Puerto Rican Boa (*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 #s: 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 #s: 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.

- 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. The applicant is responsible to ensure damaged transformers are handled, managed and disposed of in accordance with all federal and state laws and requirements. Downed electrical equipment may contain toxic and hazardous materials, such as polychlorinated biphenyls (PCBs), and may spill these materials if a rupture occurs. Applicant is responsible for screening transformers that do or may contain PCBs and the area where any related spill occurred. The applicant is then responsible to handle, manage, dispose of, or recycle damaged equipment and contaminated soil as appropriate. Where possible, temporary measures should be implemented to prevent, treat, or contain further releases or mitigate the migration of PCBs into the environment. If damaged equipment or material storage containers must be stored temporarily, containers should be placed on hardened surface areas, such as a concrete or an asphalt for no more than 90 days. Excavated contaminated material should be disposed of in accordance with federal and state laws and requirements. 3. 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.
- NEPA Determination - Additional staging areas and/or work pads within work site area haven't been identified yet. The Recipient/Subrecipient and/or private operator must provide the information of any additional staging areas or work pads for EHP evaluation as soon as available specially if any construction activity will be necessary to prepare the site(s). Information for staging areas and/or work pads confined to previously disturbed or hardened surfaces can be provided at close-out.
- NEPA Determination - All borrow or fill material must come from pre-existing stockpiles, material reclaimed from maintained roadside ditches (provided the designed width or depth of the ditch is not increased), or commercially procured material from a source existing prior to the event. For any FEMA-funded project requiring the use of a non-commercial source or a commercial source that was not permitted to operate prior to the event (e.g., a new pit, agricultural fields, road ROWs, etc.) in whole or in part, regardless of cost, the Applicant must notify FEMA and the Recipient prior to extracting material. FEMA must review the source for compliance with all applicable federal environmental planning and historic preservation laws and executive orders prior to a Sub-recipient or their contractor beginning borrow extraction. Consultation and regulatory permitting may be required. Non-compliance with this requirement may jeopardize receipt of federal funding. Documentation of borrow sources utilized is required at close-out and must include fill type (private, commercial, etc.), name, fill site GPS coordinates (not of the company/governmental office), address, and type of material.
- NHPA- National Historic Preservation Act (NHPA) a. The Subrecipient and/or Subrecipient's contractor shall follow the Low Impact Debris Removal Stipulations (LIDRS) as stated in Appendix E of the Project-Specific Programmatic Agreement Among FEMA, the SHPO, ACHP, COR3, and PREPA (PSPA), executed on August 2, 2022. b. Unexpected Discoveries: Pursuant to Stipulation III.B of the PSPA, if, in the course of implementing this Individual Undertaking(s), previously unidentified structures, sites, buildings, objects, districts, or archaeological deposits, that may be eligible for listing in the National Register, or human remains are uncovered, or if it appears that an Individual Undertaking has affected or will affect a previously identified historic property in an unanticipated manner, the contractor must notify Subrecipient who will immediately notify the Recipient. Work must stop in the vicinity of the discovery and measures must be taken to protect the discovery and avoid additional harm. c. Additional staging areas and/or work pads within work site area haven't been identified yet. The Recipient/Subrecipient and/or private operator must provide the information of any additional staging areas or work pads for EHP evaluation as soon as available specially if any construction activity will be necessary to prepare the site(s). Information for staging areas and/or work pads confined to previously disturbed or hardened surfaces can be provided at close-out

EHP Additional Info

There is no additional environmental historical preservation on **FAAST Transmission Priority Pole Replacements –38kV Line 2300 (Transmission)**.

Final Reviews

Final Review

Reviewed By CHIRICO, JOSEPH A.

Reviewed On 01/12/2023 7:47 AM AST

Review Comments

Approved for obligation - Applicant is responsible to comply with all regulatory requirements.

Recipient Review

Reviewed By Cintron, Jesus

Reviewed On 01/23/2023 3:20 PM AST

Review Comments

Review Completed. Pending Applicant Final 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 \$216,367.00 for subaward number 11184 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 Miller, Thomas

Signed On 01/26/2023

Department of Homeland Security Federal Emergency Management Agency

General Info

Project #	682031	PW #	11181	Project Type	Specialized
Project Category	F - Utilities	Applicant	PR Electric Power Authority (000-UA2QU-00)		
Project Title	FAASt [Distribution Pole and Conductor Repair - San Juan Group 9] (Distribution)			Event	4339DR-PR (4339DR)
Project Size	Large	Declaration Date	9/20/2017		
Activity Completion Date	9/20/2027	Incident Start Date	9/17/2017		
Process Step	Obligated	Incident End Date	11/15/2017		

Damage Description and Dimensions

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

Damage #1238083; FAASt [Distribution Pole and Conductor Repair - San Juan Group 9] (CACHETE 13kV 1529-12, CACHETE 13kV 1529-13, CACHETE 4kV 1530-09, BUEN PASTOR 1908-03, MARTIN PENA GIS I 1111-01, MINILLAS 1114-01)

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:** Distribution feeders CACHETE 13kV 1529-12, CACHETE 13kV 1529-13, CACHETE 4kV 1530-09, BUEN PASTOR 1908-03, MARTIN PENA GIS I 1111-01, MINILLAS 1114-01
- **Facility Description:** The specific facilities included in this project are: poles and structures (including their foundations), framing and insulators, load break switches (manual and automated), capacitor banks, voltage regulators, transformers (including lightning arresters and fuse cut-outs), conductors, guy wires, anchoring, grounding assemblies, underground cable, underground cable systems, fault interrupting equipment (fuses, reclosers, and sectionalizers), and any other associated components.
- **Approx. Year Built:** 1980
- **Start GPS Latitude/Longitude:** [REDACTED]
- **End 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

1238083

FAASt [Distribution Pole and Conductor Repair - San Juan Group 9] (CACHETE 13kV 1529-12, CACHETE 13kV 1529-13, CACHETE 4kV 1530-09, BUEN PASTOR 1908-03, MARTIN PENA GIS I 1111-01, MINILLAS 1114-01)

INTRODUCTION

This 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.

FACILITIES

The facilities listed below are part of the feeder systems in the San Juan Region. These interconnected and inter-functional distribution feeders (sites) are part of the electrical distribution system. All the feeders originate from a substation (start) and serve customers along the route to various locations (end). The coordinates shown below as "GPS End" represent the end of the mainline backbone of each feeder.

Name	Feeder Number	# Of Poles to Replace	GPS Start	GPS End	Phase	Voltage Level (kV)	Constructed Date
MARTIN PEÑAGIS I	1111-01	3	[REDACTED]	[REDACTED]	3 Phase	13.2	18 Years
MINILLAS	1114-01	1	[REDACTED]	[REDACTED]	3 Phase	13.2	More than 20 Years
CACHETE 13KV	1529-13	4	[REDACTED]	[REDACTED]	3 Phase	13.2	More than 20 Years
CACHETE 4KV	1530-09	15	[REDACTED]	[REDACTED]	3 Phase	4.16	More than 20 Years

PROJECT SCOPE OF WORK

Below includes a breakdown of pole replacement by feeder for "Proposed 428 Public Assistance Scope of Work" and "Proposed 406 Hazard Mitigation Grant Program Scope of Work", followed by descriptions of each work type specific to the Scope of Work for this group.

Proposed 428 Public Assistance Scope of Work:

Feeder 1111-01 Scope:

Remove	Quantity	Install	Quantity
45ft Wood Pole(s)	1	45ft H4 Concrete Pole(s)	1
50ft Wood Pole(s)	1	50ft Galvanized Steel S8 Pole(s)	1
60ft Wood Pole(s)	1	45ft H4 Concrete Pole(s)	1

Feeder 1114-01 Scope:

Remove	Quantity	Install	Quantity
40ft Wood Pole(s)	1	45ft H4 Concrete Pole(s)	1

Feeder 1529-13 Scope:

Remove	Quantity	Install	Quantity
40ft Wood Pole(s)	2	45ft H4 Concrete Pole(s)	2
65ft Wood Pole(s)	2	70ft Galvanized Steel S8 Pole(s)	2

Feeder 1530-09 Scope:

Remove	Quantity	Install	Quantity
35ft Wood Pole(s)	7	45ft H4 Concrete Pole(s)	7
35ft Wood Pole(s)	3	45ft H6 Concrete Pole(s)	3
40ft Wood Pole(s)	3	45ft H4 Concrete Pole(s)	3
40ft Concrete Pole(s)	1	45ft H4 Concrete Pole(s)	1
40ft Wood Pole(s)	1	50ft Galvanized Steel S8 Pole(s)	1

Detail Descriptions for Planned Field Work:

Pole Replacement

- Remove existing poles, including hardware and install new poles, including hardware, in the same location. If unable to install the replacement in the same location, the pole will be installed within 3 feet.
- All pole installations are to replace existing pole locations; no new locations are included in this scope of work. Refer to Appendix J- EHP Checklist, column C (Soil area and depth impact) for the depths of the poles to be installed.
- Remove the existing foundations as specified in Appendix J- EHP Checklist column I (Concrete Foundation) and replace them with a new concrete foundation bases as per Appendix D-Distribution Construction Standards (Concrete Base Standard). The maximum auger width used is 42" and the maximum depth drilled is 15ft.
- New guy wire/ anchors are to be installed in compliance with Appendix D- Distribution Construction Standards within 3ft from the existing anchor. The maximum distance an anchor will be installed for a 50ft pole is 25ft from the base of the pole, within the right-of-way.

- Brushing will be required in locations to gain access to the pole for replacement. Brushing refers to the removal and clearing of vegetation solely to the extent that it allows crews to conduct work. The brushing of vegetation will be limited to a 15 ft radius surrounding the surface of the pole but not to exceed the width of the right-of-way for the exclusive purpose of gaining access to the pole to conduct repairs. Please see Appendix J- EHP Checklist column H (Brushing/Clearing), Refer to Appendix B- Maps and Pictures for pictures of the vegetation.
- All work for this program will be performed within the current electrical right-of-way.
- This scope of work will not affect water or sewer utility services.

Material Disposal

- PCBs, oil from the transformer and breakers, sealants, and other chemical wastes typical of a construction site are considered hazardous waste and will be disposed of by the contractor in approved facilities as per applicable local regulations. Refer to Appendix C - Waste Management Plan.
- The type of debris that may be found in the process of removal are luminaires, pole arms, photocells, metal scrap, wiring, concrete, steel, and wood poles, etc. The debris will be separated and taken to an approved waste disposal facility in compliance with applicable local regulations. Refer to Appendix C- Waste Management Plan.
- Transformers will be contained and returned to LUMA in compliance with applicable local regulations. The removal of the transformer will require testing of the existing oil for PCB levels, drain oil, and delivery to the approved waste disposal site as per Environmental Regulations. Refer to Appendix C- Waste Management Plan.

Access Roads

- Poles are in close proximity to the roads and are site accessible. The construction of access roads is not required for this scope of work. Refer to Appendix J- EHP Checklist in column G "Site Accessible"

Staging Area

- All materials are stored and dispatched from the San Juan Regional Warehouse. Refer to Appendix L- Warehouse locations. No additional or temporary staging areas are required.

Fill, gravel, sand, etc.:

- Fill, Gravel, and Sand materials will be obtained from an approved supplier as referenced in Appendix A- Approved Supplier List.

List of Equipment to be used:

- Skid Steer, Excavator, Dump trucks, Manlifts, 120-Ton Motor Crane, Boom Trucks 45-ton Crane, Zoom Boom, Air compressor, Truck Digger, Water truck, Pump Truck, Concrete Vibrator, Oil Tanker, Filtering Machine and Flatbed platform.
- Vegetation will be removed utilizing machete, chainsaw, electric pruner, telescopic pole pruner, bucket truck, and/or chipper

Specific List of Permits Required:

- DTOP Endorsements & Municipality Notifications.
- Excavation and Demolition Notification in Department of Transportation and Public Works Agency - (DTOP).
- LUMA will provide proof of all permits.

HAZARD MITIGATION

Refer to the Hazard Mitigation (HM) section for proposal (HMP) details.

PROJECT ESTIMATE

The estimated costs (Class 3 Accuracy +/-30%) to complete the project are captured in the table below. The cost estimate was developed utilizing preliminary Architectural and Engineering design information and may be subject to change. LUMA has allocated 10% of the project cost for the mitigation of potential known risks.

Project Cost Estimate	Total	428 Public Assistance	406 Hazard Mitigation
Planning, Permits and Applications	\$10,222	\$10,222	\$0
Environmental Management	\$14,611	\$14,611	\$0
Engineering	\$54,698	\$46,141	\$8,557
Project Management	\$27,349	\$23,070	\$4,279
Distribution Line	\$546,977	\$461,406	\$85,571
Contingency	\$65,386	\$55,545	\$9,841
Total Project Cost Estimate:	\$719,242	\$610,995	\$108,247
FAAST Project # 682031 (428) Total		\$516,951	
FAAST Project # 682031 (406) Total		\$108,247	
FAAST A&E #335168 Total		\$94,044	
Total Cost		\$719,242	

Please refer to Appendix H for Cost Estimate Details.

428 Work To Be Completed (WTBC): \$610,995

428 A&E Deduction (Global A&E FAASt 335168) -\$94,044

428 Project Total Cost: \$516,951

For detailed cost estimate, please refers to document labeled: 682031-DR4339PR-Appendix H - Detail Cost Estimate - San Juan Group 9 Rev0.xlsx

Project Notes:

1. Refer to detailed SOW provided in document 682031-DR4339PR-Detailed SOW San Juan Group 9 Rev0.pdf
2. For reference documents Appendix A thru L
3. For EHP Requirements, refer to pages 5 to 7 of the detailed SOW and reference documents: Appendix J & K.
4. Architectural and Engineering (A&E) costs are deducted given previously obligated Global A&E Project for the subject FAASt PREPA work (see project: 335158 - FAASt A&E PREPA).

406 HMP Scope

Project number: 682031; FAASt [Distribution Pole and Conductor Repair - San Juan Group 9] (Distribution)

Damage # DI#1238023; FAASt [Distribution Pole and Conductor Repair - San Juan Group 9] (CACHETE 13kV 1529-1; CACHETE 13kV 1529-13, CACHETE 4kV 1530-09, BUEN PASTOR 1908-03, MARTIN PENA GIS I 1111-01, MINILLAS 1 01.

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

Location: San Juan, 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 "loss of power" 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).

Project #682031 (Distribution Poles & Conductors Repair/Replacement).

The Distribution Pole and Conductor Repair-San Juan Group 9 consists of 4 interconnected and inter-functional distribution feeders (sites) establish the electrical distribution system as follows: CACHETE 13kV 1529-13, CACHETE 4kV 1530-09, MARTIN PENA GIS I 1111-01, MINILLAS 1114-01.

The Method of Repair (MOR) included the replacement of the damaged critical distribution poles (wood, concrete or galvanized), cross-arms, insulators, and all associated hardware needed for the new structure. 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 by increasing the wind tolerance to +160mph. Note: The FEMA Accelerated Award Strategy (FAAST) MOR included the PREPA distribution standards and specifications that were based on a 145mph sustained winds. However, the new PREPA Standard 2021 updates the design-criteria to a 160mph sustained winds resistant. 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*)

➤ To avoid damage in a future event, the Applicant is proposing as a mitigation measure, increase the strength of the poles by increasing the wind tolerance of all materials to +160mph. The FAASt MOR included the PREPA distribution standards and specifications that were based on a 145mph sustained winds. However, the new PREPA Standard 2021 updates the design-criteria to a 160mph sustained winds resistant. 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.

➤ [Distribution Critical Poles Replacement] 406 Mitigation Scope of Work:

1. Feeder 1111-01 Scope (2ea):

- Replace two (2) 45ft concrete H4 poles by two (2) 50ft galvanized steel S8 poles.

1. Feeder 1114-01 Scope (1ea):

- Replace one (1) 45ft concrete H4 pole by one (1) 50ft galvanized steel S8 pole.

1. Feeder 1529-13 Scope (2ea):

- Replace two (2) 45ft concrete H4 poles by two (2) 50ft galvanized steel S8 poles.

1. Feeder 1503-09 Scope (14ea):

- Replace eleven (11) 45ft concrete H4 poles by eleven (11) 50ft galvanized steel S8 poles.
- Replace three (3) 45ft concrete H6 poles by three (3) 50ft galvanized steel S8 poles.

Hazard Mitigation Proposal (HMP) Cost:

Total Net Hazard Mitigation Cost (Base Cost) = \$ 85,571.00

+ HM (Applicant A&E, Management & General Conditions) = \$ 22,676.00

Hazard Mitigation Total Cost = **\$ 108,247.00**

HMP Cost-Effectiveness Calculations:

Eligible Cost of PA repair Scope of Work per DI: \$461,406.00

Net Cost of 406 HMP per DI: \$85,571.00

$HMR = (\text{Total Net Hazard Mitigation Cost} / \text{Project Net In-Kind Repair Cost}) \times 100$

$HMR = (\$85,571.00 / \$461,406.00) \times 100 = 18.55\% (< 100\% \text{ and Appendix J}).$

* 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.

Cost

Code	Quantity	Unit	Total Cost	Section
3510 (Engineering And Design Services (Global A&E #335168))	1.00	Lump Sum	(\$94,044.00)	Uncompleted
9201 (PAAP Fixed Estimate (No Value - Tracking Purposes Only))	1.00	Lump Sum	\$0.00	Completed
9001 (Contract (FAASt Project 682031))	1.00	Lump Sum	\$610,995.00	Uncompleted

CRC Gross Cost \$516,951.00

Total 406 HMP Cost \$108,247.00

Total Insurance Reductions \$0.00

CRC Net Cost \$625,198.00

Federal Share (90.00%) \$562,678.20

Non-Federal Share (10.00%) \$62,519.80

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-11181(13222)	\$625,198.00	90 %	\$562,678.20	1/30/2023

Drawdown History

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

Obligation History

Version #	Date Obligated	Obligated Cost	Cost Share	IFMIS Status	IFMIS Obligation #
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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

12/27/2022

GENERAL INFORMATION

Event: DR4339-PR

Project: SP 682031

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: \$625,198.00 (CRC Gross Cost \$516,951.00 + Mitigation Amount \$108,247.00)

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: No

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

Damaged Inventory (DI) #1238083:

FAAST [Distribution Pole and Conductor Repair - San Juan Group 9] (CACHETE 13kV 1529-12, CACHETE 13kV 1529-13, CACHETE 4kV 1530-09, BUEN PASTOR 1908-03, MARTIN PENA GIS I 1111-01, MINILLAS 1114-01)

Location Description: Distribution feeders CACHETE 13kV 1529-12, CACHETE 13kV 1529-13, CACHETE 4kV 1530-09, BUEN PASTOR 1908-03, MARTIN PENA GIS I 1111-01, MINILLAS 1114-01

GPS Coordinates: [REDACTED]

Cause of Loss: Wind / Wind Driven Rain

SOV / Schedule #: Not insured

SOV / Schedule Amount: Not insured

Applicable Deductible Amount: N/A

Damage Inventory Amount: \$625,198.00 (CRC Gross Cost \$516,951.00 + Mitigation Amount \$108,247.00)

-

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 as coverage is not anticipated. 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 [Distribution Pole and Conductor Repair - San Juan Group 9] (CACHETE 13kV 1529-12, CACHETE 13kV 1529-13, CACHETE 4kV 1530-09, BUEN PASTOR 1908-03, MARTIN PENA GIS I 1111-01, MINILLAS 1114-01) because the 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**
[Distribution Pole and Conductor Repair - San Juan Group 9] (Distribution).

406 Mitigation

There is no additional mitigation information on **FAAST**
[Distribution Pole and Conductor Repair - San Juan Group 9] (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 Puerto Rico Permits Management Office (OGPe) prior to initiating work and comply with any conditions of the permit established by the Planning Board (JP) for constructions in floodplains. 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) - Conservation Measures for *Epictates inornatus* applies to feeder 1530-09. 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 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 #s: 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 #s: 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. capture the boa. If boas need to be moved out of harm's way, project personnel designated by the

- National Historic Preservation Act (NHPA) - a. The Subrecipient and/or Subrecipient's contractor shall follow the Low Impact Debris Removal Stipulations (LIDRS) as stated in Appendix E of the Project-Specific Programmatic Agreement Among FEMA, the SHPO, ACHP, COR3, and PREPA (PSPA), executed on August 2, 2022. b. Unexpected Discoveries: Pursuant to Stipulation III.B of the PSPA, if, in the course of implementing this Individual Undertaking(s), previously unidentified structures, sites, buildings, objects, districts, or archaeological deposits, that may be eligible for listing in the National Register, or human remains are uncovered, or if it appears that an Individual Undertaking has affected or will affect a previously identified historic property in an unanticipated manner, the contractor must notify Subrecipient who will immediately notify the Recipient. Work must stop in the vicinity of the discovery and measures must be taken to protect the discovery and avoid additional harm. c. Additional staging areas and/or work pads within work site area haven't been identified yet. The Recipient/Subrecipient and/or private operator must provide the information of any additional staging areas or work pads for EHP evaluation as soon as available specially if any construction activity will be necessary to prepare the site(s). Information for staging areas and/or work pads confined to previously disturbed or hardened surfaces can be provided at close-out.
- 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. The applicant is responsible to ensure damaged transformers are handled, managed, and disposed of in accordance with all federal and state laws and requirements. Downed electrical equipment may contain toxic and hazardous materials, such as polychlorinated biphenyls (PCBs), and may spill these materials if a rupture occurs. Applicant is responsible for screening transformers that do or may contain PCBs and the area where any related spill occurred. The applicant is then responsible to handle, manage, dispose of, or recycle damaged equipment and contaminated soil as appropriate. Where possible, temporary measures should be implemented to prevent, treat, or contain further releases or mitigate the migration of PCBs into the environment. If damaged equipment or material storage containers must be stored temporarily, containers should be placed on hardened surface areas, such as a concrete or an asphalt for no more than 90 days. Excavated contaminated material should be disposed of in accordance with federal and state laws and requirements. 3. 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 with the requirements of the local and federal agencies. Noncompliance with these requirements may jeopardize receipt of federal funds.
- NEPA Determination - Additional staging areas and/or work pads within work site area haven't been identified yet. The Recipient/Subrecipient and/or private operator must provide the information of any additional staging areas or work pads for EHP evaluation as soon as available specially if any construction activity will be necessary to prepare the site(s). Information for staging areas and/or work pads confined to previously disturbed or hardened surfaces can be provided at close-out.
- NEPA Determination - All borrow or fill material must come from pre-existing stockpiles, material reclaimed from maintained roadside ditches (provided the designed width or depth of the ditch is not increased), or commercially procured material from a source existing prior to the event. For any FEMA-funded project requiring the use of a non-commercial source or a commercial source that was not permitted to operate prior to the event (e.g., a new pit, agricultural fields, road ROWs, etc.) in whole or in part, regardless of cost, the Applicant must notify FEMA and the Recipient prior to extracting material. FEMA must review the source for compliance with all applicable federal environmental planning and historic preservation laws and executive orders prior to a Sub-recipient or their contractor beginning borrow extraction. Consultation and regulatory permitting may be required. Non-compliance with this requirement may jeopardize receipt of federal funding. Documentation of borrow sources utilized is required at close-out and must include fill type (private, commercial, etc.), name, fill site GPS coordinates (not of the company/governmental office), address, and type of material.

EHP Additional Info

There is no additional environmental historical preservation on **FAASt [Distribution Pole and Conductor Repair - San Juan Group 9] (Distribution)**.

Final Reviews

Final Review

Reviewed By CHIRICO, JOSEPH A.

Reviewed On 01/12/2023 7:48 AM AST

Review Comments

Approved for obligation - Applicant is responsible to comply with all regulatory requirements.

Recipient Review

Reviewed By Salgado, Gabriel

Reviewed On 01/12/2023 9:59 AM AST

Review Comments

Recipient review completed. Project is ready for applicant project 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 \$625,198.00 for subaward number 11181 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 Miller, Thomas

Signed On 01/12/2023

Department of Homeland Security Federal Emergency Management Agency

General Info

Project #	682136	PW #	11203	Project Type	Specialized
Project Category	F - Utilities	Applicant	PR Electric Power Authority (000-UA2QU-00)		
Project Title	FAAST [Distribution Pole and Conductor Repair-Bayamon Group 9] (Distribution)			Event	4339DR-PR (4339DR)
Project Size	Large	Declaration Date	9/20/2017		
Activity Completion Date	9/20/2027	Incident Start Date	9/17/2017		
Process Step	Obligated	Incident End Date	11/15/2017		

Damage Description and Dimensions

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

Damage #1238084; FAASt [Distribution Pole and Conductor Repair - Bayamon Group 9]

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:** Distribution Pole and Conductor Repair - Bayamon Group 9
- **Facility Description:** The facilities listed below are part of the feeder systems in the Bayamón Region. These interconnected and interfunctional distribution feeders (sites) establish the electrical distribution system. The feeders all originate from a substation (start) and serve customers along a route to various locations (end). The coordinates represented by GPS end is the end of the mainline backbone of each feeder.
- **Approx. Year Built:** 1980
- **Start GPS Latitude/Longitude:** [REDACTED]
- **End 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

1238084 **FAAST [Distribution Pole and Conductor Repair - Bayamon Group 9]**

INTRODUCTION















The purpose of this document is to submit for approval the detailed Scope of Work ("SOW") to COR3 and FEMA for the Distribution Pole and Conductor Repair – Bayamon Group 9 Project 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, restore, or replace the eligible facilities.

LUMA submits this detailed SOW pursuant to the Transmission and Distribution Operations & Maintenance Agreement between 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 F 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 Transmission and Distribution System submitted to FEMA.

FACILITIES

The facilities listed below are part of the feeder systems in the Bayamon Region. These interconnected and inter-functional distribution feeders (sites) are part of the electrical distribution system. All the feeders originate from a substation (start) and serve customers along the route to various locations (end). The coordinates shown below as "GPS End" represent the end of the mainline backbone of each feeder.

Name	Feeder Number	# Of Poles to Replace	GPS Start	GPS End	Phase	Voltage Level (kV)	Constructed Date
HATO TEJAS TC	1713-03	6			3 Phase	13.2	More than 20 Years
HATO TEJAS TC	1713-05	2			3 Phase	13.2	More than 20 Years
CREA	1717-01	2			3 Phase	13.2	More than 20 Years
CANDELARIA ARENAS	1718-03	2			3 Phase	13.2	More than 20 Years
LEVITTOWN	1806-01	3			3 Phase	13.2	More than 20 Years
LEVITTOWN	1806-03	4			3 Phase	13.2	More than 20 Years
DORADO TC	9203-02	2			3 Phase	8.32	More than 20 Years

PROJECT SCOPE OF WORK

Below includes a breakdown of pole replacement by feeder for "Proposed 428 Public Assistance Scope of Work" and "Proposed 406 Hazard Mitigation Grant Program Scope of Work", followed by descriptions of each work type specific to the Scope of Work for this group.

Proposed 428 Public Assistance Scope of Work:

Feeder 1713-03 Scope:

Remove	Quantity	Install	Quantity
35ft Wood Pole(s)	1	45ft H6 Concrete Pole(s)	1
40ft Wood Pole(s)	1	50ft Galvanized Steel S8 pole(s)	1
40ft Concrete Pole(s)	1	50ft Galvanized Steel S8 pole(s)	1
40ft Concrete Pole(s) 40ft Wood Pole(s)	2	50ft Galvanized Steel S8 pole(s)	1
45ft Concrete Pole(s)	1	45ft H4 Concrete Pole(s)	1
45ft Concrete Pole(s)	1	45ft H6 Concrete Pole(s)	1

Feeder 1713-05 Scope:

Remove	Quantity	Install	Quantity
40ft Concrete Pole(s)	1	45ft H4 Concrete Pole(s)	1
50ft Concrete Pole(s)	1	45ft H6 Concrete Pole(s)	1

Feeder 1717-01 Scope:

Remove	Quantity	Install	Quantity
45ft Concrete Pole(s)	2	45ft H4 Concrete Pole(s)	2

Feeder 1718-03 Scope:

Remove	Quantity	Install	Quantity
40ft Concrete Pole(s)	2	45ft H4 Concrete Pole(s)	2

Feeder 1806-01 Scope:

Remove	Quantity	Install	Quantity
40ft Wood Pole(s)	1	45ft H6 Concrete Pole(s)	1
40ft Concrete Pole(s)	1	45ft H4 Concrete Pole(s)	1
40ft Concrete Pole(s)	1	45ft H6 Concrete Pole(s)	1

Feeder 1806-03 Scope:

Remove	Quantity	Install	Quantity
40ft Wood Pole(s)	1	45ft H6 Concrete Pole(s)	1
45ft Wood Pole(s)	1	45ft H4 Concrete Pole(s)	1
45ft Concrete Pole(s)	1	45ft H4 Concrete Pole(s)	1
50ft Wood Pole(s)	1	45ft H4 Concrete Pole(s)	1

Feeder 9203-02 Scope:

Remove	Quantity	Install	Quantity
35ft Wood Pole(s)	2	45ft H4 Concrete Pole(s)	2

Detail Descriptions for Planned Field Work:

Pole Replacement

- Remove existing poles, including hardware and install new poles, including hardware, in the same location. If unable to install the replacement in the same location, the pole will be installed within 3 feet.
- All pole installations are to replace existing pole locations; no new locations are included in this scope of work. Refer to Appendix J- EHP Checklist, column C (Soil area and depth impact) for the depths of the poles to be installed.
- Remove the existing foundations as specified in Appendix J- EHP Checklist column I (Concrete Foundation) and replace them with a new concrete foundation bases as per Appendix D-Distribution Construction Standards (Concrete Base Standard). The maximum auger width used is 42" and the maximum depth drilled is 15ft.
- New guy wire/ anchors are to be installed in compliance with Appendix D- Distribution Construction Standards within 3ft from the existing anchor. The maximum distance an anchor will be installed for a 50ft pole is 25ft from the base of the pole, within the right-of-way.
- Brushing will be required in locations to gain access to the pole for replacement. Brushing refers to the removal and clearing of vegetation solely to the extent that it allows crews to conduct work. The brushing of vegetation will be limited to a 15 ft radius surrounding the surface of the pole but not to exceed the width of the right-of-way for the exclusive purpose of gaining access to the pole to conduct repairs. Please see Appendix J- EHP Checklist column H (Brushing/Clearing), Refer to Appendix B- Maps and Pictures for pictures of the vegetation.
- All work for this program will be performed within the current electrical right-of-way.
- This scope of work will not affect water or sewer utility services.

Material Disposal

- PCBs, oil from the transformer and breakers, sealants, and other chemical wastes typical of a construction site are considered hazardous waste and will be disposed of by the contractor in approved facilities as per applicable local regulations. Refer to Appendix C - Waste Management Plan.
- The type of debris that may be found in the process of removal are luminaires, pole arms, photocells, metal scrap, wiring, concrete, steel, and wood poles, etc. The debris will be separated and taken to an approved waste disposal facility in compliance with applicable local regulations. Refer to Appendix C- Waste Management Plan.
- Transformers will be contained and returned to LUMA in compliance with applicable local regulations. The removal of the transformer will require testing of the existing oil for PCB levels, drain oil, and delivery to the approved waste disposal site as per Environmental Regulations. Refer to Appendix C- Waste Management Plan.

Access Roads

- Poles are in close proximity to the roads and are site accessible. The construction of access roads is not required for this scope of work. Refer to Appendix J- EHP Checklist in column G "Site Accessible"

Staging Area

- All materials are stored and dispatched from the Bayamon Regional Warehouse. Refer to Appendix L- Warehouse locations. No additional or temporary staging areas are required.

Fill, gravel, sand, etc.:

- Fill, Gravel, and Sand materials will be obtained from an approved supplier as referenced in Appendix A- Approved Supplier List.

List of Equipment to be used:

- Skid Steer, Excavator, Dump trucks, Manlifts, 120-Ton Motor Crane, Boom Trucks 45-ton Crane, Zoom Boom, Air compressor, Truck Digger, Water truck, Pump Truck, Concrete Vibrator, Oil Tanker, Filtering Machine and Flatbed platform.
- Vegetation will be removed utilizing machete, chainsaw, electric pruner, telescopic pole pruner, bucket truck, and/or chipper

Specific List of Permits Required:

- DTOP Endorsements & Municipality Notifications.
- Excavation and Demolition Notification in Department of Transportation and Public Works Agency - (DTOP).
- LUMA will provide proof of all permits.

PROJECT ESTIMATE

The estimated costs (Class 3 Accuracy +/-30%) to complete the project are captured in the table below. The cost estimate was developed utilizing preliminary Architectural and Engineering design information and may be subject to change. LUMA has allocated 10% of the project cost for the mitigation of potential known risks.

Project Cost Estimate	Total	428 Public Assistance	406 Hazard Mitigation
Planning, Permits and Applications (FAASt 335168)	\$11,298.00	\$11,298.00	\$0.00
Environmental Management (FAASt 335168)	\$16,149.00	\$16,149.00	\$0.00
Engineering (FAASt 335168)	\$49,460.30	\$41,875.00	\$7,585.30
Project Management (FAASt 335168)	\$24,730.15	\$20,937.50	\$3,792.65
Distribution Line	\$494,603.00	\$418,750.00	\$75,853.00
Contingency	\$59,624.05	\$50,900.95	\$8,723.10
Total Project Cost Estimate:	\$655,864.50	\$559,910.45	\$95,954.05
FAASt Project # 682136 (428) Total			\$469,650.95
FAASt Project # 682136 (406) Total			\$95,954.05

FAAST A&E #335168 Total	\$90,259.50
Total Cost	\$655,864.50

Please refer to Appendix H for Cost Estimate Details.

Work To Be Completed (WTBC): \$559,910.45

A&E Deduction (Global A&E FAASt 335168) - \$ 90,259.50

Project Total Cost: \$559,910.45 - \$ 90,259.50 (Global A&E FAASt 335168) = \$469,650.95

For detailed cost estimate, please refers to document labeled: 682136-DR4339PR-Appendix H - Detail Cost Estimate - Bayamon Group 9 Rev1.xlsx

Project Notes:

1. The Applicant provided a SOW and cost estimate in Grants Manger which has been modified to follow new SOW and cost estimate, after informal RFI. Refer to detailed SOW and cost estimate provided in document 682136-DR4339PR-Detailed SOW Bayamon Group 9 Rev1.pdf and 682136-DR4339PR-Appendix H - Detail Cost Estimate - Bayamon Group 9 Rev1.xlsx.
2. Refer to detailed SOW provided in document 682136-DR4339PR-Detailed SOW Bayamon Group 9 Rev1.pdf
3. For reference documents Appendix A thru L
4. For EHP Requirements, refer to pages 5 to 7 of the detailed SOW and reference documents: Appendix J & K.
5. This project is part of a FAAST (donor) project, [136271] MEPA078 Puerto Rico Electrical Power Authority Island Wide FAASt.
6. Architectural and Engineering (A&E) costs are deducted given previously obligated Global A&E Project for the subject FAASt PREPA work (see project: 335168 - FAASt A&E PREPA).

406 HMP Scope

Project number: 682136 FAASt [Distribution Pole and Conductor Repair-Bayamon Group 9]

Damage #1238084; FAASt [Distribution Pole and Conductor Repair - Bayamon Group 9]

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

Location: Bayamon, 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 "loss of power" 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).

Project #682136 [Distribution Pole and Conductor Repair-Bayamon Group 9].

The Distribution Pole and Conductor Repair-Bayamon Group 9 consists of 7 interconnected and inter-functional distribution feeders (sites) establish the electrical distribution system as follows: HATO TEJAS TC 1713-03, HATO TEJAS TC 1713-05, CREA 1717-01, CALDELARIA ARENAS 1718-03, LEVITTOWN 1806-01, LEVITTOWN 1806-03, DORADO TC 9203-02.

The Method of Repair (MOR) included the replacement of the damaged critical distribution poles (wood, concrete or galvanized), cross-arms, insulators, and all associated hardware needed for the new structure. 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 by increasing the wind tolerance to +160mph. Note: The FEMA Accelerated Award Strategy (FAAST) MOR included the PREPA distribution standards and specifications that were based on a 145mph sustained winds. However, the new PREPA Standard 2021 updates the design-criteria to a 160mph sustained winds resistant. 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)

- To avoid damage in a future event, the Applicant is proposing as a mitigation measure, increase the strength of the poles by increasing the wind tolerance of all materials to +160mph. The FAAsT MOR included the PREPA distribution standards and specifications that were based on a 145mph sustained winds. However, the new PREPA Standard 2021 updates the design-criteria to a 160mph sustained winds resistant. 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 PAPPV V3.1.

➤ [Distribution Critical Poles Replacement] 406 Mitigation Scope of Work:

1. Feeder 1713-03 Scope (2ea with HM):

1.
 - Replace one (1) 45ft concrete H6 poles by one (1) 50ft galvanized steel S8 poles.
 - Replace one (1) 45ft concrete H4 pole by one (1) 50ft galvanized steel S8 pole.
 - No 406 Hazard Mitigation work identified to replace three (3) 50ft galvanized steel S8 pole. In this case, the Mitigation is accomplished by 428 PA method of repair (MOR).
 - No 406 Hazard Mitigation work requested to replace one (1) 45ft H6 pole. In this case, the Mitigation is accomplished by 428 PA method of repair (MOR).

2. Feeder 1713-05 Scope (2ea):

- Replace one (1) 45ft concrete H4 pole by one (1) 50ft galvanized steel S8 pole.
- Replace one (1) 45ft concrete H6 pole by one (1) 50ft galvanized steel S8 pole

3. Feeder 1717-01 Scope (2ea):

- Replace one (2) 45ft concrete H4 pole by one (2) 50ft galvanized steel S8 pole.

4. Feeder 1718-03 Scope (2ea):

- Replace two (2) 45ft concrete H4 pole by two (2) 50ft galvanized steel S8 pole

5. Feeder 1806-01 Scope (3ea):

- Replace three (1) 45ft concrete H4 poles by one (1) 50ft galvanized steel S8 poles.
- Replace two (2) 45ft concrete H6 poles by two (2) 50ft galvanized steel S8 poles.

6. Feeder 1806-03 Scope (4ea):

- Replace three (3) 45ft concrete H4 poles by three (3) 50ft galvanized steel S8 poles.
- Replace one (1) 45ft concrete H6 poles by one (1) 50ft galvanized steel S8 poles.

7. Feeder 9203-02 Scope (2ea):

- Replace two (2) 45ft concrete H4 poles by two (2) 50ft galvanized steel S8 poles.

Hazard Mitigation Proposal (HMP) Cost:

Total Net Hazard Mitigation Cost (Base Cost) =	\$ 75,853.00
+ HM (Applicant A&E, Management & General Conditions) =	\$ 20,101.05
Hazard Mitigation Total Cost =	\$ 95,954.05

HMP Cost-Effectiveness Calculations:

Eligible Cost of PA repair Scope of Work per DI: \$418,750.00

Net Cost of 406 HMP per DI: \$75,853.00

$HMR = (\text{Total Net Hazard Mitigation Cost} / \text{Project Net In-Kind Repair Cost}) \times 100$

$HMR = (\$75,853.00 / \$418,750.00) \times 100 = 18.11\% (< 100\% \text{ and Appendix J}).$

* 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.

Cost

Code	Quantity	Unit	Total Cost	Section
3510 (3510 (Engineering And Design Services (FAAST Global A&E 335168)))	1.00	Lump Sum	(\$90,259.50)	Uncompleted
9201 (PAAP Fixed Estimate (No Value - Tracking Purposes Only))	1.00	Lump Sum	\$0.00	Completed
9001 (9001 (Contract (FAAST Project 136271)))	1.00	Lump Sum	\$559,910.45	Uncompleted

CRC Gross Cost \$469,650.95

Total 406 HMP Cost \$95,954.05

Total Insurance Reductions \$0.00

CRC Net Cost \$565,605.00

Federal Share (90.00%) \$509,044.50

Non-Federal Share (10.00%) \$56,560.50

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-11203(13227)	\$565,605.00	90 %	\$509,044.50	1/30/2023

Drawdown History

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

Obligation History

Version #	Date Obligated	Obligated Cost	Cost Share	IFMIS Status	IFMIS Obligation #
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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.
- 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

1/6/2023

GENERAL INFORMATION

Event: DR4339-PR

Project: SP 682136

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: \$565,605.00 (CRC Gross Cost \$469,650.95 + Mitigation Amount \$95,954.05)

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: No

NUMBER OF DAMAGED LOCATIONS INCLUDED IN THIS PROJECT: (1)**Damaged Inventory (DI) #1238084:****FAASt [Distribution Pole and Conductor Repair - Bayamon Group 9]**

Location Description: Distribution Pole and Conductor Repair - Bayamon Group 9

GPS Coordinates: [REDACTED]

Cause of Loss: Wind / Wind Driven Rain

SOV / Schedule #: Not insured

SOV / Schedule Amount: Not insured

Applicable Deductible Amount: N/A

Damage Inventory Amount: \$565,605.00 (CRC Gross Cost \$469,650.95 + Mitigation Amount \$95,954.05)

-

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 as coverage is not anticipated. 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 FFAST [Distribution Pole and Conductor Repair - Bayamon Group 9] because the 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**
[Distribution Pole and Conductor Repair-Bayamon Group
9] (Distribution).

406 Mitigation

There is no additional mitigation information on **FAAST**
[Distribution Pole and Conductor Repair-Bayamon Group
9] (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 Puerto Rico Permits Management Office (OGPe) prior to initiating work and comply with any conditions of the permit established by the Planning Board (JP) for constructions in floodplains. 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) - Conservation Measures 1-6 for Puerto Rican Boa (DLs 1713-05, 1717-01, 1806-01, 1806-03 and 9203-02): 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 #s: 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 #s: 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 10-22 for *Caretta caretta*, *Chelonia mydas*, *Dermochelys coriacea*, *Eretmochelys imbricata* (DL1806-01): 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. 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 and 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. 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.

- National Historic Preservation Act (NHPA) - a. The Subrecipient and/or Subrecipient's contractor shall follow the Low Impact Debris Removal Stipulations (LIDRS) as stated in Appendix E of the Project-Specific Programmatic Agreement Among FEMA, the SHPO, ACHP, COR3, and PREPA (PSPA), executed on August 2, 2022. b. Unexpected Discoveries: Pursuant to Stipulation III.B of the PSPA, if, in the course of implementing this Individual Undertaking(s), previously unidentified structures, sites, buildings, objects, districts, or archaeological deposits, that may be eligible for listing in the National Register, or human remains are uncovered, or if it appears that an Individual Undertaking has affected or will affect a previously identified historic property in an unanticipated manner, the contractor must notify Subrecipient who will immediately notify the Recipient. c. Work must stop in the vicinity of the discovery and measures must be taken to protect the discovery and avoid additional harm. Additional staging areas and/or work pads within work site area haven't been identified yet. The Recipient/Subrecipient and/or private operator must provide the information of any additional staging areas or work pads for EHP evaluation as soon as available specially if any construction activity will be necessary to prepare the site(s). Information for staging areas and/or work pads confined to previously disturbed or hardened surfaces can be provided at close-out.
- 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. The applicant is responsible to ensure damaged transformers are handled, managed and disposed of in accordance with all federal and state laws and requirements. Downed electrical equipment may contain toxic and hazardous materials, such as polychlorinated biphenyls (PCBs), and may spill these materials if a rupture occurs. Applicant is responsible for screening transformers that do or may contain PCBs and the area where any related spill occurred. The applicant is then responsible to handle, manage, dispose of, or recycle damaged equipment and contaminated soil as appropriate. Where possible, temporary measures should be implemented to prevent, treat, or contain further releases or mitigate the migration of PCBs into the environment. If damaged equipment or material storage containers must be stored temporarily, containers should be placed on hardened surface areas, such as a concrete or an asphalt for no more than 90 days. Excavated contaminated material should be disposed of in accordance with federal and state laws and requirements. 3. 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.
- NEPA Determination - 1. All borrow or fill material must come from pre-existing stockpiles, material reclaimed from maintained roadside ditches (provided the designed width or depth of the ditch is not increased), or commercially procured material from a source existing prior to the event. For any FEMA-funded project requiring the use of a non-commercial source or a commercial source that was not permitted to operate prior to the event (e.g., a new pit, agricultural fields, road ROWs, etc.) in whole or in part, regardless of cost, the Applicant must notify FEMA and the Recipient prior to extracting

material. FEMA must review the source for compliance with all applicable federal environmental planning and historic preservation laws and executive orders prior to a Sub-recipient or their contractor beginning borrow extraction. Consultation and regulatory permitting may be required. Non-compliance with this requirement may jeopardize receipt of federal funding. Documentation of borrow sources utilized is required at close-out and must include fill type (private, commercial, etc.), name, fill site GPS coordinates (not of the company/governmental office), address, and type of material. 2. Additional staging areas and/or work pads within work site area haven't been identified yet. The Recipient/Subrecipient and/or private operator must provide the information of any additional staging areas or work pads for EHP evaluation as soon as available specially if any construction activity will be necessary to prepare the site(s). Information for staging areas and/or work pads confined to previously disturbed or hardened surfaces can be provided at close-out.

EHP Additional Info

There is no additional environmental historical preservation on **FAASt [Distribution Pole and Conductor Repair-Bayamon Group 9] (Distribution)**.

Final Reviews

Final Review

Reviewed By CHIRICO, JOSEPH A.

Reviewed On 01/23/2023 2:36 PM AST

Review Comments

Approved for obligation- Applicant is responsible to comply with all regulatory requirements.

Recipient Review

Reviewed By Cintron, Jesus

Reviewed On 01/23/2023 3:15 PM AST

Review Comments

Review Completed. Pending Applicant Project 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 \$565,605.00 for subaward number 11203 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 Miller, Thomas

Signed On 01/26/2023

Department of Homeland Security Federal Emergency Management Agency

General Info

Project #	682178	PW #	11201	Project Type	Specialized
Project Category	F - Utilities	Applicant	PR Electric Power Authority (000-UA2QU-00)		
Project Title	FAASt [Distribution Pole and Conductor Repair - Arecibo Group 7] (Distribution)			Event	4339DR-PR (4339DR)
Project Size	Large	Declaration Date	9/20/2017		
Activity Completion Date	9/20/2027	Incident Start Date	9/17/2017		
Process Step	Obligated	Incident End Date	11/15/2017		

Damage Description and Dimensions

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

Damage #1241519; FAASt [ADJUNTAS PUEBLO 8202-01, ADJUNTAS PUEBLO 8202-02, ADJUNTAS PUEBLO 8202-03, YAHUECAS 8203-01, JAYUYA 8301-01 and GUAJATACA 7403-03]

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:** ADJUNTAS PUEBLO 8202-01, ADJUNTAS PUEBLO 8202-02, ADJUNTAS PUEBLO 8202-03, YAHUECAS 8203-01, JAYUYA 8301-01 and GUAJATACA 7403-03
- **Facility Description:** The facilities are part of the feeder systems in the Arecibo Region. These interconnected and inter functional distribution feeders (sites) establish the electrical distribution system. The feeders all originate from a substation (start) and serve customers along a route to various locations (end). The coordinates represented by GPS end is the end of the mainline backbone of each feeder. These feeders are a subset of projects identified in the Distribution Feeders – Arecibo Short Term projects in the PREPA 10-Year Infrastructure Plan. The specific facilities included in this project are: poles and structures (including their foundations), framing and insulators, load break switches (manual and automated), capacitor banks, voltage regulators, transformers (including lightning arresters and fuse cut-outs), conductors, guy wires, anchoring, grounding assemblies, underground cable, underground cable systems, fault interrupting equipment (fuses, reclosers, and sectionalizers), and any other associated components.
- **Approx. Year Built:** 1980
- **Start GPS Latitude/Longitude:** [REDACTED]
- **End 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

FAAST [ADJUNTAS PUEBLO 8202-01, ADJUNTAS PUEBLO 8202-02, ADJUNTAS PUEBLO 8202-03, YAHUECAS 8203-01, INTRODUCTION

The purpose of this document is to submit for approval the detailed Scope of Work ("SOW") to COR3 and FEMA for the Distribution Pole and Conductor Repair – Arecibo Group 7 Project 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, restore, or replace the eligible facilities.

LUMA submits this detailed SOW pursuant to the Transmission and Distribution Operations & Maintenance Agreement between 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 F 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 Transmission and Distribution System submitted to FEMA.

FACILITIES

The facilities listed below are part of the feeder systems in the Mayaguez Region. These interconnected and inter-functional distribution feeders (sites) are part of the electrical distribution system. All the feeders originate from a substation (start) and serve customers along the route to various locations (end). The coordinates shown below as "GPS End" represent the end of the mainline backbone of each feeder.

Name	Feeder Number	# Of Poles to Replace	GPS Start	GPS End	Phase	Voltage Level (kV)	Constructed Date
GUAJATACA	7403-03	1	[REDACTED]	[REDACTED]	3 Phase	4.16	More than 20 Years
ADJUNTAS PUEBLO	8202-01	4	[REDACTED]	[REDACTED]	3 Phase	8.32	More than 20 Years
ADJUNTAS PUEBLO	8202-02	1	[REDACTED]	[REDACTED]	3 Phase	8.32	More than 20 Years
YAHUECAS	8203-01	4	[REDACTED]	[REDACTED]	3 Phase	4.16	More than 20 Years

PROJECT SCOPE OF WORK

Below includes a breakdown of pole replacement by feeder for "Proposed 428 Public Assistance Scope of Work" and "Proposed 406 Hazard Mitigation Grant Program Scope of Work", followed by descriptions of each work type specific to the Scope of Work for this group.

Proposed 428 Public Assistance Scope of Work:

Feeder 7403-03 Scope:

Remove	Quantity	Install	Quantity
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40ft Concrete Pole(s)	1	50ft H4 Concrete Pole(s)	1
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Feeder 8202-01 Scope:

Remove	Quantity	Install	Quantity
35ft Wood Pole(s)	2	45ft H4 Concrete Pole(s)	2
40ft Steel Pole(s)	1	45ft Galvanized Steel S3 Pole(s)	1
45ft Wood Pole(s)	1	45ft H4 Concrete Pole(s)	1

Feeder 8202-02 Scope:

Remove	Quantity	Install	Quantity
35ft Wood Pole(s)	1	45ft H4 Concrete Pole(s)	1

Feeder 8203-01 Scope:

Remove	Quantity	Install	Quantity
35ft Wood Pole(s)	1	45ft H4 Concrete Pole(s)	1
40ft Wood Pole(s)	2	45ft H4 Concrete Pole(s)	2
40ft Wood Pole(s)	1	45ft H6 Concrete Pole(s)	1

Detail Descriptions for Planned Field Work:

Pole Replacement

- Remove existing poles, including hardware and install new poles, including hardware, in the same location. If unable to install the replacement in the same location, the pole will be installed within 3 feet.
- All pole installations are to replace existing pole locations; no new locations are included in this scope of work. Refer to Appendix J- EHP Checklist, column C (Soil area and depth impact) for the depths of the poles to be installed.
- Remove the existing foundations as specified in Appendix J- EHP Checklist column I (Concrete Foundation) and replace them with a new concrete foundation bases as per Appendix D-Distribution Construction Standards (Concrete Base Standard). The

maximum auger width used is 42" and the maximum depth drilled is 15ft.

- New guy wire/ anchors are to be installed in compliance with Appendix D- Distribution Construction Standards within 3ft from the existing anchor. The maximum distance an anchor will be installed for a 50ft pole is 25ft from the base of the pole, within the right-of-way.
- Brushing will be required in locations to gain access to the pole for replacement. Brushing refers to the removal and clearing of vegetation solely to the extent that it allows crews to conduct work. The brushing of vegetation will be limited to a 15 ft radius surrounding the surface of the pole but not to exceed the width of the right-of-way for the exclusive purpose of gaining access to the pole to conduct repairs. Please see Appendix J- EHP Checklist column H (Brushing/Clearing), Refer to Appendix B- Maps and Pictures for pictures of the vegetation.
- All work for this program will be performed within the current electrical right-of-way.
- This scope of work will not affect water or sewer utility services.

Material Disposal

- PCBs, oil from the transformer and breakers, sealants, and other chemical wastes typical of a construction site are considered hazardous waste and will be disposed of by the contractor in approved facilities as per applicable local regulations. Refer to Appendix C - Waste Management Plan.
- The type of debris that may be found in the process of removal are luminaires, pole arms, photocells, metal scrap, wiring, concrete, steel, and wood poles, etc. The debris will be separated and taken to an approved waste disposal facility in compliance with applicable local regulations. Refer to Appendix C- Waste Management Plan.
- Transformers will be contained and returned to LUMA in compliance with applicable local regulations. The removal of the transformer will require testing of the existing oil for PCB levels, drain oil, and delivery to the approved waste disposal site as per Environmental Regulations. Refer to Appendix C- Waste Management Plan.

Access Roads

- Poles are in close proximity to the roads and are site accessible. The construction of access roads is not required for this scope of work. Refer to Appendix J- EHP Checklist in column G "Site Accessible"

Staging Area

- All materials are stored and dispatched from the Mayaguez Regional Warehouse. Refer to Appendix L- Warehouse locations. No additional or temporary staging areas are required.

Fill, gravel, sand, etc.:

- Fill, Gravel, and Sand materials will be obtained from an approved supplier as referenced in Appendix A- Approved Supplier List.

List of Equipment to be used:

- Skid Steer, Excavator, Dump trucks, Manlifts, 120-Ton Motor Crane, Boom Trucks 45-ton Crane, Zoom Boom, Air compressor, Truck Digger, Water truck, Pump Truck, Concrete Vibrator, Oil Tanker, Filtering Machine and Flatbed platform.
- Vegetation will be removed utilizing machete, chainsaw, electric pruner, telescopic pole pruner, bucket truck, and/or chipper Specific

List of Permits Required:

- DTOP Endorsements & Municipality Notifications.
- Excavation and Demolition Notification in Department of Transportation and Public Works Agency - (DTOP).
- LUMA will provide proof of all permits.

PROJECT ESTIMATE

The estimated costs (Class 3 Accuracy +/-30%) to complete the project are captured in the table below. The cost estimate was developed utilizing preliminary Architectural and Engineering design information and may be subject to change. LUMA has

allocated 10% of the project cost for the mitigation of potential known risks.

Project Cost Estimate	Total	428 Public Assistance	406 Hazard Mitigation
Planning, Permits and Applications	\$5,380.00	\$5,380.00	\$0.00
Environmental Management	\$7,690.00	\$7,690.00	\$0.00
Engineering	\$22,835.00	\$18,586.30	\$4,248.70
Project Management	\$11,417.50	\$9,293.15	\$2,124.35
Distribution Line	\$228,350.00	\$185,863.00	\$42,487.00
Contingency	\$27,567.25	\$22,681.25	\$4,886.01
Total Project Cost Estimate:	\$303,239.75	\$249,493.70	\$53,746.06
FAAST Project # 682178 (428) Total		\$208,544.25	
FAAST Project # 682178 (406) Total		\$53,746.06	
FAAST A&E #335168 Total		\$40,949.45	
Total Cost		\$303,239.75	

Please refer to Appendix H for Cost Estimate Details.

428 Work To Be Completed (WTBC): \$249,493.70

428 A&E Deduction (Global A&E FAASt 335168) -\$40,949.45

428 WTBC Project Total Cost: \$208,544.25

For detailed cost estimate, please refers to document labeled: 682178-DR4339PR-Appendix H - Detail Cost Estimate - Arecibo Group 7 Rev0.xlsx.

Project Notes:

1. Refer to detailed SOW provided in document 682178-DR4339PR-Detailed SOW Arecibo Group 7 Rev0.pdf.
2. For reference, documents Appendix A thru L
3. For EHP Requirements, refer to pages 5 to 7 of the detailed SOW and reference documents: Appendix J & K.
4. Architectural and Engineering (A&E) costs are deducted given previously obligated Global A&E Project for the subject FAASt PREPA work (see project: 335168 - FAASt A&E PREPA).

406 HMP Scope

Project number: 682178

Damage #1241519: FAASt Distribution Pole and Conductor Repair - Arecibo Group 7; Guajataca 7403-03, Adjuntas Pueblo 8202-01, Adjuntas Pueblo 8202-02 and Yahuecas 8203-01.

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

Location: Arecibo, P.R.

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 "loss of power" 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).

☐ Project #682178 Distribution Pole and Conductor Repair - Arecibo Group 7

The Distribution Pole and Conductor Repair-Arecibo Group 7 consists of 4 interconnected and inter-functional distribution feeders (sites) establish the electrical distribution system as follows: Guajataca 7403-03, Adjuntas Pueblo 8202-01, Adjuntas Pueblo 8202-02 and Yahuecas 8203-01.

The Method of Repair (MOR) included the replacement of the damaged critical distribution poles (wood, concrete or galvanized), cross-arms, insulators, and all associated hardware needed for the new structure. 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 by increasing the wind tolerance to +160mph. Note: The FEMA Accelerated Award Strategy (FAASt) MOR included the PREPA distribution standards and specifications that were based on a 145mph sustained winds. However, the new PREPA Standard 2021 updates the design-criteria to a 160mph sustained winds resistant. 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 by increasing the wind tolerance of all materials to +160mph. The FAASt MOR included the PREPA distribution standards and specifications that were based on a 145mph sustained winds. However, the new PREPA Standard 2021 updates the design-criteria to a 160mph sustained winds resistant. 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 PAPPV V3.1.

➤ [Distribution Critical Poles Replacement] 406 Mitigation Scope of Work:

1. Feeder 7403-03 Scope (1ea):

- Replace one (1) 50ft concrete H4 pole by one (1) 50ft galvanized steel S8 pole.

1. Feeder 8202-01Scope (4ea):

- Replace one (2) 50ft concrete H4 pole by one (2) 50ft galvanized steel S8 pole.
- Replace one (1) 45ft galvanized steel S3 pole by one (1) 45ft concrete H4 pole.
- Replace one (1) 50ft concrete H4 pole by one (1) 50ft galvanized steel S8 pole.

1. Feeder 8202-02 Scope (1ea):

- Replace one (1) 50ft concrete H4 pole by one (1) 50ft galvanized steel S8 pole.

1. Feeder 8203-01 Scope (2ea):

- Replace one (1) 50ft concrete H4 pole by one (1) 50ft galvanized steel S8 pole.
- Replace one (2) 50ft concrete H4 pole by one (2) 50ft galvanized steel S8 pole.
- Replace one (1) 50ft concrete H4 pole by one (2) 50ft galvanized steel S8 pole.

(III) Hazard Mitigation Proposal (HMP) Cost

Total Net Hazard Mitigation Cost (Base Cost) =	\$42,487.00
+ HM (Applicant A&E, Management & General Conditions) =	<u>\$11,259.06</u>
Hazard Mitigation Total Cost =	\$53,746.06

(IV) HMP Cost-Effectiveness Calculations

HMR = (Total Net Hazard Mitigation Cost / Project Net In-Kind Repair Cost) x 100

HMR = (\$42,487.00 / \$185,863.00) x 100 = **22.9%**

The cost of this Hazard Mitigation Proposal (HMP) is **22.9%** of the repair or restoration costs and is deemed cost effective per FEMA Public Assistance Program and Policy Guide (PAPPG) V3.1 April 2018, Chapter 2, VII., Section C, **15%Rule**, **X** **100% Rule**, **BCA Rule**. This Hazard Mitigation Proposal meets eligible repair and restoration cost effective requirements.

***Cost effective calculation should be taken before CEF Factors, Soft Costs, or other Factors.**

**** See the HMP Cost Estimate and Benefit Cost Analysis (BCA) for a more detailed breakdown of HMP costs and cost effectiveness calculation(s).**

*****See Mitigation Profile Documents Tab in Grants Manager for complete version of this HMP and supporting documents (*HMP, HMP cost estimate, HMP Cost Effective Analysis, among others*).**

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

Cost

Code	Quantity	Unit	Total Cost	Section
3510 (Engineering And Design Services (PREPA FAASt Global A&E 335168))	1.00	Lump Sum	(\$40,949.45)	Uncompleted
9201 (PAAP Fixed Estimate (No Value - Tracking Purposes Only))	1.00	Lump Sum	\$0.00	Completed
9001 (Contract (PREPA FAASt Project 136271))	1.00	Lump Sum	\$249,493.70	Uncompleted

CRC Gross Cost \$208,544.25

Total 406 HMP Cost \$53,746.06

Total Insurance Reductions \$0.00

CRC Net Cost \$262,290.31

Federal Share (90.00%) \$236,061.28

Non-Federal Share (10.00%) \$26,229.03

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-11201(13226)	\$262,290.31	90 %	\$236,061.28	1/30/2023

Drawdown History

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

Obligation History

Version #	Date Obligated	Obligated Cost	Cost Share	IFMIS Status	IFMIS Obligation #
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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.
- 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

1/3/2023

GENERAL INFORMATION

Event: DR4339-PR

Project: SP 682178

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: \$262,290.31 (CRC Gross Cost \$208,544.25 + Mitigation Amount \$53,746.06)

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: No

NUMBER OF DAMAGED LOCATIONS INCLUDED IN THIS PROJECT: (1)**Damaged Inventory (DI) #1241519:**

FAAsT [ADJUNTAS PUEBLO 8202-01, ADJUNTAS PUEBLO 8202-02, ADJUNTAS PUEBLO 8202-03, YAHUECAS 8203-01, JAYUYA 8301-01 and GUAJATACA 7403-03]

Location Description: ADJUNTAS PUEBLO 8202-01, ADJUNTAS PUEBLO 8202-02, ADJUNTAS PUEBLO 8202-03, YAHUECAS 8203-01, JAYUYA 8301-01 and GUAJATACA 7403-03

GPS Coordinates: [REDACTED]

Cause of Loss: Wind / Wind Driven Rain

SOV / Schedule #: Not insured

SOV / Schedule Amount: Not insured

Applicable Deductible Amount: N/A

Damage Inventory Amount: \$262,290.31 (CRC Gross Cost \$208,544.25 + Mitigation Amount \$53,746.06)

-

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 as coverage is not anticipated. 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 [ADJUNTAS PUEBLO 8202-01, ADJUNTAS PUEBLO 8202-02, ADJUNTAS PUEBLO 8202-03, YAHUECAS 8203-01, JAYUYA 8301-01 and GUAJATACA 7403-03] because the 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**
[Distribution Pole and Conductor Repair - Arecibo Group
7] (Distribution).

406 Mitigation

There is no additional mitigation information on **FAAST**
[Distribution Pole and Conductor Repair - Arecibo Group
7] (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 - Conditions are only applicable for the Feeder 8203-01. Applicant must obtain any required permits from the Puerto Rico Permits Management Office (OGPe) prior to initiating work and comply with any conditions of the permit established by the Planning Board (JP) for constructions in floodplains. 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) - Conditions for the Puerto Rican Boa (*Epicrates inornatus*) are applicable for feeders 7403-03, 8202-01, 8202-02 and 8203-01. 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 #s: 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 #s: 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) - Birds Conditions for the *Accipiter striatus venator*, *Buteo platypterus brunescens* and *Amazona vittata* are applicable for feeders 8202-01, 8202 -02 and 8203-01. 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 parrot (*Amazona vittata*): February to June, 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) - The Applicant must provide documentation at close-out that proves completion of required Conservation Measures.
- 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. The applicant is responsible to ensure damaged transformers are handled, managed and disposed of in accordance with all federal and state laws and requirements. Downed electrical equipment may contain toxic and hazardous materials, such as polychlorinated biphenyls (PCBs) and may spill these materials if a rupture occurs. Applicant is responsible for screening transformers that do or may contain PCBs and the area where any related spill occurred. The applicant is then responsible to handle, manage, dispose of, or recycle damaged equipment and contaminated soil as appropriate. Where possible, temporary measures should be implemented to prevent, treat, or contain further releases or mitigate the migration of PCBs into the environment. If damaged equipment or material storage containers must be stored temporarily, containers should be placed on hardened surface areas, such as a concrete or an asphalt for no more than 90 days. Excavated contaminated material should be disposed of in accordance with federal and state laws and requirements. 3. 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.
- NEPA Determination - Additional staging areas and/or work pads within work site area haven't been identified yet. The Recipient/Subrecipient and/or private operator must provide the information of any additional staging areas or work pads for EHP evaluation as soon as available specially if any construction activity will be necessary to prepare the site(s). Information for staging areas and/or work pads confined to previously disturbed or hardened surfaces can be provided at close-out.
- NEPA Determination - All borrow or fill material must come from pre-existing stockpiles, material reclaimed from maintained roadside ditches (provided the designed width or depth of the ditch is not increased), or commercially procured material from a source existing prior to the event. For any FEMA-funded project requiring the use of a non-commercial source or a commercial source that was not permitted to operate prior to the event (e.g., a new pit, agricultural fields, road ROWs, etc.) in whole or in part, regardless of cost, the Applicant must notify FEMA and the Recipient prior to extracting material. FEMA must review the source for compliance with all applicable federal environmental planning and historic preservation laws and executive orders prior to a Sub-recipient or their contractor beginning borrow extraction. Consultation and regulatory permitting may be required. Non-compliance with this requirement may jeopardize receipt of federal funding.

Documentation of borrow sources utilized is required at close-out and must include fill type (private, commercial, etc.), name, fill site GPS coordinates (not of the company/governmental office), address, and type of material.

- NHPA- a. The Subrecipient and/or Subrecipient's contractor shall follow the Low Impact Debris Removal Stipulations (LIDRS) as stated in Appendix E of the Project- Specific Programmatic Agreement Among FEMA, the SHPO, ACHP, COR3, and PREPA (PSPA), executed on August 2, 2022. b. Unexpected Discoveries: Pursuant to Stipulation III.B of the PSPA, if, in the course of implementing this Individual Undertaking(s), previously unidentified structures, sites, buildings, objects, districts, or archaeological deposits, that may be eligible for listing in the National Register, or human remains are uncovered, or if it appears that an Individual Undertaking has affected or will affect a previously identified historic property in an unanticipated manner, the contractor must notify Subrecipient who will immediately notify the Recipient. Work must stop in the vicinity of the discovery and measures must be taken to protect the discovery and avoid additional harm. c. Additional staging areas and/or work pads within work site area haven't been identified yet. The Recipient/Subrecipient and/or private operator must provide the information of any additional staging areas or work pads for EHP evaluation as soon as available specially if any construction activity will be necessary to prepare the site(s). Information for staging areas and/or work pads confined to previously disturbed or hardened surfaces can be provided at close-out.

EHP Additional Info

There is no additional environmental historical preservation on **FAASt [Distribution Pole and Conductor Repair - Arecibo Group 7] (Distribution)**.

Final Reviews

Final Review

Reviewed By CHIRICO, JOSEPH A.

Reviewed On 01/10/2023 3:21 PM AST

Review Comments

Approved for obligation - Applicant are responsible to comply with all requirements.

Recipient Review

Reviewed By Salgado, Gabriel

Reviewed On 01/10/2023 4:56 PM AST

Review Comments

Recipient Review completed. Project is ready for 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 \$262,290.31 for subaward number 11201 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 Miller, Thomas

Signed On 01/11/2023

Department of Homeland Security Federal Emergency Management Agency

General Info

Project #	682228	PW #	11196	Project Type	Specialized
Project Category	F - Utilities	Applicant	PR Electric Power Authority (000-UA2QU-00)		
Project Title	FAASt Distribution Pole and Conductor Repair - Ponce Group 8 (Distribution)			Event	4339DR-PR (4339DR)
Project Size	Large	Declaration Date	9/20/2017		
Activity Completion Date	9/20/2027	Incident Start Date	9/17/2017		
Process Step	Obligated	Incident End Date	11/15/2017		

Damage Description and Dimensions

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

Damage #1241503; FAASt Distribution Pole and Conductor Repair - Ponce Group 8 (Inabon 4KV 5013-01, 5013-02, 5013-03, Villa del Carmen 5016-01, Canas TC 13KV 5018-02, 5018-04)

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:** DISTRIBUTION POLE AND CONDUCTOR REPAIR - PONCE GROUP 8 (INABON 4KV 5013-01, 5013-02, 5013-03, VILLA DEL CARMEN 5016-01, CANAS TC 13KV 5018-02, 5018-04)
- **Facility Description:** The specific facilities included in this project are: poles and structures (including their foundations), framing and insulators, load break switches (manual and automated), capacitor banks, voltage regulators, transformers (including lightning arresters and fuse cut-outs), conductors, guy wires, anchoring, grounding assemblies, underground cable, underground cable systems, fault interrupting equipment (fuses, reclosers, and sectionalizers), and any other associated components
- **Approx. Year Built:** 1967
- **Start GPS Latitude/Longitude:** [REDACTED]
- **End 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

1241503

FAASt Distribution Pole and Conductor Repair - Ponce Group 8 (Inabon 4KV 5013-01, 5013-02, 5013-03,









INTRODUCTION

The purpose of this document is to submit for approval the detailed Scope of Work ("SOW") to COR3 and FEMA for the Distribution Pole and Conductor Repair – Ponce Group 8 Project 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, restore, or replace the eligible facilities.

LUMA submits this detailed SOW pursuant to the Transmission and Distribution Operations & Maintenance Agreement between 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 F 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 Transmission and Distribution System submitted to FEMA.

FACILITIES

The facilities listed below are part of the feeder systems in the Ponce Region. These interconnected and inter-functional distribution feeders (sites) are part of the electrical distribution system. All the feeders originate from a substation (start) and serve customers along the route to various locations (end). The coordinates shown below as "GPS End" represent the end of the mainline backbone of each feeder.

Name	Feeder Number	# Of Poles to Replace	GPS Start	GPS End	Phase	Voltage Level (kV)	Constructed Date
INABON 4 KV	5013-01	9			3 Phase	4.16	More than 20 Years
INABON 4 KV	5013-02	9			3 Phase	4.16	More than 20 Years
INABON 4 KV	5013-03	17			3 Phase	4.16	More than 20 Years
VILLADEL CARMEN	5016-01	1			3 Phase	13.2	More than 20 Years

PROJECT SCOPE OF WORK

Below includes a breakdown of pole replacement by feeder for "Proposed 428 Public Assistance Scope of Work" and "Proposed 406 Hazard Mitigation Grant Program Scope of Work", followed by descriptions of each work type specific to the Scope of Work for this group.

Proposed 428 Public Assistance Scope of Work:

Feeder 5013-01 Scope:

Remove	Quantity	Install	Quantity
35ft Wood Pole(s)	2	45ft H4 Concrete Pole(s)	2

35ft Wood Pole(s)	2	45ft H6 Concrete Pole(s)	2
35ft Wood Pole(s)	1	50ft H4 Concrete Pole(s)	1
45ft Wood Pole(s)	1	45ft H4 Concrete Pole(s)	1
45ft Wood Pole(s)	3	45ft H6 Concrete Pole(s)	3

Feeder 5013-02 Scope:

Remove	Quantity	Install	Quantity
35ft Wood Pole(s)	2	45ft H4 Concrete Pole(s)	2
40ft Wood Pole(s)	2	45ft H4 Concrete Pole(s)	2
40ft Wood Pole(s)	3	45ft H6 Concrete Pole(s)	3
40ft Wood Pole(s)	1	50ft Galvanized Steel S8 pole(s)	1
45ft Wood Pole(s)	1	45ft H4 Concrete Pole(s)	1

Feeder 5013-03 Scope:

Remove	Quantity	Install	Quantity
35ft Wood Pole(s)	8	45ft H4 Concrete Pole(s)	8
35ft Wood Pole(s)	3	45ft H6 Concrete Pole(s)	3
40ft Concrete Pole(s)	2	45ft H4 Concrete Pole(s)	2
40ft Concrete Pole(s)	1	45ft H6 Concrete Pole(s)	1
45ft Wood Pole(s)	1	45ft H4 Concrete Pole(s)	1
45ft Wood Pole(s)	2	45ft H6 Concrete Pole(s)	2

Feeder 5016-01 Scope:

Remove	Quantity	Install	Quantity
65ft Wood Pole(s)	1	70ft Galvanized Steel S8 pole(s)	1

Detail Descriptions for Planned Field Work:

Pole Replacement

- Remove existing poles, including hardware and install new poles, including hardware, in the same location. If unable to install the replacement in the same location, the pole will be installed within 3 feet.
- All pole installations are to replace existing pole locations; no new locations are included in this scope of work. Refer to Appendix J- EHP Checklist, column C (Soil area and depth impact) for the depths of the poles to be installed.
- Remove the existing foundations as specified in Appendix J- EHP Checklist column I (Concrete Foundation) and replace them with a new concrete foundation bases as per Appendix D-Distribution Construction Standards (Concrete Base Standard). The maximum auger width used is 42" and the maximum depth drilled is 15ft.
- New guy wire/ anchors are to be installed in compliance with Appendix D- Distribution Construction Standards within 3ft from the existing anchor. The maximum distance an anchor will be installed for a 50ft pole is 25ft from the base of the pole, within the right-of-way.
- Brushing will be required in locations to gain access to the pole for replacement. Brushing refers to the removal and clearing of vegetation solely to the extent that it allows crews to conduct work. The brushing of vegetation will be limited to a 15 ft radius surrounding the surface of the pole but not to exceed the width of the right-of-way for the exclusive purpose of gaining access to the pole to conduct repairs. Please see Appendix J- EHP Checklist column H (Brushing/Clearing), Refer to Appendix B- Maps and Pictures for pictures of the vegetation.
- All work for this program will be performed within the current electrical right-of-way.
- This scope of work will not affect water or sewer utility services.

Material Disposal

- PCBs, oil from the transformer and breakers, sealants, and other chemical wastes typical of a construction site are considered hazardous waste and will be disposed of by the contractor in approved facilities as per applicable local regulations. Refer to Appendix C - Waste Management Plan.
- The type of debris that may be found in the process of removal are luminaires, pole arms, photocells, metal scrap, wiring, concrete, steel, and wood poles, etc. The debris will be separated and taken to an approved waste disposal facility in compliance with applicable local regulations. Refer to Appendix C- Waste Management Plan.
- Transformers will be contained and returned to LUMA in compliance with applicable local regulations. The removal of the transformer will require testing of the existing oil for PCB levels, drain oil, and delivery to the approved waste disposal site as per Environmental Regulations. Refer to Appendix C- Waste Management Plan.

Access Roads

- Poles are in close proximity to the roads and are site accessible. The construction of access roads is not required for this scope of work. Refer to Appendix J- EHP Checklist in column G "Site Accessible"

Staging Area

- All materials are stored and dispatched from the Ponce Regional Warehouse. Refer to Appendix L- Warehouse locations. No additional or temporary staging areas are required.

Fill, gravel, sand, etc.:

- Fill, Gravel, and Sand materials will be obtained from an approved supplier as referenced in Appendix A- Approved Supplier List.

List of Equipment to be used:

- Skid Steer, Excavator, Dump trucks, Manlifts, 120-Ton Motor Crane, Boom Trucks 45-ton Crane, Zoom Boom, Air compressor, Truck Digger, Water truck, Pump Truck, Concrete Vibrator, Oil Tanker, Filtering Machine and Flatbed platform.
- Vegetation will be removed utilizing machete, chainsaw, electric pruner, telescopic pole pruner, bucket truck, and/or chipper

Specific List of Permits Required:

- DTOP Endorsements & Municipality Notifications.
- Excavation and Demolition Notification in Department of Transportation and Public Works Agency - (DTOP).

- LUMA will provide proof of all permits.

PROJECT ESTIMATE

The estimated costs (Class 3 Accuracy +/-30%) to complete the project are captured in the table below. The cost estimate was developed utilizing preliminary Architectural and Engineering design information and may be subject to change. LUMA has allocated 10% of the project cost for the mitigation of potential known risks.

Project Cost Estimate	Total	428 Public Assistance	406 Hazard Mitigation
Planning, Permits and Applications	\$19,368	\$19,368	\$0
Environmental Management	\$27,684	\$27,684	\$0
Engineering	\$83,137	\$69,155	\$13,983
Project Management	\$41,569	\$34,577	\$6,991
Distribution Line	\$831,374	\$691,546	\$139,828
Contingency	\$100,313	\$84,233	\$16,080
Total Project Cost Estimate:	\$1,103,445	\$926,563	\$176,882
FAASt Project # 679127 (428) Total			\$775,779
FAASt Project # 679127 (406) Total			\$176,882
FAASt A&E #335168 Total			\$150,784
Total Cost			\$1,103,445

Please refer to Appendix H for Cost Estimate Details.

428 Work To Be Completed (WTBC): \$926,563

428 A&E Deduction (Global A&E FAASt 335168) -\$150,784

428 Project Total Cost: \$775,779

For detailed cost estimate, please refers to document labeled: 682228-DR4339PR-Appendix H - Detail Cost Estimate - Ponce Group 8 Rev0.xlsx

Project Notes:

1. This project is part of 136271- MEPA078 Puerto Rico Electrical Power Authority Island Wide FAASt Project.
2. Refer to detailed SOW provided in document 682228-DR4339PR-Detailed SOW Ponce Group 8 Rev0.pdf.
3. For reference documents Appendix A thru L
4. For EHP Requirements, refer to pages 5 to 7 of the detailed SOW and reference documents: Appendix J & K.

5. Architectural and Engineering (A&E) costs are deducted given previously obligated Global A&E Project for the subject FAAS^t PREPA work (see project: 335168 - FAAS^t A&E PREPA).

406 HMP Scope

Project number: 682228 FAAS^t [Distribution Pole and Conductor Repair - Ponce Group 8] (Distribution)
Damage #1241503; FAAS^t [Ponce Group 8 - (Inabon 4KV 5013-01, 5013-02, 5013-03, Villa del Carmen 5016-01, Canas TC 13KV 5018-02, 5018-04)].
Applicant: PR Electric Power Authority (000-UA2QU-00)

Location: Ponce, Puerto Rico, [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 “loss of power” 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).

☐ Project #682228 (Distribution Critical Poles & Conductors Repair/Replacement).

The Distribution Pole and Conductor Repair-Ponce Group 8 consists of 4 interconnected and inter-functional distribution feeders (sites) establish the electrical distribution system as follow: (Inabon 4KV 5013-01, 5013-02, 5013-03, Villa del Carmen 5016-01, Canas TC 13KV 5018-02, 5018-04).

The Method of Repair (MOR) included the replacement of the damaged critical distribution poles (wood, concrete or galvanized), cross-arms, insulators, and all associated hardware needed for the new structure. 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 by increasing the wind tolerance to +160mph. Note: The FEMA Accelerated Award Strategy (FAAS^t) MOR included the PREPA distribution standards and specifications that were based on a 145mph sustained winds. However, the new PREPA Standard 2021 updates the design-criteria to a 160mph sustained winds resistant. 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)*

➤ To avoid damage in a future event, the Applicant is proposing as a mitigation measure, increase the strength of the poles by increasing the wind tolerance of all materials to +160mph. The FAAS^t MOR included the PREPA distribution standards and specifications that were based on a 145mph sustained winds. However, the new PREPA Standard 2021 updates the design-criteria to a 160mph sustained winds resistant. 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.

➤ [Distribution Critical Poles Replacement] 406 Mitigation Scope of Work:

Utilize 406 Hazard Mitigation Pole below in place of 428 Identified Pole	Quantity
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1. Feeder Inabon 4KV 5013-01: 9EA. poles.

- Replace three (3) 45ft concrete H4 poles by three (3) 50ft galvanized steel S8 poles.
- Replace five (5) 45ft concrete H6 poles by five (5) 50ft galvanized steel S8 poles.
- Replace one (1) 50ft concrete H4 pole by one (1) 50ft galvanized steel S8 pole.

1. Feeder Inabon 4KV 5013-02 Scope: 8EA.poles.

- Replace five (5) 45ft concrete H6 poles by five (5) 50ft galvanized steel S8 poles.
- Replace three (3) 45ft concrete H6 poles by three (3) 50ft galvanized steel S8 poles.

1. Feeder Inabon 4KV 5013-03 Scope: 15EA. Poles.

- Replace nine (9) 45ft concrete H4 poles by nine (9) 50ft galvanized steel S8 poles.
- Replace six (6) 45ft concrete H6 poles by six (6) 50ft galvanized steel S8 poles.

1. Feeder Villa del Carmen 5016-01 Scope: 1EA. Poles.

- No 406-mitigation identified.

(III) Hazard Mitigation Proposal (HMP) Cost

Total Net Hazard Mitigation Cost (Base Cost) =	\$139,828.00
+ HM (Applicant A&E, Management & General Conditions) =	<u>\$37,054.42</u>
Hazard Mitigation Total Cost =	\$176,882.42

(IV) HMP Cost-Effectiveness Calculations

HMR = (Total Net Hazard Mitigation Cost / Project Net In-Kind Repair Cost) x 100

HMR = (\$139,828.00 / \$691,546) x 100 = 20.22%

The cost of this Hazard Mitigation Proposal (HMP) is **20.22%** of the repair or restoration costs and is deemed cost effective per FEMA Public Assistance Program and Policy Guide (PAPPG) V3.1 April2018, Chapter 2, VII., Section C, __ 15%Rule, **X 100% Rule**, __ BCA Rule. This Hazard Mitigation Proposal meets eligible repair and restoration cost effective requirements.

***Cost effective calculation should be taken before CEF Factors, Soft Costs, or other Factors.**

**** See the HMP Cost Estimate and Benefit Cost Analysis (BCA) for a more detailed breakdown of HMP costs and cost effectiveness calculation(s).**

*****See Mitigation Profile Documents Tab in Grants Manager for complete version of this HMP and supporting documents (HMP, HMP cost estimate, HMP Cost Effective Analysis, among others).**

Cost

Code	Quantity	Unit	Total Cost	Section
3510 (Engineering And Design Services (Global A&E FAASt PREPA 335168))	1.00	Lump Sum	(\$150,784.00)	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	\$926,563.00	Uncompleted

CRC Gross Cost \$775,779.00

Total 406 HMP Cost \$176,882.42

Total Insurance Reductions \$0.00

CRC Net Cost \$952,661.42

Federal Share (90.00%) \$857,395.28

Non-Federal Share (10.00%) \$95,266.14

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-11196(13225)	\$952,661.42	90 %	\$857,395.28	1/30/2023

Drawdown History

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

Obligation History

Version #	Date Obligated	Obligated Cost	Cost Share	IFMIS Status	IFMIS Obligation #
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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 all of its small projects and compliance with all environmental and historic preservation requirements within 180 days of the applicant's completion of its last small project, or the latest approved deadline, whichever is sooner.
- 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

12/30/2022

Property insurance coverage for the electrical distribution facilities represented on this project are not insured or insurable. No insurance relief is anticipated. No Obtain and Maintain requirement will be made.

FEMA requires the applicant to take reasonable efforts to pursue claims to recover insurance proceeds that it is entitled to receive from its insurer(s). In the event that any insurance proceeds are received for these expenses those proceeds must be reduced from FEMA Public Assistance funding to ensure no duplication of benefits has occurred.

No duplication of benefits from insurance is anticipated for work described in this application. In the event any part or all costs are paid by an insurance policy, a duplication of benefits from insurance will occur. Applicant must notify grantee and FEMA of such recoveries and the Sub-Grant award amount must be reduced by actual insurance proceeds.

No insurance requirements will be required for this project. Insurance requirements are specific to permanent work to replace, restore, repair, reconstruct, or construct buildings, contents, equipment, or vehicles. (FEMA Recovery Policy FP 206-086-1).

No insurance narrative will be produced or uploaded into documents or attachments.

Olga Renta, PA Insurance Specialist, CRC Atlantic, PR

O&M Requirements

There are no Obtain and Maintain Requirements on **FAAST Distribution Pole and Conductor Repair - Ponce Group 8 (Distribution)**.

406 Mitigation

There is no additional mitigation information on **FAAST Distribution Pole and Conductor Repair - Ponce Group 8 (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 Puerto Rico Permits Management Office (OGPe) prior to initiating work and comply with any conditions of the permit established by the Planning Board (JP) for constructions in floodplains. 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.

- Endangered Species Act (ESA) - USFWS Required Conservation Measures for *Epicrates inornatus* (Feeders: 5013-01, 5013-02, 5013-03): 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 *Amazona vittata* and *Buteo platypterus brunnescens* (5013-02): 1. 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 parrot (*Amazona vittata*): February to June; Puerto Rican plain pigeon (*Patagioenas inornata wetmorei* [*Columba inornata*]): April-September; Puerto Rican broad-winged hawk (*Buteo platypterus*): December-June; Puerto Rican sharp shinned hawk (*Accipiter striatus venator*): December-June; Puerto Rican nightjar (*Antrostomus noctitherus*): February-August; Elfin-woods warbler (*Setophaga angelae*): March-June; yellow-shouldered blackbird (*Agelaius xanthomus*): February through November. 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.
- National Historic Preservation Act (NHPA) - a. The Subrecipient and/or Subrecipient's contractor shall follow the Low Impact Debris Removal Stipulations (LIDRS) as stated in Appendix E of the Project-Specific Programmatic Agreement Among FEMA, the SHPO, ACHP, COR3, and PREPA (PSPA), executed on August 2, 2022. b. Unexpected Discoveries: Pursuant to Stipulation III.B of the PSPA, if, in the course of implementing this Individual Undertaking(s), previously unidentified structures, sites, buildings, objects, districts, or archaeological deposits, that may be eligible for listing in the National Register, or human remains are uncovered, or if it appears that an Individual Undertaking has affected or will affect a previously identified historic property in an unanticipated manner, the contractor must notify Subrecipient who will immediately notify the Recipient. Work must stop in the vicinity of the discovery and measures must be taken to protect the

discovery and avoid additional harm. c. Additional staging areas and/or work pads within work site area haven't been identified yet. The Recipient/Subrecipient and/or private operator must provide the information of any additional staging areas or work pads for EHP evaluation as soon as available specially if any construction activity will be necessary to prepare the site(s). Information for staging areas and/or work pads confined to previously disturbed or hardened surfaces can be provided at close-out.

- 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. The applicant is responsible to ensure damaged transformers are handled, managed and disposed of in accordance with all federal and state laws and requirements. Downed electrical equipment may contain toxic and hazardous materials, such as polychlorinated biphenyls (PCBs), and may spill these materials if a rupture occurs. Applicant is responsible for screening transformers that do or may contain PCBs and the area where any related spill occurred. The applicant is then responsible to handle, manage, dispose of, or recycle damaged equipment and contaminated soil as appropriate. Where possible, temporary measures should be implemented to prevent, treat, or contain further releases or mitigate the migration of PCBs into the environment. If damaged equipment or material storage containers must be stored temporarily, containers should be placed on hardened surface areas, such as a concrete or an asphalt for no more than 90 days. Excavated contaminated material should be disposed of in accordance with federal and state laws and requirements. 3. 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.
- NEPA Determination- Additional staging areas and/or work pads within work site area haven't been identified yet. The Recipient/Subrecipient and/or private operator must provide the information of any additional staging areas or work pads for EHP evaluation as soon as available specially if any construction activity will be necessary to prepare the site(s). Information for staging areas and/or work pads confined to previously disturbed or hardened surfaces can be provided at close-out.
- NEPA Determination - All borrow or fill material must come from pre-existing stockpiles, material reclaimed from maintained roadside ditches (provided the designed width or depth of the ditch is not increased), or commercially procured material from a source existing prior to the event. For any FEMA-funded project requiring the use of a non-commercial source or a commercial source that was not permitted to operate prior to the event (e.g., a new pit, agricultural fields, road ROWs, etc.) in whole or in part, regardless of cost, the Applicant must notify FEMA and the Recipient prior to extracting material. FEMA must review the source for compliance with all applicable federal environmental planning and historic preservation laws and executive orders prior to a Sub-recipient or their contractor beginning borrow extraction. Consultation and regulatory permitting may be required. Non-compliance with this requirement may jeopardize receipt of federal funding. Documentation of borrow sources utilized is required at close-out and must include fill type (private, commercial, etc.), name, fill site GPS coordinates (not of the company/governmental office), address, and type of material.

EHP Additional Info

There is no additional environmental historical preservation on **FAAST Distribution Pole and Conductor Repair - Ponce Group 8 (Distribution)**.

Final Reviews

Final Review

Reviewed By Soto Toro, Hildelix L.

Reviewed On 01/17/2023 12:42 PM AST

Review Comments

Approved for obligation. Applicant is responsible to comply with all requirements.

Recipient Review

Reviewed By Salgado, Gabriel

Reviewed On 01/17/2023 4:08 PM AST

Review Comments

Recipient review completed. Project is ready for 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 \$952,661.42 for subaward number 11196 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 Miller, Thomas

Signed On 01/18/2023

Department of Homeland Security Federal Emergency Management Agency

General Info

Project #	682910	PW #	11212	Project Type	Specialized
Project Category	F - Utilities	Applicant	PR Electric Power Authority (000-UA2QU-00)		
Project Title	FAAST [Distribution Pole and Conductor Repair - Bayamón Group 7] (Distribution)			Event	4339DR-PR (4339DR)
Project Size	Large	Declaration Date	9/20/2017		
Activity Completion Date	9/20/2027	Incident Start Date	9/17/2017		
Process Step	Obligated	Incident End Date	11/15/2017		

Damage Description and Dimensions

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

Damage #429496; FAASSt [Monterrey 9502-03, Monterrey PDS 13kV 9503-06, Dorado Pueblo 9202-04, Dorado TC 9203-04, Dorado TC PDS 13kV 9207-08, Naranjito 9801-01]

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

General Facility Information:

- **Facility Type:** Power generation, transmission, and distribution facilities
- **Facility:** Bayamon TC 13: Replace Circuit Breaker and Upgrade P&C
- **Facility Description:** Bayamon Transmission Center (TC)
- **Approx. Year Built:** 1980
- **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

429496

FAASSt [Monterrey 9502-03, Monterrey PDS 13kV 9503-06, Dorado Pueblo 9202-04, Dorado TC 9203-04, Dora













INTRODUCTION

The purpose of this document is to submit for approval the detailed Scope of Work ("SOW") to COR3 and FEMA for the Distribution Pole and Conductor Repair – Bayamon Group 7 Project 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, restore, or replace the eligible facilities.

LUMA submits this detailed SOW pursuant to the Transmission and Distribution Operations & Maintenance Agreement between 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 F 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 Transmission and Distribution System submitted to FEMA.

FACILITIES

The facilities listed below are part of the feeder systems in the Bayamon Region. These interconnected and inter-functional distribution feeders (sites) are part of the electrical distribution system. All the feeders originate from a substation (start) and serve customers along the route to various locations (end). The coordinates shown below as "GPS End" represent the end of the mainline backbone of each feeder.

Name	Feeder Number	# Of Poles to Replace	GPS Start	GPS End	Phase	Voltage Level (kV)	Constructed Date
Dorado Pueblo	9202-04	0			3 Phase	8.32	
Dorado Tc	9203-04	3			3 Phase	8.32	
Dorado Tc Pds 13kv	9207-08	5			3 Phase	13.2	
Monterrey	9502-03	0			3 Phase	8.32	
Monterrey Pds 13kv	9503-06	10			3 Phase	13.2	
Naranjito	9801-01	5			3 Phase	8.32	

PROJECT SCOPE OF WORK

Below includes a breakdown of pole replacement by feeder for "Proposed 428 Public Assistance Scope of Work" and "Proposed 406 Hazard Mitigation Grant Program Scope of Work", followed by descriptions of each work type specific to the Scope of Work for this group.

Proposed 428 Public Assistance Scope of Work:

Feeder 9202-04 Scope:

- No 428 PA work identified

Feeder 9203-04 Scope:

Remove	Quantity	Install	Quantity
35ft Wood Pole(s)	1	50ft H4 Concrete Pole(s)	1
35ft Wood Pole(s)	1	50ft H6 Concrete Pole(s)	1
45ft Wood Pole(s)	1	50ft H4 Concrete Pole(s)	1

Feeder 9207-08 Scope:

Remove	Quantity	Install	Quantity
40ft Concrete Pole(s)	5	50ft H4 Concrete Pole(s)	5

Feeder 9502-03 Scope:

- No 428 PA work identified

Feeder 9503-06 Scope:

Remove	Quantity	Install	Quantity
35ft Concrete Pole(s)	1	50ft Galvanized Steel S8 Pole(s)	1
35ft Concrete Pole(s)	1	50ft H4 Concrete Pole(s)	1
40ft Concrete Pole(s)	7	50ft H4 Concrete Pole(s)	7
45ft Steel Pole(s)	1	50ft H4 Concrete Pole(s)	1

Feeder 9801-01 Scope:

Remove	Quantity	Install	Quantity
35ft Wood Pole(s)	1	50ft H4 Concrete Pole(s)	1
35ft Wood Pole(s)	1	50ft H6 Concrete Pole(s)	1
40ft Wood Pole(s)	1	50ft H4 Concrete Pole(s)	1
40ft Wood Pole(s)	1	50ft H6 Concrete Pole(s)	1
50ft Wood Pole(s)	1	60ft H6 Concrete Pole(s)	1

Detail Descriptions for Planned Field Work:

Pole Replacement

- Remove existing poles, including hardware and install new poles, including hardware, in the same location. If unable to install the

replacement in the same location, the pole will be installed within 3 feet.

- All pole installations are to replace existing pole locations; no new locations are included in this scope of work. Refer to Appendix J- EHP Checklist, column C (Soil area and depth impact) for the depths of the poles to be installed.
- Remove the existing foundations as specified in Appendix J- EHP Checklist column I (Concrete Foundation) and replace them with a new concrete foundation bases as per Appendix D-Distribution Construction Standards (Concrete Base Standard). The maximum auger width used is 42" and the maximum depth drilled is 15ft.
- New guy wire/ anchors are to be installed in compliance with Appendix D- Distribution Construction Standards within 3ft from the existing anchor. The maximum distance an anchor will be installed for a 50ft pole is 25ft from the base of the pole, within the right-of-way.
- Brushing will be required in locations to gain access to the pole for replacement. Brushing refers to the removal and clearing of vegetation solely to the extent that it allows crews to conduct work. The brushing of vegetation will be limited to a 15 ft radius surrounding the surface of the pole but not to exceed the width of the right-of-way for the exclusive purpose of gaining access to the pole to conduct repairs. Please see Appendix J- EHP Checklist column H (Brushing/Clearing), Refer to Appendix B- Maps and Pictures for pictures of the vegetation.
- All work for this program will be performed within the current electrical right-of-way.
- This scope of work will not affect water or sewer utility services.

Material Disposal

- PCBs, oil from the transformer and breakers, sealants, and other chemical wastes typical of a construction site are considered hazardous waste and will be disposed of by the contractor in approved facilities as per applicable local regulations. Refer to Appendix C- Waste Management Plan.
- The type of debris that may be found in the process of removal are luminaires, pole arms, photocells, metal scrap, wiring, concrete, steel, and wood poles, etc. The debris will be separated and taken to an approved waste disposal facility in compliance with applicable local regulations. Refer to Appendix C- Waste Management Plan.
- Transformers will be contained and returned to LUMA in compliance with applicable local regulations. The removal of the transformer will require testing of the existing oil for PCB levels, drain oil, and delivery to the approved waste disposal site as per Environmental Regulations. Refer to Appendix C- Waste Management Plan.

Access Roads

- Poles are in close proximity to the roads and are site accessible. The construction of access roads is not required for this scope of work. Refer to Appendix J- EHP Checklist in column G "Site Accessible"

Staging Area

- All materials are stored and dispatched from the Bayamon Regional Warehouse. Refer to Appendix L- Warehouse locations. No additional or temporary staging areas are required.

Fill, gravel, sand, etc.:

- Fill, Gravel, and Sand materials will be obtained from an approved supplier as referenced in Appendix A- Approved Supplier List.

List of Equipment to be used:

- Skid Steer, Excavator, Dump trucks, Manlifts, 120-Ton Motor Crane, Boom Trucks 45-ton Crane, Zoom Boom, Air compressor, Truck Digger, Water truck, Pump Truck, Concrete Vibrator, Oil Tanker, Filtering Machine and Flatbed platform.
- Vegetation will be removed utilizing machete, chainsaw, electric pruner, telescopic pole pruner, bucket truck, and/or chipper

Specific List of Permits Required:

- DTOP Endorsements & Municipality Notifications.
- Excavation and Demolition Notification in Department of Transportation and Public Works Agency - (DTOP).

- LUMA will provide proof of all permits.

Proposed 406 Hazard Mitigation Grant Program Scope of Work:

Replace damaged poles with higher-rated poles as referenced in Appendix H in compliance with Appendix J of the Public Assistance Program and Policy Guide. Design standard has increase from FEMA consensus-based standards (145mph rating) to new LUMA standard (160mph rating)

Utilize 406 Hazard Mitigation Pole below in place of 428 Identified Pole	Quantity
50ft Galvanized Steel S8 pole(s)	21
60ft Galvanized Steel S8 pole(s)	1

TYPE OF PROJECT

Restoration to Codes/Standards:

Restores the facility(ies) to pre-disaster function and approved codes/standard

CODES AND STANDARDS

The following will be referenced when applying specific codes, specifications, and standards to the project design:

1. Consensus-based codes, per FEMA (Public Assistance Alternative Procedures (Section 428) Guide for Permanent Work FEMA-4339-DR-PR February 2020).
2. Industry standards per FEMA Recovery Policy FP-104-009-5, Version 2, Implementing Section 20601 of the 2018 Bipartisan Budget Act through the Public Assistance Program.
3. FEMA Recovery Interim Policy FP-104-009-11 Version 2.1, Consensus-Based Codes, Specifications, and Standards for Public Assistance.
4. LUMA's latest Design Criteria Document (DCD) which aggregates the design considerations for most of the consensus-based codes, specifications, and standards listed in FEMA Recovery Interim Policy 104-009-11 Version 2.1 (December 20, 2019).

PROJECT ESTIMATE

The estimated costs (Class 3 Accuracy +/-30%) to complete the project are captured in the table below. The cost estimate was developed utilizing preliminary Architectural and Engineering design information and may be subject to change. LUMA has allocated 10% of the project cost for the mitigation of potential known risks.

Project Cost Estimate	Total	428 Public Assistance	406 Hazard Mitigation
Planning, Permits and Applications	\$12,374	\$12,374	\$0
Environmental Management	\$17,687	\$17,687	\$0
Engineering	\$54,465	\$46,112	\$8,353
Project Management	\$27,233	\$23,056	\$4,177
Distribution Line	\$544,652	\$461,121	\$83,531
Contingency	\$65,641	\$56,035	\$9,606
Total Project Cost Estimate:	\$722,052	\$616,385	\$105,667

FAASt Project # 682910 (428) Total	\$517,156
FAASt Project # 682910 (406) Total	\$105,667
FAASt A&E #335168 Total	\$99,229
Total Cost	\$722,052

Please refer to Appendix H for Cost Estimate Details.

428 Work To Be Completed (WTBC): \$616,385

428 A&E Deduction (Global A&E FAASt 335168) -\$99,229

428 Project Total Cost: \$517,156

Project Notes:

1. The permanent staging area will be located inside the existing LUMA Bayamon Technical Yard ([REDACTED]), no additional or temporary staging areas are required. The expected use is to stage materials to be installed.
2. Refer to detailed SOW provided in document named: 682910-DR4339PR-Detailed SOW Bayamon Group 7 Rev0.pdf
3. For reference documents Appendix A thru K, see file labeled: 682910-DR4339PR-Detailed SOW Bayamon Group 7 Rev0.pdf. The corresponding Appendix files are in Documents section in GM.
4. For EHP Requirements, refer to pages 6 to 7 of the detailed SOW and reference documents: Appendix J & K.
5. Architectural and Engineering (A&E) costs are deducted given previously obligated Global A&E Project for the subject FAASt PREPA work (see project: 335168 - FAASt A&E PREPA).

406 HMP Scope

Project number: 682910 FAASt Distribution Pole and Conductor Repair – Bayamon Group 7 (Distribution)

Damage #429496; FAASt Distribution Pole and Conductor Repair - Bayamon Group 7.

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

Location: Bayamon, 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 "loss of power" 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).

Project #682910 (Distribution Poles & Conductors Repair – Bayamon Group 7).

The Distribution Pole and Conductor Repair-Bayamon Group 7 consists of 6 interconnected and inter-functional distribution feeders (sites) establish the electrical distribution system as follows: Dorado Pueblo 9202-04, Dorato TC 9203-04, Dorado TC PDS 13Kv 9207-08, Monterrey 9502-03, Monterrey PDS 13Kv 9503-06, Naranjito 9801-01.

The Method of Repair (MOR) included the replacement of the damaged critical distribution poles (wood, concrete or galvanized), cross-arms, insulators, and all associated hardware needed for the new structure. 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 by increasing the wind tolerance to +160mph. Note: The FEMA Accelerated Award Strategy (FAAST) MOR included the PREPA distribution standards and specifications that were based on a 145mph sustained winds. However, the new PREPA Standard 2021 updates the design-criteria to a 160mph sustained winds resistant. 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)*

➤ To avoid damage in a future event, the Applicant is proposing as a mitigation measure, increase the strength of the poles by increasing the wind tolerance of all materials to +160mph. The FAAsT MOR included the PREPA distribution standards and specifications that were based on a 145mph sustained winds. However, the new PREPA Standard 2021 updates the design-criteria to a 160mph sustained winds resistant. 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.

➤ [Distribution Critical Poles Replacement] 406 Mitigation Scope of Work:

1. Feeder 9202-04 Scope(ea):

- No 428 PA work Identified.

1. Feeder 9203-04 Scope(ea):

- Replace one (2) 50ft concrete H4 pole by one (2) 50ft Galvanized S8 pole.
- Replace one (1) 50ft concrete H6 pole by one (1) 50ft Galvanized S8 pole.

1. Feeder 9207-08 Scope(ea):

- Replace one (5) 50ft concrete H4 pole by one (5) 50ft Galvanized S8 pole.

1. Feeder 9502-03 Scope:

- No 428 PA work Identified

1. Feeder 9503-06 Scope(ea):

- Replace one (9) 50ft concrete H4 pole by one (9) 50ft Galvanized S8 pole.

1. Feeder 9801-01 Scope:

- Replace one (2) 50ft concrete H6 pole by one (2) 50ft Galvanized S8 pole.
- Replace one (1) 60ft concrete H6 pole by one (1) 60ft Galvanized S8 pole.
- Replace one (2) 50ft concrete H4 pole by one (2) 50ft Galvanized S8 pole

Hazard Mitigation Proposal (HMP) Cost:

Total Net Hazard Mitigation Cost (Base Cost) =	\$ 83,531.00
+ HM (Applicant A&E, Management & General Conditions) =	<u>\$ 22,135.72</u>
Hazard Mitigation Total Cost =	\$ 105,667.00

HMP Cost-Effectiveness Calculations:

Eligible Cost of PA repair Scope of Work per DI: \$461,121.00

Net Cost of 406 HMP per DI: \$83,531.00

$HMR = (\text{Total Net Hazard Mitigation Cost} / \text{Project Net In-Kind Repair Cost}) \times 100$

$HMR = (\$83,531.00 / \$461,121.00) \times 100 = 18.11\% (< 100\% \text{ and Appendix J}).$

* 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.

Cost

Code	Quantity	Unit	Total Cost	Section
3510 (A&E Deduction (Global A&E FAASt 335168 Version 0))	1.00	Lump Sum	(\$99,229.00)	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	\$616,385.00	Uncompleted

CRC Gross Cost \$517,156.00

Total 406 HMP Cost \$105,667.00

Total Insurance Reductions \$0.00

CRC Net Cost \$622,823.00

Federal Share (90.00%) \$560,540.70

Non-Federal Share (10.00%) \$62,282.30

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-11212(13229)	\$622,823.00	90 %	\$560,540.70	1/30/2023

Drawdown History

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

Obligation History

Version #	Date Obligated	Obligated Cost	Cost Share	IFMIS Status	IFMIS Obligation #
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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.
- 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

1/12/2023

GENERAL INFORMATION

Event: 4339DR-PR

Project: SP 682910

Category of Work: Cat F - Utilities

Applicant: PR Electric Power Authority

Event Type: Hurricane / Maria

Cause of Loss: Wind / Wind Driven Rain

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

Total Public Assistance Amount: \$622,823.00 (CRC Gross Cost \$517,156.00 + HMP Cost \$105,667.00)

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: No

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

Damaged Inventory (DI) #429496:

FAAST [Monterrey 9502-03, Monterrey PDS 13kV 9503-06, Dorado Pueblo 9202-04, Dorado TC 9203-04, Dorado TC PDS 13kV 9207-08, Naranjito 9801-01]

Location Description: Bayamon Transmission Center (TC)

GPS Coordinates: [REDACTED]

Cause of Loss: Wind / Wind Driven Rain

SOV / Schedule #: Not insured

SOV / Schedule Amount: Not insured

Applicable Deductible Amount: N/A

Damage Inventory Amount: \$622,823.00 (CRC Gross Cost \$517,156.00 + HMP Cost \$105,667.00)

-

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 as coverage is not anticipated. 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 "FAAST [Monterrey 9502-03, Monterrey PDS 13kV 9503-06, Dorado Pueblo 9202-04, Dorado TC 9203-04, Dorado TC PDS 13kV 9207-08, Naranjito 9801-01]" 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 to 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).

Charlotte De Jesus Negron, PA Insurance Specialist
CRC Atlantic, Guaynabo, PR

O&M Requirements

There are no Obtain and Maintain Requirements on **FAAST**
[Distribution Pole and Conductor Repair - Bayamón Group
7] (Distribution).

406 Mitigation

There is no additional mitigation information on **FAAST**
[Distribution Pole and Conductor Repair - Bayamón Group
7] (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 Puerto Rico Permits Management Office (OGPe) prior to initiating work and comply with any conditions of the permit established by the Planning Board (JP) for constructions in floodplains. 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) - Conservation Measures for *Epictates inornatus* applies to Feeder 9801-01. 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 #s: 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 #s: 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.

- National Historic Preservation Act (NHPA) - 1. The Subrecipient and/or Subrecipient's contractor shall follow the Low Impact Debris Removal Stipulations (LIDRS) as stated in Appendix E of the Project-Specific Programmatic Agreement Among FEMA, the SHPO, ACHP, COR3, and PREPA (PSPA), executed on August 2, 2022. 2. Unexpected Discoveries: Pursuant to Stipulation III.B of the PSPA, if, in the course of implementing this Individual Undertaking(s), previously unidentified structures, sites, buildings, objects, districts, or archaeological deposits, that may be eligible for listing in the National Register, or human remains are uncovered, or if it appears that an Individual Undertaking has affected or will affect a previously identified historic property in an unanticipated manner, the contractor must notify Subrecipient who will immediately notify the Recipient. Work must stop in the vicinity of the discovery and measures must be taken to protect the discovery and avoid additional harm. 3. Additional staging areas and/or work pads within work site area haven't been identified yet. The Recipient/Subrecipient and/or private operator must provide the information of any additional staging areas or work pads for EHP evaluation as soon as available specially if any construction activity will be necessary to prepare the site(s). Information for staging areas and/or work pads confined to previously disturbed or hardened surfaces can be provided at close-out.
- 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. The applicant is responsible to ensure damaged transformers are handled, managed, and disposed of in accordance with all federal and state laws and requirements. Downed electrical equipment may contain toxic and hazardous materials, such as polychlorinated biphenyls (PCBs), and may spill these materials if a rupture occurs. Applicant is responsible for screening transformers that do or may contain PCBs and the area where any related spill occurred. The applicant is then responsible to handle, manage, dispose of, or recycle damaged equipment and contaminated soil as appropriate. Where possible, temporary measures should be implemented to prevent, treat, or contain further releases or mitigate the migration of PCBs into the environment. If damaged equipment or material storage containers must be stored temporarily, containers should be placed on hardened surface areas, such as a concrete or an asphalt for no more than 90 days. Excavated contaminated material should be disposed of in accordance with federal and state laws and requirements. 3. 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 with the requirements of the local and federal agencies. Noncompliance with these requirements may jeopardize receipt of federal funds.
- NEPA Determination - 1. Additional staging areas and/or work pads within work site area haven't been identified yet. The Recipient/Subrecipient and/or private operator must provide the information of any additional staging areas or work pads for EHP evaluation as soon as available specially if any construction activity will be necessary to prepare the site(s). Information for staging areas and/or work pads confined to previously disturbed or hardened surfaces can be provided at close-out. 2. All borrow or fill material must come from pre-existing stockpiles, material reclaimed from maintained roadside ditches (provided the designed width or depth of the ditch is not increased), or commercially procured material from a source existing prior to the event. For any FEMA-funded project requiring the use of a non-commercial source or a commercial source that was not permitted to operate prior to the event (e.g., a new pit, agricultural fields, road ROWs, etc.) in whole or in part, regardless of cost, the Applicant must notify FEMA and the Recipient prior to extracting material. FEMA must review the source for compliance with all applicable federal environmental planning and historic preservation laws and executive orders prior to a Sub-recipient or their contractor beginning borrow extraction. Consultation and regulatory permitting may be required. Non-compliance with this requirement may jeopardize receipt of federal funding. Documentation of borrow sources utilized is required at close-out and must include fill type (private, commercial, etc.), name, fill site GPS coordinates (not of the company/governmental office), address, and type of material.

There is no additional environmental historical preservation on **FAASt [Distribution Pole and Conductor Repair - Bayamón Group 7] (Distribution)**.

Final Reviews

Final Review

Reviewed By CHIRICO, JOSEPH A.

Reviewed On 01/20/2023 8:38 AM AST

Review Comments

Approved for obligation - The applicant is responsible to comply with all requirements.

Recipient Review

Reviewed By Salgado, Gabriel

Reviewed On 01/20/2023 9:45 AM AST

Review Comments

Recipient review completed. Project is ready for 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 \$622,823.00 for subaward number 11212 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 Miller, Thomas

Signed On 01/20/2023

Department of Homeland Security Federal Emergency Management Agency

General Info

Project #	688096	PW #	11214	Project Type	Specialized
Project Category	F - Utilities	Applicant	PR Electric Power Authority (000-UA2QU-00)		
Project Title	FAAST [Distribution Pole and Conductor Repair - Caguas Group 15] (Distribution)			Event	4339DR-PR (4339DR)
Project Size	Small	Declaration Date	9/20/2017		
Activity Completion Date	9/20/2027	Incident Start Date	9/17/2017		
Process Step	Obligated	Incident End Date	11/15/2017		

Damage Description and Dimensions

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

Damage #1257185; FAASt [Distribution Pole and Conductor Repair - Caguas Group 15] (Pueblito del Rio 2803-03, Naguabo 2701-02, Rio Blanco 2702-01, Yabucoa Pueblo 2901-01, Yabucoa Pueblo 2901-02 and Yabucoa Pueblo 2901-04)

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:** Distribution Feeders (Pueblito del Rio 2803-03, Naguabo 2701-02, Rio Blanco 2702-01, Yabucoa Pueblo 2901-01, Yabucoa Pueblo 2901-02 and Yabucoa Pueblo 2901-04)
- **Facility Description:** The facilities listed below are part of the feeder systems in the Caguas Region. These interconnected and inter-functional distribution feeders (sites) establish the electrical distribution system. The feeders all originate from a substation (start) and serve customers along a route to various locations (end). The coordinates represented by GPS end is the end of the mainline backbone of each feeder.
- **Approx. Year Built:** 1970
- **Start GPS Latitude/Longitude:** [REDACTED]
- **End 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

1257185

FAAST [Distribution Pole and Conductor Repair - Caguas Group 15] (Pueblito del Rio

2803-03, Naguabo



INTRODUCTION

The purpose of this document is to submit for approval the detailed Scope of Work ("SOW") to COR3 and FEMA for the Distribution Pole and Conductor Repair – Caguas Group 15 Project 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, restore, or replace the eligible facilities.

LUMA submits this detailed SOW pursuant to the Transmission and Distribution Operations & Maintenance Agreement between 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 F 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 Transmission and Distribution System submitted to FEMA.

FACILITIES

The facilities listed below are part of the feeder systems in the Caguas Region. These interconnected and inter-functional distribution feeders (sites) are part of the electrical distribution system. All the feeders originate from a substation (start) and serve customers along the route to various locations (end). The coordinates shown below as "GPS End" represent the end of the mainline backbone of each feeder.

Name	Feeder Number	# Of Poles to Replace	GPS Start	GPS End	Phase	Voltage Level (kV)	Constructed Date
RIO BLANCO	2702-01	1			3 Phase	8.32	More than 20 Years

PROJECT SCOPE OF WORK

Below includes a breakdown of pole replacement by feeder for "Proposed 428 Public Assistance Scope of Work" and "Proposed 406 Hazard Mitigation Grant Program Scope of Work", followed by descriptions of each work type specific to the Scope of Work for this group.

Proposed 428 Public Assistance Scope of Work:

Feeder 2702-01 Scope:

Remove	Quantity	Install	Quantity
40ft Wood Pole(s)	1	45ft H4 Concrete Pole(s)	1

Detail Descriptions for Planned Field Work:

Pole Replacement

- Remove existing poles, including hardware and install new poles, including hardware, in the same location. If unable to install the replacement in the same location, the pole will be installed within 3 feet.
- All pole installations are to replace existing pole locations; no new locations are included in this scope of work. Refer to Appendix J- EHP Checklist, column C (Soil area and depth impact) for the depths of the poles to be installed.
- Remove the existing foundations as specified in Appendix J- EHP Checklist column I (Concrete Foundation) and replace them

with a new concrete foundation bases as per Appendix D-Distribution Construction Standards (Concrete Base Standard). The maximum auger width used is 42" and the maximum depth drilled is 15ft.

- New guy wire/ anchors are to be installed in compliance with Appendix D- Distribution Construction Standards within 3ft from the existing anchor. The maximum distance an anchor will be installed for a 50ft pole is 25ft from the base of the pole, within the right-of-way.
- Brushing will be required in locations to gain access to the pole for replacement. Brushing refers to the removal and clearing of vegetation solely to the extent that it allows crews to conduct work. The brushing of vegetation will be limited to a 15 ft radius surrounding the surface of the pole but not to exceed the width of the right-of-way for the exclusive purpose of gaining access to the pole to conduct repairs. Please see Appendix J- EHP Checklist column H (Brushing/Clearing), Refer to Appendix B- Maps and Pictures for pictures of the vegetation.
- All work for this program will be performed within the current electrical right-of-way.
- This scope of work will not affect water or sewer utility services.

Material Disposal

- PCBs, oil from the transformer and breakers, sealants, and other chemical wastes typical of a construction site are considered hazardous waste and will be disposed of by the contractor in approved facilities as per applicable local regulations. Refer to Appendix C - Waste Management Plan.
- The type of debris that may be found in the process of removal are luminaires, pole arms, photocells, metal scrap, wiring, concrete, steel, and wood poles, etc. The debris will be separated and taken to an approved waste disposal facility in compliance with applicable local regulations. Refer to Appendix C- Waste Management Plan.
- Transformers will be contained and returned to LUMA in compliance with applicable local regulations. The removal of the transformer will require testing of the existing oil for PCB levels, drain oil, and delivery to the approved waste disposal site as per Environmental Regulations. Refer to Appendix C- Waste Management Plan.

Access Roads

- Poles are in close proximity to the roads and are site accessible. The construction of access roads is not required for this scope of work. Refer to Appendix J- EHP Checklist in column G "Site Accessible"

Staging Area

- All materials are stored and dispatched from the Caguas Regional Warehouse. Refer to Appendix L- Warehouse locations. No additional or temporary staging areas are required.

Fill, gravel, sand, etc.:

- Fill, Gravel, and Sand materials will be obtained from an approved supplier as referenced in Appendix A- Approved Supplier List.

List of Equipment to be used:

- Skid Steer, Excavator, Dump trucks, Manlifts, 120-Ton Motor Crane, Boom Trucks 45-ton Crane, Zoom Boom, Air compressor, Truck Digger, Water truck, Pump Truck, Concrete Vibrator, Oil Tanker, Filtering Machine and Flatbed platform.
- Vegetation will be removed utilizing machete, chainsaw, electric pruner, telescopic pole pruner, bucket truck, and/or chipper

Specific List of Permits Required:

- DTOP Endorsements & Municipality Notifications.
- Excavation and Demolition Notification in Department of Transportation and Public Works Agency - (DTOP).
- LUMA will provide proof of all permits.

PROJECT ESTIMATE

The estimated costs (Class 3 Accuracy +/-30%) to complete the project are captured in the table below. The cost estimate was developed utilizing preliminary Architectural and Engineering design information and may be subject to change. LUMA has

allocated 10% of the project cost for the mitigation of potential known risks.

Project Cost Estimate	Total	428 Public Assistance	406 Hazard Mitigation
Planning, Permits and Applications	\$538.00	\$538.00	\$0
Environmental Management	\$769.00	\$769.00	\$0
Engineering	\$2,369.20	\$1,908.30	\$460.90
Project Management	\$1,184.60	\$954.15	\$230.45
Distribution Line	\$23,692.00	\$19,083.00	\$4,609.00
Contingency	\$2,855.28	\$2,325.25	\$530.04
Total Project Cost Estimate:	\$31,408.08	\$25,577.70	\$5,830.39
FAAST Project # 688096 (428) Total			\$21,408.25
FAAST Project # 688096 (406) Total			\$5,830.39
FAAST A&E #335168 Total			\$4,169.45
Total Cost			\$31,408.08

Please refer to Appendix H for Cost Estimate Details.

428 Work To Be Completed (WTBC): \$25,577.70

428 A&E Deduction (Global A&E FAASt 335168) -\$4,169.45

428 Project Total Cost: \$21,408.25

For detailed cost estimate, please refers to document labeled: 688096-DR4339PR-Appendix H - Detail Cost Estimate - Caguas Group 15 Rev0.xlsx

Project Notes:

1. Refer to detailed SOW provided in document 688096-DR4339PR-Detailed SOW Caguas Group 15 Rev0.pdf
2. For reference documents Appendix A thru L
3. For EHP Requirements, refer to pages 5 to 7 of the detailed SOW and reference documents: Appendix J & K.
4. Architectural and Engineering (A&E) costs are deducted given previously obligated Global A&E Project for the subject FAASt PREPA work (see project: 335168 - FAASt A&E PREPA).

406 HMP Scope

Project number: 688096; FAASt [Distribution Pole and Conductor Repair – Caguas Group 15] (Distribution)

Damage #: 1257185; FAASt [Distribution Pole and Conductor Repair - Caguas Group 15]

Location: Caguas, 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 "loss of power" 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).

Project #688096 (Distribution Pole & Conductor Repair - Caguas Group 15] (Distribution)

The Distribution Pole and Conductor Repair - Caguas Group 15 consists of 1 interconnected and inter-functional distribution feeder (site) establish the electrical distribution system as follows: Rio Blanco 2702-01.

The Method of Repair (MOR) included the replacement of the damaged critical distribution poles (wood, concrete or galvanized), cross-arms, insulators, and all associated hardware needed for the new structure. 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 by increasing the wind tolerance to +160mph. Note: The FEMA Accelerated Award Strategy (FAAST) MOR included the PREPA distribution standards and specifications that were based on a 145mph sustained winds. However, the new PREPA Standard 2021 updates the design-criteria to a 160mph sustained winds resistant. 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)*

- To avoid damage in a future event, the Applicant is proposing as a mitigation measure, increase the strength of the poles by increasing the wind tolerance of all materials to +160mph. The FAAsT MOR included the PREPA distribution standards and specifications that were based on a 145mph sustained winds. However, the new PREPA Standard 2021 updates the design-criteria to a 160mph sustained winds resistant. 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.
- [Distribution Critical Poles Replacement] 406 Mitigation Scope of Work:
 - 1. Feeder 9401-02 Scope (4ea):
 - Replace one (1) 45ft concrete H4 pole by one (1) 50ft Galvanized Steel Pole S8

Hazard Mitigation Proposal (HMP) Cost:

Total Net Hazard Mitigation Cost (Base Cost) =	\$ 4,609.00
+ HM (Applicant A&E, Management & General Conditions) =	\$ 1,221.39
Hazard Mitigation Total Cost =	\$ 5,830.39

HMP Cost-Effectiveness Calculations:

Eligible Cost of PA repair Scope of Work per DI: \$19,083.00

Net Cost of 406 HMP per DI: \$4,609.00

HMR = (Total Net Hazard Mitigation Cost / Project Net In-Kind Repair Cost) x 100

HMR = (\$4,609.00 / \$19,083.00) x 100 = 24.15%

* 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.

Cost

Code	Quantity	Unit	Total Cost	Section
3510 (Engineering And Design Services (Prepa Fasst Global A & E 335168))	1.00	Lump Sum	(\$4,169.45)	Uncompleted
9001 (Contract (Prepa Faast Project 136271))	1.00	Lump Sum	\$25,577.70	Uncompleted

CRC Gross Cost \$21,408.25

Total 406 HMP Cost \$5,830.39

Total Insurance Reductions \$0.00

CRC Net Cost \$27,238.64

Federal Share (90.00%) \$24,514.78

Non-Federal Share (10.00%) \$2,723.86

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-11214(13230)	\$27,238.64	90 %	\$24,514.78	1/30/2023

Drawdown History

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

Obligation History

Version #	Date Obligated	Obligated Cost	Cost Share	IFMIS Status	IFMIS Obligation #
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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 all of its small projects and compliance with all environmental and historic preservation requirements within 180 days of the applicant's completion of its last small project, or the latest approved deadline, whichever is sooner.
- 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

1/12/2023

GENERAL INFORMATION

Event: 4339DR-PR

Project: SP 688096

Category of Work: Cat F - Utilities

Applicant: PR Electric Power Authority

Event Type: Hurricane / Maria

Cause of Loss: Wind / Wind Driven Rain

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

Total Public Assistance Amount: \$27,238.64 (CRC Gross Cost \$21,408.25 + HMP Cost \$5,830.39)

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: No

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

Damaged Inventory (DI) #1257185:

FAASt [Distribution Pole and Conductor Repair - Caguas Group 15] (Pueblito del Rio 2803-03, Naguabo 2701-02, Rio Blanco 2702-01, Yabucoa Pueblo 2901-01, Yabucoa Pueblo 2901-02 and Yabucoa Pueblo 2901-04)

Location Description: The facilities listed below are part of the feeder systems in the Caguas Region. These interconnected and inter-functional distribution feeders (sites) establish the electrical distribution system. The feeders all originate from a substation (start) and serve customers along a route to various locations (end). The coordinates represented by GPS end is the end of the mainline backbone of each feeder.

GPS Coordinates: [REDACTED]

Cause of Loss: Wind / Wind Driven Rain

SOV / Schedule #: Not insured

SOV / Schedule Amount: Not insured

Applicable Deductible Amount: N/A

Damage Inventory Amount: \$27,238.64 (CRC Gross Cost \$21,408.25 + HMP Cost \$5,830.39)

-

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 as coverage is not anticipated. 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 "FAAST [Distribution Pole and Conductor Repair - Caguas Group 15] (Pueblito del Rio 2803-03, Naguabo 2701-02, Rio Blanco 2702-01, Yabucoa Pueblo 2901-01, Yabucoa Pueblo 2901-02 and Yabucoa Pueblo 2901-04)" 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 to 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).

Charlotte De Jesus Negrón, PA Insurance Specialist
CRC Atlantic, Guaynabo, PR

O&M Requirements

There are no Obtain and Maintain Requirements on **FAAST [Distribution Pole and Conductor Repair - Caguas Group 15] (Distribution)**.

406 Mitigation

There is no additional mitigation information on **FAAST [Distribution Pole and Conductor Repair - Caguas Group 15] (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 - Condition is applicable for feeder 2702-01. Applicant must obtain any required permits from the Puerto Rico Permits Management Office (OGPe) prior to initiating work and comply with any conditions of the permit established by the Planning Board (JP) for constructions in floodplains. 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) - Conditions for the Puerto Rican Boa (*Epicrates inornatus*) are applicable for feeder 2702-01. 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 #s: 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) - Birds The below conservation measures apply to feeder 2702-01 for the following species: Puerto Rican parrot and Puerto Rican broad-winged 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 parrot (*Amazona vittata*): February to June and Puerto Rican broad-winged hawk (*Buteo platypterus*): 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.
- National Historic Preservation Act (NHPA) - a. The Subrecipient and/or Subrecipient's contractor shall follow the Low Impact Debris Removal Stipulations (LIDRS) as stated in Appendix E of the Project-Specific Programmatic Agreement Among FEMA, the SHPO, ACHP, COR3, and PREPA (PSPA), executed on August 2, 2022. b. Unexpected Discoveries: Pursuant to Stipulation III.B of the PSPA, if, in the course of implementing this Individual Undertaking(s), previously unidentified structures, sites, buildings, objects, districts, or archaeological deposits, that may be eligible for listing in the National Register, or human remains are uncovered, or if it appears that an Individual Undertaking has affected or will affect a previously identified historic property in an unanticipated manner, the contractor must notify Subrecipient who will immediately notify the Recipient. Work must stop in the vicinity of the discovery and measures must be taken to protect the discovery and avoid additional harm. c. Additional staging areas and/or work pads within work site area haven't been identified yet. The Recipient/Subrecipient and/or private operator must provide the information of any additional staging areas or work pads for EHP evaluation as soon as available specially if any construction activity will be necessary to prepare the site(s). Information for staging areas and/or work pads confined to previously disturbed or hardened surfaces can be provided at close-out.
- 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. The applicant is responsible to ensure damaged transformers are handled, managed and disposed of in accordance with all federal and state laws and requirements. Downed electrical equipment may contain toxic and hazardous materials, such as polychlorinated biphenyls (PCBs), and may spill these materials if a rupture occurs. Applicant is responsible for screening transformers that do or may contain PCBs and the area where any related spill occurred. The applicant is then responsible to handle, manage, dispose of, or recycle damaged equipment and contaminated soil as appropriate. Where possible, temporary measures should be implemented to prevent, treat, or contain further releases or mitigate the migration of PCBs into the environment. If damaged equipment or material storage containers must be stored temporarily, containers should be placed on hardened surface areas, such as a concrete or an asphalt for no more than 90 days. Excavated contaminated material should be disposed of in accordance with federal and state laws and requirements. 3. 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.

- NEPA Determination - 1. Additional staging areas and/or work pads within work site area haven't been identified yet. The Recipient/Subrecipient and/or private operator must provide the information of any additional staging areas or work pads for EHP evaluation as soon as available specially if any construction activity will be necessary to prepare the site(s). Information for staging areas and/or work pads confined to previously disturbed or hardened surfaces can be provided at close-out. 2. All borrow or fill material must come from pre-existing stockpiles, material reclaimed from maintained roadside ditches (provided the designed width or depth of the ditch is not increased), or commercially procured material from a source existing prior to the event. For any FEMA-funded project requiring the use of a non-commercial source or a commercial source that was not permitted to operate prior to the event (e.g., a new pit, agricultural fields, road ROWs, etc.) in whole or in part, regardless of cost, the Applicant must notify FEMA and the Recipient prior to extracting material. FEMA must review the source for compliance with all applicable federal environmental planning and historic preservation laws and executive orders prior to a Sub-recipient or their contractor beginning borrow extraction. Consultation and regulatory permitting may be required. Non-compliance with this requirement may jeopardize receipt of federal funding. Documentation of borrow sources utilized is required at close-out and must include fill type (private, commercial, etc.), name, fill site GPS coordinates (not of the company/governmental office), address, and type of material.

EHP Additional Info

There is no additional environmental historical preservation on **FAASt [Distribution Pole and Conductor Repair - Caguas Group 15] (Distribution)**.

Final Reviews

Final Review

Reviewed By CHIRICO, JOSEPH A.

Reviewed On 01/20/2023 8:10 AM AST

Review Comments

Approved for obligation - the applicant is responsible to comply with all applicable requirements.

Recipient Review

Reviewed By Salgado, Gabriel

Reviewed On 01/20/2023 9:50 AM AST

Review Comments

Recipient review completed. Project is ready for Applicant review.

Project Signatures

Signed By Miller, Thomas

Signed On 01/20/2023

Department of Homeland Security Federal Emergency Management Agency

General Info

Project #	688627	P/W #	11193	Project Type	Specialized
Project Category	F - Utilities	Applicant	PR Electric Power Authority (000-UA2QU-00)		
Project Title	FAASt [Distribution Pole and Conductor Repair - Arecibo Group 9] (Distribution)			Event	4339DR-PR (4339DR)
Project Size	Large	Declaration Date	9/20/2017		
Activity Completion Date	9/20/2027	Incident Start Date	9/17/2017		
Process Step	Obligated	Incident End Date	11/15/2017		

Damage Description and Dimensions

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

Damage #1257526; FAASt : Distribution Pole and Conductor Repair - Arecibo Group 9 (MANATÍ PUEBLO -8405-01, FLORIDA -8602-01, 8602-03, CIALES -8701-04, BARCELONETA PUEBLO -8504-03 , CRUCE DAVILA -8501-01)

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:** Distribution pole and conductor - MANATÍ PUEBLO -8405-01, FLORIDA -8602-01, 8602-03, CIALES -8701-04, BARCELONETA PUEBLO -8504-03 , CRUCE DAVILA -8501-01)
- **Facility Description:** The specific facilities included in this project are: poles and structures (including their foundations), framing and insulators, load break switches (manual and automated), capacitor banks, voltage regulators, transformers (including lightning arresters and fuse cut-outs), conductors, guy wires, anchoring, grounding assemblies, underground cable, underground cable systems, fault interrupting equipment (fuses, reclosers, and sectionalizers), and any other associated components.
- **Approx. Year Built:** 1980
- **Start GPS Latitude/Longitude:** [REDACTED]
- **End 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

1257526

FAASt : Distribution Pole and Conductor Repair - Arecibo Group 9 (MANATÍ PUEBLO -8405-01, FLORIDA -8

INTRODUCTION

The purpose of this document is to submit for approval the detailed Scope of Work ("SOW") to COR3 and FEMA for the Distribution Pole and Conductor Repair – Arecibo Group 9 Project 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, restore, or replace the eligible facilities.

LUMA submits this detailed SOW pursuant to the Transmission and Distribution Operations & Maintenance Agreement between 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 F 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 Transmission and Distribution System submitted to FEMA.

FACILITIES

The facilities listed below are part of the feeder systems in the Arecibo Region. These interconnected and inter-functional distribution feeders (sites) are part of the electrical distribution system. All the feeders originate from a substation (start) and serve customers along the route to various locations (end). The coordinates shown below as "GPS End" represent the end of the mainline backbone of each feeder.

Name	Feeder Number	# Of Poles to Replace	GPS Start	GPS End	Phase	Voltage Level (kV)	Constructed Date
MANATÍ PUEBLO	8405-01	2	██████████ ██████████	██████████ ██████████	3 Phase	13.2	More than 20 Years
FLORIDA	8602-01	2	██████████	██████████	3 Phase	4.16	More than 20 Years
FLORIDA	8602-03	10	██████████	██████████	3 Phase	4.16	More than 20 Years

PROJECT SCOPE OF WORK

Below includes a breakdown of pole replacement by feeder for "Proposed 428 Public Assistance Scope of Work" and "Proposed 406 Hazard Mitigation Grant Program Scope of Work", followed by descriptions of each work type specific to the Scope of Work for this group.

Proposed 428 Public Assistance Scope of Work:

Feeder 8405-01 Scope:

Remove	Quantity	Install	Quantity
35ft Concrete Pole(s)	2	50ft H6 Concrete Pole(s)	2

Feeder 8602-01 Scope:

Remove	Quantity	Install	Quantity
35ft Wood Pole(s)	1	45ft H4 Concrete Pole(s)	1
45ft Wood Pole(s)	1	50ft H6 Concrete Pole(s)	1

Feeder 8602-03 Scope:

Remove	Quantity	Install	Quantity
35ft Wood Pole(s)	3	45ft H4 Concrete Pole(s)	3
35ft Wood Pole(s)	1	50ft H6 Concrete Pole(s)	1
35ft Concrete Pole(s)	2	45ft H4 Concrete Pole(s)	2
40ft Concrete Pole(s)	1	50ft H6 Concrete Pole(s)	1
45ft Wood Pole(s)	1	45ft H4 Concrete Pole(s)	1
45ft Wood Pole(s)	1	45ft H6 Concrete Pole(s)	1
45ft Wood Pole(s)	1	50ft H6 Concrete Pole(s)	1

Detail Descriptions for Planned Field Work:

Pole Replacement

- Remove existing poles, including hardware and install new poles, including hardware, in the same location. If unable to install the replacement in the same location, the pole will be installed within 3 feet.
- All pole installations are to replace existing pole locations; no new locations are included in this scope of work. Refer to Appendix J- EHP Checklist, column C (Soil area and depth impact) for the depths of the poles to be installed.
- Remove the existing foundations as specified in Appendix J- EHP Checklist column I (Concrete Foundation) and replace them with a new concrete foundation bases as per Appendix D-Distribution Construction Standards (Concrete Base Standard). The maximum auger width used is 42" and the maximum depth drilled is 15ft.
- New guy wire/ anchors are to be installed in compliance with Appendix D- Distribution Construction Standards within 3ft from the existing anchor. The maximum distance an anchor will be installed for a 50ft pole is 25ft from the base of the pole, within the right-of-way.
- Brushing will be required in locations to gain access to the pole for replacement. Brushing refers to the removal and clearing of vegetation solely to the extent that it allows crews to conduct work. The brushing of vegetation will be limited to a 15 ft radius surrounding the surface of the pole but not to exceed the width of the right-of-way for the exclusive purpose of gaining access to the pole to conduct repairs. Please see Appendix J- EHP Checklist column H (Brushing/Clearing), Refer to Appendix B- Maps and Pictures for pictures of the vegetation.
- All work for this program will be performed within the current electrical right-of-way.
- This scope of work will not affect water or sewer utility services.

Material Disposal

- PCBs, oil from the transformer and breakers, sealants, and other chemical wastes typical of a construction site are considered hazardous waste and will be disposed of by the contractor in approved facilities as per applicable local regulations. Refer to Appendix C - Waste Management Plan.
- The type of debris that may be found in the process of removal are luminaires, pole arms, photocells, metal scrap, wiring, concrete, steel, and wood poles, etc. The debris will be separated and taken to an approved waste disposal facility in compliance with applicable local regulations. Refer to Appendix C- Waste Management Plan.
- Transformers will be contained and returned to LUMA in compliance with applicable local regulations. The removal of the transformer will require testing of the existing oil for PCB levels, drain oil, and delivery to the approved waste disposal site as per Environmental Regulations. Refer to Appendix C- Waste Management Plan.

Access Roads

- Poles are in close proximity to the roads and are site accessible. The construction of access roads is not required for this scope of work. Refer to Appendix J- EHP Checklist in column G "Site Accessible"

Staging Area

- All materials are stored and dispatched from the Arecibo Regional Warehouse. Refer to Appendix L- Warehouse locations. No additional or temporary staging areas are required.

Fill, gravel, sand, etc.:

- Fill, Gravel, and Sand materials will be obtained from an approved supplier as referenced in Appendix A- Approved Supplier List.

List of Equipment to be used:

- Skid Steer, Excavator, Dump trucks, Manlifts, 120-Ton Motor Crane, Boom Trucks 45-ton Crane, Zoom Boom, Air compressor, Truck Digger, Water truck, Pump Truck, Concrete Vibrator, Oil Tanker, Filtering Machine and Flatbed platform.
- Vegetation will be removed utilizing machete, chainsaw, electric pruner, telescopic pole pruner, bucket truck, and/or chipper

Specific List of Permits Required:

- DTP Endorsements & Municipality Notifications.
- Excavation and Demolition Notification in Department of Transportation and Public Works Agency - (DTP).
- LUMA will provide proof of all permits.

PROJECT ESTIMATE

The estimated costs (Class 3 Accuracy +/-30%) to complete the project are captured in the table below. The cost estimate was developed utilizing preliminary Architectural and Engineering design information and may be subject to change. LUMA has allocated 10% of the project cost for the mitigation of potential known risks.

Project Cost Estimate	Total	428 Public Assistance	406 Hazard Mitigation
Planning, Permits and Applications	\$7,532	\$7,532	\$0
Environmental Management	\$10,766	\$10,766	\$0
Engineering	\$32,787	\$27,080	\$5,707
Project Management	\$16,393	\$13,540	\$2,853
Distribution Line	\$327,868	\$270,802	\$57,066
Contingency	\$39,535	\$32,972	\$6,563
Total Project Cost Estimate:	\$434,881	\$362,692	\$72,188
FAASt Project # 688627 (428) Total		\$303,774	
FAASt Project # 688627 (406) Total		\$72,188	
FAASt A&E #335168 Total		\$58,918	
Total Cost		\$434,881	

Please refer to Appendix H for Cost Estimate Details.

428 Work To Be Completed (WTBC): \$362,692

428 A&E Deduction (Global A&E FAASt 335168) -\$58,918

428 Project Total Cost: \$303,774

For detailed cost estimate, please refers to document labeled: 688627-DR4339PR-Appendix H - Detail Cost Estimate - Arecibo Group 9 Rev0.xlsx

Project Notes:

1. Refer to detailed SOW provided in document 688627-DR4339PR-Detailed SOW Arecibo Group 9 Rev0.pdf
2. For reference documents Appendix A thru L
3. For EHP Requirements, refer to pages 5 to 7 of the detailed SOW and reference documents: Appendix J & K.
4. Architectural and Engineering (A&E) costs are deducted given previously obligated Global A&E Project for the subject FAASt PREPA work (see project: 335158 - FAASt A&E PREPA).

406 HMP Scope

Project number: 688627; FAASt [Distribution Pole and Conductor Repair - Arecibo Group 9] (Distribution)

Damage # 1257526; FAASt: Distribution Pole and Conductor Repair - Arecibo Group 9 (MANATÍ PUEBLO -8405-01, FLORIDA -860 01, 8602-03, CIALES -8701-04, BARCELONETA PUEBLO -8504-03, CRUCE DAVILA -8501-01).

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

Location: Arecibo, 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 "loss of power" 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).

Project #688627 (Distribution Poles & Conductors Repair/Replacement).

The Distribution Pole and Conductor Repair-Arecibo Group 9 consists of 3 interconnected and inter-functional distribution feeders (sites) establish the electrical distribution system as follows: Manati Pueblo 8405-01; Florida 8602-01; Florida 8602-03).

The Method of Repair (MOR) included the replacement of the damaged critical distribution poles (wood, concrete or galvanized), cross-arms, insulators, and all associated hardware needed for the new structure. 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 by increasing the wind tolerance to +160mph. Note: The FEMA Accelerated Award Strategy (FAASt) MOR included the PREPA distribution standards and specifications that were based on a 145mph sustained winds. However, the new PREPA Standard 2021 updates the design-criteria to a 160mph sustained winds resistant. 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*)

To avoid damage in a future event, the Applicant is proposing as a mitigation measure, increase the strength of the poles by increasing the wind tolerance of all materials to +160mph. The FAASt MOR included the PREPA distribution standards and specifications that were based on a 145mph sustained winds. However, the new PREPA Standard 2021 updates the design-criteria to a 160mph sustained winds resistant. 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.

➤ [Distribution Critical Poles Replacement] 406 Mitigation Scope of Work:

1. Feeder 8405-01 Scope (2ea):

- Replace two (2) 50ft concrete H6 poles by two (2) 50ft galvanized steel S8 poles.

1. Feeder 8602-01 Scope (2ea):

- Replace one (1) 45ft concrete H4 pole by one (1) 50ft galvanized steel S8 pole.
- Replace one (1) 50ft concrete H6 pole by one (1) 50ft galvanized steel S8 pole.

1. Feeder 8602-03 Scope (10ea):

- Replace six (6) 45ft concrete H4 poles by six (6) 50ft galvanized steel S8 poles.
- Replace one (1) 45ft concrete H6 pole by one (1) 50ft galvanized steel S8 pole.
- Replace three (3) 50ft concrete H6 poles by three (3) 50ft galvanized steel S8 poles.

Hazard Mitigation Proposal (HMP) Cost:

Total Net Hazard Mitigation Cost (Base Cost) = \$ 57,066.00

+ HM (Applicant A&E, Management & General Conditions) = \$ 15,122.49

Hazard Mitigation Total Cost = **\$ 72,188.49**

HMP Cost-Effectiveness Calculations:

Eligible Cost of PA repair Scope of Work per DI: \$270,802.00

Net Cost of 406 HMP per DI: \$57,066.00

$HMR = (Total\ Net\ Hazard\ Mitigation\ Cost / Project\ Net\ In-Kind\ Repair\ Cost) \times 100$

$HMR = (\$57,066.00 / \$270,802.00) \times 100 = 21.07\% (< 100\% \text{ and Appendix J}).$

* 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.

Cost

Code	Quantity	Unit	Total Cost	Section
3510 (Engineering And Design Services (A&E Deduction from Project 335168 - FAAST A&E PREPA))	1.00	Lump Sum	(\$58,918.00)	Uncompleted
9201 (PAAP Fixed Estimate (No Value - Tracking Purposes Only))	1.00	Lump Sum	\$0.00	Completed
9001 (Contract (Total Cost Estimate - FAAST 136271))	1.00	Lump Sum	\$362,692.00	Uncompleted

CRC Gross Cost \$303,774.00

Total 406 HMP Cost \$72,188.49

Total Insurance Reductions \$0.00

CRC Net Cost \$375,962.49

Federal Share (90.00%) \$338,366.25

Non-Federal Share (10.00%) \$37,596.24

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-11193(13224)	\$375,962.49	90 %	\$338,366.24	1/30/2023

Drawdown History

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

Obligation History

Version #	Date Obligated	Obligated Cost	Cost Share	IFMIS Status	IFMIS Obligation #
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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

12/30/2022

Property insurance coverage for the electrical distribution facilities represented on this project are not insured or insurable. No insurance relief is

anticipated. No Obtain and Maintain requirement will be made.

FEMA requires the applicant to take reasonable efforts to pursue claims to recover insurance proceeds that it is entitled to receive from its insurer(s). In the event that any insurance proceeds are received for these expenses those proceeds must be reduced from FEMA Public Assistance funding to ensure no duplication of benefits has occurred.

No duplication of benefits from insurance is anticipated for work described in this application. In the event any part or all costs are paid by an insurance policy, a duplication of benefits from insurance will occur. Applicant must notify grantee and FEMA of such recoveries and the Sub-Grant award amount must be reduced by actual insurance proceeds.

No insurance requirements will be required for this project. Insurance requirements are specific to permanent work to replace, restore, repair, reconstruct, or construct buildings, contents, equipment, or vehicles. (FEMA Recovery Policy FP 206-086-1).

No insurance narrative will be produced or uploaded into documents or attachments.

Olga Renta, PA Insurance Specialist, CRC Atlantic, PR

O&M Requirements

There are no Obtain and Maintain Requirements on **FAAST**
[Distribution Pole and Conductor Repair - Arecibo Group 9]
(Distribution).

406 Mitigation

There is no additional mitigation information on **FAAST**
[Distribution Pole and Conductor Repair - Arecibo Group 9]
(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.
- Endangered Species Act (ESA) - The Applicant must provide documentation at close-out that proves completion of required Conservation Measures.
- Endangered Species Act (ESA) - Conservation Measures for Epictates Inornatus applies to Feeders 8602-01, 8602-03 and 8405-01. 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 #s: 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 #s: 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 *Amazona vittata* applies to Feeders 8602-03 and 8602-01, and Conservation Measures for *Buteo platypterus brunescens* applies to Feeder 8602-03. The below conservation measures apply to the following species: Puerto Rican parrot, Puerto Rican plain pigeon, Puerto Rican broad winged hawk, Puerto Rican sharp-shinned hawk, Puerto Rican nightjar, yellow-shouldered blackbird, and Elfín-woods warbler. 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 parrot (*Amazona vittata*): February to June; Puerto Rican plain pigeon (*Patagioenas inornata wetmorei* [*Columba inornata*]): April-September; Puerto Rican broad-winged hawk (*Buteo platypterus*): December-June; Puerto Rican sharp shinned hawk (*Accipiter striatus venator*): December-June; Puerto Rican nightjar (*Antrostomus noctitherus*): February-August; Elfín-woods warbler (*Setophaga angelae*): March-June; yellow-shouldered blackbird (*Agelaius xanthomus*): February through November. 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.
- National Historic Preservation Act (NHPA) - a. The Subrecipient and/or Subrecipient's contractor shall follow the Low Impact Debris Removal Stipulations (LIDRS) as stated in Appendix E of the Project-Specific Programmatic Agreement Among FEMA, the SHPO, ACHP, COR3, and PREPA (PSPA), executed on August 2, 2022. b. Unexpected Discoveries: Pursuant to Stipulation III.B of the PSPA, if, in the course of implementing this Individual Undertaking(s), previously unidentified structures, sites, buildings, objects, districts, or archaeological deposits, that may be eligible for listing in the National Register, or human remains are uncovered, or if it appears that an Individual Undertaking has affected or will affect a previously identified historic property in an unanticipated manner, the contractor must notify Subrecipient who will immediately notify the Recipient. Work must stop in the vicinity of the discovery and measures must be taken to protect the discovery and avoid additional harm. c. Additional staging areas and/or work pads within work site area haven't been identified yet. The Recipient/Subrecipient and/or private operator must provide the information of any additional staging areas or work pads for EHP evaluation as soon as available specially if any construction activity will be necessary to prepare the site(s). Information for staging areas and/or work pads confined to previously disturbed or hardened surfaces can be provided at close-out.
- Resource Conservation and Recovery Act, aka Solid Waste Disposal Act (RCRA) - 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. The applicant is responsible to ensure damaged transformers are handled, managed, and disposed of in accordance with all federal and state laws and requirements. Downed electrical equipment may contain toxic and hazardous materials, such as polychlorinated biphenyls (PCBs), and may spill these materials if a rupture occurs. Applicant is responsible for screening transformers that do or may contain PCBs and the area where any related spill occurred. The applicant is then responsible to handle, manage, dispose of, or recycle damaged equipment and contaminated soil as appropriate. Where possible, temporary measures should be implemented to prevent, treat, or contain further releases or mitigate the migration of PCBs into the environment. If damaged equipment or material storage containers must be stored temporarily, containers should be placed on hardened surface areas, such as a concrete or an asphalt for no more than 90 days. Excavated contaminated material should be disposed of in accordance with federal and state laws and requirements. 3. 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 with the requirements of the local and federal agencies. Noncompliance with these requirements may jeopardize receipt of federal funds. 1.

- NEPA Determination - Additional staging areas and/or work pads within work site area haven't been identified yet. The Recipient/Subrecipient and/or private operator must provide the information of any additional staging areas or work pads for EHP evaluation as soon as available specially if any construction activity will be necessary to prepare the site(s). Information for staging areas and/or work pads confined to previously disturbed or hardened surfaces can be provided at close-out.
- NEPA Determination - All borrow or fill material must come from pre-existing stockpiles, material reclaimed from maintained roadside ditches (provided the designed width or depth of the ditch is not increased), or commercially procured material from a source existing prior to the event. For any FEMA-funded project requiring the use of a non-commercial source or a commercial source that was not permitted to operate prior to the event (e.g., a new pit, agricultural fields, road ROWs, etc.) in whole or in part, regardless of cost, the Applicant must notify FEMA and the Recipient prior to extracting material. FEMA must review the source for compliance with all applicable federal environmental planning and historic preservation laws and executive orders prior to a Sub-recipient or their contractor beginning borrow extraction. Consultation and regulatory permitting may be required. Non-compliance with this requirement may jeopardize receipt of federal funding. Documentation of borrow sources utilized is required at close-out and must include fill type (private, commercial, etc.), name, fill site GPS coordinates (not of the company/governmental office), address, and type of material.

EHP Additional Info

There is no additional environmental historical preservation on **FAASt [Distribution Pole and Conductor Repair - Arecibo Group 9] (Distribution)**.

Final Reviews

Final Review

Reviewed By CHIRICO, JOSEPH A.

Reviewed On 01/10/2023 3:21 PM AST

Review Comments

Approved for obligation - Applicant are responsible to comply with all requirements.

Recipient Review

Reviewed By Salgado, Gabriel

Reviewed On 01/10/2023 4:56 PM AST

Review Comments

Recipient Review completed. Project is ready for 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 \$375,962.49 for subaward number 11193 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 Miller, Thomas

Signed On 01/11/2023

Department of Homeland Security Federal Emergency Management Agency

General Info

Project #	688774	PW #	11207	Project Type	Specialized
Project Category	F - Utilities	Applicant	PR Electric Power Authority (000-UA2QU-00)		
Project Title	FAASt Distribution Pole and Conductor Repair - Ponce Group 9 (Distribution)			Event	4339DR-PR (4339DR)
Project Size	Large	Declaration Date	9/20/2017		
Activity Completion Date	9/20/2027	Incident Start Date	9/17/2017		
Process Step	Obligated	Incident End Date	11/15/2017		

Damage Description and Dimensions

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

Damage #1257238; FAASt Distribution Pole and Conductor Repair - Ponce Group 9 (CANAS T.C - 5018-05, PORTUGUES 4 KV 5021-01, VILLALBA 4 KV -5901-01, 5901-02, 5901-03, TOA VACA - 5902-02)

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:** Distribution pole and conductor - (CANAS T.C -5018-05, PORTUGUES 4 KV 5021-01, VILLALBA 4 KV -5901-01, 5901-02, 5901-03, TOA VACA -5902-02)
- **Facility Description:** The specific facilities included in this project are: poles and structures (including their foundations), framing and insulators, load break switches (manual and automated), capacitor banks, voltage regulators, transformers (including lightning arresters and fuse cut-outs), conductors, guy wires, anchoring, grounding assemblies, underground cable, underground cable systems, fault interrupting equipment (fuses, reclosers, and sectionalizers), and any other associated components.
- **Approx. Year Built:** 1980
- **Start GPS Latitude/Longitude:** [REDACTED]
- **End 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

1257238

FAASt Distribution Pole and Conductor Repair - Ponce Group 9 (CANAS T.C -5018-05,

PORTUGUES 4 KV 502

INTRODUCTION

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 ("The Applicant") is seeking approval from COR3 and FEMA for project funding to repair, restore, or replace the eligible facilities.

FACILITIES

The facilities listed below are part of the feeder systems in the Ponce Region. These interconnected and inter-functional distribution feeders (sites) are part of the electrical distribution system. All the feeders originate from a substation (start) and serve customers along the route to various locations (end). The coordinates shown below as "GPS End" represent the end of the mainline backbone of each feeder.

Name	Feeder Number	# Of Poles to Replace	GPS Start	GPS End	Phase	Voltage Level (kV)	Constructed Date
CANAS T.C. 13 KV	5018-05	4	██████████ ██████████	██████████ ██████████	3 Phase	13.2	More than 20 Years
PORTUGUES 4 KV	5021-01	6	██████████ ██████████	██████████ ██████████	3 Phase	4.16	More than 20 Years
VILLALBA 4 KV	5901-02	10	██████████ ██████████		3 Phase	4.16	More than 20 Years
VILLALBA 4 KV	5901-03	1	██████████ ██████████		3 Phase	4.16	More than 20 Years

PROJECT SCOPE OF WORK

Below includes a breakdown of pole replacement by feeder for "Proposed 428 Public Assistance Scope of Work" and "Proposed 406 Hazard Mitigation Grant Program Scope of Work", followed by descriptions of each work type specific to the Scope of Work for this group.

Proposed 428 Public Assistance Scope of Work:

Feeder 5018-05 Scope:

Remove	Quantity	Install	Quantity
35ft Wood Pole(s)	1	45ft H4 Concrete Pole(s)	1
40ft Wood Pole(s)	2	45ft H4 Concrete Pole(s)	2
45ft Wood Pole(s)	1	45ft H4 Concrete Pole(s)	1

Feeder 5021-01 Scope:

Remove	Quantity	Install	Quantity
35ft Wood Pole(s)	1	45ft H4 Concrete Pole(s)	1
40ft Wood Pole(s)	3	45ft H4 Concrete Pole(s)	3
45ft Wood Pole(s)	2	45ft H4 Concrete Pole(s)	2

Feeder 5901-02 Scope:

Remove	Quantity	Install	Quantity
35ft Wood Pole(s)	3	45ft H4 Concrete Pole(s)	3
40ft Wood Pole(s)	4	45ft H4 Concrete Pole(s)	4
40ft Galvanized Steel pole(s)	1	45ft H4 Concrete Pole(s)	1
45ft Wood Pole(s)	2	45ft H4 Concrete Pole(s)	2

Feeder 5901-03 Scope:

Remove	Quantity	Install	Quantity
40ft Wood Pole(s)	1	45ft H6 Concrete Pole(s)	1

Detail Descriptions for Planned Field Work:

Pole Replacement

- Remove existing poles, including hardware and install new poles, including hardware, in the same location. If unable to install the replacement in the same location, the pole will be installed within 3 feet.
- All pole installations are to replace existing pole locations; no new locations are included in this scope of work. Refer to Appendix J- EHP Checklist, column C (Soil area and depth impact) for the depths of the poles to be installed.
- Remove the existing foundations as specified in Appendix J- EHP Checklist column I (Concrete Foundation) and replace them with a new concrete foundation bases as per Appendix D-Distribution Construction Standards (Concrete Base Standard). The maximum auger width used is 42" and the maximum depth drilled is 15ft.
- New guy wire/ anchors are to be installed in compliance with Appendix D- Distribution Construction Standards within 3ft from the existing anchor. The maximum distance an anchor will be installed for a 50ft pole is 25ft from the base of the pole, within the right-of-way.
- Brushing will be required in locations to gain access to the pole for replacement. Brushing refers to the removal and clearing of vegetation solely to the extent that it allows crews to conduct work. The brushing of vegetation will be limited to a 15 ft radius surrounding the surface of the pole but not to exceed the width of the right-of-way for the exclusive purpose of gaining access to the pole to conduct repairs. Please see Appendix J- EHP Checklist column H (Brushing/Clearing), Refer to Appendix B- Maps and Pictures for pictures of the vegetation.

- All work for this program will be performed within the current electrical right-of-way.
- This scope of work will not affect water or sewer utility services.

Material Disposal

- PCBs, oil from the transformer and breakers, sealants, and other chemical wastes typical of a construction site are considered hazardous waste and will be disposed of by the contractor in approved facilities as per applicable local regulations. Refer to Appendix C - Waste Management Plan.
- The type of debris that may be found in the process of removal are luminaires, pole arms, photocells, metal scrap, wiring, concrete, steel, and wood poles, etc. The debris will be separated and taken to an approved waste disposal facility in compliance with applicable local regulations. Refer to Appendix C- Waste Management Plan.
- Transformers will be contained and returned to LUMA in compliance with applicable local regulations. The removal of the transformer will require testing of the existing oil for PCB levels, drain oil, and delivery to the approved waste disposal site as per Environmental Regulations. Refer to Appendix C- Waste Management Plan.

Access Roads

- Poles are in close proximity to the roads and are site accessible. The construction of access roads is not required for this scope of work. Refer to Appendix J- EHP Checklist in column G "Site Accessible"

Staging Area

- All materials are stored and dispatched from the Ponce Regional Warehouse. Refer to Appendix L- Warehouse locations. No additional or temporary staging areas are required.

Fill, gravel, sand, etc.:

- Fill, Gravel, and Sand materials will be obtained from an approved supplier as referenced in Appendix A- Approved Supplier List.

List of Equipment to be used:

- Skid Steer, Excavator, Dump trucks, Manlifts, 120-Ton Motor Crane, Boom Trucks 45-ton Crane, Zoom Boom, Air compressor, Truck Digger, Water truck, Pump Truck, Concrete Vibrator, Oil Tanker, Filtering Machine and Flatbed platform.
- Vegetation will be removed utilizing machete, chainsaw, electric pruner, telescopic pole pruner, bucket truck, and/or chipper

Specific List of Permits Required:

- DTOP Endorsements & Municipality Notifications.
- Excavation and Demolition Notification in Department of Transportation and Public Works Agency - (DTOP).
- LUMA will provide proof of all permits.

HAZARD MITIGATION

Refer to the Hazard Mitigation tab/section for the provided Hazard Mitigation Proposal.

PROJECT ESTIMATE

The estimated costs (Class 3 Accuracy +/-30%) to complete the project are captured in the table below. The cost estimate was developed utilizing preliminary Architectural and Engineering design information and may be subject to change. LUMA has allocated 10% of the project cost for the mitigation of potential known risks.

Project Cost Estimate	Total	428 Public Assistance	406 Hazard Mitigation
Planning, Permits and Applications	\$11,298	\$11,298	\$0

Environmental Management	\$16,149	\$16,149	\$0
Engineering	\$47,300	\$39,515	\$7,785
Project Management	\$23,650	\$19,757	\$3,893
Distribution Line	\$472,998	\$395,145	\$77,853
Contingency	\$57,139	\$48,186	\$8,953
Total Project Cost Estimate:	\$628,534	\$530,050	\$98,484
FAASt Project # 688774 (428) Total			\$443,331
FAASt Project # 688774 (406) Total			\$98,484
FAASt A&E #335168 Total			\$86,719
Total Cost			\$628,534

Please refer to Appendix H for Cost Estimate Details.

428 Work To Be Completed (WTBC): \$530,050.00

428 A&E Deduction (Global A&E FAASt 335168) -\$86,719.00

428 Project Total Cost: \$443,331.00

For detailed cost estimate, please refers to document labeled: 688774-DR4339PR-Appendix H - Detail Cost Estimate - Ponce Group 9 Rev0.xlsx

Project Notes:

1. Refer to detailed SOW provided in document 688774-DR4339PR-Detailed SOW Ponce Group 9 Rev0.pdf
2. For reference documents Appendix A thru L
3. For EHP Requirements, refer to pages 5 to 7 of the detailed SOW and reference documents: Appendix J & K.
4. Architectural and Engineering (A&E) costs are deducted given previously obligated Global A&E Project for the subject FAASt PREPA work (see project: 335168 - FAASt A&E PREPA).

406 HMP Scope

Project number: 688774; FAASt Distribution Pole and Conductor Repair - Ponce Group 9 (Distribution)

Damage #1257238; FAASt Distribution Pole and Conductor Repair - Ponce Group 9 (CANAS T.C -5018-05, PORTUGUES 4 K 5021-01, VILLALBA 4 KV -5901-02, VILLALBA 4 KV -5901-03)

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

Location: Ponce, 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 "loss of power" 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).

Project #688774 (Distribution Poles & Conductors Repair).

The Distribution Pole and Conductor Repair-Ponce Group 9 consists of 4 interconnected and inter-functional distribution feeders (sites) establish the electrical distribution system as follows: CANAS T.C -5018-05, PORTUGUES 4 KV 5021-01, VILLALBA 4 KV - 5901-02, VILLALBA 4 KV-5901-03.

The Method of Repair (MOR) included the replacement of the damaged critical distribution poles (wood, concrete or galvanized), cross-arms, insulators, and all associated hardware needed for the new structure. 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 by increasing the wind tolerance to +160mph. Note: The FEMA Accelerated Award Strategy (FAAST) MOR included the PREPA distribution standards and specifications that were based on a 145mph sustained winds. However, the new PREPA Standard 2021 updates the design-criteria to a 160mph sustained winds resistant. 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*)

➤ To avoid damage in a future event, the Applicant is proposing as a mitigation measure, increase the strength of the poles by increasing the wind tolerance of all materials to +160mph. The FAASt MOR included the PREPA distribution standards and specifications that were based on a 145mph sustained winds. However, the new PREPA Standard 2021 updates the design-criteria to a 160mph sustained winds resistant. 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.

➤ [Distribution Critical Poles Replacement] 406 Mitigation Scope of Work:

1. Feeder 5018-05 Scope (4ea):

- Replace four (4) 45ft concrete H4 poles by four (4) 50ft galvanized steel S8 poles.

1. Feeder 5021-01 Scope (6ea):

- Replace six (6) 45ft concrete H4 poles by six (6) 50ft galvanized steel S8 poles.

1. Feeder 5901-02 Scope (10ea):

- Replace six (6) 45ft concrete H4 poles by six (6) 50ft galvanized steel S8 poles.
- No 406 Mitigation work identified at this time for four (4) 45' Concrete Pole H4 poles. Therefore, the mitigation is accomplished by 428 PA method of repair (MOR).

1. Feeder 5901-03 Scope (1ea):

- Replace one (1) 45ft concrete H4 pole by one (1) 50ft galvanized steel S8 pole.

Hazard Mitigation Proposal (HMP) Cost:

Total Net Hazard Mitigation Cost (Base Cost) =	\$ 77,853.00
+ HM (Applicant A&E, Management & General Conditions) =	<u>\$ 20,631.00</u>
Hazard Mitigation Total Cost =	\$ 98,484.00

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HMP Cost-Effectiveness Calculations:

Eligible Cost of PA repair Scope of Work per DI: \$321,420.00

Net Cost of 406 HMP per DI: \$77,853.00

$HMR = (Total\ Net\ Hazard\ Mitigation\ Cost / Project\ Net\ In-Kind\ Repair\ Cost) \times 100$

$HMR = (\$77,853.00 / \$321,420.00) \times 100 = 24.22\% (< 100\% \text{ and Appendix J}).$

* 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.

Cost

Code	Quantity	Unit	Total Cost	Section
3510 (Engineering And Design Services (Global A&E FAASt #335168))	1.00	Lump Sum	(\$86,719.00)	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	\$530,050.00	Uncompleted

CRC Gross Cost \$443,331.00

Total 406 HMP Cost \$98,484.00

Total Insurance Reductions \$0.00

CRC Net Cost \$541,815.00

Federal Share (90.00%) \$487,633.50

Non-Federal Share (10.00%) \$54,181.50

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-11207(13228)	\$541,815.00	90 %	\$487,633.50	1/30/2023

Drawdown History

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

Obligation History

Version #	Date Obligated	Obligated Cost	Cost Share	IFMIS Status	IFMIS Obligation #
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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

1/11/2023

GENERAL INFORMATION

Event: DR4339-PR

Project: SP 688774

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: \$541,815.00 (CRC Gross Cost \$443,331.00 + Mitigation Amount \$98,484.00)

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: No

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

Damaged Inventory (DI) #1257238:

FAASt Distribution Pole and Conductor Repair - Ponce Group 9 (CANAS T.C -5018-05, PORTUGUES 4 KV 5021-01, VILLALBA 4 KV - 5901-01, 5901-02, 5901-03, TOA VACA -5902-02)

Location Description: Distribution pole and conductor - (CANAS T.C -5018-05, PORTUGUES 4 KV 5021-01, VILLALBA 4 KV -5901-01, 5901-02, 5901-03, TOA VACA -5902-02)

GPS Coordinates: [REDACTED]

Cause of Loss: Wind / Wind Driven Rain

SOV / Schedule #: Not insured

SOV / Schedule Amount: Not insured

Applicable Deductible Amount: N/A

Damage Inventory Amount: \$541,815.00 (CRC Gross Cost \$443,331.00 + Mitigation Amount \$98,484.00)

-
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 as coverage is not anticipated. 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.

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Obtain and Maintain Requirement:

No Obtain & Maintain Requirement is being mandated for the FAASt Distribution Pole and Conductor Repair - Ponce Group 9 (CANAS T.C - 5018-05, PORTUGUES 4 KV 5021-01, VILLALBA 4 KV -5901-01, 5901-02, 5901-03, TOA VACA -5902-02) because the 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 Distribution Pole and Conductor Repair - Ponce Group 9 (Distribution)**.

406 Mitigation

There is no additional mitigation information on **FAAST Distribution Pole and Conductor Repair - Ponce Group 9 (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 - Applicable to feeder - 5018-05 Applicant must obtain any required permits from the Puerto Rico Permits Management Office (OGPe) prior to initiating work and comply with any conditions of the permit established by the Planning Board (JP) for constructions in floodplains. 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) - Conditions for the Puerto Rican Boa (*Epicrates inornatus*) are applicable for feeders 5018-05, 5021-01 and 5901-02. 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) - The below conservation measures apply to feeder 5018-05 for the species Puerto Rican nightjar. Conservation measures apply to feeders 5021-01 and 5901-02 for the species Puerto Rican sharp shinned hawk. The Conservation measures apply to feeder 5901-02 for the following species: Puerto Rican parrot and Puerto Rican broad-winged 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 parrot (*Amazona vittata*): February to June; Puerto Rican broad-winged hawk (*Buteo platypterus*): December-June; Puerto Rican sharp-shinned hawk (*Accipiter striatus venator*): December-June and Puerto Rican nightjar (*Antrostomus noctitherus*): February-August. 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.
- National Historic Preservation Act (NHPA) - a. The Subrecipient and/or Subrecipient's contractor shall follow the Low Impact Debris Removal Stipulations (LIDRS) as stated in Appendix E of the Project-Specific Programmatic Agreement Among FEMA, the SHPO, ACHP, COR3, and PREPA (PSPA), executed on August 2, 2022. b. Unexpected Discoveries: Pursuant to Stipulation III.B of the PSPA, if, in the course of implementing this Individual Undertaking(s), previously unidentified structures, sites, buildings, objects, districts, or archaeological deposits, that may be eligible for listing in the National Register, or human remains are uncovered, or if it appears that an Individual Undertaking has affected or will affect a previously identified historic property in an unanticipated manner, the contractor must notify Subrecipient who will immediately notify the Recipient. Work must stop in the vicinity of the discovery and measures must be taken to protect the discovery and avoid additional harm. c. Additional staging areas and/or work pads within work site area haven't been identified yet. The Recipient/Subrecipient and/or private operator must provide the information of any additional staging areas or work pads for EHP evaluation as soon as available specially if any construction activity will be necessary to prepare the site(s). Information for staging areas and/or work pads confined to previously disturbed or hardened surfaces can be provided at close-out.
- 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. The applicant is responsible to ensure damaged transformers are handled, managed and disposed of in accordance with all federal and state laws and requirements. Downed electrical equipment may contain toxic and hazardous materials, such as polychlorinated biphenyls (PCBs), and may spill these materials if a rupture occurs. Applicant is responsible for screening transformers that do or may contain PCBs and the area where any related spill occurred. The applicant is then responsible to handle, manage, dispose of, or recycle damaged equipment and contaminated soil as appropriate. Where possible, temporary measures should be implemented to prevent, treat, or contain further releases or mitigate the migration of PCBs into the environment. If damaged equipment or material storage containers must be stored temporarily, containers should be placed on hardened surface areas, such as a concrete or an asphalt for no more than 90 days. Excavated contaminated material should be disposed of in accordance with federal and state laws and requirements. 3. 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.

- NEPA Determination - 1. Additional staging areas and/or work pads within work site area haven't been identified yet. The Recipient/Subrecipient and/or private operator must provide the information of any additional staging areas or work pads for EHP evaluation as soon as available specially if any construction activity will be necessary to prepare the site(s). Information for staging areas and/or work pads confined to previously disturbed or hardened surfaces can be provided at close-out. 2. All borrow or fill material must come from pre-existing stockpiles, material reclaimed from maintained roadside ditches (provided the designed width or depth of the ditch is not increased), or commercially procured material from a source existing prior to the event. For any FEMA-funded project requiring the use of a non-commercial source or a commercial source that was not permitted to operate prior to the event (e.g., a new pit, agricultural fields, road ROWs, etc.) in whole or in part, regardless of cost, the Applicant must notify FEMA and the Recipient prior to extracting material. FEMA must review the source for compliance with all applicable federal environmental planning and historic preservation laws and executive orders prior to a Sub-recipient or their contractor beginning borrow extraction. Consultation and regulatory permitting may be required. Non-compliance with this requirement may jeopardize receipt of federal funding. Documentation of borrow sources utilized is required at close-out and must include fill type (private, commercial, etc.), name, fill site GPS coordinates (not of the company/governmental office), address, and type of material

EHP Additional Info

There is no additional environmental historical preservation on **FAAST Distribution Pole and Conductor Repair - Ponce Group 9 (Distribution)**.

Final Reviews

Final Review

Reviewed By CHIRICO, JOSEPH A.

Reviewed On 01/23/2023 2:37 PM AST

Review Comments

Approved for obligation- Applicant is responsible to comply with all regulatory requirements.

Recipient Review

Reviewed By Cintron, Jesus

Reviewed On 01/23/2023 3:17 PM AST

Review Comments

Review Completed. Pending Applicant Final 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 \$541,815.00 for subaward number 11207 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 Miller, Thomas

Signed On 01/26/2023