

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

NEPR

Received:

Aug 12, 2026

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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 Three (3) Amended
FEMA Approval of Project, Request for
Confidential Treatment, and Supporting
Memorandum of Law**

**MOTION SUBMITTING THREE (3) AMENDED FEMA APPROVALS OF PROJECT,
REQUEST FOR CONFIDENTIAL TREATMENT AND SUPPORTING
MEMORANDUM OF LAW**

TO THE PUERTO RICO ENERGY BUREAU:

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

I. Submittal of Three Amended FEMA Approvals of Projects 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, 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 ("March 26th Order"). It also directed PREPA to continue reporting to the Energy Bureau and FEMA, within the next five years, on the progress of all ongoing efforts related to the approval of the submitted Projects that have

not yet been approved by the Energy Bureau.¹ The Energy Bureau thereafter determined that this directive should be applied to PREPA and LUMA. *See* Resolution and Order of August 20, 2021.

2. On July 8, 2021, LUMA filed a *Motion Submitting List of Projects and Twenty-Eight Scopes of Work* (“July 8th Motion”). In the July 8th Motion, LUMA submitted twenty-eight (28) scopes of work (“SOWs”) for T&D Projects for the Energy Bureau’s review and approval prior to submitting them to COR3 and FEMA. Among the twenty-eight SOWs, LUMA submitted the “Distribution Feeders – San Juan Short Term Group 1” and the “Distribution Feeders – San Juan Short Term Group 2” SOWs.

3. On August 20, 2021, the Energy Bureau issued a Resolution and Order (“August 20th Order”) that determined that all of the SOWs for the T&D projects submitted by LUMA in the July 8th Motion were necessary to improve the system’s reliability. Therefore, it approved all of the projects presented in the July 8th Motion, including the “the “Distribution Feeders – San Juan Short Term Group 1” and the “Distribution Feeders – San Juan Short Term Group 2” SOWs. The Energy Bureau also ordered LUMA to submit a copy of the approval by COR3 and/or FEMA of the Project, which shall contain the costs obligated for each project within ten (10) days of receiving such approval.

4. Then, 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 Scopes 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

¹ On April 22, 2026, the Energy Bureau issued a Resolution and Order (“April 22nd Order”), in which it extended the March 26th Order’s reporting period for an additional five (5) years. *See* April 22nd Order, p.2. The Energy Bureau stated that all the other provisions of the March 26th Order would remain in full force and effect. *Id.*

FEMA. Among the twenty-nine (29) SOWs, LUMA submitted the “Distribution Streetlighting” SOW.

5. On September 22, 2021, the Energy Bureau issued a Resolution and Order that determined that most of the SOWs for T&D projects submitted by LUMA in the August 30th Motion were necessary to improve the system’s reliability (“September 22nd Order”). Therefore, it approved most of the projects presented in the August 30th Motion, including the “Distribution Streetlighting” SOW. The Energy Bureau also ordered LUMA to submit a copy of the approval by COR3 and/or FEMA of the Project, which shall contain the costs obligated for each project within ten (10) days of receiving such approval.

6. Thereafter, on September 26, 2025, LUMA filed a *Motion Submitting Eighteen FEMA Approvals of Projects, Request for Confidential Treatment and Supporting Memorandum of Law*, whereby, in compliance with the August 20th Order, LUMA submitted a copy of the project approval issued by FEMA on September 17, 2025, for the “FAASt [Feeder Rebuild # 1529-15] (Distribution)”² T&D Project.

7. Similarly, on October 3, 2025, LUMA filed a *Motion Submitting Seven FEMA Approvals of Projects, Request for Confidential Treatment and Supporting Memorandum of Law*, whereby, in compliance with the August 20th Order, LUMA submitted a copy of the project approval issued by FEMA on September 25, 2025, for the “FAASt [Feeder Rebuild # 1303-02] (Distribution)”³ T&D Project.

8. Finally, on March 5, 2026, LUMA filed a *Motion Submitting Seventeen (17) FEMA Approvals of Project, Request for Confidential Treatment and Supporting Memorandum of Law*, whereby, in compliance with the September 22nd Order, LUMA submitted a copy of the project

² Which is part of the “Distribution Feeders – San Juan Short Term Group 2” SOW.

³ Which is part of the “Distribution Feeders – San Juan Short Term Group 1” SOW.

approval issued by FEMA on March 1, 2026, for the “FAASt [Rincón Streetlighting] (Distribution)”⁴ T&D Project.

9. In compliance with the August 20th and September 22nd Orders, LUMA hereby submits copies of the following amended approvals by FEMA, which state they were re-obligated on August 3, 2026: “FAASt [Rincón Streetlighting] (Distribution)”, “FAASt [Feeder Rebuild # 1529-15] (Distribution)”, and “FAASt [Feeder Rebuild # 1303-02] (Distribution)” T&D Projects. *See Exhibit 1* to this Motion.

10. Version 1 of the “FAASt [Rincón Streetlighting] (Distribution)” approved T&D project was created to capture the LUMA change in cost of the project and request an amendment to the SOW. In this version, LUMA sought to modify the cost estimate for the project to reflect accurate allocations of Architecture and Engineering (“A&E”) costs to FAASt # 335168 and the appropriate allocation of Equipment and Materials (“E&M”) costs to FAASt # 673691. Version 0 will be fully de-obligated to reclassify 428 (Public Assistance) costs from the previous version, which will be added to 406 (Mitigation) costs in this version. *See Exhibit 1* of this Motion, FEMA-re-obligation for this project, p. 15.

11. As for the “FAASt [Feeder Rebuild # 1529-15] (Distribution)” and “FAASt [Feeder Rebuild # 1303-02] (Distribution)” approved T&D projects, Version 1 of both projects were created to align the scope and cost in Public Assistance and Hazard Mitigation. Since these versions include both 406 Hazard Mitigation Proposal and 428 Public Assistance Costs, one with a positive amount and the other with a negative amount, LUMA will process first the positive funds and in a later version will de-obligate the negative portion. SOWs from the previous versions have been removed from the current SOWs. *See, respectively, Exhibit 1* of this Motion, FEMA

⁴ Which is part of the “Distribution Streetlighting” SOW.

“FAASt [Feeder Rebuild # 1529-15] (Distribution)” Cost Approval, p. 14; **Exhibit 1** of this Motion, “FAASt [Feeder Rebuild # 1303-02] (Distribution)” Cost Approval, p. 16.

12. LUMA is submitting herein redacted public versions of the amended FEMA approvals (**Exhibit 1**) protecting confidential information associated with Critical Energy Infrastructure Information (“CEII”). As explained below, portions of the amended FEMA approvals of projects are protected from disclosure as CEII, *see, e.g.*, 6 U.S.C. §§ 671-674; 18 C.F.R. § 388.113 (2020), and pursuant to the Energy 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

13. 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 (2026). 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).

14. 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).

15. 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.

16. 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.

17. The Energy Bureau's Policy on Management of Confidential Information states the following with regard to access to validated CEII:

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).

18. 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

19. Portions of the three amended FEMA Approvals included in **Exhibit 1** contain CEII that, under relevant federal law and regulations, are protected from public disclosure. LUMA stresses that the amended 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.

20. This Energy Bureau has granted LUMA's requests for confidential treatment of portions of the amended FEMA Approvals submitted for approval in the present case. Notably, the Energy Bureau has granted LUMA's request for confidential treatment of portions of FEMA Approvals of Projects submitted for consideration and authorization. Furthermore, this Energy Bureau designated portions of submitted FEMA Approvals of Projects as confidential CEII in its Resolution and Order of March 20, 2023; *see* Table 1 on pages 1-2.

21. 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.

22. CEII or critical infrastructure information is generally exempted from public disclosure because it involves assets and information that 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.

23. 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.*

24. 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”).⁵

⁵ Regarding protection of voluntary disclosures of critical infrastructure information, 6 U.S.C. § 673, provides in pertinent part, that CII:

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

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).⁶

25. Portions of the amended FEMA Approvals in **Exhibit 1** qualify as CEII because each of these documents contains the express coordinates and physical addresses to power transmission and distribution facilities (18 C.F.R. § 388.113(iv)), and these specific coordinates and addresses could potentially be helpful to a person planning an attack on the energy facilities listed as part of this FEMA approval. The information 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 amended FEMA Approvals with CEII in **Exhibit 1** from disclosure, given the nature and scope of the details included in those portions of the Exhibit.

26. Based on the above, LUMA respectfully submits that portions of the amended FEMA Approvals should be designated as CEII. This designation is a reasonable and necessary

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- (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.

⁶ CII includes the following types of information:

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

measure to protect the specific location of the energy facilities listed or discussed in the amended 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.

C. Identification of Confidential Information

27. In compliance with the Energy Bureau’s Policy on Management of Confidential Information (CEPR-MI-2016-0009) below, find a table summarizing the portions of the amended FEMA approvals for which we present this request for confidential treatment.

Document	Name	Pages in which Confidential Information is Found, if applicable	Summary of Legal Basis for Confidentiality Protection, if applicable	Date Filed
Exhibit 1	FAAST [Rincón Streetlighting] (Distribution)	Pages 1, 3, 5, 15, 19, 22	Critical Energy Infrastructure Information, 18 C.F.R. § 388.113; 6 U.S.C. §§ 671-674.	August 12, 2026
	FAAST [Feeder Rebuild # 1529-15] (Distribution)	Pages 1-5, 14-16, 32, 35	Critical Energy Infrastructure Information, 18 C.F.R. § 388.113; 6 U.S.C. §§ 671-674.	August 12, 2026
	FAAST [Feeder Rebuild # 1303-02] (Distribution)	Pages 1-2, 16-17, 21, 24	Critical Energy Infrastructure Information, 18 C.F.R. § 388.113;	August 12, 2026

Document	Name	Pages in which Confidential Information is Found, if applicable	Summary of Legal Basis for Confidentiality Protection, if applicable	Date Filed
			6 U.S.C. §§ 671-674.	

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

RESPECTFULLY SUBMITTED.

We hereby certify that we filed this Motion using the electronic filing system of this Energy Bureau. We will send an electronic copy of this Motion to PREPA via Alexis Rivera, alexis.rivera@prepa.pr.gov, and through its counsel of record, Natalia Zayas Godoy, nzayas@gmlex.net, Richard Cruz Franqui, rcruzfranqui@gmlex.net, and Mirelis Valle Cancel, mvalle@gmlex.net, to Genera PR LLC, through its counsel of record, Jorge Fernández-Reboredo, jfernandez@ecija.com, José J. Díaz Alonso, jdiaz@ecija.com, and Ernesto R. Ramos Maldonado, eramos@ecija.com.

In Guaynabo, Puerto Rico, on this 12th day of August 2026.



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Exhibit 1

(public version, confidential version to be filed under seal of confidentiality)

**Department of Homeland Security
Federal Emergency Management Agency**

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General Info

Project #	714641	P/W #	11630	Project Type	Specialized
Project Category	F - Utilities			Applicant	PR Electric Power Authority (000-UA2QU-00)
Project Title	FAASt [Rincón Streetlighting] (Distribution)			Event	4339DR-PR (4339DR)
Project Size	Large			Declaration Date	9/20/2017
Activity	9/20/2027			Incident Start Date	9/17/2017
Completion Date				Incident End Date	11/15/2017
Process Step	Obligated				

Damage Description and Dimensions

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

Damage #1317631; FAASt [Distribution Streetlighting - Rincón]

General Facility Information:

- **Facility Type:** Power generation, transmission, and distribution facilities
- **Facility:** Distribution Streetlighting - Rincón
- **Facility Description:** The Rincón municipality has a total of 3236 luminaires of which damage was estimated for 70% of these luminaires. Additional descriptions of typical components of a streetlight system are described below:
 - Pole – This can be either a standalone structure intended to house a streetlight, or a utility pole shared with other overhead utilities.
 - Arm – A piece of hardware affixed to a pole to which a luminaire is mounted. The arm serves to position the streetlight over the street for optimal lighting.
 - Luminaire/Light Bulb – The light emitting part of a streetlight
 - Light controller (e.g., photocell) – A hardware device affixed to the luminaire which controls the operating mode
 - Communication network – A wired or wireless system that allows the smart streetlight to communicate with other devices and the control system
 - Technology control system – A software platform that allows a remote operator to set the operating parameters for the smart streetlight or manually override the parameter if needed.
- **Approx. Year Built:** 1970
- **GPS Latitude/Longitude:** [REDACTED]

Final Scope

1317631 **FAASt [Distribution Streetlighting - Rincón]**

Introduction

The purpose of this document is to submit the Detailed Scope of Work (DSOW), for project 714641 Rincón Streetlighting (Distribution), for approval by COR3 and FEMA. This project is submitted for approval under DR-4339-PR Public Assistance. The document provides a detailed description of the project, including scope, schedule, cost estimate, project considerations, 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 according to the Transmission and Distribution Operations & Maintenance Agreement between the Puerto Rico Electric Power Authority ("PREPA"), the Puerto Rico Public-Private Partnerships Authority ("P3A") and LUMA Energy, an following the Consent to Federal Funding Letter issued by PREPA and P3A which collectively provides the necessary consent for LUMA Energy, as agent of PREPA, to undertake work in connection with any Federal Funding requests related to the T&D System submitted to FEMA.

Facilities

Facilities Description

This description outlines the diverse infrastructure of the streetlight facilities, including existing components, materials, structures, disposal procedures, and hazard mitigation measures.

Existing Lighting Components

The existing lighting components include photo controls, luminaires, arms, and associated hardware. These components are installed on various poles throughout the municipality.

Existing Streetlight Poles

The streetlight poles are made of aluminum, wood, steel, or concrete. Concrete poles are octagonal, varying in height from 33ft to 35ft, and installed to a depth of 5ft to 6ft. Aluminum poles are typically 30ft high, with increased strength versions reaching 40ft in height. Secondary wood poles and 35ft steel poles are also present, designed to withstand specific wind forces.

Facilities List

A complete list of facilities by GPS location is provide at Appendix B.

Name	Damage Number	GPS Location
Rincón Municipality	1317631	See Appendix B.

Project Scope of Work

Scope Summary

The proposed scope of work addresses the impacts on the streetlight facilities caused by Hurricane María. The project's objectives are to repair, replace, and upgrade the existing streetlight components to consensus-based codes and/or standards and mitigate future similar damage.

The project's final deliverables will include fully functional and upgraded streetlight facilities. These deliverables include replacing existing lighting components, poles, and disposal of hazardous materials. The proposed 406 Hazard Mitigation Scope of Work (Section 4.5 below) will also enhance streetlight components to withstand extreme weather events. The completion of the project will ensure improved lighting infrastructure, enhanced safety measures, and increased resilience to future challenges.

Work Description	Number of Points
Components only, does not require pole replacement, installation, removal	1833
Secondary pole replacement, installation, removal, with third party attachments	876
Secondary pole replacement, installation, removal, without third party attachments	246
Secondary pole, removal, with third party attachments, Luminaire Location Change (LLC)	45
Streetlight pole replacement, installation, and/removal	8
Grand Total	3008

Proposed 428 Public Assistance Scope of Work

The proposed restoration includes the repair of eligible disaster damage up to required codes and standards and the request to upgrade undamaged infrastructure that must be addressed to fully effectuate the restoration of disaster-damaged components to restore the system's function to an approved industry standard. The Detailed Scope of Work consists of the repair, removal, replacement, and addition of the following infrastructure to restore this facility to codes and standards.

A. Lighting Components Replacement

1. Remove existing lighting components, including photo controls, luminaires, arms, and associated hardware, and replacing with new lighting components in the exact location. Quantities for these replacements are provided in the table in section 4.1 above.
2. Brush vegetation, as identified, to gain access to the pole and conduct repairs. (See Scope Note #5)
3. Perform site evaluation and disposal of hazardous bulbs and photocells in an authorized facility.

B. Pole Replacement

1. Remove and replace existing streetlight poles, including lighting components, at the exact location or within 3 feet. Quantities for these replacements are provided in the table in section 4.1 above. The locations of the poles and description of work on each pole is described in Appendix D -- Project Considerations Rincón Municipality.
2. Brush vegetation, as identified, to gain access to the pole and conduct repairs. (See Scope Note #5)
3. All work for this program will be performed within the municipality's current electrical right-of- way.

Scope Notes

1. The Project does not include removal and/or disposal of transformers because they are secondary voltage facilities, and transformers removal pertains to primary voltage facilities.
2. Equipment to be used includes Skid Steer, Excavator, Dump trucks, Man lifts, 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. All equipment to be used will comply with Tier 4 EPA Emission Standards, if available.
3. All materials are stored and dispatched from the assigned LUMA Regional Warehouse. The location assigned for this project is the Mayagüez Warehouse, [REDACTED].
4. All work for this program will be performed within the current electrical right-of-way of the municipality. Poles are near the roads and are site accessible. The construction of access roads is not required for this scope of work. (Refer to Appendix D in the "Site Accessible" column).
5. The brushing of vegetation will be limited to a 10ft radius that surrounds the surface of the pole without exceeding the width of the right-of-way. Refer to (Appendix D in the "Brushing/Clearing required" column) for locations where vegetation brushing has been identified. The vegetation clearing process will be managed according to federal and state regulations.
6. Fill, gravel, and sand materials will be obtained from a preferred vendor as referenced in the Approved Supplier List Directory PR (see Applicant Profile).
7. Appendix C and Appendix D contain coordinates for streetlight poles where ground disturbance is required. The replacement of poles has a standard diameter for ground disturbance of 18 inches. The depth, of the poles to be installed, is stated in Appendix D (see "soil area and depth impact" column).
8. The debris that will be produced during removal is luminaires, pole arms, photocells, metal scrap, wiring, concrete, steel, and wood poles. The debris will be separated and taken to an authorized waste disposal facility.
9. Luminaires and photocells are considered hazardous waste and will be disposed of by the contractor in authorized facilities.
10. Staging areas within work site have not yet been identified. The contractor must provide the information of the staging areas as soon as available. Staging areas are confined to previously disturbed or hardened surfaces.

Specific List of Permits Required

- I. Department of Transportation and Public Works (DTOP) Endorsement.
- II. Rincón Municipality Notifications.
- III. Excavation and Demolition Notification to the Department of Transportation and Public Works (DTOP).

Project Cost Estimate (PCE)

The estimated costs (compliant with Class 3 Accuracy +/-30%) to complete the project are captured in the table(s) 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 to mitigate potential known risks.

COST ESTIMATE			
COST ELEMENT	428	406	PROJECT TOTAL
PLANNING (A&E)	\$93,514.10	\$5,113.47	\$98,627.57
ENVIRONMENTAL MANAGEMENT (A&E)	\$280,542.31	\$15,340.40	\$295,882.71
MANAGEMENT (A&E)	\$467,570.53	\$25,567.33	\$493,137.86
ENGINEERING (A&E)	\$1,104,599.03	\$60,400.83	\$1,164,999.86
CONSTRUCTION	\$9,348,905.39	\$46,232.29	\$9,395,137.68
CONSTRUCTION - CONTINGENCY	\$654,598.74	\$35,794.26	\$690,393.00
LODGING, PER DIEM & TRAVEL	\$838,835.13	\$0.00	\$838,835.13
EQUIPMENT & MATERIAL	\$750,618.00	\$506,022.00	\$1,256,640.00
COST TOTALS	\$13,539,183.23	\$694,470.58	\$14,233,653.81
FAAST ALLOCATIONS	FAAST Project # 714641 TOTAL		\$11,536,80
	FAAST 428 A&E # 335168 TOTAL		\$1,946,22
	FAAST 428 E&M # 673691 TOTAL		\$750,61

Project 714641 Cost Summary, 428 PAAP:

Work to be Completed (WTBC): \$13,539,183.23

A&E Deduction, Global A&E 335168: (\$1,946,225.97)

E&M Deduction, Global E&M 673691: (\$750,618.00)

Project Total: \$10,842,339.26

Project Notes

- Reduction(s): No insurance reduction will be applied to this project. An anticipated insurance reduction was applied to FAAST project # 136271 for anticipated insurance proceeds for Hurricane Maria losses.
- A&E cost included in this project will be reduced from this project and obligated under the FAAST Project #335168, A&E, as show in the table above. The A&E project was obligated to track and account for costs associated with individual FAAST projects.
- Equipment and material costs included in this project will be reduced from this project and obligated under FAAST Project #673691,

Equipment and Materials, as shown in the table above. Only the base cost of equipment and/or material will be reduced from this project (not labor). All costs associated with Planning, Management, General Conditions, and Contingencies will remain in this project.

- 4. This project is part of Donor FAAS 136271 – MEPA078 Puerto Rico Electrical Power Authority (PREPA) Island Wide FAAS Project.
- 5. For details on the updated SOW and CE, refer to filenames:
 - 714641-DR4339PR-Rincón Streetlight-Detailed Scope of Work Rev. 10.pdf
 - 714641-DR4339PR- Rincón Streetlighting-Appendix C - Cost Estimate Rincón Municipality - Rev11.xlsx

Attachments

For reference documents Appendix A through E, see the files labeled:

- Appendix A – Rincón Work Zones Map
- Appendix B – Rincón Municipality Work Zones FIDs SIDs and Coordinates
- Appendix C – Cost Estimate Rincón Municipality
- Appendix D – Project Considerations Rincón Municipality
- Appendix E – FEMA 406 Justification: Streetlight Program

406 HMP Scope

Project number: 714641; FAAS [Distribution Streetlighting - Rincón] (Distribution)

Damage # 1317631; FAAS [Distribution Streetlighting - Rincón]

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

Location: Rincón, Puerto Rico

GPS Latitude/Longitude: [REDACTED]

Hazard Mitigation Narrative

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

In the Rincón Municipality, PREPA has a total of 3,008 ea. streetlights luminaries. The Method of Repair (MOR) include the replacement of the damage lighting components including photocells, luminaires, arms, and associated hardware. Also include the replacement of the damage distribution and streetlight poles (wood, concrete, galvanized & aluminum), the replacement of the aerial secondary wiring connections, and the construction of new concrete base for the aluminum streetlight poles. 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, aluminum poles breakaway bases, and foundations (concrete bases) by increasing the wind tolerance of all materials to 160mph. Note: The FEMA Accelerated Award Strategy (FAAS) MOR included the PREPA distribution standards and specifications that were based on a 90mph sustained winds for all materials. Although in PREPA Technical Communication #13-02 (August 22, 2013) a design-criteria of 145mph winds were published,

the specifications for streetlighting material were never revised, and in the specification documents, the 90mph winds stayed as the requirement for procurement purposes of all streetlighting materials. The 160mph wind tolerance mitigation measure, will protect and make the affected infrastructure more resistant, stronger, and resilient to similar hazards.

Hazard Mitigation Proposal (HMP) Scope of Work:

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

Mitigation Measures (*Replacement*)

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

406 Mitigation Scope of Work:

- Replace (8 ea.) 33ft octagonal concrete poles by (8 ea.) 39ft octagonal concrete poles.
- Replace (1,121 ea.) 35ft galvanized poles by (1,121 ea.) 35ft S3.5 galvanized poles.

Hazard Mitigation Proposal (HMP) Cost:

Total Net Hazard Mitigation Cost (Base Cost) = \$511,346.56

+ HM (Applicant A&E, Management & General Conditions) = \$183,124.02

Hazard Mitigation Total Cost = \$694,470.58

Hazard Mitigation Proposal (HMP) Cost Distribution:

Equipment and Materials (E&M) = \$506,022.00

Architecture and Engineering (A&E) = \$106,422.03

Construction Cost = _\$82,026.55

Hazard Mitigation Total Cost = \$694,470.58

HMP Cost-Effectiveness Calculations:

FEMA's Benefit-Cost Analysis (BCA), methodology evaluates expected risk reduction benefits of a hazard mitigation project and compares those benefits to the cost of the mitigation project. FEMA Public Assistance Program and Policy Guide (PAPPG) Chapter 2. Section VII. C. defines cost effective mitigation as: The Hazard Mitigation Measure is cost effective through an acceptable Benefit Cost Analysis (BCA) with a resulting Benefit Cost Ratio equal to or greater than (1).

The Island Wide Benefit Cost Analysis (IWBCA) created for the PREPA infrastructure defines a maximum potential benefit using the incurred costs of the PREPA FEMA Accelerated Award Strategy (FAAS) fixed cost estimate, the mission assignments utilized for the reconnection effort, and the costs associated with loss of service. This maximum benefit has been developed to fund all mitigation projects from both Public Assistance Hazard Mitigation and the Hazard Mitigation Grant program.

It is the applicant's responsibility to maintain a record of approved IWBCA related projects to avoid running out of funds for their Mitigation portion projects.". Please see attached IWBCA Package

The cost of the Hazard Mitigation Proposal (HMP) described herein is \$694,470.58 (Hazard Mitigation Total Cost). The cost of this HMP combined will all other proposals (both PA and HMGP) does not exceed the maximum potential benefit and is therefore deemed cost effective per FEMA Public

Assistance Program and Policy Guide (PAPPG) V3.1 April 2018, Chapter 2, VII., Section C, BCA Rule. This Hazard Mitigation Proposal meets eligible repair and restoration cost-effective requirements.

****See Mitigation Profile Documents Tab in Grants Manager for complete version of this HMP and supporting documents (HMP, HMP cost estimate, Supporting documents file).**

Cost

Code	Quantity	Unit	Total Cost	Section
3510	1	Lump Sum	(\$1,946,225.97)	Uncompleted
9001	1	Lump Sum	\$13,539,183.23	Uncompleted
9008	1	Lump Sum	(\$750,618.00)	Uncompleted
9201	1	Lump Sum	\$0.00	Completed

CRC Gross Cost	\$10,842,339.26
Total 406 HMP Cost	\$694,470.58
Total Insurance Reductions	\$0.00

CRC Net Cost	\$11,536,809.84
Federal Share (90.00%)	\$10,383,128.86
Non-Federal Share (10.00%)	\$1,153,680.98

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.
- 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.
- 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.
- 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.
- 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.
- The Subrecipient provided the estimate for this PW. FEMA validated the estimate and found it to be reasonable for the work to be performed.

Insurance

Additional Information

5/28/2026

No adjustments to be made to the previous insurance coverage determination, no revisions to narrative needed, updated applicant tracker if needed, providing administrative function and forwarding project for completion.

Olga Renta, PA Insurance Specialist
CRC Atlantic, Guaynabo, PR

7/3/2025

Does the Applicant have a Commercial Policy: Yes.

Does the Applicant's Commercial Policy extend coverage for the damage described in this project: No.

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, Guaynabo, PR

O&M Requirements

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

406 Mitigation

There is no additional mitigation information on **FAASt [Rincón Streetlighting] (Distribution)**.

Environmental Historical Preservation

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

EHP Conditions

- Any change to the approved scope of work will require re-evaluation for compliance with NEPA and other Laws and Executive Orders.
- This review does not address all federal, state and local requirements. Acceptance of federal funding requires recipient to comply with all federal, state and local laws. Failure to obtain all appropriate federal, state and local environmental permits and clearances may jeopardize funding.
- If ground disturbing activities occur during construction, applicant will monitor ground disturbance and if any potential archaeological resources are discovered, will immediately cease construction in that area and notify the State and FEMA.
- 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 hardened surfaces can be provided at closeout. d. FEMA will require that an archaeologist, who meets the Secretary of the Interior (SOI) Qualification Standards (36 CFR Part 61) for archaeology, be present to monitor all trenching activities within the Traditional Urban Center of Rincón and for trenches within 200m of the coordinates of RN-1/RC0100001 Yacimientos Ensenada/Fuerra I, RN-9-A Puentes o Atarjeas, and any trenching along Calle Parque in Rincón (See Appendix B for complete Archeological Monitoring Plan). e. In the event that historically or archaeologically significant materials (or evidence thereof) are discovered during the implementation of this project, the Sub-Recipient and the Recipient shall proceed as indicated in Stipulation III.B. of the Programmatic Agreement, and the project shall be halted until such time as FEMA, in consultation with the PRSHPO, determines that appropriate measures have been taken to ensure that the project is in compliance with the NHPA. f. Archaeological monitoring of the activities will be documented by the SOI-qualified archaeologist in a report that must be submitted to FEMA's EHP Section for review. The level of description and documentation in the report submitted to FEMA for review shall be consistent with The Secretary of the Interior's Standards and Guidelines for Archaeological Documentation (http://www.nps.gov/history/local-law/arch_stnds_7.htm). After approval, FEMA EHP will submit the report to PRSHPO for comments and concurrence.
- *****DISREGARD PREVIOUS NHPAA CONDITIONS***** 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. d. 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 Recipient prior to extracting material. FEMA must review the source for compliance with all applicable federal environmental planning and historic preservation laws and execute orders prior to a subrecipient or their contractor commencing 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 closeout.
- 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.
- 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.
- For Rincon Streetlighting only: 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.

- The Applicant must provide documentation at close-out that proves completion of required Conservation Measures. For PR Boa (*Chilabothrus inornatus*) In 2023, the Service amended a Programmatic Biological Opinion (PBO) for the Puerto Rican boa and the Virgin Islands tree boa. The below measures are included as Terms and Conditions (T&Cs) in the amended PBO (USFWS 2023).
 1. Inform all project personnel about the potential presence of the Puerto Rican (PR) boa and Virgin Islands (VI) boa in areas where the proposed work will be conducted and provide training on PR and VI boa identification. A pre-construction meeting will be conducted to inform all project personnel about the need to avoid harming these species. All personnel will be advised that there are civil and criminal penalties for harming, harassing, or killing species protected under the Endangered Species Act of 1973. An educational poster or sign with photo or illustration of these species will be displayed at the project site.
 2. Prior to any construction activity, including removal of vegetation and earth movement, the boundaries of the project area and any area to be excluded and protected will be clearly marked in the project plan and in the field to avoid further habitat degradation outside of the footprint of the project.
 3. Once areas are clearly marked, and right before the use of heavy machinery and any construction activity (including removal of vegetation and earth movement), biologist or designated project personnel with experience on these species will survey the areas to be cleared to verify the presence of any PR or VI boa within the Action Area. If a PR or VI boa is found during the search, it should be captured and managed as per #6 below. Once the removal of vegetation begins, the biologist or designated personnel must remain at the work site and be ready to capture any boa that might be in harms way as the result of the habitat disturbance (see #6).
- 4. For VI boas, once the Action Area has been searched, vegetation will be cut about one meter above ground prior to the use of heavy machinery for land clearing. Cutting vegetation by hand will allow VI boas present on site to move away on their own to adjacent available habitat. If there is no suitable habitat adjacent to the project site, any VI boa found will be relocated accordingly (see #6). 5. For all boa sightings (dead or alive), record the time and date of the sighting and the specific location where it was found. Data will also include a photo of the animal (dead or alive), relocation site GPS coordinates, time and date of the relocation, and comments on how the animal was detected and its behavior. 6. If any PR or VI boa (dead or alive) is found within the Action Area and on harms way, the action will stop, and information will be recorded (see #5). All attempts will be made to immediately safely capture and relocate the animal within suitable habitat (forested) at least 1km from the Action Area and away from construction areas. PR boa relocation sites will be pre-determined before the project starts and sites shared with the Service for revision and concurrence. Relocation of PR boas will be conducted by trained, designated personnel ensuring the animal is not harmed or injured during the capture and relocation process. 7. Measures will be taken to avoid and minimize PR boa and VI boa casualties by heavy machinery or motor vehicles being left in the Action Area.
- - Any heavy machinery left on site (staging areas) or near potential PR or VI boa habitat will be thoroughly inspected each morning before work starts to ensure that no boas have sheltered within engine compartments or other areas of the heavy machinery. If a PR boa or VI boa is found within vehicles or heavy machinery, boas will be safely captured accordingly. If not possible, the animal will be left alone until it leaves the vehicle or machine by itself. - The PR boa and VI boa may seek shelter within debris piles. Measures should be taken to avoid and minimize boa casualties associated with sheltering in new debris piles as a result of project activities. New debris piles should be placed in areas as far as possible from forested areas. Prior to moving, disposing, or shredding, debris piles should be carefully inspected for the presence of PR boas and VI boas. If debris piles will be left on site, we recommend they be placed in an undisturbed area. - In the event a PR boa and VI boa is found dead within the project area, the Federal Agency and the Recipient must contact the Service to appropriately dispose the animal. - If a PR boa or a VI boa is accidentally injured or killed during capture and relocation activities during the Action, the Federal Agency and the Recipient shall terminate the authorized activities and contact the Service within 24 hours to reinstate consultation. The Federal Agency will consult with the Service to determine whether authorized activities should continue as proposed and whether modifications are warranted. - Should the forms of take reach the amount of exempted take during the Action, the Federal Agency and the Recipient shall terminate the authorized activities and contact the Service within 24 hours to reinstate consultation. The Federal Agency will consult with the Service to determine whether authorized activities should continue as proposed and whether modifications are warranted.
- For questions and to submit reports, the Services Point of Contact (POC) is Jose Cruz-Burgos, Endangered Species Coordinator, and can be contacted at: Mobile: 305-304-1386 Office phone: 786-244-0081 Office Direct Line: 939-320-3120
- For Sea Turtles There is potential for sea turtle nesting activity on all ocean-facing sand beaches in Puerto Rico and the U.S. Virgin Islands, including mixed sand and gravel (shell, coral rubble) beaches. The following measures are applicable to green, loggerhead, leatherback, and hawksbill sea turtles. During sea turtle nesting season (March 1 to November 30), a qualified sea turtle monitor must survey beach work areas each morning for possible nests. Nests found in the area should be marked or flagged in place. Outside of nesting season, these areas should be surveyed at least twice a week. Debris removal or construction on beaches may only begin after morning surveys are completed by the sea turtle monitor, and nests are clearly marked. - All personnel will be advised that there are civil and criminal penalties for harming, harassing, or killing species protected under the Endangered Species Act of 1973, as amended. - Surveys shall be conducted by sea turtle permit holders or trained personnel following PRDNER/DPNR-DFW protocols. (See image and list of contacts below.) - Nests located adjacent to the work area should be marked with flagging, creating a 10-foot square roped-off buffer with an unobstructed path leading from the nest to the water. - Nest surveys must be conducted in the mornings, immediately before any construction activity commences. - Sea turtle monitoring groups should possess site-specific information for nests in their designated areas and should communicate these details to work crews to ensure avoidance.
- For Puerto Rico contact: ATMAR: 787-448-8627 Chelonia: 787-306-0916 DRNA Loiza: 787-453-6484 DRNA Rio Grande:

787-646-9689 Reserva Natural de Humacao: 787-594-6568 Siete Quillas: 787-688-6763 TICATOVE Vieques: 787-438-4493 Tortugueros del CEN: 787-635-4493 Tortugueros de Culebra: 787-685-7820 Tortugueros de Isla Verde: 787-604-4959 Tortugeros del Sur: 787-341-8888 Vida Marina: 787-380-5254, 787-206-6800 Yo Amo el Tinglar: 939-276-9901

- 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 projects footprint does not stay within previously permitted structures footprint, then the Service must be consulted. Relocation of sea turtle nests to accommodate construction is not authorized. All project activity shall be confined to daylight hours following the completion of all necessary marine turtle surveys and conservation activities. The sea turtle monitor shall be available via telephone after the initial inspection throughout the workday. If planting will occur, only native plant species are authorized to be planted. Existing native dune vegetation shall be disturbed to the minimum extent necessary. 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. Prior to any planting, the Applicant will submit a vegetation plan to the Service 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 be immediately contacted to assess the situation and provide guidance on the appropriate steps to safeguard the nest. 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.
- 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 nestlings emerge from the nest and make their way safely to the sea. If a sea turtle nest is found after November, work should be postponed until the nestlings have safely hatched and made their way to the sea. 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 workday. 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. 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 waters edge. Removal of vegetation, fence installation, construction activities, and light installation shall be limited within 50 meters from the high tide line.
- No construction involving lights shall be used during the nesting season. Outside of the nesting season, in Puerto Rico and the U.S. Virgin Islands, it is mandatory to have a lighting plan that incorporates sea turtle-friendly lights for coastal areas whenever lights are being repaired or newly installed. For projects in Puerto Rico, compliance with Puerto Rico Law 218 of 2008, which addresses the Control and Prevention of Lighting Pollution in Puerto Rico, and the PR EQB 2016 Regulation to Control and Prevent Light Contamination, is also required. These lighting plans should be submitted to the Service at caribbean_es@fws.gov for review. When submitting the lighting plan, please include: The name and location of the project. A brief description of the project. An associated tracking number (if available). A Point of Contact. After the plan has been fully implemented, the Applicant is responsible for conducting a lighting inspection to identify and correct any remaining problematic lights. 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.
- 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 PRDNER/DPNR-DFW and the National Marine Fisheries Services (NMFS) Protected Resources Division (PRD) at (1-727-824-5312) or by email to takereport.nmfs@noaa.gov and SAJ-RD-Enforcement@usace.army.mil. All sea turtle sightings and incidents involving nesting sea turtles or hatchlings shall be reported to PRDNER/DPNR-DFW and the Service. The Services point of contact is Jose Cruz-Burgos, Endangered Species Program Coordinator: Mobile: 305-304-1386 Office phone: 786-244-0081 Office Direct Line: 939-320-3120 caribbean_es@fws.gov or jose_cruz-burgos@fws.gov
- For *Buxus vahlii*: Before initiating any work within the range of listed plant species and in areas with suitable habitat, applicants must conduct plant surveys. In the event that listed species are discovered at the project site, the Service must be notified. The Applicant must develop conservation measures to minimize or avoid impacts on those species and share those measures with the Service for evaluation and approval. If no listed plants are found during surveys, no further action is required. However, if a listed plant species is found while the project is being conducted, project personnel shall stop work, and the Service should be contacted for further technical assistance. Services point of contacts: Jose Cruz-Burgos, Endangered Species Program Coordinator, Mobile: 305-304-1386, Office: 786-244-0081, jose_cruz-burgos@fws.gov. Omar Monsegur, Fish and Wildlife Biologist, Mobile: (305) 304-0292, omar_monsegur@fws.gov.
- 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 hardened surfaces can be provided at close-out.

EHP Additional Info

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

Final Reviews

Final Review

Reviewed By LEFRANC-GARCIA, CARLOS L.

Reviewed On 09/16/2025 9:37 PM PDT

Review Comments

Reviewed, found eligible and reasonable. CLG 09.16.2025

Recipient Review

Reviewed By Mulero, Noel

Reviewed On 09/23/2025 7:43 PM PDT

Review Comments

Recipient review completed. Applicant must ensure to compliance with all regulatory requirements, Record of Environmental Consideration (REC) Special Conditions and PA policy. Project is ready for applicant review.

Project Signatures

Reviewed By Unsigned

Reviewed On Unsigned

General Info

Project #	714641	P/W #	11630	Project Type	Specialized
Project Category	F - Utilities			Applicant	PR Electric Power Authority (000-UA2QU-00)
Project Title	FAASt [Rincón Streetlighting] (Distribution)				
Project Size	Large			Event	4339DR-PR (4339DR)
Activity Completion Date	9/20/2027			Declaration Date	9/20/2017
Process Step	Obligated			Incident Start Date	9/17/2017
				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 #1317631; FAASt [Distribution Streetlighting - Rincón]

General Facility Information:

- **Facility Type:** Power generation, transmission, and distribution facilities
- **Facility:** Distribution Streetlighting - Rincón
- **Facility Description:** The Rincón municipality has a total of 3236 luminaires of which damage was estimated for 70% of these luminaires. Additional descriptions of typical components of a streetlight system are described below:
 - Pole – This can be either a standalone structure intended to house a streetlight, or a utility pole shared with other overhead utilities.
 - Arm – A piece of hardware affixed to a pole to which a luminaire is mounted. The arm serves to position the streetlight over the street for optimal lighting.
 - Luminaire/Light Bulb – The light emitting part of a streetlight
 - Light controller (e.g., photocell) – A hardware device affixed to the luminaire which controls the operating mode
 - Communication network – A wired or wireless system that allows the smart streetlight to communicate with other devices and the control system
 - Technology control system – A software platform that allows a remote operator to set the operating parameters for the smart streetlight or manually override the parameter if needed.
- **Approx. Year Built:** 1970
- **GPS Latitude/Longitude:** [REDACTED]

Final Scope

1317631 FAASt [Distribution Streetlighting - Rincón]

***** VERSION 1 *****

Version 1 has been created to capture the LUMA change in cost of the project and request an amendment to the Scope of Work (SOW). In Version 0 The project a total estimated cost of \$11,536,809.84 was obligated. In this version, LUMA seeks to modify the cost estimate for the project to reflect accurate allocations of Architecture and Engineering (A&E) costs to FAASt # 335168 and the appropriate allocation of Equipment and Materials (E&M) costs to FAASt # 673691.

Version 0 will be fully de-obligated to reclassify 428 (Public Assistance) costs from the previous version, which will be added to 406 (Mitigation) costs in this version. SOW from previous version has been removed from current SOW. It can be found in the "Versioning and Amendments" tab in GM.

Introduction

Pursuant to FEMA’s Post-Fixed Cost Estimate Obligation SOP (the “SOP”) for FAASSt projects, FAASSt subrecipients must provide to FEMA recovery project scopes of work (“SOW”) for the proposed construction work to be performed. The SOW defines the activities that will be performed using Public Assistance (“PA”) funding and may include § 406 hazard mitigation proposals (“HMPs”). The SOW defines the activities that will be performed using Public Assistance (“PA”) funding.

According to the SOP, FEMA “anticipates that [SOW] submissions might include preliminary designs including drawings and cost estimates. FEMA also recognizes that, generally, architects and/or engineers do not include or delineate the information needed to enable FEMA to complete programmatic reviews. Therefore, in those cases, subrecipients must ensure to submit all the information described [in the SOP] and not limit the submission to a drawing set. Refer to Part C- II. Recipient/Subrecipient Checklist for Submissions as a guide to review completeness.”

This document contains the detailed SOW for FEMA PA Project 714641 FAASSt [Rincón Streetlighting] (Distribution) under DR-4339-PR Public Assistance. The document provides a detailed description of the project, scope of PA construction activities to be completed, common EHP review information, proposed hazard mitigation measures, and project cost estimates. LUMA is seeking approval from COR3 and FEMA for PA funding for the scope described in this document.

LUMA submits this Detailed SOW pursuant to the Transmission and Distribution Operations and Maintenance Agreement between the Puerto Rico Electric Power Authority (“PREPA”), the Puerto Rico Public-Private Partnerships Authority (“P3A”), and LUMA, and in accordance with the Consent to Federal Funding Letter issued by PREPA and P3A, which collectively provides the necessary consent for LUMA, as agent of PREPA, to undertake work in connection with any Federal Funding requests related to the T&D System submitted to FEMA. References to “Subrecipient” herein refer to PREPA pursuant to this agreement and consent for LUMA to act as its agent with respect to federal funds.

Project Description

The proposed scope of work addresses the impacts on the streetlight facilities caused by Hurricane María. The project's objectives are to repair, replace, and upgrade the existing streetlight components to consensus-based codes and/or standards and mitigate future similar damage.

The project's final deliverables will include fully functional and upgraded streetlight facilities. These deliverables include replacing existing lighting components, poles, and disposing of hazardous materials. The proposed § 406 Hazard Mitigation Scope of Work (Section 10.2 below) will also increase the strength of the poles by increasing the wind tolerance of all materials to 160mph. The completion of the project will ensure improved lighting infrastructure, enhanced safety measures, and increased resilience to future challenges.

Facilities

FACILITIES LIST – BUILDINGS AND SUBSTATIONS

The following list includes the name, year of construction, and GPS coordinates of each building or substation included in this project:

- None

FACILITIES LIST – OTHER FACILITIES

The following list includes the name and GPS coordinates identifying the areas of work for other types of facilities. For any access roads or other line work, the coordinates listed below are the beginning and end points.

Name	Damage Number	GPS Location
Rincón Municipality	1317631	Please refer to Appendix B for a list of all GPS locations to be impacted by this project.

Existing Lighting Components

The existing lighting components include photo controls, luminaires, arms, and associated hardware. These components are installed on various pole throughout the municipality.

Existing Streetlight Poles

The streetlight poles are made of aluminum, wood, steel, or concrete. Concrete poles are octagonal, varying in height from 33ft to 35ft, and installed to a depth of 5ft to 6ft. Aluminum poles are typically 30ft high, with increased strength versions reaching 40ft in height. Secondary wood poles and 35ft steel poles are also present, designed to withstand specific wind forces.

PROJECT AREA MAP WITH BOUNDARIES OF CONSTRUCTION

Please see the attached map identified as **Work Zone Map** at **Appendix A**.

SECTION 428 SCOPE OF WORK

The proposed type of work for this project:

☒ **X** Standard Project: Restores the facility/facilities to pre-disaster design and function to locally-adopted codes/standards and/or FEMA-approved industry standards.

☐ Improved Project: Restores the pre-disaster function of the facilities and incorporates improvements or changes to its pre-disaster design not required by codes or standards.

☐ Subrecipient's request letter included, see **Appendix** ____.

☐ Recipient's approval letter included, see **Appendix** ____.

☐ Alternate Project: Does not restore the pre-disaster function of the damage facility. The Subrecipient, through the Recipients, must obtain approval from FEMA.

☐ Subrecipient's request letter included, see **Appendix** ____.

☐ Recipient's approval letter included, see **Appendix** ____.

DESCRIPTION OF PROPOSED WORK TO BE PERFORMED

Scope of Work Description	Number of Points
Components only do not require pole replacement, installation, removal	1,833
Secondary pole replacement, installation, removal, with third-party attachments	876
Secondary pole replacement, installation, removal, without third-party attachments	246
Secondary pole, removal, with third party attachments, Luminaire Location Change (LLC)	45
Streetlight pole replacement, installation, removal	8
Grand Total	3,008

The proposed restoration includes the repair of eligible disaster damage up to required codes and standards, and the request to upgrade undamaged infrastructure that must be addressed to fully effectuate the restoration of disaster-damaged components to restore the system's function to an approved industry standard. The Detailed Scope of Work consists of the repair, removal, replacement, and addition of the following infrastructure to restore this facility to codes and standards. Refer to **Appendix D – Project Considerations Rincón Municipality**.

Lighting Components Replaced

- Remove existing lighting components, including photo controls, luminaires, arms, and associated hardware, and replace them with new lighting components. Quantities for these replacements are provided in the table above.
- Brush vegetation, as identified, to gain access to the pole and conduct repairs.
- Perform site evaluation and dispose of universal bulbs and photocells in an authorized facility.

Pole Replacement

- Remove and replace existing streetlight poles, including lighting components. Quantities for these replacements are provided in the table above. The locations of the poles and description of work on each pole are described in **Appendix D – Project Considerations Rincón Municipality**.
- Brush vegetation, as identified, to gain access to the pole and conduct repairs.
- All work for this program will be performed within the municipality's existing electrical easement.

CODES & STANDARDS

Per FEMA's SOP, the locally adopted codes/standards and/or FEMA-approved industry standards used for this project are provided below:

- LUMA Distribution Design Manual (See Applicant Profile)
- LUMA Streetlighting Construction Standards (See Applicant Profile)

COMMON EHP REVIEW INFORMATION

Please check any items applicable to the proposed scope of work in this Project. If an item is checked, provide a description of the scope extent and location of the selected activity.

 x **Ground disturbance outside of existing footprint.** If checked, provide a description of the ground disturbing activities, including the extent, location, and depth of the disturbance.

- All work for this program will be performed within the existing electrical easement of the municipality. Poles are near the roads and are site accessible.
- **Streetlights Poles:** Appendix C and Appendix D contain coordinates for streetlight poles where ground disturbance is required. The replacement of poles has a standard diameter for ground disturbance of 18 inches. The depth of the poles to be installed is stated in Appendix D (see "Soil area and depth impact" column).
- Equipment to be used includes Skid Steer, Excavator, Dump trucks, Man lifts, 120-ton Motor Crane, Boom Trucks, 45-ton Crane, Zoom Boom, Air compressor, Truck Digger, Water truck, Pump Truck, Concrete Vibrator, Filtering Machine, and Flatbed platform.

 Soil testing or boring to be performed as part of pre-construction activities. If checked, provide a description, location, and dimensions of the testing/boring activities.

Relocation of utilities. If checked, include a description of the relocation, including the type of utility, relocation coordinates, and the extent and depth of associated ground disturbance.

Vegetative Removal. If checked, describe the removal work to be performed, its location, and its extent.

- Vegetation clearance will be performed solely to the extent that it allows crews to conduct work and will be limited to a 10 ft radius surrounding the surface of the pole, but not to exceed the width of the easement. This is for the exclusive purpose of gaining access to the pole to conduct repairs. The costs related to vegetation clearance procedures are covered in **727562 FAASSt [Region 5 - Mayaguez Group C] (Vegetation)** and **750068 FAASSt [Region 5 - Mayaguez Group A] Low Density (Vegetation)**. The vegetation removal process will be managed in accordance with federal and state regulations.

X Demolition. If checked, include a description of what will be removed and the extent and depth of any ground disturbing activities. Additionally, include a description of (1) demolition debris type (construction debris, white goods, hazardous materials, etc.); (2) GPS location of temporary debris storage sites; (3) final debris disposal location; and (4) final debris disposal method.

- **Construction Debris:** The debris that will be produced during removal includes luminaires, polearms, photocells, metal scrap, wiring, concrete, steel, and wood poles. The debris will be separated and taken to an authorized waste disposal facility.
- Luminaires are considered universal waste and will be disposed of by the contractor in authorized facilities.
- The Project does not include removal and/or disposal of transformers because they are secondary voltage facilities, and transformer removal pertains to primary voltage facilities.
- The GPS location of temporary debris storage sites, the final debris disposal location, and the final debris disposal method has not been identified yet.

X Staging areas, landing areas for air transport, and access roads. If checked, provide the GPS location of staging areas and access roads. Include a description of the extent of any related vegetative removal, ground disturbance, or stabilization measures required (such as gabion walls, retaining walls, paving, etc.).

- **Staging Areas:** Staging areas within the work site have not been identified at this moment. The contractor must provide the information on the staging areas as soon as available. Staging areas are confined to previously disturbed or hardened surfaces.
 - o All materials are stored and dispatched from the assigned LUMA Regional Warehouse. The location assigned for this project is the Mayaguez Warehouse (REDACTED).
- **Access Roads:** The construction of access roads is not required for this scope of work. (Refer to **Appendix D** in the "Site Accessible" column).

X Fill material. If the project includes the use of fill material, provide the source of the fill material, including the provider's name and address (if known).

- Fill, gravel, and sand materials will be obtained from a preferred vendor as referenced in the *Approved Supplier List Directory PR* (see Applicant Profile).

Work in water, including coffer dams, dredging, placement of equipment in water, or other work in wetlands. If checked, provide a description of the activities to be performed in water or wetlands.

PROJECT COST ESTIMATE (PCE)

The estimated costs (compliant with **Class 3 Accuracy +/-30%**) to complete the project are summarized in the table(s) below. The cost estimate(s) was developed utilizing preliminary Architectural and Engineering ("A&E") design information. For a more detailed cost estimate refer to *t Appendix A-LUMA Project Cost Estimate*.

Distribution Streetlights Estimate Summary - Rincón					
	Total Cost Estimate	Cost Factor	FAASSt Project 714641 (428 Cost Estimate)	FAASSt Project 714641 (406 Cost Estimate)	A&E FAASSt Project 335168 (428)
Planning, Permits and Applications (A&E)	\$ 98,627.57	1.00%	\$ 0.00	\$ 5,113.47	\$ 93,514.10
Environmental Management (A&E)	\$ 295,882.71	3.00%	\$ 0.00	\$ 15,340.40	\$ 280,542.31

Project Management (A&E)	\$ 98,627.57	1.00%	\$ 0.00	\$ 5,113.47	\$ 93,514.10
Engineering - A&E Estimate	\$ 671,862.00	6.81%	\$ 0.00	\$ 34,833.50	\$ 637,028.50
Engineering - Owners Engineering (A&E)	\$ 493,137.86	5.00%	\$ 0.00	\$ 25,567.33	\$ 467,570.53
Construction - Labor & Materials	\$ 9,862,757.11	100.00%	\$ 9,351,410.55	\$ 11,346.56	\$ 0.00
Construction - Project Management	\$ 394,510.28	4.00%	\$ 374,056.42	\$ 20,453.86	\$ 0.00
Construction - Site Management	\$ 493,137.86	5.00%	\$ 67,570.53	\$ 25,567.33	\$ 0.00
Construction - Quality Inspections	\$ 295,882.71	3.00%	\$ 280,542.31	\$ 15,340.40	\$ 0.00
Construction - Contingency	\$ 690,393.00	7.00%	\$ 654,598.74	\$ 35,794.26	\$ 0.00
Lodging & Per Diem & Travel	\$ 838,835.13	50.00%	\$ 838,835.13	\$ 0.00	\$ 0.00
TOTAL PROJECT COST ESTIMATE	\$ 14,233,653.80		\$ 11,967,013.68	\$ 694,470.58	\$ 1,572,169.54

	Version 0			Version 1			Difference		
Cost Element	Total Cost	428	406	Total Cost	428	406	Total Cost	428	406
Planning	\$98,627.57	\$93,514.10	\$5,113.47	\$98,627.57	\$93,514.10	\$5,113.47	\$0.00	\$0.00	\$0.00
Environmental Management	\$295,882.71	\$280,542.31	\$15,340.40	\$295,882.71	\$280,542.31	\$15,340.40	\$0.00	\$0.00	\$0.00
Management/Project Management	\$493,137.86	\$467,570.53	\$25,567.33	\$98,627.57	\$93,514.10	\$5,113.47	(\$394,510.29)	(\$374,056.42)	(\$20,453.86)
Engineering	\$1,164,999.86	\$1,104,599.03	\$60,400.83	\$671,862.00	\$637,028.50	\$34,833.50	(\$493,137.86)	(\$467,570.53)	(\$25,567.33)
Engineering - Owners Engineering	\$0.00	\$0.00	\$0.00	\$493,137.86	\$467,570.53	\$25,567.33	\$493,137.86	\$467,570.53	\$25,567.33
Construction	\$9,395,137.68	\$9,348,905.39	\$46,232.29	\$0.00	\$0.00	\$0.00	(\$9,395,137.68)	(\$9,348,905.39)	(\$46,232.29)
Construction - Labor & Materials	\$8,606,117.11	\$8,600,792.55	\$5,324.56	\$9,862,757.11	\$9,351,410.55	\$511,346.56	(\$1,256,640.00)	(\$750,618.00)	(\$506,022.00)
Construction - Project Management	\$0.00	\$0.00	\$0.00	\$394,510.28	\$374,056.42	\$20,453.86	\$394,510.28	\$374,056.42	\$20,453.86
Construction - Site Management	\$493,137.86	\$467,570.53	\$25,567.33	\$493,137.86	\$467,570.53	\$25,567.33	\$0.00	\$0.00	\$0.00

Construction - Quality Inspections	\$295,882.71	\$280,542.31	\$15,340.40	\$295,882.71	\$280,542.31	\$15,340.40	\$0.00	\$0.00	\$0.00
Construction - Contingency	\$690,393.00	\$654,598.74	\$35,794.26	\$690,393.00	\$654,598.74	\$35,794.26	\$0.00	\$0.00	\$0.00
Lodging, Per Diem & Travel	\$838,835.13	\$838,835.13	\$0.00	\$838,835.13	\$838,835.13	\$0.00	\$0.00	\$0.00	\$0.00
Equipment & Material	\$1,256,640.00	\$750,618.00	\$506,022.00	\$0.00	\$0.00	\$0.00	(\$1,256,640.00)	(\$750,618.00)	(\$506,022.00)
Cost Totals	\$14,233,653.81	\$13,539,183.23	\$694,470.58	\$14,233,653.80	\$13,539,183.22	\$694,470.58	(\$0.00)	(\$0.00)	\$0.00
FAAST Project # 714641 428:	\$11,536,809.84			\$11,967,013.68			\$430,203.84		
FAAST Project # 714641 406:	\$0.00			\$694,470.58			\$694,470.58		
FAAST 428 A&E # 335168 TOTAL	\$1,946,225.97			\$1,572,169.54			(\$374,056.42)		
FAAST 428 E&M # 673691 TOTAL	\$1,256,640.00			\$0.00			(\$1,256,640.00)		

428 Project Summary, Version 1:

Work to Be Completed (WTBC): \$13,539,183.23

E&M Deduction (#673691) 428: -\$0.00 (See project note # 3)

A&E Deduction (Global A&E FAAS 335168): -\$0.00 (See project note # 3)

Project Total Cost: \$13,539,183.23

VERSION SUMMARY OF KEY CHANGES:

V0: \$10,842,339.26 (WTBC, A&E, E&M Deduction)

V1: \$13,539,183.23 (WTBC, A&E Deduction, E&M Deduction, Reconcile funding from De-obligation of V0)

Project Notes:

1. Refer to detailed SOW provided in document: 752808- DR4339PR - DSOW Group 19- Revision 004- V1.pdf.
2. Refer to detailed cost estimate in document: 752808-DR4339PR-APPENDIX B-Detailed Cost Estimate Revision 004 - V1.xlsx.
3. In the previous version, the Architecture and Engineering (A&E) and Equipment and Materials (E&M) dollar amounts were deducted. Accordingly, a positive value in the same amount has been added in Version 1 to zero out these costs. This adjustment was made to prevent duplication of A&E and E&M funds in Version 0, as requested by the Applicant, to modify the project cost estimate to reflect accurate allocations of A&E cost to FAAS 335168, and E&M cost to FAAS #673691. Refer to document file: SP714641 - DR4339PR - AE and E&M Cost Clarification.pdf
4. This project is part of 136271-MEPA078 Puerto Rico Electrical Power Authority Island Wide FAAS Project.
5. Attachments:

For reference documents Appendix A through E, see the files labeled:

- Appendix A – Rincón Work Zones Map

- Appendix B – Rincón Municipality Work Zones FIDs SIDs and Coordinates
- Appendix C – Cost Estimate Rincón Municipality
- Appendix D – Project Considerations Rincón Municipality
- Appendix E – FEMA 406 Justification: Streetlight Program

406 HMP Scope

Project number: 714641; FAASt [Distribution Streetlighting - Rincón] (Distribution)

Damage # 1317631; FAASt [Distribution Streetlighting - Rincón]

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

Location: Rincón, Puerto Rico

GPS Latitude/Longitude: [REDACTED]

Hazard Mitigation Narrative

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

In the Rincón Municipality, PREPA has a total of 3,008 ea. streetlights luminaries. The Method of Repair (MOR) include the replacement of the damage lighting components including photocells, luminaires, arms, and associated hardware. Also include the replacement of the damage distribution and streetlight poles (wood, concrete, galvanized & aluminum), the replacement of the aerial secondary wiring connections, and the construction of new concrete base for the aluminum streetlight poles. 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, aluminum poles breakaway bases, and foundations (concrete bases) by increasing the wind tolerance of all materials to 160mph. Note: The FEMA Accelerated Award Strategy (FAASt) MOR included the PREPA distribution standards and specifications that were based on a 90mph sustained winds for all materials. Although in PREPA Technical Communication #13-02 (August 22, 2013) a design-criteria of 145mph winds were published, the specifications for streetlighting material were never revised, and in the specification documents, the 90mph winds stayed as the requirement for procurement purposes of all streetlighting materials. The 160mph wind tolerance mitigation measure, will protect and make the affected infrastructure more resistant, stronger, and resilient to similar hazards.

Hazard Mitigation Proposal (HMP) Scope of Work:

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

Mitigation Measures (Replacement)

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

406 Mitigation Scope of Work:

- Replace (8 ea.) 33ft octagonal concrete poles by (8 ea.) 39ft octagonal concrete poles.
- Replace (1,121 ea.) 35ft galvanized poles by (1,121 ea.) 35ft S3.5 galvanized poles.

Hazard Mitigation Proposal (HMP) Cost:

Total Net Hazard Mitigation Cost (Base Cost) = \$511,346.56
+ HM (Applicant A&E, Management & General Conditions) = \$183,124.02
Hazard Mitigation Total Cost = \$694,470.58

Hazard Mitigation Proposal (HMP) Cost Distribution:

Equipment and Materials (E&M) = \$506,022.00
Architecture and Engineering (A&E) = \$106,422.03
Construction Cost = _\$82,026.55
Hazard Mitigation Total Cost = \$694,470.58

-

HMP Cost-Effectiveness Calculations:

FEMA's Benefit-Cost Analysis (BCA), methodology evaluates expected risk reduction benefits of a hazard mitigation project and compares those benefits to the cost of the mitigation project. FEMA Public Assistance Program and Policy Guide (PAPPG) Chapter 2, Section VII. C. defines cost effective mitigation as: The Hazard Mitigation Measure is cost effective through an acceptable Benefit Cost Analysis (BCA) with a resulting Benefit Cost Ratio equal to or greater than (1).

The Island Wide Benefit Cost Analysis (IWBCA) created for the PREPA infrastructure defines a maximum potential benefit using the incurred costs of the PREPA FEMA Accelerated Award Strategy (FAAST) fixed cost estimate, the mission assignments utilized for the reconnection effort, and the costs associated with loss of service. This maximum benefit has been developed to fund all mitigation projects from both Public Assistance Hazard Mitigation and the Hazard Mitigation Grant program.

It is the applicant's responsibility to maintain a record of approved IWBCA related projects to avoid running out of funds for their Mitigation portion projects.". Please see attached IWBCA Package

The cost of the Hazard Mitigation Proposal (HMP) described herein is \$694,470.58 (Hazard Mitigation Total Cost). The cost of this HMP combined with all other proposals (both PA and HMGP) does not exceed the maximum potential benefit and is therefore deemed cost effective per FEMA Public Assistance Program and Policy Guide (PAPPG) V3.1 April 2018, Chapter 2, VII., Section C, BCA Rule. This Hazard Mitigation Proposal meets eligible repair and restoration cost-effective requirements.

****See Mitigation Profile Documents Tab in Grants Manager for complete version of this HMP and supporting documents (HMP, HMP cost estimate, Supporting documents file).**

Cost

Code	Quantity	Unit	Total Cost	Section
3510	1	Lump Sum	(\$1,946,225.97)	Uncompleted
9001	1	Lump Sum	\$13,539,183.23	Uncompleted
9008	1	Lump Sum	(\$750,618.00)	Uncompleted
9201	1	Lump Sum	\$0.00	Completed
9001	1	Lump Sum	(\$13,539,183.23)	Uncompleted
9001	1	Lump Sum	\$13,539,183.23	Uncompleted
3510	1	Lump Sum	\$1,946,225.97	Uncompleted
9001	1	Lump Sum	\$750,618.00	Uncompleted

CRC Gross Cost	\$13,539,183.23
Total 406 HMP Cost	\$694,470.58
Total Insurance Reductions	\$0.00
CRC Net Cost	\$14,233,653.81
Federal Share (90.00%)	\$12,810,288.43
Non-Federal Share (10.00%)	\$1,423,365.38

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.
- 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.
- 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.
- 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.
- 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.
- The Subrecipient provided the estimate for this PW. FEMA validated the estimate and found it to be reasonable for the work to be performed.

Insurance

Additional Information

5/28/2026

No adjustments to be made to the previous insurance coverage determination, no revisions to narrative needed, updated applicant tracker if needed, providing administrative function and forwarding project for completion.

Olga Renta, PA Insurance Specialist
CRC Atlantic, Guaynabo, PR

7/3/2025

Does the Applicant have a Commercial Policy: Yes.

Does the Applicant's Commercial Policy extend coverage for the damage described in this project: No.

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, Guaynabo, PR

O&M Requirements

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

406 Mitigation

There is no additional mitigation information on **FAASt [Rincón Streetlighting] (Distribution)**.

Environmental Historical Preservation

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

EHP Conditions

- Any change to the approved scope of work will require re-evaluation for compliance with NEPA and other Laws and Executive Orders.
- This review does not address all federal, state and local requirements. Acceptance of federal funding requires recipient to comply with all federal, state and local laws. Failure to obtain all appropriate federal, state and local environmental permits and clearances may jeopardize funding.
- If ground disturbing activities occur during construction, applicant will monitor ground disturbance and if any potential archaeological resources are discovered, will immediately cease construction in that area and notify the State and FEMA.
- 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 hardened surfaces can be provided at closeout. d. FEMA will require that an archaeologist, who meets the Secretary of the Interior (SOI) Qualification Standards (36 CFR Part 61) for archaeology, be present to monitor all trenching activities within the Traditional Urban Center of Rincón and for trenches within 200m of the coordinates of RN-1/RC0100001 Yacimientos Ensenada/Fuerra I, RN-9-A Puentes o Atarjeas, and any trenching along Calle Parque in Rincón (See Appendix B for complete Archeological Monitoring Plan). e. In the event that historically or archaeologically significant materials (or evidence thereof) are discovered during the implementation of this project, the Sub-Recipient and the Recipient shall proceed as indicated in Stipulation III.B. of the Programmatic Agreement, and the project shall be halted until such time as FEMA, in consultation with the PRSHPO, determines that appropriate measures have been taken to ensure that the project is in compliance with the NHPA. f. Archaeological monitoring of the activities will be documented by the SOI-qualified archaeologist in a report that must be submitted to FEMA's EHP Section for review. The level of description and documentation in the report submitted to FEMA for review shall be consistent with The Secretary of the Interior's Standards and Guidelines for Archaeological Documentation (http://www.nps.gov/history/local-law/arch_stnds_7.htm). After approval, FEMA EHP will submit the report to PRSHPO for comments and concurrence.
- *****DISREGARD PREVIOUS NHPAA CONDITIONS***** 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. d. 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 Recipient prior to extracting material. FEMA must review the source for compliance with all applicable federal environmental planning and historic preservation laws and execute orders prior to a subrecipient or their contractor commencing 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 closeout.
- 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.
- 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.
- For Rincon Streetlighting only: 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.

- The Applicant must provide documentation at close-out that proves completion of required Conservation Measures. For PR Boa (*Chilabothrus inornatus*) In 2023, the Service amended a Programmatic Biological Opinion (PBO) for the Puerto Rican boa and the Virgin Islands tree boa. The below measures are included as Terms and Conditions (T&Cs) in the amended PBO (USFWS 2023).
 1. Inform all project personnel about the potential presence of the Puerto Rican (PR) boa and Virgin Islands (VI) boa in areas where the proposed work will be conducted and provide training on PR and VI boa identification. A pre-construction meeting will be conducted to inform all project personnel about the need to avoid harming these species. All personnel will be advised that there are civil and criminal penalties for harming, harassing, or killing species protected under the Endangered Species Act of 1973. An educational poster or sign with photo or illustration of these species will be displayed at the project site.
 2. Prior to any construction activity, including removal of vegetation and earth movement, the boundaries of the project area and any area to be excluded and protected will be clearly marked in the project plan and in the field to avoid further habitat degradation outside of the footprint of the project.
 3. Once areas are clearly marked, and right before the use of heavy machinery and any construction activity (including removal of vegetation and earth movement), biologist or designated project personnel with experience on these species will survey the areas to be cleared to verify the presence of any PR or VI boa within the Action Area. If a PR or VI boa is found during the search, it should be captured and managed as per #6 below. Once the removal of vegetation begins, the biologist or designated personnel must remain at the work site and be ready to capture any boa that might be in harms way as the result of the habitat disturbance (see #6).
- 4. For VI boas, once the Action Area has been searched, vegetation will be cut about one meter above ground prior to the use of heavy machinery for land clearing. Cutting vegetation by hand will allow VI boas present on site to move away on their own to adjacent available habitat. If there is no suitable habitat adjacent to the project site, any VI boa found will be relocated accordingly (see #6). 5. For all boa sightings (dead or alive), record the time and date of the sighting and the specific location where it was found. Data will also include a photo of the animal (dead or alive), relocation site GPS coordinates, time and date of the relocation, and comments on how the animal was detected and its behavior. 6. If any PR or VI boa (dead or alive) is found within the Action Area and on harms way, the action will stop, and information will be recorded (see #5). All attempts will be made to immediately safely capture and relocate the animal within suitable habitat (forested) at least 1km from the Action Area and away from construction areas. PR boa relocation sites will be pre-determined before the project starts and sites shared with the Service for revision and concurrence. Relocation of PR boas will be conducted by trained, designated personnel ensuring the animal is not harmed or injured during the capture and relocation process. 7. Measures will be taken to avoid and minimize PR boa and VI boa casualties by heavy machinery or motor vehicles being left in the Action Area.
- - Any heavy machinery left on site (staging areas) or near potential PR or VI boa habitat will be thoroughly inspected each morning before work starts to ensure that no boas have sheltered within engine compartments or other areas of the heavy machinery. If a PR boa or VI boa is found within vehicles or heavy machinery, boas will be safely captured accordingly. If not possible, the animal will be left alone until it leaves the vehicle or machine by itself. - The PR boa and VI boa may seek shelter within debris piles. Measures should be taken to avoid and minimize boa casualties associated with sheltering in new debris piles as a result of project activities. New debris piles should be placed in areas as far as possible from forested areas. Prior to moving, disposing, or shredding, debris piles should be carefully inspected for the presence of PR boas and VI boas. If debris piles will be left on site, we recommend they be placed in an undisturbed area. - In the event a PR boa and VI boa is found dead within the project area, the Federal Agency and the Recipient must contact the Service to appropriately dispose the animal. - If a PR boa or a VI boa is accidentally injured or killed during capture and relocation activities during the Action, the Federal Agency and the Recipient shall terminate the authorized activities and contact the Service within 24 hours to reinstate consultation. The Federal Agency will consult with the Service to determine whether authorized activities should continue as proposed and whether modifications are warranted. - Should the forms of take reach the amount of exempted take during the Action, the Federal Agency and the Recipient shall terminate the authorized activities and contact the Service within 24 hours to reinstate consultation. The Federal Agency will consult with the Service to determine whether authorized activities should continue as proposed and whether modifications are warranted.
- For questions and to submit reports, the Services Point of Contact (POC) is Jose Cruz-Burgos, Endangered Species Coordinator, and can be contacted at: Mobile: 305-304-1386 Office phone: 786-244-0081 Office Direct Line: 939-320-3120
- For Sea Turtles There is potential for sea turtle nesting activity on all ocean-facing sand beaches in Puerto Rico and the U.S. Virgin Islands, including mixed sand and gravel (shell, coral rubble) beaches. The following measures are applicable to green, loggerhead, leatherback, and hawksbill sea turtles. During sea turtle nesting season (March 1 to November 30), a qualified sea turtle monitor must survey beach work areas each morning for possible nests. Nests found in the area should be marked or flagged in place. Outside of nesting season, these areas should be surveyed at least twice a week. Debris removal or construction on beaches may only begin after morning surveys are completed by the sea turtle monitor, and nests are clearly marked. - All personnel will be advised that there are civil and criminal penalties for harming, harassing, or killing species protected under the Endangered Species Act of 1973, as amended. - Surveys shall be conducted by sea turtle permit holders or trained personnel following PRDNER/DPNR-DFW protocols. (See image and list of contacts below.) - Nests located adjacent to the work area should be marked with flagging, creating a 10-foot square roped-off buffer with an unobstructed path leading from the nest to the water. - Nest surveys must be conducted in the mornings, immediately before any construction activity commences. - Sea turtle monitoring groups should possess site-specific information for nests in their designated areas and should communicate these details to work crews to ensure avoidance.
- For Puerto Rico contact: ATMAR: 787-448-8627 Chelonia: 787-306-0916 DRNA Loiza: 787-453-6484 DRNA Rio Grande:

787-646-9689 Reserva Natural de Humacao: 787-594-6568 Siete Quillas: 787-688-6763 TICATOVE Vieques: 787-438-4493 Tortugueros del CEN: 787-635-4493 Tortugueros de Culebra: 787-685-7820 Tortugueros de Isla Verde: 787-604-4959 Tortugeros del Sur: 787-341-8888 Vida Marina: 787-380-5254, 787-206-6800 Yo Amo el Tinglar: 939-276-9901

- 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 projects footprint does not stay within previously permitted structures footprint, then the Service must be consulted. Relocation of sea turtle nests to accommodate construction is not authorized. All project activity shall be confined to daylight hours following the completion of all necessary marine turtle surveys and conservation activities. The sea turtle monitor shall be available via telephone after the initial inspection throughout the workday. If planting will occur, only native plant species are authorized to be planted. Existing native dune vegetation shall be disturbed to the minimum extent necessary. 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. Prior to any planting, the Applicant will submit a vegetation plan to the Service 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 be immediately contacted to assess the situation and provide guidance on the appropriate steps to safeguard the nest. 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.
- 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 nestlings emerge from the nest and make their way safely to the sea. If a sea turtle nest is found after November, work should be postponed until the nestlings have safely hatched and made their way to the sea. 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 workday. 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. 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 waters edge. Removal of vegetation, fence installation, construction activities, and light installation shall be limited within 50 meters from the high tide line.
- No construction involving lights shall be used during the nesting season. Outside of the nesting season, in Puerto Rico and the U.S. Virgin Islands, it is mandatory to have a lighting plan that incorporates sea turtle-friendly lights for coastal areas whenever lights are being repaired or newly installed. For projects in Puerto Rico, compliance with Puerto Rico Law 218 of 2008, which addresses the Control and Prevention of Lighting Pollution in Puerto Rico, and the PR EQB 2016 Regulation to Control and Prevent Light Contamination, is also required. These lighting plans should be submitted to the Service at caribbean_es@fws.gov for review. When submitting the lighting plan, please include: The name and location of the project. A brief description of the project. An associated tracking number (if available). A Point of Contact. After the plan has been fully implemented, the Applicant is responsible for conducting a lighting inspection to identify and correct any remaining problematic lights. 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.
- 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 PRDNER/DPNR-DFW and the National Marine Fisheries Services (NMFS) Protected Resources Division (PRD) at (1-727-824-5312) or by email to takereport.nmfs@noaa.gov and SAJ-RD-Enforcement@usace.army.mil. All sea turtle sightings and incidents involving nesting sea turtles or hatchlings shall be reported to PRDNER/DPNR-DFW and the Service. The Services point of contact is Jose Cruz-Burgos, Endangered Species Program Coordinator: Mobile: 305-304-1386 Office phone: 786-244-0081 Office Direct Line: 939-320-3120 caribbean_es@fws.gov or jose_cruz-burgos@fws.gov
- For *Buxus vahlii*: Before initiating any work within the range of listed plant species and in areas with suitable habitat, applicants must conduct plant surveys. In the event that listed species are discovered at the project site, the Service must be notified. The Applicant must develop conservation measures to minimize or avoid impacts on those species and share those measures with the Service for evaluation and approval. If no listed plants are found during surveys, no further action is required. However, if a listed plant species is found while the project is being conducted, project personnel shall stop work, and the Service should be contacted for further technical assistance. Services point of contacts: Jose Cruz-Burgos, Endangered Species Program Coordinator, Mobile: 305-304-1386, Office: 786-244-0081, jose_cruz-burgos@fws.gov. Omar Monsegur, Fish and Wildlife Biologist, Mobile: (305) 304-0292, omar_monsegur@fws.gov.
- 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 hardened surfaces can be provided at close-out.

EHP Additional Info

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

Final Reviews

Final Review

Reviewed By LEFRANC-GARCIA, CARLOS L.

Reviewed On 07/14/2026 8:11 PM PDT

Review Comments

REC still applies. Project has been reviewed, found eligible and reasonable. Subrecipient and its agents are responsible for complying with all grants and subgrant conditions. CLG 07.14.2026

Recipient Review

Reviewed By Mulero, Noel

Reviewed On 07/22/2026 3:53 PM PDT

Review Comments

Recipient review completed. Applicant must ensure to compliance with all regulatory requirements, Record of Environmental Consideration (REC) Special Conditions and PA policy. Project is ready for applicant review. This project does not comply with the DOE executive order. This means that FEMA is the lead agency for environmental matters.

Project Signatures

Reviewed By Unsigned

Reviewed On Unsigned

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 \$14,233,653.81 for subaward number 11630 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.

Award Information

EMMIE Imported Version Information

Version #	Eligibility Status	Current Location	Bundle Number	Project Amount	Cost Share	Federal Share Obligated	Date Obligated
0	Pending	In Review		\$12,467,409.38	90%	\$0.00	

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 #
1	8/3/2026	\$2,427,159.57	90%	Accepted	4339DRPRP00116301
0	3/1/2026	\$10,383,128.86	90%	Accepted	4339DRPRP00116301

**Department of Homeland Security
Federal Emergency Management Agency**

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General Info

Project #	801172	PW #	108083	Project Type	Specialized
Project Category	F - Utilities	Applicant	PR Electric Power Authority (000-UA2QU-00)		
Project Title	FAASt * [Feeder Rebuild # 1529-15] (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 #1492050; FAASt [Distribution Feeder Rebuild # 1529-15]

General Facility Information:

- **Facility Type:** Power generation, transmission, and distribution facilities
- **Facility:** Distribution Feeder Rebuild # 1529-15
- **Facility Description:** The facility included: 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, and fault interrupting equipment (fuses, reclosers, and sectionalizers).
- **Approx. Year Built:** 1980
- **Start GPS Latitude/Longitude:** [REDACTED]
- **End GPS Latitude/Longitude:** [REDACTED]

Final Scope

1492050 **FAASt [Distribution Feeder Rebuild # 1529-15]**

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Introduction:

This document contains the Detailed Scope of Work (DSOW) for the project 801172 Distribution Feeder Rebuild #1529-15 Project. The document provides a detailed description of the project, including scope, schedule, cost estimates and project considerations. LUMA Energy is seeking approval from COR3 and FEMA for project funding to repair, restore, or replace the eligible facilities under DR-4339-PR Public Assistance.

LUMA submits this (DSOW) pursuant to the Transmission and Distribution Operations & Maintenance Agreement between the 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 LUMA Vendor Directory List included on the Applicant Event Profile in Grants Portal, which collectively provides the necessary consent for LUMA Energy, as agent of PREPA, to execute federally-funded projects and seek reimbursement from FEMA as it relates to the Transmission and Distribution ("T&D") System.

Facilities Description

Feeder 1529-15 serves suburban and rural areas of the municipality of San Juan. Feeder 1529-15 is approximately 1.33 miles of three-phase overhead and underground distribution conductor. During the design process, LUMA decided that the 0.71-mile underground segment of the Feeder would be removed from this project because it complies with Code and Standards. The existing feeder route and runs along with three other feeders in the same poles (1526-05, 1526-01 & 1529-12). To bring the poles to standard and add reliability and resiliency to the system, the design is relocating the overhead feeder with a new route of poles along with feeder 1526-05 to the other side of the PR-17 Avenida Central. It continues thru marginal Jesus T. Pinero until pole FID 12250191 where it goes underground. The feeder comes out from the underground in PR-21 to continue the overhead until the recloser FID 1002118839. Also coming out of las Lomas substation the feeder moves to the west until pole FID 12253033. Therefore, this project is a 0.62-mile project split into three segments.

The First Segment exits from Cachete substation (see table below with GPS Start coordinates 18.398253, -66.099082) (please refer to **Appendix B- Design** and **Appendix A- Structural Pole Analysis** for a map and list of all GPS locations to be impacted by this project) and continues west following road PR-17 Av. Central for approximately 0.5 miles. At that point, the First Segment ends and connects to an existing underground section of the distribution line (see table below with GPS End coordinates [REDACTED]). While not part of this project, the feeder continues for approximately 0.71 miles on the existing underground section of the distribution line.

The Second Segment of the project resumes when the feeder is installed as overhead wire at the termination of the existing underground segment located at the riser in front of Hospital Metropolitano (see table below with GS Start coordinates [REDACTED]). From that point a new conductor is installed and it continues east, following road PR-21, for 0.06 miles until reaching the existing recloser with an FID 1002118839 (see table below with GPS End coordinates [REDACTED]).

The Third Segments of the project starts in Lomas Substation (see table below with GPS Start coordinates [REDACTED]) and continues west following road PR-21 for approximately 0.06 miles and ends at a pole with FID 12253033 (see table below with GPS End coordinates [REDACTED]).

GPS Coordinates for the start and end points of the electrical feeder backbone (BB) project are noted in the table below. This existing overhead distribution line consists of three segments extending for approximately 0.62 miles. The table also identifies the number and type of poles in each Line Segment and the voltage of the line.

Facility List

Line Segment	Line Number	GPS Start	GPS End	Concrete	Wood	Steel	Voltage (kV)
First Segment	1529-15	[REDACTED]	[REDACTED]	18	5	0	13.2
Second Segment	1529-15			3	0	1	13.2
Third Segment	1529-15			3	0	0	13.2

The table below lists a pole that is excluded from this project because it was installed through the Distribution Automation Program (DA):

Pole FID	Program	Latitude	Longitude
1002118839	DA		

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Project Scope of Work:

This section contains the proposed SOW for the project, including work to repair PREPA's disaster- damaged facilities for which LUMA will request funding under PREPA's § 428 fixed cost subaward (this work and funding is referred to herein as § 428 work or § 428 funding). For specific details of the proposed reconstruction of the feeder, please refer to **Appendix B – Design and Appendix C – Voltage Improvements and Additional Protection Devices**.

As noted above, § 428 work includes efforts to repair PREPA's facilities damaged by Hurricanes Irma and Maria, including (pursuant to the Bipartisan Budget Act of 2018) the repair or restoration of non- damaged components required to fully effectuate a disaster-related repair. Work funded under § 428 will be completed consistent with required codes and standards. Further, the Bipartisan Budget Act requires that work on non-damaged elements restore the function of the facility or system to industry standards.

Proposed 428 Public Assistance Scope of Work

This project includes the removal and replacement of twenty (20) existing poles, the installation of eleven new poles and works in two existing poles to install components to comply with code and standards. The tables below summarize the structure count of the work in this project backbone for the distribution feeder, grouped into the following categories:

A. Poles

Pole Description	Remove and Replace	New Installation
Steel galvanized, 12-sided, tapered shaft, 50' S8.5	8	2
Steel galvanized, 12-sided, tapered shaft, 50' S10	2	0
Steel galvanized, 12-sided, tapered shaft, 55' S10	1	0
Steel galvanized, 12-sided, tapered shaft, 60' S8.5	6	2
Steel galvanized, 12-sided, tapered shaft, 60' S10	1	4
Steel galvanized, 12-sided, tapered shaft, 60' S13	0	2
Steel galvanized, 12-sided, tapered shaft, 65' S10	0	1
Steel galvanized, 12-sided, tapered shaft, 73' S21	1	0
Steel galvanized, 12-sided, tapered shaft, 73' S35	1	0
Sub-Total	20	11
Total	31	

B. Concrete Bases

Concrete Base Description	Diameter (in.)	Depth (ft.)	Volume (CY)	Quant
Concrete Base for 50-S8.5 and 60-S8.5	40	14.5	6.7	2
Concrete Base for 60'-S10, 60-S13, and 65- S10	48	16	18.33	3

C. Stainless Steel Transformers

Interconnection Voltage 13.2kV/Power Transformer Single Configuration	
37.5 kVA	75 kVA
3	1

D. Guys & Anchors

Guy Wire and Anchor Distribution		
Description	Unit	Quantity
Guy Wires 1/2" & Anchors	ea.	37

E. Conductor

Type of Conductor	Unit	Quantity
556 ACSR Conductor	C.L.F.	207.60
1/0 TPX	C.L.F.	26.4

Distribution Line Replacement:

- A. Install eleven (11) additional poles to comply with structure loading cases along the feeder backbone. The pole quantities are described in part A of section 4.1, above.
- B. Remove existing transformers and replace them with new stainless-steel units with their respective capacity. The transformer quantities are described in part C of section 4.1, above.
- C. Remove existing transformers and replace them with three (3) new 37.5KVA and one (1) new 75KVA transformers. The transformers are sized to comply with the current consensus-based Codes and Standards, the LUMA Overhead Electrical Distribution System Manual 4301.001 version 4, available in Grants Portal - Applicant Event Profiles.
- D. Remove existing conductors and replace with new conductors per the LUMA specification. The conductor quantities are described in part E of section 4.1, above.
- E. Remove existing poles and replace with new poles with streetlighting, including a new luminaire.
- F. Remove and replace all distribution equipment, including disconnect switches, fuse cutouts, surge arresters, pole insulators, suspension insulators, cross arms, service drops, secondary lines, tap conductors (first span), in compliance with LUMA Overhead Electrical Distribution System Manual 4301.001 version 4, available in Grants Portal - Applicant Event Profiles.
- G. Remove and dispose of the existing distribution lines facilities with their related components (poles, conductors, insulators, and hardware).
- H. All the work to be completed will be in the current utility easement.
- I. The replacement of individual structures and components will follow the design methodology per the Project Design Criteria and will conform to LUMA codes and standards applicable to the infrastructure.
- J. Remove and install three fuses at pole FID# 12253897, coordinates [REDACTED]. Please refer to **Appendix C - Voltage Improvement and Additional Protection Devices**.

Pole Replacement:

- A. Remove existing poles and hardware and replace with new poles and hardware within 10 feet of the same location.
- B. Depths of the poles to be erected are provided in **Appendix B – Design**.
- C. Install new concrete foundation bases in compliance with Distribution Construction Standards (Concrete Base Standard), available in Grants Portal - Applicant Event Profiles. The maximum auger width to be used is 48".
- D. Install new guys and anchors to new poles and existing poles in compliance with LUMA Overhead Electrical Distribution System Manual, version 4, available in Grants Portal - Applicant Event Profiles.

Scope Notes

1) Miscellaneous Civil Earthworks:

- i) Install erosion control blankets as temporary **erosion control and protection measures** to mitigate erosion or environmental risks will be installed.

2) Water Quality

Install temporary erosion and control measures to protect any water body, as required by applicable state and federal regulations.

3) List of Equipment to be used

- i) 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.
- ii) Vegetation will be brushed using a machete, chainsaw, electric pruner, telescopic pole pruner, bucket truck, and/or chipper.
- iii) All the above equipment will adhere to Tier 4 EPA Emission Standards where applicable.

4) Fill, Gravel, Sand, etc.:

Fill, gravel, and sand materials will be obtained from an approved supplier as referenced in LUMA Vendor Directory List included on the Applicant Event Profile in Grants Portal.

5) Staging Area:

The main staging area will be in Cachete Substation ([REDACTED]). Additional temporary staging areas are located at ([REDACTED]), ([REDACTED]),

([REDACTED]) and ([REDACTED]). Refer to **Appendix D – Staging Area**

for locations with detailed information.

6) Material Disposal:

- i) The types of debris that will be removed from the project are luminaires, pole arms, photocells, wiring, transformers, concrete, metal scrap, steel, wood, domestic and construction waste. The debris will be separated and taken to an authorized waste disposal facility.
- ii) Chemical wastes typical of a construction site are considered hazardous waste and will be disposed of by the contractor in authorized facilities.

7) Transformer:

Transformers will be contained and returned to LUMA in compliance with applicable local regulations. The removal of transformers will require testing of the existing oil for PCB levels, draining of the oil, and delivery to the authorized waste disposal site.

8) Ground disturbance:

Poles and Concrete Bases: Location and depth of poles and concrete bases to be installed are provided in **Appendix B – Design**. For concrete bases, the maximum auger diameter is 48". The project's design is not 100% complete and details on exact width of ground disturbance for poles and concrete bases is still to be determined.

9) Vegetation Management:

- i) Vegetation clearance will be performed solely to extent that it allows crews to conduct work and will be limited to 10ft radius surroundings the surface of the pole, but to exceed the width of the right-of way for the exclusive purpose of gaining access to the pole to conduct repairs. The costs related to Vegetation clearance procedures are in project 723883 FAASt Region San Juan Municipality San Juan Group A High Density (Vegetation). The vegetation removal process will be managed according to federal and state regulations.

10) Access Roads

No access roads are needed. Poles can be accessed from PR-17 Av. Central, PR-21 and municipal roads.

Project Cost Estimate (PCE):

The estimated costs (compliant with 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 to mitigate potential known risks.

COST ESTIMATE			
Cost Element	428	406	PROJECT TOTAL
PLANNING	\$ 378,044.53	\$ -	\$ 378,044.53
(A&E) Permitting and Assessments	\$ 19,631.70	\$ -	\$ 19,631.70
(A&E) Environmental Documentation & Management	\$ 223,240.00	\$ -	\$ 223,240.00
(A&E) Engineering Services & Design	\$ 135,172.83	\$ -	\$ 135,172.83
MANAGEMENT	\$ 130,732.48	\$ -	\$ 130,732.48
(A&E) Project Management	\$ 36,791.51	\$ -	\$ 36,791.51
(A&E) Construction Management	\$ 49,055.34	\$ -	\$ 49,055.34
(A&E) Contracting, Procurement & Contract Administration	\$ 20,357.96	\$ -	\$ 20,357.96
(A&E) Projects Controls (Scheduling, Estimating, Support, Cost Control, Risk, Document Control & Reporting)	\$ 24,527.67	\$ -	\$ 24,527.67
San Juan Distribution Hardening Project Cachete 1529-15, FEMA Project Name: San Juan Distribution Hardening Project Cachete 1529-15 Rev. 2, FAAST#: 801172	\$ 2,409,831.44	\$ -	\$ 2,409,831.44
San Juan Distribution Hardening Project Cachete 1529-15, FEMA Project Name: San Juan Distribution Hardening Project Cachete 1529-15 Rev. 2, FAAST#: 801172, material, labor and equipment.	\$ 1,983,001.00	\$ -	\$ 1,983,001.00
Start Up/Commissioning	\$ 29,745.01	\$ -	\$ 29,745.01
Construction Trespass	\$ 9,915.00	\$ -	\$ 9,915.00
Transportation Expenses	\$ 9,915.00	\$ -	\$ 9,915.00

Security (Field 24 hr)	\$ 17,847.00	\$ -	\$ 17,847.00
Insurance	\$ 40,056.62	\$ -	\$ 40,056.62
Construction Contingency	\$ 245,768.79	\$ -	\$ 245,768.79
Escalation	\$ 73,583.02	\$ -	\$ 73,583.02
GENERAL CONDITIONS	\$ 119,416.08	\$ -	\$ 119,416.08
Sales Tax	\$ 20,266.03	\$ -	\$ 20,266.03
Municipal Construction Tax	\$ 99,150.05	\$ -	\$ 99,150.05
COST TOTALS	\$ 3,038,024.53	\$ -	\$ 3,038,024.53
DEDUCTIONS	TOTAL INSURANCE PROCEEDS RECEIVED		\$ -
	DE-OBLIGATION TO FAAS_t IF APPLICABLE		\$ -
FAAS_t ALLOCATIONS	FAAS _t PROJECT # 801172 - 428		\$ 2,285,961.13
	FAAS _t PROJECT # 801172 - 406 HM		\$ -
	FAAS_t PROJECT # 801172 TOTAL:		\$ 2,285,961.13
	FAAS _t A&E # 335168 - 428		\$ 508,777.01
	FAAS _t A&E # 335168 - 406 HM		\$ -
	FAAS_t A&E # 335168 TOTAL		\$ 508,777.01
	FAAS _t E&M #673691 - 428		\$ 243,286.39
	FAAS _t E&M #673691 - 406 HM		\$ -
	FAAS_t E&M #673691 TOTAL		\$ 243,286.39

Work To Be Completed: \$ 3,038,024.53

A&E Deduction (Global A&E FAASt# 335168): \$ 508,777.01

E&M Deduction (FAASt# 673691): \$ 243,286.39

Project Total Cost (FAASt Project# 801172): \$ 2,285,961.13

Project Notes:

1. This project is part of Donor FAASt 136271 – MEPA078 Puerto Rico Electrical Power Authority (PREPA) Island Wide FAASt Project.
2. For additional information of detailed SOW please refer to document labeled: 801172-DR4339PR- - FEEDER 1529-15 DETAILED SCOPE OF WORK FULL 428 REV.3.pdf.
3. For detailed Cost Estimate please refer to document labeled: 801172-DR4339PR-FEEDER 1529-15-APPENDIX F - LUMA LPCE-Rev.2.xlsx.
4. A&E cost included in this project will be reduced from this project and obligated under the FAASt Project #335168, A&E, as show in in the table above. The A&E project was obligated to track and account for cost associated with individual FAASt projects.
5. Equipment and material costs included in this project will be reduced from this project and obligated under FAASt Project#673691, Equipment and Materials, as shown in the table above. Only the base cost of equipment and/or material will be reduced from this project (not labor). All costs associated with Planning, Management, General Conditions, and Contingencies will remain in this project.
6. For reference documents Appendix A through H, see the file labelled:

APPENDIX A – Structural Pole Analysis

APPENDIX B – Design

APPENDIX C – Voltage Improvements and Additional Protection Devices

APPENDIX D – Staging Area

APPENDIX E –Vegetation Management

APPENDIX F – LUMA LPCE

APPENDIX G – Proposed Design KMZ

APPENDIX H – Project Considerations

406 HMP Scope

406 Hazard Mitigation measures were not requested by the Subrecipient for this project in Version 0. However, the mitigation opportunities will be applied in a future version of the Permanent Work Project. The project is ready for insurance completion.

Cost

Code	Quantity	Unit	Total Cost	Section
3510	1	Lump Sum	(\$508,777.01)	Uncompleted
9001	1	Lump Sum	(\$243,286.39)	Uncompleted
9001	1	Lump Sum	\$3,038,024.53	Uncompleted
9201	1	Lump Sum	\$0.00	Completed

CRC Gross Cost \$2,285,961.13

Total 406 HMP Cost \$0.00

Total Insurance Reductions \$0.00

CRC Net Cost \$2,285,961.13

Federal Share (90.00%) \$2,057,365.02

Non-Federal Share (10.00%) \$228,596.11

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.
- 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.
- 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.
- 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.
- 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.
- 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 Subrecipient provided the estimate for this PW. FEMA validated the estimate and found it to be reasonable for the work to be performed.

Insurance

Additional Information

7/1/2026

No adjustments to be made to the previous insurance coverage determination, no revisions to narrative needed, updated applicant tracker if

needed, providing administrative function and forwarding project for completion.

Jean-Carlo Echevarria, PA Insurance Specialist, CRC Atlantic, Guaynabo P.R.

5/14/2026

Does the Applicant have a Commercial Policy: Yes.

Does the Applicant's Commercial Policy extend coverage for the damage described in this project: No.

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.

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

O&M Requirements

There are no Obtain and Maintain Requirements on **FAAST * [Feeder Rebuild # 1529-15] (Distribution)**.

406 Mitigation

There is no additional mitigation information on **FAAST * [Feeder Rebuild # 1529-15] (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.
- 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 to 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 mater.

- 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. 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. 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.
- 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. 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. If transformers: 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.

EHP Additional Info

There is no additional environmental historical preservation on **FAASt * [Feeder Rebuild # 1529-15] (Distribution)**.

Final Reviews

Final Review

Reviewed By LEFRANC-GARCIA, CARLOS L.

Reviewed On 06/18/2025 12:51 PM PDT

Review Comments

Reviewed, found eligible and reasonable - CLG 06.18.25

Recipient Review

Reviewed By Mulero, Noel

Reviewed On 07/03/2025 3:44 PM PDT

Review Comments

Recipient review completed. Applicant must ensure to compliance with all regulatory requirements, Record of Environmental Consideration (REC) Special Conditions and PA policy. Project is ready for applicant review.

Project Signatures

Reviewed By Unsigned

Reviewed On Unsigned

General Info

Project #	801172	PW #	108083	Project Type	Specialized
Project Category	F - Utilities	Applicant	PR Electric Power Authority (000-UA2QU-00)		
Project Title	FAAST * [Feeder Rebuild # 1529-15] (Distribution)			Event	4339DR-PR (4339DR)
Project Size	Large	Declaration Date	9/20/2017		
Activity	9/20/2027	Incident Start Date	9/17/2017		
Completion Date		Incident End Date	11/15/2017		
Process Step	Obligated				

Damage Description and Dimensions

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

Damage #1492050; FAASSt [Distribution Feeder Rebuild # 1529-15]

General Facility Information:

- **Facility Type:** Power generation, transmission, and distribution facilities
- **Facility:** Distribution Feeder Rebuild # 1529-15
- **Facility Description:** The facility included: 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, and fault interrupting equipment (fuses, reclosers, and sectionalizers).
- **Approx. Year Built:** 1980
- **Start GPS Latitude/Longitude:** [REDACTED]
- **End GPS Latitude/Longitude:** [REDACTED]

Final Scope

1492050 FAASSt [Distribution Feeder Rebuild # 1529-15]

***** VERSION 1 *****

Version 1 created to align the scope and cost in PA and HM. Since this version include both 406 HMP and 428 PA costs, one with positive amount and the other negative, we'll process first the positive funds and in a later version we'll de-obligate the negative portion. SOW from previous Versions has been removed from current SOW. It can be found in the "Versioning and Amendments" tab in GM.

SOW from previous version has been removed from current SOW. It can be found in the "Versioning and Amendments" tab in GM.

Introduction

Pursuant to FEMA's Post-Fixed Cost Estimate Obligation SOP (the "SOP") for FAASSt projects, FAASSt subrecipients must provide to FEMA recovery project scopes of work ("SOW") for the proposed construction work to be performed. The SOW defines the activities that will be performed using Public Assistance ("PA") funding and § 406 hazard mitigation proposals ("HMPs").

According to the SOP, FEMA "anticipates that [SOW] submissions might include preliminary designs, including drawings and cost estimates. FEMA also recognizes that, generally, architects and/or engineers do not include or delineate the information needed to enable FEMA to complete programmatic reviews. Therefore, in those cases, subrecipients must ensure to submit all the information described [in the SOP] and not

limit the submission to a drawing set. Refer to Part C - II. Recipient/Subrecipient Checklist for Submissions as a guide to review completeness." SOP at 4.

This document contains the detailed SOW for FEMA PA Project #801172 Distribution Feeder Rebuild #1529-15 under DR-4339-PR Public Assistance. The document provides a detailed description of the project, scope of PA construction activities to be completed, common EHP review information, proposed hazard mitigation measures, and project cost estimates. LUMA is seeking approval from COR3 and FEMA for PA and HM funding for the scope described in this document.

LUMA submits this Detailed SOW pursuant to the Transmission and Distribution Operations and Maintenance Agreement between the Puerto Rico Electric Power Authority ("PREPA"), the Puerto Rico Public-Private Partnerships Authority ("P3A"), and LUMA, and in accordance with the Consent to Federal Funding Letter issued by PREPA and P3A, which collectively provides the necessary consent for LUMA, as agent of PREPA, to undertake work in connection with any Federal Funding requests related to the T&D System submitted to FEMA. References to "Subrecipient" herein refer to PREPA pursuant to this agreement and consent for LUMA to act as its agent with respect to federal funds.

Project Description

Feeder 1529-15 serves suburban and rural areas of the municipality of San Juan. Feeder 1529-15 is approximately 1.26 miles of three-phase overhead and underground distribution conductor. During the design process, LUMA decided that the 0.71-mile underground segment of the Feeder would be removed from this project because it complies with Code and Standards. The existing feeder route runs along with three other feeders in the same poles (1526-05, 1526-01 & 1529-12). To bring the poles to standard and add reliability and resiliency to the system, the design is relocating the overhead feeder with a new route of poles along with feeder 1526-05 to the other side of the PR-17 Avenida Central. It continues through marginal Jesus T. Piñero until pole FID 12250191 where it goes underground. The feeder comes out from the underground in PR-21 to continue the overhead until the recloser FID 1002118839. Therefore, this project is a 0.55-mile project split into two segments.

The First Segment exits from Cachete substation (see table in Section 7.1 below with GPS Start coordinates [REDACTED]) (please refer to Appendix C- Design and Appendix B-Structural Pole Analysis for a map and list of all GPS locations to be impacted by this project) and continues west following road PR-17 Av. Central for approximately 0.5 miles. At that point, the First Segment ends and connects to an existing underground section of the distribution line (see table in Section 7.1 below with GPS End coordinates [REDACTED]). While not part of this project, the feeder continues for approximately 0.71 miles on the existing underground section of the distribution line. In front of the substation, a new riser will be installed at location WL-N3.1 to transition feeder 1526-05 from overhead to underground. The scope also includes the installation of a new pull box and underground work to connect the riser to the pull box (please refer to Appendix I – Underground Design for a map and list of all the GPS locations to be impacted by this project and the work associated with each installation). At location WL-N19, underground work will be performed to replace the existing riser and install a new pull box. This will support the transition of feeder 1526-05 from overhead to underground (please refer to Appendix I – Underground Design for a map and list of all the GPS locations to be impacted by this project and the work associated with each installation).

The Second Segment of the project resumes when the feeder is installed as overhead wire at the termination of the existing underground segment located at the new riser in front of Hospital Metropolitano (see table in Section 7.1 below with GPS Start coordinates [REDACTED]). From that point a new aerial conductor is installed, and continues east, following road PR-21, for 0.05 miles until reaching the existing recloser with an FID 1002118839 (see table in Section 7.1 below with GPS End coordinates [REDACTED]). The new riser at location WL-N22 includes underground work. A new trench will connect to an existing conduit path, allowing the existing underground conductor to link with the new one. This enables the transition from underground to overhead service (please refer to Appendix I – Underground Design for a map and list of all the GPS locations to be impacted by this project and the work associated with each installation).

GPS Coordinates for the start and end points of the electrical feeder backbone (BB) project are noted in the table in Section 7.1 below. This existing overhead distribution line consists of two segments extending for approximately 0.55 miles. The table also identifies the number and type of poles in each Line Segment and the voltage of the line.

LUMA will remove and replace poles along the feeder backbone. New poles will be located within the public easement and are listed in Appendix B – Structural Pole Analysis, which includes the pole FID, coordinates, type of pole, hardware and equipment to be installed, type of pole and hardware to be removed, and whether it has a concrete foundation or not.

This scope of work also includes the installation of poles and guy wires within the existing easement, as shown in Appendix H – Easement Plan. At this stage of the project, surveying has already been completed. LUMA is awaiting stamped plans. No new land acquisition is required.

Facilities

FACILITIES LIST

Electrical feeder 1529-15 serves 1,802 customers along a route to various locations. None

Feeder Number	Feeder Name	Poles to be impacted	GPS Start	GPS End	Phase	Voltage Level (kV)	Constructi on Date
1529-15	First Segment	24			3-Phase	13.2	More than 20 years
1529-15	Second Segment	4			3-Phase	13.2	More than 20 years

The table below lists one (1) pole that is along this feeder line but was replaced as part of Distribution Automation FAASt #741678 and therefore is not part of the scope of this project.

As mentioned, Pole FIDs were removed and replaced as part of Distribution Automation FAASt #741678. This DSOW does not include scope or costs associated with that previously funded repair and replacement work. For details on the additional work on these FIDs, please refer to Section 9.1.

Pole FID	Program	FAASt	Latitude	Longitude	Executed Scope of Work
1002118839	Distribution Automation	741678			Replace pole with 50ft 12-side galvanized steel, insulators, Crossarms, and all associated hardware with 3-Phase recloser.

PROJECT AREA MAP WITH BOUNDARIES OF CONSTRUCTION

The map below (also included as Appendix A – Location Map) identifies the project location.

The photographs are available at Appendix F – Proposed Design KMZ. Poles are marked in each picture.

First Segment from WLN1 to WLN5

First Segment from WLN6 to WLN12

First Segment from WLN11 to WLN16

First Segment from WLN16 to WLN20.1

Second Segment from WL-21 to WL24

Also refer to **Appendix C – Design** for aerial pictures of poles.

SECTION 428 SCOPE OF WORK

The proposed type of work for this project:

? Standard Project: Restores the facility/facilities to pre-disaster design and function to locally adopted codes/standards and/or FEMA-approved industry standards.

? Improved Project: Restores the pre-disaster function of the facilities and incorporates improvements or changes to its pre-disaster design not required by codes or standards.

? Subrecipient's request letter included, see Appendix .

? Recipient's approval letter included, see Appendix .

? Alternate Project: Does not restore the pre-disaster function of the damage facility. The Subrecipient, through the Recipients, must obtain approval from FEMA.

? Subrecipient's request letter included, see Appendix .

? Recipient's approval letter included, see Appendix . In the obligated project (Version 0), LUMA proposed:

- Removal and replacement of 20 poles and installation of eleven (11) new poles.
- Installation of five (5) concrete bases.
- Removal of four (4) existing transformers and replacement with three (3) 37.5kVA transformers and one (1) 75kVA transformer.

- Installation of 37 guy wires.
- Removal and replacement of 207.60 C.L.F. of 556 ACSR conductor and removal and replacement of 26.4 C.L.F. of 1/0 TPX.
- In Version 0, the project consisted of three segments.

Version 1 of this project reflects the incorporation of this revised Detailed Scope of Work and the revised Line-Item Project Cost Estimate (LPCE) for Feeder 1529-15. The update reconciles design adjustments identified during the engineering and IFC development stage.

Key updates of Version 1 include:

- Relocation of the feeder alignment to the opposite side of PR-17 (Avenida Central) to meet code-compliant clearances and structural loading criteria.
- Replacement of 14 existing wood and concrete poles with 50' and 70' galvanized steel round poles, plus installation of 10 new poles for improved geometry and load distribution.
- Installation of six concrete foundation types (precast and cast-in-place) totaling 23.11 CY (11 CY with 428 PA funds and 406 HM will cover the additional 12.11 CY).
- Installation of 1 span guy and 28 guy wires for stability under 160 mph wind loads (19 ea. With 428 PA funds and 406 HM will cover the additional 9 ea.).
- Removal of four (4) existing pole-mounted transformers and installation of three (3) stainless-steel replacements (2 × 37.5 kVA, 1 × 100 kVA) (406 HM will cover the replacement of material from galvanized steel to stainless steel).
- Definition of the scope of work related to underground interface work at WL-N3.1, WL-N19, and WL-N22 for transitions between overhead and underground systems.
- Replacement of six (6) streetlights and reuse of one (1) LED luminaire to prevent duplication of benefits.
- Replacement of multiple conductor types, all classified under §428 Public Assistance in accordance with Luma standards (195 Spacer Cable, 556 ACSR, 652.4 AAAC, 3/0 ACSR, 750 MCM 15kV, 4/0 THW, 4/0 Cu 15 kV, 1/0 TPX, #2 Cu 600 V, 1/0 Cu 600 V, 4/0 Cu 600 V, THHN/THWN #12, and Alum weld Messenger, Copper Bare 2 AWG, and Copper-Clad Steel 19 #9.).
- Consists of two (2) segments.

Version 1 also adds the required labor adjustments for §406 Hazard Mitigation scope to account for the installation of heavier 12-sided poles, larger concrete foundations, and enhanced anchoring systems.

For more information, refer to the amendment letter for this project.

DESCRIPTION OF PROPOSED WORK TO BE PERFORMED

The tables below summarize the § 428 PA scope of work.

A. Poles

- Remove and replace fourteen (14) poles to comply with structure loading cases along the feeder backbone. Refer to line 25 of the LPCE for removal of the 18 poles, but only four (4) will not be replaced. The pole types and quantities are described in the table below.
- Retire and dispose of four (4) existing streetlight distribution pole (that do not have a replacement) with their related components. Refer to line 25 of the LPCE. The total quantity of poles to be removed is 18, but only four (4) will not be replaced.
- Install ten (10) additional poles to meet structural requirements and to support the relocation of the feeder along the backbone alignment. The pole types, quantities and references to LPCE lines are described in the tables below.
- The total of poles to be installed is 24. Refer to lines 66 to 72 of the LPCE for such total.

Poles to Be Removed and the §428 Pole That Would Replace It Per the Fixed Cost Estimate (see columns C, F and G of "Dist. Install Pole Schedule" tab of Appendix B Structural Pole Analysis for pole FIDs and pole coordinates).

Poles to Be Removed	§ 428 Pole of the Fixed Cost Estimate (FCE) (refer to Section 10.2(A) for description of the poles that are proposed as §406)	Quantity (Ea.)
40' Wood C2	Poles to be replaced by electrical utility pole, 50ft round galvanized Steel	1
40' Concrete H3	Poles to be replaced by electrical utility pole, 50ft round galvanized Steel	1
	Poles to be replaced by electrical utility pole, 55ft round galvanized Steel	1
	Poles to be replaced by electrical utility pole, 60ft round galvanized Steel	3
	Poles to be replaced by electrical utility pole, 65ft round galvanized Steel	1
45' Concrete H3	Poles to be replaced by electrical utility pole, 60ft round galvanized Steel	1
45' Concrete H4	Poles to be replaced by electrical utility pole, 50ft round galvanized Steel	1
50' Concrete H6	Poles to be replaced by electrical utility pole, 60ft round galvanized Steel	2
	Poles to be replaced by electrical utility pole, 65ft round galvanized Steel	1

60' Wood C2	Poles to be replaced by electrical utility pole, 70ft round galvanized Steel	1
65' Concrete H6	Poles to be replaced by electrical utility pole, 70ft round galvanized Steel	1

Poles to Be Removed	§ 428 Pole of the Fixed Cost Estimate (FCE) (refer to Section 10.2(A) for description of the poles that are proposed as §406)	Quantity (Ea.)
	Total	14

New §428 Poles That Would Be Installed Per the Fixed Cost Estimate (see columns C, F and G of "Dist. Install Pole Schedule" tab of **Appendix B Structural Pole Analysis** for pole FIDs and pole coordinates)

Description (refer to Section 10.2(A) for description of the poles that are proposed as §406)	Quantity (Ea.)
Poles to be installed, electrical utility pole, 60ft round galvanized Steel	7
Poles to be installed, electrical utility pole, 70ft round galvanized Steel	3
Total	10

Pole to Be Removed and Retired

Poles to Be Removed	Quantity (Ea.)
Pole to be removed, 37' Aluminum STL	3 (refer to line 25 of the LPCE)
Pole to be removed, 38' Concrete Octagonal	1 (refer to line 25 of the LPCE)
Total	4

Existing to Remain: Work on Pole FID 1002118839

As mentioned in Section 7.1 above, Pole FID: 1002118839 was removed and replaced as part of Distribution Automation FAASt #741678. This project, 801172 DSOW does not include scope or costs associated with that previously funded pole replacement work. The scope of work included in this Project 801172 for this pole is limited to the following, which is not duplicated in Distribution Automation FAASt #741678.

FID	Description of Work Under This DSOW
1002118839	Remove conductor and replace with new 556 ACSR conductor

Refer to **Appendix B – Structural Pole Analysis**

The following poles are existing poles that passed the PLA analysis and complied with codes and standards. The table below describes the work to be performed under such poles in this DSOW.

FID	Description of Work Under This DSOW*
12251068	Install one (1) CP-A5, one (1) T-1 (37.5 kVA)
12250191	Install one (1) CP-C4-XARM, two (2) E-1-2-3, one (1) F-4-2, one (1) URD-3
12253079	Install two (2) E-1-2-3, one (1) E-2-1, one (1) F-4-2
Total	3

- ***Refer to Appendix B – Structural Pole Analysis and LUMA Standards located in Grants Portal Applicant Profile.**
- v. Remove existing hardware and replace it with new hardware.
- vi. Pole depths range from 7 feet to 11.4 feet. The exact depth for a pole replacement or new pole is provided in **Appendix G – Project Considerations**, column E. The maximum pole diameter is 24 inches.
- vii. Remove six (6) street lighting on 3 phase primary poles and replace them with a new five (5) LED luminaire. Refer to lines 27 and 60 of the LPCE. Transfer existing LED lighting to new poles. For additional information, please refer to **Appendix B – Structural Pole Analysis**. The luminaries included in this DSOW to be replaced have been verified with the following Streetlight Projects to avoid any duplication of benefits:
 - i. San Juan Municipality:
 - P666894

B. Concrete Foundations for Line Poles

- i. Install eleven (11) cubic yards of new concrete foundations at locations provided in **Appendix B – Structural Pole Analysis** (see column M). The table below summarizes the total volume of concrete installed for all bases. Refer to Section 11.0 (letter A of “Ground Disturbance”) for information on ground disturbance of the concrete bases.

Description	Quantity (CY)
Concrete Foundation Base	11
Total	11

C. Steel Galvanized Transformers

- i. Remove four (4) existing transformers (for additional information refer to Appendix B) and replace them with two (2) 37.5kVA and one (1) 100kVA steel galvanized transformers, in compliance with LUMA's current codes and standards for replacement and design. Transformer quantities are described in the table below.

Steel Galvanized Transformers	Interconnection Voltage	Quantity (Ea.)
37.5 kVA	13.2 kV	2 (refer to line 73 of the LPCE)
100 kVA	13.2 kV	1 (refer to line 74 of the LPCE)
Total		3

D. Guy Wires / Anchoring

- i. Install nineteen (19) new guy wires, one (1) span guy wire, four (4) expansion anchors and twelve (12) screw type anchors in compliance with the LUMA Overhead Electrical Distribution System Manual, available in Grants Portal - Applicant Event Profiles.

Description	Quantity (Ea.)
Guy Wires 1/2"	19 (refer to line item 42 of LPCE, which presents the total quantity of 28 guy wires to be installed, including those proposed as hazard mitigation)

Span Guy Wire	1 (refer to line item 43 of LPCE)
Expansion Anchor	4 (refer to line item 44 of LPCE)
Screw Type Anchor	12 (refer to line item 45 of LPCE)

E. Conductors

- i. Remove two hundred thirty-seven point sixty (237.60) C.L.F. of existing conductor and replace with the following conductors for feeders 1529-15 and 1526-05 per LUMA codes and standards.

Description	Quantity
195 Spacer Cable	6 C.L.F. (refer to line 93 of LPCE)
652.4 AAAC Cable	66.11 C.L.F. (refer to line 79 of LPCE)
556.5 ACSR	111.70 C.L.F. (refer to line 76 of LPCE)
3/0 ACSR	5.51 C.L.F. (refer to line 77 of LPCE)
750 MCM 15KV	6.75 C.L.F. (refer to line 80 of LPCE)
4/0 THW	2.25 C.L.F. (refer to line 81 of LPCE)
4/0 Copper 15KV	4 C.L.F. (refer to line 91 of LPCE)
1/0 TPX	11.2 C.L.F. (refer to line 78 of LPCE)
Copper Bare Conductor, 2 AWG	2.48 C.L.F. (refer to line 99 of LPCE)
Copper-Clad Steel-Bare Ground Wire 19#9	0.25 C.L.F. (refer to line 95 of LPCE)
Stranded copper cable 600V #2 AWG	3.78 C.L.F. (refer to line 96 of LPCE)
Stranded copper cable 600V 1/0 AWG	0.24 C.L.F. (refer to line 97 of LPCE)
Stranded copper cable 600V 4/0 AWG	0.91 C.L.F. (refer to line 98 of LPCE)
THHN/THWN #12	1.5 C.L.F. (refer to line 100 of LPCE)
7no7 Alum weld Messenger Cable	23.77 C.L.F. (refer to line 94 of LPCE)

F. Underground

The underground scope of work includes construction activities at three distinct locations to support the transition of feeders 1526-05 and 1529-15 between overhead and underground infrastructure. The work includes trenching, conduit installation, and pull box placement as detailed below:

A. WL-N3.1:

Installation of two (2) 6-inch conduits to connect a new riser to a newly installed pull box measuring 7'L x 4'-6"W x 5'D. This work supports the transition of feeder 1526-05 from overhead to underground. Installation of one (1) Underground cable connection to the overhead three phase system, including a disconnecting switch URD-3. Refer to line 61 of the LPCE. Install one (1) Primary and secondary voltage riser with precast concrete foundation URD-4-A. Refer to line 64 of the LPCE. For additional information, please refer to **Appendix I – Underground Design and Appendix B – Structural Pole Analysis**.

Pull Box ID	Work Description	Reference to LPCE (Qty.)
PB-15-3.1-(N)	Install one (1) Pull Box (7ft.(l), 4ft., 6-inch(w), 5ft. (d))	1 (Refer to line 65 of the LPCE)

B. WL-N19:

Installation of two (2) 6-inch conduits between a new riser and a new 7ft.(l), 4ft., 6-inch(w), 5ft. (d) pull box to facilitate the overhead-to-underground transition of feeder 1526-05. Install one (1) Underground cable connection to the overhead three phase system, including a disconnecting switch URD-3. Refer to line 61 of the LPCE. Install one (1) primary and secondary distribution voltage riser URD-4. Refer to line 63 of the LPCE. For additional information, please refer to **Appendix I -Underground Design and Appendix B – Structural Pole Analysis**.

Pull Box ID	Work Description	Reference to LPCE
PB-15-19-(N)	Install one (1) Pull Box (7ft. (l), 4ft., 6-inch (w) 5ft. (d))	1 (Refer to line 65 of the LPCE)

C. WL-N22 (in front of Hospital Metropolitano):

Installation of two (2) 6-inch conduits to connect a new riser to the existing underground infrastructure. This work supports the transition of feeder 1529-15 from underground to overhead. Install one (1) primary and secondary distribution voltage riser URD-4. Refer to line 63 of the LPCE. Install one (1) underground cable connection to overhead system, including a three-phase disconnecting switch URD-3-B. Refer to line 62 of the

2.3 CODES & STANDARDS

Per FEMA's SOP, the locally adopted codes/standards and/or FEMA-approved industry standards used for this project are provided below:

1. LUMA Overhead Electrical Distribution System Manual, version 5.0, available in Grants Portal - Applicant Event Profiles.

SECTION 406 HAZARD MITIGATION PROPOSAL

FEMA PAPPG v.3.1 provides, "Hazard mitigation is any sustained action taken to reduce or eliminate long-term risk to people and property from natural hazards and their effects." The subrecipient proposes to lessen or eliminate long-term risk to people and property from future natural hazards and their effects by performing the work described in this project to

Subrecipient's Distribution Design Criteria, which exceeds required codes and standards. Doing so will directly reduce the potential of future, similar negative consequences of damage to the T&D system, as occurred after Hurricane Maria by improving the system's physical resilience, functional resiliency, or both.

Below is a description of the proposed mitigation opportunity and the proposed scope of work.

Refer to Appendix B – Structural Pole Analysis, Column FN– HM Justification, for site-specific rationales supporting labor delta assignments to pole replacements. These entries are aligned with FEMA's hazard mitigation guidance and validate the inclusion of associated costs under Category 406."

§ 406 HAZARD MITIGATION OPPORTUNITY

1. Poles:

Poles will be replaced with a new 12-sided, electrical utility pole, steel galvanized tapered shaft with a wind resistance rating of up to 160 mph. Because the 12-sided poles are stronger than the round steel galvanized pole established in the Fixed Cost Estimate (FCE) these poles will improve facility resiliency from future disasters. LUMA requests 406 HM funding for the replacement of material of the FCE round pole to the class of 12-sided poles that are being proposed as a hazard mitigation measure. The table below lists the quantity and types of poles (refer to columns C, F and G of the "Dist. Install Pole Schedule" tab of Appendix B Structural Pole Analysis for pole FIDs and pole coordinates) eligible for which LUMA is requesting § 406 hazard mitigation assistance:

428 Fixed Cost Estimate	428 PA	406 Hazard Mitigation Pole Description:	406 HM
Pole Description	Quantity	Material	Quantity
50ft Round Galvanized Steel	3	Electrical utility pole, steel galvanized, 12-sided, tapered shaft, 50ft S-8.5, for distribution	3
55ft Round Galvanized Steel	1	Electrical utility pole, steel galvanized, 12-sided, tapered shaft, 55ft S-8.5, for distribution	1
60ft Round Galvanized Steel	13	Electrical utility pole, steel galvanized, 12-sided, tapered shaft, 60ft S-10, for distribution	13

65ft Round Galvanized Steel	2	Electrical utility pole, steel galvanized, 12-sided, tapered shaft, 65ft S-10, for distribution	2
70ft Round Galvanized	4	Electrical utility pole, steel galvanized, 12-sided, tapered shaft, 70ft S-13, for distribution	4
Steel	1	Electrical utility pole, steel galvanized, 12-sided, tapered shaft, 70ft S-21, for distribution	1
		Total	24

For detail information please refer to Appendix B – Structural Pole Analysis.

428 Fixed Cost Estimate	428 PA	406 Hazard Mitigation Pole Description:	406 HM
Pole Description	Quantity	Material	Quantity
50ft Round Galvanized Steel	3	Electrical utility pole, steel galvanized, 12-sided, tapered shaft, 50ft S-8.5, for distribution	3
55ft Round Galvanized Steel	1	Electrical utility pole, steel galvanized, 12-sided, tapered shaft, 55ft S-8.5, for distribution	1
60ft Round Galvanized Steel	13	Electrical utility pole, steel galvanized, 12-sided, tapered shaft, 60ft S-10, for distribution	13
65ft Round Galvanized Steel	2	Electrical utility pole, steel galvanized, 12-sided, tapered shaft, 65ft S-10, for distribution	2
70ft Round Galvanized Steel	4	Electrical utility pole, steel galvanized, 12-sided, tapered shaft, 70ft S-13, for distribution	4
Steel	1	Electrical utility pole, steel galvanized, 12-sided, tapered shaft, 70ft S-21, for distribution	1
		Total	24

2. Concrete Base Foundations

This proposed hazard mitigation measure prevents the cascading domino effect of pole collapse due to a future similar disaster. Based on LUMA STD 4350.198, the dimensions for the concrete foundation will vary based on the size and classification of the pole that will be installed (50'/60'/70' S8.5, S10, S13, or S21).

The table below presents Foundation dimensions for Precast Concrete Bases:

Concrete Base Description	Diam. (in.)	Length (ft.)	Volume (CY)	HM Amount of Precast Foundation
Precast Concrete Base for 50-S10, 55-S10, 60'-S10, 60-S13, and 65-S10	48	16	6.11	1
Cast in Place 70' S-13	48	10	14	4
Cast in Place 70' S-21	48	11.5	3	1

As per design, the total volume of concrete bases for the entire project is 23.11 cubic yards. The FCE was developed using 20 cubic yards of concrete per mile for the foundations. As a proposed hazard mitigation measure, LUMA proposes to install larger foundations that would comply with a design that withstands sustained winds of 160 mph.

The following table indicates the cubic yards per mile requested for § 428 PA assistance and for § 406 hazard mitigation assistance:

Concrete Base evaluation of quantity of CY/mi PA vs. HM			
Total miles	Project Design CY/mi	428 PA CY/mi	406HM CY/mi

3. Guys Wires:

LUMA requests § 406 hazard mitigation funding to cover the cost difference for additional guy wires beyond those included in the FCE. The FCE includes guy wires at a rate of 35 per mile.

Total guy wires per the FCE = (35 guy wires per mile) x 0.55 miles = 19 guy wires (PA). The total of guy wires to be installed along this Feeder so the line can withstand sustained winds of 160 MPH is 28. That is more than the 19 guy wires that would be installed under the FCE. Therefore, LUMA proposes that 9 guy wires be eligible for § 406 hazard mitigation funds.

Quantity of Guy wires vs. FCE

Total miles	Project Design	428 PA Guy wires	406 HM Guy Wires Quantity
0.55	28	19	9

4. Stainless Steel Transformers:

LUMA is upgrading all steel galvanized transformers outside the 1 mile from the seashore to stainless steel. The following table indicates the quantity of transformers outside of the 1 mile from the coast that are considered as 406 Hazard Mitigation upgrade LUMA galvanized steel transformers are being upgraded to high-strength stainless steel. Stainless steel transformers protect life and property from catastrophic failures of corroded transformers caused by a disaster. Transformer failure poses harm to the equipment and the public due to resulting loss of power. LUMA proposes that this measure be eligible for § 406 hazard mitigation funding. In addition, the Fixed Cost Estimate was based on pole mounted transformers that are coated steel with a corrosion resistant cover band and not stainless steel transformers.

Stainless Steel transformer tanks offer several advantages over galvanized steel and other materials, including durability, overall strength, and corrosion resistance. Stainless steel is a high-strength material that can withstand a variety of harsh conditions that transformers are subjected to before, during, and after a hurricane, such as high temperatures, extreme pressures, and physical impact. They are made of non-combustible materials, so they resist fire more effectively than other materials often used in transformer construction, such as painted steel. This reduces the likelihood of fires which place the system at risk of further damage and neighborhoods at risk of life and property damage after a storm.

Additionally, existing transformers across the island suffer from corrosion, not just the ones close to the seashore. Stainless steel transformers offer superior resistance to corrosion. Corroded transformers have a higher likelihood of failure during a disaster due to debris impacts, fires, and significant water intrusion. Such failure can create unintended electrical paths outside the insulated circuits. This leads to short circuits, which can immediately disrupt transformer function and cause widespread power outages. Additionally, corrosion degrades insulation within the transformer, making it prone to electrical arcing, further increasing the risk of failure or potential for a fire. Oil leaking from a damaged transformer could lead to vegetation damage or groundwater contamination. A stainless steel transformer is better able to withstand the corrosive effects of that exposure than a galvanized steel transformer. As a result, a stainless steel transformer will be more resistant to the effects of a disaster like Hurricane Maria and help to protect life and property.

By upgrading to this material, LUMA will significantly reduce the chances of electrical malfunctions, insulation breakdowns, transformer failures during future hurricanes and the resulting risk to public and private property and life. This proactive mitigation measure not only ensures a more resilient power grid during and after the next hurricane but also decreases the need for frequent replacements and maintenance, which helps avoid future damage from similar storms and enhances the long-term reliability of Puerto Rico's electrical infrastructure. LUMA requests that stainless steel galvanized transformers that are more than one mile from the seashore be eligible for § 406 hazard mitigation funding equal to the difference in price between a stainless steel and galvanized steel transformer.

The following table indicates the quantity of transformers that are more than 1 mile from the coast for which LUMA requests § 406 hazard mitigation assistance:

Proposed Stainless Steel Power Transformer	
Stainless Steel Transformers	Quantity
37.5 KVA	2
100 KVA	1

Refer to columns EL and EM of the “Dist. Install Pole Schedule” tab to identify the poles and their coordinates and refer to the “Equipment Schedule” tab of Appendix B for the capacity information that will support the three transformers.

COMMON EHP REVIEW INFORMATION

Please check any items applicable to the proposed scope of work in this Project. If an item is checked, provide a description of the scope, extent and location of the selected activity.

? Ground disturbance outside of existing footprint. If checked, provide a description of the ground disturbing activities including the extent, location, and depth of the disturbance

A. Poles and Concrete Bases

Location and depth of poles and concrete bases to be installed are provided in **APPENDIX B – Structural Pole Analysis** (refer to column J). Pole depths range from 7 feet to 11.4 feet. Maximum pole diameter is 32 inches. For further details of the volume impact for the installation of concrete bases and poles, please refer to column E in **APPENDIX G - PROJECT CONSIDERATIONS**.

Concrete Base Description	Diameter (in.)	Depth (ft.)
Precast Concrete Base for 50-S10, 55-S10, 60'-S10, 60-S13, and 65-S10	48	16
Concrete Bases for Concrete Poles 70' S-13	48	10
Concrete Bases for Concrete Poles 70' S-21	48	11.5

B. Underground Works

The proposed underground electrical work will involve trenching and excavation activities at three locations—WL-N3.1, WL-N19, and WL-N22—to install new conduit systems and pull boxes as part of the transition of feeders 1526-05 and 1529-15 between overhead and underground infrastructure.

Extent and Location of Disturbance

1. WL-N3.1 (Feeder 1526-05)

- o Scope: Installation of two (2) 6-inch PVC conduits and one (1) pull box (7'L x 4'-6"W x 5'D)
- o Trench Length: Approx. 120 linear feet
- o Location: Along the feeder route near the Cachete Substation, within existing utility corridors

2. WL-N19 (Feeder 1526-05)

- o Scope: Installation of two (2) 6-inch PVC conduits and one (1) pull box (7'L x 4'-6"W x 5'D)
- o Trench Length: Approx. 75 linear feet

- o Location: Along Manuel Rodríguez Ema Boulevard (PR-20), connecting to a new riser pole
- 3. WL-N22 (Feeder 1529-15)
- o Scope: Installation of two (2) 6-inch PVC conduits to intercept existing duct bank and connect to a new riser pole
- o Trench Length: Approx. 100 linear feet
- o Location: Along PR-21, in front of Hospital Metropolitano

Depth of Disturbance

- All trenches will be excavated to a depth of 57 inches below grade, in accordance with LUMA Standard URD-6.
- Trench cross-sections include:
 - o Concrete encasement at road crossings and utility intersections
 - o Compacted backfill in non-critical areas
 - o Warning tape and spacers as per LUMA standards

Additional Notes

- All conduit installations will follow LUMA trenching and conduit standards, including PVC Schedule 40 for horizontal runs and Schedule 80 for riser transitions.
- Pull boxes will be installed flush with grade and located to allow safe access for future maintenance.

 Soil testing or boring to be performed as part of pre-construction activities. If checked, provide a description, location, and dimensions of the testing/boring activities.

 Relocation of utilities. If checked, include a description of the relocation including the type of utility, relocation coordinates, and the extent and depth of associated ground disturbance.

X **Vegetative Removal.** If checked, describe the removal work to be performed, its location, and its extent.

A. Vegetation clearance will be performed solely to the extent that it allows crews to conduct work and will be limited to a 10-ft radius surrounding the surface of the pole, but not to exceed the width of the easement. This is for the exclusive purpose of gaining access to the pole to conduct repairs. The costs related to vegetation clearance procedures are covered in FAAS#723883 [Region San Juan – Municipality San Juan Group A] (Vegetation). The vegetation removal process will be managed in accordance with federal and state regulations.

X **Demolition.** If checked, include a description of what will be removed and the extent and depth of any ground disturbing activities. Additionally, include a description of (1) demolition debris type (construction debris, white goods, hazardous materials, etc.); (2) GPS location of temporary debris storage sites; (3) final debris disposal location; and (4) final debris disposal method.

A. Material Disposal:

- i. Polychlorinated biphenyl ("PCB"), oil from the transformer and breakers, sealants, and chemical wastes will be disposed of by the contractor in authorized facilities.
- ii. The type of debris generated in the process of removal are luminaires, pole arms, photocells, wiring, transformers, concrete, metal scrap, steel, wood, domestic and construction waste. The debris will be separated and taken to an authorized waste disposal facility.
- iii. Photocells are considered universal waste and will be disposed of by the contractor in authorized facilities.

B. Transformer:

- i. Transformers will be contained and returned to LUMA in compliance with applicable federal and state regulations. The removal of transformers will require testing the existing oil for PCB levels, draining of the oil, and delivery to the authorized waste disposal site.

Information on location of temporary debris storage sites, final debris disposal location, and final debris disposal method are not yet available.

X **Staging areas, landing area for air transport, and access roads.** If checked, provide GPS location of staging areas, and access roads. Include a description of the extent of any related vegetative removal, ground disturbance, or stabilization measures required (such as gabion

walls, retaining walls, paving, etc.).

- The proposed **staging area** has been identified, located at Cachete Substation ([REDACTED]). Refer to **Appendix D – Staging Area**, which includes photographs. LUMA does not anticipate that ground disturbance or stabilization measures will be required. The area will store equipment and materials such as poles, cables, transformers, hardware and construction materials. Normally growing vegetation on the property will be cleared to the minimum extent necessary to make the staging area workable.

 X **Fill material.** If the project includes the use of fill material, provide the source of the fill material including the provider's name and address (if known).

- Fill, gravel, and sand materials will be obtained from an approved supplier as referenced in the LUMA Vendor Directory List included in the Applicant Event Profile in Grants Portal.

 Work in water including coffer dams, dredging, placement of equipment in water, or other work in wetlands. If checked, provide a description of the activities to be performed in water or wetlands.

The following items are generally intended for buildings:

 Facility is over 45 years old. If checked, provide a thorough description of materials to be used and method of repair, including cleaning methods. If substitute materials will be used in the restoration, specify whether they match the original color, texture, and design of the damaged facility.

 Known renovations to the facility. If checked, provide dates of any previous major renovations to the interior or exterior of the facility.

 Photos of all sides of the facility are provided.

PROJECT COST ESTIMATE (PCE)

The estimated costs (compliant with Class 3) to complete the project are summarized in the table(s) below. The cost estimate(s) was developed utilizing detailed Architectural and Engineering ("A&E") design information. For a more detailed cost estimate refer to **Appendix E – LUMA LPCE**.

COST ESTIMATE			
Cost Element	428	406	PROJECT TOTAL
PLANNING	\$ 541,423.54	\$ 21,152.86	\$ 562,576.40
(A&E) Permitting and Assessments	\$ 14,570.55	\$ 569.25	\$ 15,139.80
(A&E) Environmental Documentation & Management	\$ 214,846.18	\$ 8,393.82	\$ 223,240.00
(A&E) Engineering Services & Design	\$ 312,006.81	\$ 12,189.79	\$ 324,196.60
MANAGEMENT	\$ 165,556.61	\$ 6,468.13	\$ 172,024.74
(A&E) Design Development Project Management A&E	\$ 16,909.27	\$ 660.63	\$ 17,569.90

(A&E) - Design Lodging & Per Diem A&E	\$ 9,757.53	\$ 381.22	\$ 10,138.75
Project Management	\$ 59,207.52	\$ 2,313.18	\$ 61,520.70
Construction Management	\$ 37,576.18	\$ 1,468.06	\$ 39,044.24
Contracting, Procurement & Contract Administration	\$ 18,621.00	\$ 727.50	\$ 19,348.50
Projects Controls (Scheduling, Estimating, Support, Cost Control, Risk, Document Control & Reporting)	\$ 23,485.11	\$ 917.54	\$ 24,402.65
San Juan Distribution Hardening Project Cachete 1529-15, FAAST#: 801172	\$ 1,795,788.07	\$ 70,159.48	\$ 1,865,947.55
San Juan Distribution Hardening Project Cachete 1529-15, FAAST#: 801172, material, labor and equipment.	\$ 1,471,485.32	\$ 57,788.05	\$ 1,529,273.37
Start Up/Commissioning	\$ 22,076.59	\$ 862.51	\$ 22,939.10
Construction Trespass	\$ 7,646.36	\$ -	\$ 7,646.36
Transportation Expenses	\$ 7,358.86	\$ 287.50	\$ 7,646.36
Security (Field 24 hr)	\$ 13,245.96	\$ 517.50	\$ 13,763.46
Insurance	\$ 29,729.81	\$ 1,161.51	\$ 30,891.32
Contingency	\$ 187,880.90	\$ 7,340.32	\$ 195,221.22
Escalation	\$ 56,364.26	\$ 2,202.10	\$ 58,566.36
GENERAL CONDITIONS	\$ 88,575.56	\$ 3,460.55	\$ 92,036.11
Sales Tax	\$ 14,986.93	\$ 585.52	\$ 15,572.45
Municipal Construction Tax	\$ 73,588.63	\$ 2,875.03	\$ 76,463.66
COST TOTALS	\$ 2,591,343.77	\$ 101,241.03	\$ 2,692,584.80
DEDUCTIONS	TOTAL INSURANCE PROCEEDS RECEIVED		\$ -
	DE-OBLIGATION TO FAASt IF APPLICABLE?		\$ -
FAASt ALLOCATIONS	FAASt PROJECT # 801172 - 428		\$ 1,862,738.37
	FAASt PROJECT # 801172 - 406 HM		\$ 101,241.03

	FAAST PROJECT # 801172 TOTAL:	\$ 1,963,979.40	428 Project Summary, Version 1:
	FAAST A&E # 335168 - 428	\$ 568,090.34	Work to Be Completed (WTBC): \$ 2,591,347.77 - 2,591,347.77 = \$0.00 (See project note #7).
	FAAST A&E # 335168 - 406 HM	\$ 22,194.71	E&M Deduction (#673691) 428: -\$ 160,515.06 + 160,515.06 = \$0.00 (See project note #7).
	FAAST A&E # 335168 TOTAL	\$ 590,285.05	A&E Deduction (Global A&E FAAST 335168): -\$ 568,090.34 + 568,090.34 = \$0.00 (See project note #7).
	FAAST E&M #673691 - 428	\$ 160,515.06	
	FAAST E&M #673691 - 406 HM	\$ 28,092.46	
	FAAST E&M #673691 TOTAL	\$ 188,607.52	

- 1,862,738.37 = \$0.00 (See project note #7).

VERSION SUMMARY OF KEY CHANGES:

V0: \$2,285,961.13 (WTBC, A&E Deduction)

V1: \$0.00 (WTBC)

Project Cost Estimate Notes:

1. Refer to detailed SOW provided in document: *801172-DR4339PR-Feeder 1529-15-Amendment-Detailed Scope of Work-v.1 rev. 2.pdf*.
2. Refer to detailed cost estimate in document: *801172-DR4339PR-Feeder 1529-15-Amendment-Appendix E - LUMA LPCE.xlsx*.
3. A&E costs included in this project will be reduced from this project and obligated under the FAAST Project #335168, A&E, as shown in the table above. The A&E project was obligated to track and account for costs associated with individual FAAST projects.
4. Equipment and material costs included in this project will be reduced from this project and obligated under FAAST Project #673691, Equipment and Materials, as shown in the table above. Only the base costs of equipment and/or material will be reduced from this project (not labor). All costs associated with Planning, Management, General Conditions, and Contingencies will remain in this project.
5. This project is part of 136271-MEPA078 Puerto Rico Electrical Power Authority Island Wide FAAST Project.
6. The following attachments and appendices are provided with this DSOW:

Appendix A	Location Map
Appendix B	Structural Pole Analysis
Appendix C	Design
Appendix D	Staging Area
Appendix E	LUMA LPCE
Appendix F	Proposed Design KMZ
Appendix G	Project Considerations

Appendix H	Easement Plan
Appendix I	Underground Design
Appendix J	A&E Design Cost Justification

7. This version includes both 406 HMP and 428 PA costs, with one positive amount and the other negative. They cannot be processed in the same version, so two separate versions are required. Version 1 will obligate the positive funds (whether 406 HMP or 428), and Version 2 (amendment) will de-obligate the negative portion. This guidance applies only to Sub-FAAST transactions; non-FAAST transactions remain unchanged. See document file: 'SP 801172- DR4339PR - Email Confirmation Sub-FAAST Transaction Guidance.pdf.'"

406 HMP Scope

Project number: 801172; FAASt [Feeder Rebuild # 1529-15] (Distribution)

Damage: 1492050; FAASt [Distribution Feeder Rebuild #1529-15]

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

Location: San Juan, Puerto Rico

GPS Latitude/Longitude: Start: [REDACTED]; End: [REDACTED]

Hazard Mitigation Narrative

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

The Method of Repair (MOR) included the replacement of the damaged critical distribution poles, cross-arms, insulators, guy wires, transformers, conductors and all associated hardware needed for the new structure. Feeder 1529-15 is approximately 1.26 miles of three-phase overhead and underground distribution conductor. During the design process, LUMA decided that the 0.71-mile underground segment of the feeder would be removed from this project because it complies with Code and Standards. Therefore, the total scope of this project is 0.55 miles.

In order to minimize the damages in a future event, the Subrecipient proposes as a mitigation measure, increase the structural strength of the poles by replacing round galvanized steel poles with 12-sided galvanized steel poles, increasing the dimensions of the poles concrete foundations, and installing additional guy wires. Additionally, the Subrecipient requested the replacement of the galvanized steel transformers with stainless steel transformers. The implementation of these mitigation measures 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 Subrecipient proposed the following mitigation measures:

Mitigation Measures (Replacement)

A. Poles:

o To avoid damage in a future event, the Subrecipient proposes as a mitigation measure, increase the strength of the poles by replacing it with a 12-sided, tapered shaft distribution pole to mitigate future damage to the structure due to high wind (160mph). The above mitigation measures will protect and make the affected infrastructure more resistant, stronger, and resilient to similar hazards.

- i. Replace three (3) 50ft round galvanized steel poles with three (3) new 50ft 12-sided galvanized steel pole, tapered shaft distribution poles.
- ii. Replace one (1) 55ft round galvanized steel pole with one (1) new 55ft 12-sided galvanized steel pole, tapered shaft distribution pole. Note: Additional funding for pole replacement could not be identified. In this case, the mitigation is accomplished through the PA method of repair.
- iii. Replace thirteen (13) 60ft round galvanized steel poles with thirteen (13) new 50ft 12-sided galvanized steel pole, tapered shaft distribution poles.

iv. Replace two (2) 65ft round galvanized steel poles with two (2) new 65ft 12-sided galvanized steel pole, tapered shaft distribution poles.

v. Replace five (5) 70ft round galvanized steel poles with five (5) new 70ft 12-sided galvanized steel pole, tapered shaft distribution poles.

B. Stainless Steel Transformer (37.5kVA & 50kVA):

o As a mitigation strategy, 406 HM will fund the additional cost (delta) for replacing transformer material from galvanized steel to high-strength stainless steel transformers. Stainless steel transformers protect life and property and prevent physical damage to PREPA's infrastructure from catastrophic failures caused when corroded transformers fail during a disaster. Stainless steel also withstands the impact of debris better than galvanized steel. By upgrading to this material, the Subrecipient will significantly reduce the chances of electrical malfunctions, insulation breakdowns, transformer failures during future hurricanes and the resulting risk to public and private property and life. This proactive mitigation measure not only ensures a more resilient power grid during and after the next hurricane but also decreases the need for frequent replacements and maintenance, which helps avoid future damage from similar storms and enhances the long-term reliability of Puerto Rico's electrical infrastructure.

i. Two (2) 37.5kVA galvanized steel transformers by two (2) 37.5kVA stainless steel transformers.

ii. One (1) 50kVA galvanized steel transformer by one (1) 50kVA stainless steel transformer.

Mitigation Measures (Supplement)

C. Poles Concrete Base Foundations:

o To avoid damage in a future event, the Subrecipient proposes as a mitigation measure, increase the dimensions of the concrete bases in order to mitigate future damage to the structures caused by strong winds (160mph) and flooding. The above mitigation measures will protect and make the affected infrastructure more resistant, stronger, and resilient to similar hazards.

i. Install one (1) concrete base foundation for one (1) 50ft 12-sided galvanized steel pole.

$$\bullet \quad [(4/2)^2 \times 3.14 \times 16] - [(1.85/2)^2 \times 3.14 \times 15] = 163.35/27 = \text{approx. } 6.11Y \times 1 \text{ base} = 6.11CY.$$

ii. Install four (4) concrete base foundation for four (4) 70ft 12-sided galvanized steel pole.

$$\bullet \quad [(4/2)^2 \times 3.14 \times 10] - [(2/2)^2 \times 3.14 \times 9] = 97.34/27 = \text{approx. } 3.5CY \times 4 \text{ base} = 14CY.$$

iii. Install one (1) concrete base foundation for one (1) 70ft 12-sided galvanized steel pole.

$$\bullet \quad [(4/2)^2 \times 3.14 \times 11.5] - [(2/2)^2 \times 3.14 \times 10.5] = 111.47/27 = \text{approx. } 3CY \times 1 \text{ base} = 3CY.$$

iv. Total 406 HM (Delta) = (6.11CY + 14CY + 3CY) = 23.11CY – 11CY (FCE 428 PA) = 12.11CY.

D. Guy Wires/Anchoring:

o To avoid damage in a future event, the Subrecipient proposes as a mitigation measure, install additional guys wires and anchors to provide lateral support to the poles. The above mitigation measures will protect and make the affected infrastructure more resistant, stronger, and resilient to similar hazards.

i. Total guy wires to be installed along this Feeder are twenty-eight (28).

ii. Total 406 HM (Delta) = 28EA– 19EA (FCE 428 PA) = 9EA.

Hazard Mitigation Proposal (HMP) Cost:

Total Net Hazard Mitigation Cost (Base Cost) =	\$ 73,040.69
+ HM (Subrecipient A&E, Management & General Conditions) =	<u>\$ 28,200.34</u>
Hazard Mitigation Total Cost =	\$ 101,241.03

Hazard Mitigation Proposal (HMP) Cost Distribution:

Equipment and Materials (E&M) =	\$ 28,092.46
Architecture and Engineering (A&E) =	\$ 22,194.71

Construction Cost =	<u>\$ 50,953.86</u>
Hazard Mitigation Total Cost =	\$101,241.03

HMP Cost-Effectiveness Calculations:

FEMA's Benefit-Cost Analysis (BCA), methodology evaluates expected risk reduction benefits of a hazard mitigation project and compares those benefits to the cost of the mitigation project. FEMA Public Assistance Program and Policy Guide (PAPPG) Chapter 2, Section VII. C. defines cost effective mitigation as: The Hazard Mitigation Measure is cost effective through an acceptable Benefit Cost Analysis (BCA) with a resulting Benefit Cost Ratio equal to or greater than (1).

The Island Wide Benefit Cost Analysis (IWBCA) created for the PREPA infrastructure defines a maximum potential benefit using the incurred costs of the PREPA FEMA Accelerated Award Strategy (FAAST) fixed cost estimate, the mission assignments utilized for the reconnection effort, and the costs associated with loss of service. This maximum benefit has been developed to fund all mitigation projects from both Public Assistance Hazard Mitigation and the Hazard Mitigation Grant program.

It is the Subrecipient responsibility to maintain a record of approved IWBCA related projects to avoid running out of funds for their Mitigation portion projects. Please see attached IWBCA Package.

The cost of the Hazard Mitigation Proposal (HMP) described herein is **\$101,241.03 (Hazard Mitigation Total Cost)**. The cost of this HMP combined with all other proposals (both PA and HMGP) does not exceed the maximum potential benefit and is therefore deemed cost effective per FEMA Public Assistance Program and Policy Guide (PAPPG) V3.1 April 2018, Chapter 2, VII., Section C, BCA Rule. This Hazard Mitigation Proposal meets eligible repair and restoration cost-effective requirements.

***See Mitigation Profile Documents Tab in Grants Manager for complete version of this HMP and supporting documents. (HMP, HMP cost estimate, Supporting documents file).*

Cost

Code	Quantity	Unit	Total Cost	Section
3510	1	Lump Sum	(\$508,777.01)	Uncompleted
9001	1	Lump Sum	(\$243,286.39)	Uncompleted
9001	1	Lump Sum	\$3,038,024.53	Uncompleted
9201	1	Lump Sum	\$0.00	Completed
9001	1	Lump Sum	\$0.00	Uncompleted
9001	1	Lump Sum	\$0.00	Uncompleted
9001	1	Lump Sum	\$0.00	Uncompleted

CRC Gross Cost \$2,285,961.13

Total 406 HMP Cost \$101,241.03

Total Insurance Reductions \$0.00

CRC Net Cost \$2,387,202.16

Federal Share (90.00%) \$2,148,481.95

Non-Federal Share (10.00%) \$238,720.21

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.
- 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.
- 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.
- 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.
- 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.
- 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 Subrecipient provided the estimate for this PW. FEMA validated the estimate and found it to be reasonable for the work to be performed.

Insurance

Additional Information

7/1/2026

No adjustments to be made to the previous insurance coverage determination, no revisions to narrative needed, updated applicant tracker if

needed, providing administrative function and forwarding project for completion.

Jean-Carlo Echevarria, PA Insurance Specialist, CRC Atlantic, Guaynabo P.R.

5/14/2026

Does the Applicant have a Commercial Policy: Yes.

Does the Applicant's Commercial Policy extend coverage for the damage described in this project: No.

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.

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

O&M Requirements

There are no Obtain and Maintain Requirements on **FAAST * [Feeder Rebuild # 1529-15] (Distribution)**.

406 Mitigation

There is no additional mitigation information on **FAAST * [Feeder Rebuild # 1529-15] (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.
- 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 to 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 mater.

- 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. 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. Additional staging areas and/or work pads within work site area have not 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.
- 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. 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. If transformers: 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.
- PLEASE DISREGARD PREVIOUS CONDITIONS
- On May 16, 2025, the Secretary of the U.S. Department of Energy (DOE) issued Order 202-25-2 (Order), pursuant to the authority vested in him by section 202(c) of the Federal Power Act (FPA), 16 U.S.C. § 824a(c), and section 301(b) of the Department of Energy Organization Act, 42 U.S.C. § 7151(b). The Order sought to expedite repair and maintenance efforts to the electrical grid of Puerto Rico by directing the Puerto Rico Electric Power Authority (PREPA) to perform vegetation management, including vegetation clearing to reestablish a right-of-way, for particular transmission and distribution facilities in the Territory as specified in the Order. The Order required PREPA to identify certain parameters by which the directed work would be performed, and required that all work be performed, to the maximum extent practicable, in a manner consistent with all applicable Federal, State, or local environmental laws or regulations and minimize any adverse environmental impacts. However, pursuant to Section 202(c) (3) of the FPA, to the extent any omission or action taken by PREPA that was necessary to comply with the Order, including any omission or action taken to voluntarily comply with the Order, caused PREPA to not comply with any Federal, State, or local environmental law or regulation, including any environmental conditions in this REC's "Standard Conditions," such omission or action shall not be considered a violation of such environmental law or regulation, or subject PREPA to any requirement, civil or criminal liability, or citizen suit under such environmental law or regulation. On August 15, 2025, DOE reissued the Order to direct PREPA to also perform asset management, including component refurbishment and replacement. To renew/reissue the Order, DOE was required to consult with the primary Federal agency with expertise in the environmental interest protected by such law or regulation and include in the Order conditions necessary to minimize any adverse environmental impacts to the extent practicable. Pursuant to Section 202(c)(4)(B) of the FPA, DOE provided the relevant agencies the opportunity to submit conditions for worked performed under the Order, to be included in the Order. According to DOE, no conditions were submitted by the agencies for inclusion in the Order. On November 12, 2025, DOE reissued the Order to direct PREPA to also perform asset management, including component refurbishment and replacement. DOE and FEMA have agreed that DOE is the lead agency for activities that fall under the prior and any future DOE 202(c) orders issued under the Federal Power Act to resolve the current and related emergencies in Puerto Rico. FEMA has requested that DOE provide FEMA with all documentation relating to their EHP compliance. FEMA will review and incorporate all available information and data for this project pertaining to applicable environmental laws and regulations into this REC when it is received from DOE. On February 10, 2026, and again on May 7, 2026, DOE reissued the Order to direct PREPA to perform vegetation management, including vegetation clearing to reestablish the right-of-way, and asset management, including component refurbishment and replacement, to ensure operational availability of

the transmission and distribution facilities.

EHP Additional Info

There is no additional environmental historical preservation on **FAAST * [Feeder Rebuild # 1529-15] (Distribution)**.

Final Reviews

Final Review

Reviewed By LEFRANC-GARCIA, CARLOS L.

Reviewed On 07/15/2026 12:34 PM PDT

Review Comments

Project has been reviewed, found eligible and reasonable. Subrecipient and its agents are responsible for complying with all grants and subgrant conditions including any applicable Federal, State and Local requirements. CLG 07.15.26

Recipient Review

Reviewed By Mulero, Noel

Reviewed On 07/29/2026 1:40 PM PDT

Review Comments

Recipient review completed. Applicant must ensure to compliance with all regulatory requirements, Record of Environmental Consideration (REC) Special Conditions and PA policy. This project applies to the Department of Energy's executive order. This means that DOE is the lead agency for environmental matters. Project is ready for applicant review.

Project Signatures

Reviewed By Unsigned

Reviewed On Unsigned

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 \$2,387,202.16 for subaward number 108083 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.

Award Information

EMMIE Imported Version Information

Version #	Eligibility Status	Current Location	Bundle Number	Project Amount	Cost Share	Federal Share Obligated	Date Obligated
No Records							

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 #
1	8/3/2026	\$91,116.93	90%	Accepted	4339DRPRP01080831
0	9/17/2025	\$2,057,365.02	90%	Accepted	4339DRPRP01080831

**Department of Homeland Security
Federal Emergency Management Agency**

v0

General Info

Project #	817956	P/W #	108119	Project Type	Specialized
Project Category	F - Utilities	Applicant	PR Electric Power Authority (000-UA2QU-00)		
Project Title	FAASt * [Feeder Rebuild # 1303-02] (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 #1414781; FAASt [Feeder Rebuild # 1303-02] (Distribution)

General Facility Information:

- **Facility Type:** Power generation, transmission, and distribution facilities
- **Facility:** FAASt [Feeder Rebuild # 1303-02] (Distribution)
- **Facility Description:** Feeder 1303-02 supplies suburban and rural loads in the municipality of San Juan. Feeder 1303-02 is approximately 0.49 circuit miles long with a three-phase overhead distribution conductor. It starts at Villa Betina substation (18.34394, -66.05654). For more details and a list of all GPS locations to be impacted by this project. LUMA will remove and replace 17 poles and install one (1) new pole along the feeder backbone. All new poles will be located within the easement.
- **Approx. Year Built:** 1967
- **GPS Latitude/Longitude:** [REDACTED]

Final Scope

1414781 **FAASt [Feeder Rebuild # 1303-02] (Distribution)**

INTRODUCTION

Pursuant to FEMA's Post-Fixed Cost Estimate Obligation SOP (the "SOP") for FAASt projects, FAASt subrecipients must provide to FEMA recovery project scopes of work ("SOW") for the proposed construction work to be performed. The SOW defines the activities that will be performed using Public Assistance ("PA") funding and may include § 406 hazard mitigation

proposals ("HMPs"). According to the SOP, FEMA "anticipates that [SOW] submissions might include preliminary designs, including drawings and cost estimates. FEMA also recognizes that, generally, architects and/or engineers do not include or delineate the information needed to enable FEMA to complete programmatic reviews. Therefore, in those cases, subrecipients must ensure to submit all the information described [in the SOP] and not limit the submission to a drawing set. Refer to Part

This document contains the detailed SOW for FEMA PA project #817956 Distribution Feeder Rebuild #1303-02 under DR-4339-PR Public Assistance. The document provides a detailed description of the project, the scope of PA construction activities to be completed, common EHP review information, proposed hazard mitigation measures, and project cost estimates. LUMA is seeking approval from COR3 and FEMA for PA funding for the scope described in this document. LUMA submits this Detailed SOW pursuant to the Transmission and Distribution Operations and Maintenance Agreement between the Puerto Rico Electric Power Authority ("PREPA"), the Puerto Rico Public-Private Partnerships Authority ("P3A"), and LUMA, and in accordance with the Consent to Federal Funding Letter issued by PREPA and P3A, which collectively provides the necessary consent for LUMA, as agent of PREPA, to undertake work in connection with any Federal Funding requests related to the T&D System submitted to FEMA. References to "Subrecipient" herein refer to PREPA pursuant to this agreement and consent for LUMA to act as its agent with respect to federal funds.

PROJECT DESCRIPTION

Feeder 1303-02 supplies suburban and rural loads in the municipality of San Juan. Feeder 1303-02 is approximately 0.49 circuit miles long with a three-phase overhead distribution conductor. It starts at Villa Betina substation (18.34394, -66.05654). For more details and a list of all GPS locations to be impacted by this project, please refer to Section 8.0 and Appendix A – Structural Pole Analysis.

LUMA will remove and replace 17 poles and install one (1) new pole along the feeder backbone. All new poles will be located within the easement. Refer to Appendix A – Structural Pole Analysis, which includes the pole FID, coordinates, type of pole to be installed, type of pole and hardware to be removed, and whether it has a concrete foundation. This scope of work also includes the installation of poles and guy wires within the existing easement. In some cases, guy wires and anchors will fall outside of the existing easement, as shown in Appendix D – Right of Way Plan. At this stage of the project, the easement for the proposed design has been identified and a certified surveying process will be executed later to confirm the easement limits.

FACILITIES

FACILITIES LIST

The electrical feeder 1303-02 serves 2,435 customers along a route to various locations.

Feeder Number	Feeder Name	Customers Counts	GPS Start	GPS End	Phase	Voltage Level (kV)	Construction Date
1303-02	Villa Betina 1303-02	2,435			3-Phase	13.2	More than 20 years

Appendix A – Structural Pole Analysis includes a list of all GPS locations for all poles impacted by this project.

PROJECT AREA MAP WITH BOUNDARIES OF CONSTRUCTION

Please see Project Area Map inside Detailed Scope of Work Rev. 1-pages-4 and 5.

Also refer to Appendix D – Right of Way Plan for aerial pictures also with identified poles and to

Appendix B – LUMA Drawings OH Design.

428 SCOPE OF WORK

The proposed type of work for this project:

[X] Standard Project: Restores the facility/facilities to pre-disaster design and function to locally adopted codes/standards and/or FEMA-approved industry standards.

[] Improved Project: Restores the pre-disaster function of the facilities and incorporates improvements or changes to its pre-disaster design not required by codes or standards.

[] Subrecipient’s request letter included, see Appendix ____.

[] Recipient’s approval letter included, see Appendix ____.

[] Alternate Project: Does not restore the pre-disaster function of the damage facility. The Subrecipient, through the Recipients, must obtain approval from FEMA.

[] Subrecipient’s request letter included, see Appendix ____.

[] Recipient’s approval letter included, see Appendix ____.

DESCRIPTION OF PROPOSED WORK TO BE PERFORMED

The tables below summarize the § 428 PA scope of work.

A. Poles

- i. Remove and replace seventeen (17) poles to comply with structure loading cases along the feeder backbone. The pole types and quantities are described in the table below.
- ii. Install one (1) additional pole to comply with structure loading cases along the feeder backbone. The pole type and quantity is described in the table below.
- iii. Remove existing hardware and replace with new hardware.
- iv. Depths of the poles to be replaced are provided in Appendix A – Structural Pole Analysis, column E. Pole depths are 7 feet and 7.70 feet. The maximum pole diameter is 23 inches.
- v. Remove nine (9) halogen lighting on three (3)-phase primary poles and replace with a nine (9) new LED luminaire. Transfer existing LED lighting to new poles. See Appendix A – Structural Pole Analysis for information on pole FIDs, and coordinates of luminaire transfers.
- vi. Remove and dispose of the 17 existing distribution line poles with their related components.

vii. The majority of work to be completed will be under the public domain (10 feet wide from the center line, as per the existing PREPA easement) of state highway PR-176. For work that is outside of the public domain (installation of certain guy wires and anchors, refer to Appendix D – Right of Way Plan) an easement will be obtained per the PREPA Easement Regulation No. 7282. Poles with new easements and encroachments are included as part of the engineering design.

Poles to Be Removed and Replaced

Poles to Be Removed	Poles to Replace the Removed Poles	Quantity (Ea.)
Pole to be removed, 45' concrete H3	Electrical utility pole, steel galvanized, 12-sided, tapered shaft, 50' S-8.5	10 (refer line 46 of the LPCE)
Pole to be removed, 45' concrete H3	Electrical utility pole, steel galvanized, 12-sided, tapered shaft, 50' S-10	4 (refer line 47 of the LPCE)
Pole to be removed, 45' concrete H4	Electrical utility pole, steel galvanized, 12-sided, tapered shaft, 55' S-8.5	2 (refer line 48 of the LPCE)
Pole to be removed, 45' concrete H3	Electrical utility pole, steel galvanized, 12-sided, tapered shaft, 55' S-8.5	1 (refer line 48 of the LPCE)
	Total	17

New Pole to Be Installed Description Quantity

Description	Quantity (Ea.)
Poles to be installed, steel galvanized, 12-sided, tapered shaft, 50' S-8.5	1 (refer line 46 of the LPCE)
Total	1

B. Concrete Bases

i. Install four (4) new concrete foundation bases at locations provided in **Appendix F – Project Considerations** (see columns D and L). The table below summarizes the types of bases installed, their quantity, the volume of concrete per type of base, and the total volume of concrete installed for all bases of a certain type. Refer to Section 11.0 (letter A) for information on ground disturbance of the concrete bases.

Concrete Base Description	Volume of Concrete per Base (CY)	Quantity (Ea.)	Total (CY)
Precast Concrete Base for 50'-S8.5, 55'-S8.5, 60'-S8.5, and 65'-S8.5	3.35	1	3.35 (refer to line 42 of the LPCE)
Concrete Bases for 60'-S10, 60'-S13	6.11	3	18.33 (refer to line 42 of the LPCE)
Total		4	21.68

*Precast Concrete Base Volume Formula / 50' or 60'-S8.5 = $\{[(p \cdot 1.66^2 \cdot 14.5) - (p \cdot 1.1^2 \cdot 9.8)] / 27\} = 3.35\text{CY}$

**Precast Concrete Base Volume Formula / 50'-S10 and 60'-S13 = $\{[(p \cdot 2^2 \cdot 16) - (p \cdot 1.1^2 \cdot 9.8)] / 27\} = 6.11\text{CY}$

C. Steel Galvanized Transformers

Steel Galvanized Transformers	Interconnection Voltage	Quantity (Ea.)
50 kVA	13.2 kV	1 (refer to line 50 of the LPCE)
Total		1

i. Remove one (1) 50 kVA transformer and replace with one (1) new 50 kVA stainless-steel unit in compliance with current codes and standards for replacement and design. Transformer quantities are described in the table below.

D. Guy Wires / Anchoring

i. Install twenty-one (21) new guy wires, twelve (12) expansion anchors, and one (1) screw type anchor in compliance with the LUMA Overhead Electrical Distribution System Manual, available in Grants Portal - Applicant Event Profiles.

Description	Quantity (Ea.)
Guy Wires 1/2"	21 (refer to line item 34 of LPCE)
Expansion Anchor	12 (refer to line item 35 of LPCE)
Screw Type Anchor	1 (refer to line item 36 of LPCE)

E. Conductors

i. Remove one hundred and four (104) hundred feet of existing conductors and replace with 103.62 C.L.F. of new 556 ACSR conductor per LUMA codes and standards. The conductor quantity is described in the table below.

Description	Quantity (C.L.F.)
556 ACSR Conductor	103.62 (refer to line item 49 of LPCE)

CODES & STANDARDS

Per FEMA's SOP, the locally adopted codes/standards and/or FEMA-approved industry standards used for this project are provided below:

1. LUMA Overhead Electrical Distribution System Manual, version 4.0, available in Grants Portal - Applicant Event Profiles.

406 HAZARD MITIGATION PROPOSAL

FEMA PAPPG v.3.1 provides, "Hazard mitigation is any sustained action taken to reduce or eliminate long-term risk to people and property from natural hazards and their effects." The subrecipient proposes to lessen or eliminate long-term risk to people and property from future natural hazards and their effects by performing the work described in this project to Subrecipient's Distribution Design Criteria, which exceeds required codes and standards. Doing so will directly reduce the potential of future, similar negative consequences of damage to the T&D system, as occurred after Hurricane Maria by improving the system's physical resilience, functional resiliency, or both.

406 HAZARD MITIGATION OPPORTUNITY

This version does not contain a hazard mitigation proposal.

406 SCOPE OF WORK

Not applicable.

COMMON EHP REVIEW INFORMATION

Please check any items applicable to the proposed scope of work in this Project. If an item is checked, provide a description of the scope, extent and location of the selected activity.

? **Ground disturbance outside of existing footprint.** If checked, provide a description of the ground disturbing activities including the extent, location, and depth of the disturbance.

A. Poles and Concrete Bases

Location and depth of poles and concrete bases to be installed are provided in **APPENDIX A - STRUCTURAL POLE ANALYSIS** (refer to columns E, H, I and CM). Pole depths are 7 feet and 7.70 feet. Maximum pole diameter is 23 inches. For further details of the volume impact for the installation of concrete bases and poles, please refer to column D in **APPENDIX F - PROJECT CONSIDERATIONS**.

Concrete Base Description	Diameter (in.)	Depth (ft.)
Precast Concrete Bases for 50'-S8.5 and 55'-S8.5	40	14.5
Precast Concrete Bases for 50'-S10	48	16

[] **Soil testing or boring to be performed as part of pre-construction activities.** If checked, provide a description, location, and dimensions of the testing/boring activities.

[] **Relocation of utilities.** If checked, include a description of the relocation including the type of utility, relocation coordinates, and the extent and depth of associated ground disturbance.

[X] **Vegetative Removal.** If checked, describe the removal work to be performed, its location, and its extent.

A. Vegetation clearance will be performed solely to the extent that it allows crews to conduct work and will be limited to a 10 ft radius surrounding the surface of the pole, but not to exceed the width of the right-of-way. This is for the exclusive purpose of gaining access to the pole to conduct repairs. The costs related to vegetation clearance procedures are covered in project San Juan Group A FAAS 723883 Region 1 High Density (Vegetation). The vegetation removal process will be managed in accordance with federal and state regulations.

[X] **Demolition.** If checked, include a description of what will be removed and the extent and depth of any ground disturbing activities. Additionally, include a description of (1) demolition debris type (construction debris, white goods, hazardous materials, etc.); (2) GPS location of temporary debris storage sites; (3) final debris disposal location; and (4) final debris disposal method.

A. Material Disposal:

- Polychlorinated biphenyl ("PCB"), oil from the transformer and breakers, sealants, and chemical wastes will be disposed of by the contractor in authorized facilities.
- The type of debris generated in the process of removal are luminaires, pole arms, photocells, wiring, transformers, concrete, metal scrap, steel, wood, domestic and construction waste. The debris will be separated and taken to an authorized waste disposal facility.
- Photocells are considered universal waste and will be disposed of by the contractor in authorized facilities.

B. Transformer:

- Transformers will be contained and returned to LUMA in compliance with applicable federal and state regulations. The removal of transformers will require testing the existing oil for PCB levels, draining of the oil, and delivery to the authorized waste disposal site.

[X] **Staging areas, landing area for air transport, and access roads.** If checked, provide GPS location of staging areas, and access roads.

Include a description of the extent of any related vegetative removal, ground disturbance, or stabilization measures required (such as gabion walls, retaining walls, paving, etc.).

- Proposed **staging area** has been identified, area of 3,000m² located at Bo Cupey Alto, Camino Don Diego Km 6.4, PR, 00926, San Juan, Refer to **Appendix C – Staging Area**, which includes several photographs. LUMA does not anticipate that ground disturbance or stabilization measures will be required. Normally growing vegetation on the property will be cleared to the minimum extent necessary to make the staging area workable.

[X] **Fill material.** If the project includes the use of fill material, provide the source of the fill material including the provider's name and address (if known).

- Fill, gravel, and sand materials will be obtained from an approved supplier as referenced in the LUMA Vendor Directory List included in the

☐ **Work in water including coffer dams, dredging, placement of equipment in water, or other work in wetlands.** If checked, provide a description of the activities to be performed in water or wetlands.

The following items are generally intended for buildings:

☐ **Facility is over 45 years old.** If checked, provide a thorough description of materials to be used and method of repair, including cleaning methods. If substitute materials will be used in the restoration, specify whether they match the original color, texture, and design of the damaged facility.

☐ **Known renovations to the facility.** If checked, provide dates of any previous major renovations to the interior or exterior of the facility.

☐ Photos of all sides of the facility are provided.

PROJECT COST ESTIMATE (PCE)

The estimated costs (compliant with Class 1) to complete the project are summarized in the table(s) below. The cost estimate(s) was developed utilizing detailed Architectural and Engineering ("A&E") design information. For a more detailed cost estimate refer to **Appendix G – LUMA LPCE.**

COST ESTIMATE			
Cost Element	428	406	PROJECT TOTAL
PLANNING	\$1,262,779.80	\$-	\$1,262,779.80
(A&E) Permitting and Assessments	\$ 17,018.96	\$ -	\$ 17,018.96
(A&E) Environmental Documentation & Management	\$ 10,320.00	\$ -	\$ 10,320.00
(A&E) Engineering Services & Design	\$ 1,035,440.84	\$ -	\$ 1,035,440.84
MANAGEMENT	\$ 113,742.46	\$ -	\$ 113,742.46
(A&E) Project Management	\$ 32,010.07	\$ -	\$ 32,010.07
(A&E) Construction Management	\$ 42,680.10	\$ -	\$ 42,680.10
(A&E) Contracting, Procurement & Contract Administration	\$ 17,712.24	\$ -	\$ 17,712.24
(A&E) Projects Controls (Scheduling, Estimating, Support, Cost Control, Risk, Document Control & Reporting)	\$ 21,340.05	\$ -	\$ 21,340.05
San Juan Short Term Group 1,	\$ 2,089,682.39	\$ -	\$ 2,089,682.39

San Juan Short Term Group 1, Feeder 1303-02, Project ID: 10013, FEMA Project Name: San Juan Short Term Group 1, Feeder 1303-02, FAAST#: 817956, material, labor and equipment.	\$ 1,719,087.22	\$ -	\$ 1,719,087.22
Start Up/Commissioning	\$ 25,786.30	\$ -	\$ 25,786.30
Construction Trespass	\$ 8,595.43	\$ -	\$ 8,595.43
Transportation Expenses	\$ 8,595.43	\$ -	\$ 8,595.43
Security (Field 24 hr)	\$ 15,471.78	\$ -	\$ 15,471.78
Insurance	\$ 34,725.56	\$ -	\$ 34,725.56
Construction Contingency	\$ 13,400.52	\$ -	\$ 213,400.52
Escalation	\$ 64,020.15	\$ -	\$ 64,020.15
GENERAL CONDITIONS	\$ 94,404.59	\$ -	\$ 94,404.59
Sales Tax	\$ 8,450.23	\$ -	\$ 8,450.23
Municipal Construction Tax	\$ 85,954.36	\$ -	\$ 85,954.36
COST TOTALS	\$3,560,609.24	\$-	\$3,560,609.24
DEDUCTIONS	TOTAL INSURANCE PROCEEDS RECEIVED	\$	
	DE-OBLIGATION TO FAASt IF APPLICABLE	\$	
FAASt ALLOCATIONS	FAASt PROJECT # 167446 - 428	\$2,054,461.78	
	FAASt PROJECT # 167446 – 406 HM	\$-	
	FAASt PROJECT #167446 Total	\$2,054,461.78	
	FAASt A&E # 335168 - 428	\$1,376,522.26	
	FAASt A&E # 335168 – 406 HM	\$-	
	FAASt A&E # 335168 TOTAL	\$1,376,522.26	
	FAASt E&M # 673691- 428	\$129,625.20	
	FAASt E&M # 673691 – 406 HM	\$-	

	FAASt E&M # 673691 TOTAL	\$129,625.20
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Work To Be Completed (WTBC): \$3,560,609.24
A&E Deduction (Global A&E FAASt 335168): - \$1,376,522.26
E&M Deduction (Global E&M FAASt 673691): -\$129,625.20
Project Total Cost: \$2,054,461.78

Project Notes:

1. Refer to detailed SOW provided in document "817956- DR4339PR- DETAILED SCOPE OF WORK San Juan Short Term Group 1 FEEDER 1303-02 - signed.pdf"
2. Refer to detailed cost estimate provided in document "817956 - DR4339PR- Appendix G - LUMA LPCE.xlsx".
3. This project is part of Donor FAASt 136271 – MEPA078 Puerto Rico Electrical Power Authority (PREPA) Island Wide FAASt Project 136271.
4. A&E cost included in this project will be reduced from this project and obligated under the FAASt Project #335168, A&E, as show in the table above. The A&E project was obligated to track and account for cost associated with individual FAASt projects.
5. Equipment and material costs included in this project will be reduced from this project and obligated under FAASt Project #673691, Equipment and Materials, as shown in the table above. Only the base cost of equipment and/or material will be reduced from this project (not labor). All costs associated with Planning, Management, General Conditions, and Contingencies will remain in this project.
6. For Attachments refer to:
 - Appendix A: Structural Pole Analysis
 - Appendix B: LUMA Drawings OH Design
 - Appendix C: Staging Area
 - Appendix D: Right of Way Plan
 - Appendix E: Proposed Design KMZ
 - Appendix F: Project Considerations
 - Appendix G: LUMA LPCE

406 HMP Scope

406 Hazard Mitigation measures were not requested by the sub-applicant for this project in this Version. However, there may be mitigation opportunities that might apply to Version 1 of the Permanent Work Project. The project is ready for Insurance completion.

Cost

Code	Quantity	Unit	Total Cost	Section
9001	1	Lump Sum	\$3,560,609.24	Uncompleted
3510	1	Lump Sum	(\$1,376,522.26)	Uncompleted
9001	1	Lump Sum	(\$129,625.20)	Uncompleted
9201	1	Lump Sum	\$0.00	Completed

CRC Gross Cost \$2,054,461.78

Total 406 HMP Cost \$0.00

Total Insurance Reductions \$0.00

CRC Net Cost \$2,054,461.78

Federal Share (90.00%) \$1,849,015.61

Non-Federal Share (10.00%) \$205,446.17

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.
- 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.
- 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.
- 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.
- 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.
- The Subrecipient provided the estimate for this PW. FEMA validated the estimate and found it to be reasonable for the work to be performed.

Insurance

Additional Information

6/30/2026

No adjustments to be made to the previous insurance coverage determination, no revisions to narrative needed, updated applicant tracker if

needed, providing administrative function and forwarding project for completion.

Jean-Carlo Echevarria, PA Insurance Specialist, CRC Atlantic, Guaynabo P.R.

6/27/2025

Does the Applicant have a Commercial Policy: Yes.

Does the Applicant's Commercial Policy extend coverage for the damage described in this project: No.

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.

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

O&M Requirements

There are no Obtain and Maintain Requirements on **FAASt * [Feeder Rebuild # 1303-02] (Distribution)**.

406 Mitigation

There is no additional mitigation information on **FAASt * [Feeder Rebuild # 1303-02] (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.
- The Subrecipient and/or Subrecipient's contractor must follow the Low Impact Debris Removal Stipulations (LIDRS) outlined in Appendix E of the Project-Specific Programmatic Agreement Among FEMA, the SHPO, ACHP, COR3, and PREPA (PSPA), executed on August 2, 2022.

- 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.
- Additional staging areas and/or work pads within work site area haven't been identified yet. The 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.
- 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 Recipient prior to extracting material. FEMA must review the source for compliance with all applicable federal environmental planning and historic preservation laws and execute orders prior to a subrecipient or their contractor commencing 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 closeout.
- § 65533; 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. § 65533; 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. § 65533; 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.

EHP Additional Info

There is no additional environmental historical preservation on **FAAST * [Feeder Rebuild # 1303-02] (Distribution)**.

Final Reviews

Final Review

Reviewed By LEFRANC-GARCIA, CARLOS L.

Reviewed On 09/12/2025 6:41 PM PDT

Review Comments

Reviewed, found eligible and reasonable - CLG 09.12

Recipient Review

Reviewed By Mulero, Noel

Reviewed On 09/18/2025 5:12 PM PDT

Review Comments

Recipient review completed. Applicant must ensure to compliance with all regulatory requirements, Record of Environmental Consideration (REC) Special Conditions and PA policy. Project is ready for applicant review.

Project Signatures

Reviewed By Unsigned

Reviewed On Unsigned

General Info

Project #	817956	P/W #	108119	Project Type	Specialized
Project Category	F - Utilities	Applicant	PR Electric Power Authority (000-UA2QU-00)		
Project Title	FAASt * [Feeder Rebuild # 1303-02] (Distribution)			Event	4339DR-PR (4339DR)
Project Size	Large	Declaration Date	9/20/2017		
Activity	9/20/2027	Incident Start Date	9/17/2017		
Completion Date		Incident End Date	11/15/2017		
Process Step	Obligated				

Damage Description and Dimensions

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

Damage #1414781; FAASt [Feeder Rebuild # 1303-02] (Distribution)

General Facility Information:

- **Facility Type:** Power generation, transmission, and distribution facilities
- **Facility:** FAASt [Feeder Rebuild # 1303-02] (Distribution)
- **Facility Description:** Feeder 1303-02 supplies suburban and rural loads in the municipality of San Juan. Feeder 1303-02 is approximately 0.49 circuit miles long with a three-phase overhead distribution conductor. It starts at Villa Betina substation (REDACTED). For more details and a list of all GPS locations to be impacted by this project. LUMA will remove and replace 17 poles and install one (1) new pole along the feeder backbone. All new poles will be located within the easement.
- **Approx. Year Built:** 1967
- **GPS Latitude/Longitude:** REDACTED

Final Scope

1414781 FAASt [Feeder Rebuild # 1303-02] (Distribution)

***** Version 1 *****

Version 1 created to align the scope and cost in PA and HM. Since this version include both 406 HMP and 428 PA costs, one with positive amount and the other negative, we'll process first the positive funds and in a later version we'll de-obligate the negative portion.

SOW from previous Versions has been removed from current SOW. It can be found in the "Versioning and Amendments" tab in GM.

5.0 INTRODUCTION

Pursuant to FEMA's Post-Fixed Cost Estimate Obligation SOP (the "SOP") for FAASt projects, FAASt subrecipients must provide to FEMA recovery project scopes of work ("SOW") for the proposed construction work to be performed. The SOW may include § 406 hazard mitigation proposals ("HMPs").

According to the SOP, FEMA "anticipates that [SOW] submissions might include preliminary designs, including drawings and cost estimates. FEMA also recognizes that, generally, architects and/or engineers do not include or delineate the information needed to enable FEMA to complete programmatic reviews. Therefore, in those cases, subrecipients must ensure to submit all the information described [in the SOP] and not limit the submission to a drawing set. Refer to Part C - II. Recipient/Subrecipient Checklist for

Submissions as a guide to review completeness.” SOP at 4.

This document contains the detailed SOW for FEMA PA project #817956 Distribution Feeder Rebuild #1303-02 under DR-4339-PR Public Assistance. The document provides a detailed description of the project, scope of PA construction activities to be completed, common EHP review information, proposed hazard mitigation measures, and project cost estimates. LUMA is seeking approval from COR3 and FEMA for PA funding for the scope described in this document.

LUMA submits this Detailed SOW pursuant to the Transmission and Distribution Operations and Maintenance Agreement between the Puerto Rico Electric Power Authority ("PREPA"), the Puerto Rico Public-Private Partnerships Authority ("P3A"), and LUMA, and in accordance with the Consent to Federal Funding Letter issued by PREPA and P3A, which collectively provides the necessary consent for LUMA, as agent of PREPA, to undertake work in connection with any Federal Funding requests related to the T&D System submitted to FEMA. References to "Subrecipient" herein refer to PREPA pursuant to this agreement and consent for LUMA to act as its agent with respect to federal funds.

6.0 PROJECT DESCRIPTION

Feeder 1303-02 supplies suburban and rural loads in the municipalities of San Juan. Feeder 1303 02 is approximately 0.49 circuit miles long with a three-phase overhead distribution conductor. It starts at Villa Betina substation (). For more details and a list of all GPS locations to be impacted by this project, please refer to Appendix A –Structural Pole Analysis.

LUMA will remove and replace 17 poles and install one (1) new pole along the feeder backbone. All new poles will be located within the easement. Refer to Appendix A – Structural Pole Analysis, which includes the pole FID, coordinates, type of pole to be installed, type of pole and hardware to be removed, and whether it has a concrete foundation. This scope of work also includes the installation of poles and guy wires within the existing easement. At this stage of the project, the easement for the proposed design has been identified, and a certified surveying process will be executed later to confirm the easement limits.

7.0 FACILITIES

7.1 FACILITIES LIST

The electrical feeder 1303-02 serves 2,435 customers along a route to various locations that supply suburban and rural loads in the municipality of San Juan.

Feeder Number	Feeder Name	Customers Counts	GPS Start	GPS End	Phase	Voltage Level (kV)	Construction Date
1303-02	Villa Betina 1303-02	2,435			3-Phase	13.2	1989

Appendix A – Structural Pole Analysis includes a list of all GPS locations for all poles impacted by this project. The table below lists poles that are along this feeder line that were installed on different programs. Therefore, they are not part of the scope of this project:

Pole FID	Installation Program	FAASt / Disaster Related	LATITUDE	LONGITUDE
10607087	D-Pole and Conductor Repair	673775		

8.0 PROJECT AREA MAP WITH BOUNDARIES OF CONSTRUCTION

For Figure 1. Poles are marked in the picture above, refer to document: 817956-DR4339PR- Feeder 1303-02-Detailed Scope of Work-V. 1- Rev. 1- RFI June 2026.pdf

For Figure 2. Poles are marked in the picture above, refer to document: 817956-DR4339PR- Feeder 1303-02-Detailed Scope of Work-V. 1- Rev. 1- RFI June 2026.pdf

Also refer to Appendix D – Right of Way Plan for aerial pictures, also with identified poles, and to Appendix B – LUMA Drawings OH Design.

9.0 § 428 SCOPE OF WORK

The proposed type of work for this project:

X Standard Project: Restores the facility/facilities to pre-disaster design and function to locally adopted codes/standards and/or FEMA-approved industry standards.

In the obligated DSOW, LUMA proposed:

- Removal and replacement of seventeen (17) Poles, 50' S-8.5, 50' S-10, 55 S-8.5 galvanized steel round poles.
- Installation of one (1) additional Pole, 50' S-8.5 galvanized steel round poles
- Installation of twenty-one point sixty-two (21.62) cubic yards of concrete base
- Removal and installation of nine (9) existing street lighting. Removal and replacement of one (1) 50 kVA transformer.
- Removal and installation of one-hundred-and three-point sixty-two (103.62) C.L.F of ACSR Conductor.

The amendment reflects the incorporation of the new Detailed Scope of Work (DSOW Rev. 2, dated November 5, 2025) and the revised Line-Item Project Cost Estimate (LPCE) for Feeder 1303-02. The update reconciles design adjustments identified during the engineering and IFC development stage.

Key updates include:

- Removal and Replacement of seventeen (17) existing concrete poles with 50ft galvanized steel round poles, plus installation of one (1) new pole for improved geometry and load distribution.
- Remove one (1) 50 kVA transformer and replace it with one (1) new 50 kVA steel galvanized transformer unit in compliance with current codes and standards for replacement and design (406 hazard mitigation will cover the replacement of material from galvanized steel to stainless steel).
- Install fifteen (15) new guy wires, four (4) expansion anchors, and five (5) screw-type anchors in compliance with the LUMA Overhead Electrical Distribution System Manual.
- Remove one hundred and three point sixty-two (103.62) feet of existing conductors 556.5 ACSR and replace with one hundred and three point sixty-two (103.62) feet of new 556.5 ACSR conductor per LUMA codes and standards.

The amendment also adds the required labor adjustments for §406 Hazard Mitigation scope to account for the installation of heavier 12-sided poles. These changes result in an updated total project cost of \$ 2,849,365.01 reflecting all §428 and §406 allocations across the related FAASSt projects (#817956, #335168, and #673691).

For more information, refer to the amendment letter for this project.

9.1 DESCRIPTION OF PROPOSED WORK TO BE PERFORMED

The tables below summarize the § 428 PA scope of work.

A. Poles

- Remove and replace a total of seventeen (17) poles to comply with structure loading cases along the feeder backbone. The pole types and quantities are described in the table below.
- Install a total of one (1) additional pole to comply with structure loading cases along the feeder backbone. The pole type and quantity are described in the table below.
- Remove existing hardware and replace it with new hardware.
- Depths of the poles to be replaced are provided in Appendix A – Structural Pole Analysis, column D. Pole depths are 7 feet. The maximum pole diameter is 23 inches.
- Remove nine (9) halogen lighting on three (3)-phase primary poles and replace with nine (9) new LED luminaire. Transfer existing LED lighting to new poles. See Appendix A – Structural Pole Analysis for information on pole FIDs and coordinates of luminaire transfers.
- Remove and dispose of the seventeen (17) existing distribution line poles with their related components.
- Work to be completed will be within the public domain (10 feet wide from the center line, as per the existing PREPA easement) of

state highway PR-176.

9.2 POLES TO BE REMOVED AND REPLACE

Poles to be Replace	Poles to Replace the Removed Poles	Quantity (Ea.)
Pole to be removed, 45ft. concrete H3	Electrical utility pole, 50ft round galvanized steel	14
Pole to be removed, 45ft. concrete H4	Electrical utility pole, 50ft round galvanized steel	3
	Total	17

Refer to columns C, H, and I of the tab named "IFC Feeder 1303-02" of Appendix A - Structural Pole Analysis_Rev 03-05-2026 for coordinates and pole FIDs

New Pole to Be Installed

Description	Quantity (Ea.)
Electrical utility pole, steel galvanized, round, tapered shaft, 50ft.	1
Total	1

B. Steel Galvanized Transformers

i. Remove a total of one (1) 50 kVA transformer and replace it with one (1) new 50 kVA steel galvanized transformer unit in compliance with current codes and standards for replacement and design. Transformer quantities are described in the table below. For references to LPCE line, refer to Section 10.2(B) below. Refer to column BQ of "IFC Feeder 1303-02" tab of Appendix A- Structural Pole Analysis_Rev 12012025 for coordinates of said transformer.

Steel Galvanized Transformers	Interconnection Voltage	Quantity (Ea.)
50 KVA	2.4 – 4.16 KV	1
Total		1

C. Guy Wires / Anchoring

i. Install fifteen (15) new guy wires, four (4) expansion anchors, and five (5) screw-type anchors in compliance with the LUMA Overhead Electrical Distribution System Manual, available in Grants Portal - Applicant Event Profiles.

Description	Quantity (Ea.)
Guy Wires 3/8"	15 (refer to line item 35 of LPCE)
Expanding Anchor	4 (refer to line item 36 of LPCE)
Screw Type Anchor	5 (refer to line item 37 of LPCE)

D. Conductor

i. Remove one hundred and three point sixty-two (103.62) feet of existing conductors 556.5 ACSR and replace with one hundred and three point two (103.62) feet of new 556 ACSR conductor per LUMA codes and standards. The conductor quantity is described in the table below.

Description	Quantity (Ea.)
556.5 ACSR Conductor	103.62(refer to line item 48 of LPCE)

CODES & STANDARDS

Per FEMA's SOP, the locally adopted codes/standards and/or FEMA-approved industry standards used for this project are provided

below:

1. LUMA Overhead Electrical Distribution System Manual, version 5.0, available in Grants Portal - Applicant Event Profiles.

10.0 § 406 HAZARD MITIGATION PROPOSAL, refer to document: 817956-DR4339PR- Feeder 1303-02-Detailed Scope of Work-V. 1- Rev. 1- RFI June 2026.pdf

11.0 COMMON EHP REVIEW INFORMATION

Please check any items applicable to the proposed scope of work in this Project. If an item is checked, provide a description of the scope, extent, and location of the selected activity.

☒ Ground disturbance outside of the existing footprint. If checked, provide a description of the ground disturbing activities, including the extent, location, and depth of the disturbance.

A. Poles and Guy Wires Location and depth of poles to be installed are provided in APPENDIX A - STRUCTURAL POLE ANALYSIS (refer to columns D, H, and I). Pole depths are 7 feet. The maximum pole diameter is 23 inches. For further details of the volume impact for the installation of poles, please refer to column D in APPENDIX F - PROJECT CONSIDERATIONS.

☐ Soil testing or boring is to be performed as part of pre-construction activities. If checked, provide a description, location, and dimensions of the testing/boring activities.

☐ Relocation of utilities. If checked, include a description of the relocation, including the type of utility, relocation coordinates, and the extent and depth of associated ground disturbance.

☒ Vegetative Removal. If checked, describe the removal work to be performed, its location, and its extent.

A. Vegetation clearance will be performed solely to the extent that it allows crews to conduct work and will be limited to a 10 ft radius surrounding the surface of the pole, but not to exceed the width of the right-of-way. This is for the exclusive purpose of gaining access to the pole to conduct repairs. The costs related to vegetation clearance procedures are covered in project San Juan Group A FAAS 723883 Region 1 High Density (Vegetation). The vegetation removal process will be managed in accordance with federal and state regulations.

☒ Demolition. If checked, include a description of what will be removed and the extent and depth of any ground disturbing activities. Additionally, include a description of (1) demolition debris type (construction debris, white goods, hazardous materials, etc.); (2) GPS location of temporary debris storage sites; (3) final debris disposal location; and (4) final debris disposal method.

A. Material Disposal:

- i. Polychlorinated biphenyl (PCBs), oil from the transformer and breakers, sealants, and chemical waste will be disposed of by the contractor in authorized facilities.
- ii. The types of debris generated in the process of removal are luminaires, pole arms, photocells, wiring, transformers, concrete, metal scrap, steel, wood, domestic and construction waste. The debris will be separated and taken to an authorized waste disposal facility.
- iii. Photocells are considered universal waste and will be disposed of by the contractor in authorized facilities.

B. Transformer:

- i. Transformers will be contained and returned to LUMA in compliance with applicable federal and state regulations. The removal of transformers will require testing of the existing oil for PCB levels, draining of the oil, and delivery to the authorized waste disposal site.

☒ Staging areas, landing area for air transport, and access roads. If checked, provide the GPS location of staging areas and access roads. Include a description of the extent of any related vegetative removal, ground disturbance, or stabilization measures required (such

as gabion walls, retaining walls, paving, etc.).

- Originally, the staging area was identified as an area of 2,550.13m2 located at Bo. Cupey Bajo, Carr 844 Interior KM 2.3, San Juan, PR, 00926. Refer to Appendix C – Staging Area, which includes several photographs. A new staging area has been identified to support project activities. The proposed staging area comprises approximately 23,189.3 m², and is located at the Sabana Llana Regional Warehouse, at the intersection of Road Jose De Diego and Las Brisas street, San Juan, PR, 00924 (coordinates [REDACTED]). Per FEMA environmental compliance requirements, this location has been previously reviewed. Refer to Appendix H for the Record of Environmental Consideration (REC) associated with FEMA's prior approval of this staging area under Projects 757700-FAASt Group 35 (1909-08 and 757698-FAASt Group 33 (1711-01).

LUMA does not anticipate that any ground disturbance or ground-stabilization measures will be required for the use of this staging area. Only normally growing vegetation on the property will be cleared to the minimum extent necessary to ensure safe and functional use of the area for staging purposes.

- X Fill material. If the project includes the use of fill material, provide the source of the fill material, including the provider's name and address (if known).
- Fill, gravel, and sand materials will be obtained from an approved supplier as referenced in the LUMA Vendor Directory List included on the Applicant Event Profile in Grants Portal.

___ Work in water including coffer dams, dredging, placement of equipment in water, or other work in wetlands. If checked, provide a description of the activities to be performed in water or wetlands.

The following items are generally intended for buildings:

___ Facility is over 45 years old. If checked, provide a thorough description of materials to be used and the method of repair, including cleaning methods. If substitute materials will be used in the restoration, specify whether they match the original color, texture, and design of the damaged facility.

___ Known renovations to the facility. If checked, provide dates of any previous major renovations to the interior or exterior of the facility.

___ Photos of all sides of the facility are provided.

12.0 PROJECT COST ESTIMATE (PCE)

The estimated costs (compliant with Class 3 Accuracy +/-30%) for completing the project are summarized in the table(s) below. The cost estimate was developed utilizing preliminary Architectural and Engineering design information. For a more detailed cost estimate, refer to Appendix G – LUMA LPCE.

COST ESTIMATE			
Cost Element	428	406	PROJECT TOTAL
PLANNING	\$542,776.80	7,204.76	\$549,981.56
(A&E) Permitting and Assessments	\$15,262.37	\$202.59	\$15,464.96
(A&E) Environmental Documentation & Management	\$207,564.81	\$2,755.19	\$210,320.00

(A&E) Engineering Services & Design	\$319,949.62	\$4,246.98	\$324,196.60
MANAGEMENT	\$309,113.31	\$4,103.14	\$313,216.45
(A&E) Design Development Project Management A&E	\$68,589.55	\$910.45	\$69,500.00
(A&E) Design Lodging & Per Diem A&E	\$20,011.86	\$265.64	\$20,277.50
Project Management	\$112,501.96	\$1,493.34	\$113,995.30
Construction Management	\$38,636.73	\$512.86	\$39,149.59
Contracting, Procurement, & Contract Administration	\$33,943.50	\$450.56	\$34,394.06
Project Controls (Scheduling, Estimating, Support, Cost Control, Risk, Document Control & Reporting)	\$35,429.71	\$470.29	\$35,900.00
FEMA Project Name: San Juan Short Term Group 1	\$1,876,428.75	\$24,828.43	\$1,901,257.18
FEMA Project Name: San Juan Short Term Group 1, Feeder 1303-02, FFAST#: 817956,	\$1,541,630.03	\$20,488.02	\$1,562,118.05
Start Up/Commissioning	\$23,124.81	\$306.96	\$23,431.77
Construction Trespass	\$7,810.59	\$-	\$7,810.59
Transportation Expenses	\$7,708.27	\$102.32	\$7,810.59
Security (Field 24 hr)	\$13,874.89	\$184.17	\$14,059.06
Insurance	\$31,141.41	\$413.37	\$31,554.78
Contingency	\$193,183.66	\$2,564.30	\$195,747.96
Escalation	\$57,955.09	\$769.29	\$58,724.38

GENERAL CONDITIONS	\$83,797.50	\$1,112.32	\$84,909.82
Sales Tax	\$6,714.79	\$89.13	\$6,803.92
Municipal Construction Tax	\$77,082.71	\$1,023.19	\$78,105.90
COST TOTALS	\$2,812,116.36	\$37,248.64	\$2,849,365.01
DEDUCTIONS	TOTAL INSURANCE PROCEEDS RECEIVED		\$-
	DE-OBLIGATION TO FAAS_t IF APPLICABLE		\$-
FAAS_t ALLOCATIONS	FAAST PROJECT # 817956 - 428		\$2,101,302.65
	FAAST PROJECT # 817956 - 406HM		\$37,248.64
	FAAST PROJECT # 817956 TOTAL:		\$2,138,551.29
	FAAS _t A&E # 335168 - 428		\$631,378.21
	FAAS _t A&E # 335168 - 406 HM		\$8,380.84
	FAAS_t A&E # 335168 TOTAL		\$639,759.06
	FAAS _t E&M #673691 - 428		\$79,435.50
	FAAS _t E&M #673691 - 406 HM		\$20,488.02
	FAAS_t E&M #673691 TOTAL		\$99,923.52

Project Cost Summary, 428 Version 1:

Work to be Completed (WTBC): $\$2,812,116.36 - 2,812,116.36 = \0.00 (See project note 5)

A&E Deduction (Global A&E FAAS_t 335168): $-\$631,378.21 + \$631,378.21 = \$0.00$ (See project note 5)

E&M Deduction (Global E&M FAAS_t 673691): $-\$79,435.50 + \$79,435.50 = \$0.00$ (See project note 5)

Project Total: $\$2,101,302.65 - \$2,101,302.65 = \$0.00$ (See project note 5)

Version Summary of Key Changes

Version 0: \$ 2,054,461.78 (WTBC)

Project Notes:

1. Refer to detailed SOW provided in document labeled: "817956-DR4339PR- Feeder 1303-02-Detailed Scope of Work-V. 1- Rev. 1- RFI June 2026.pdf"
2. Refer to detailed Cost Estimate provided in document labeled: "817956-DR4339PR-Feeders 1303-02-Appendix G - LPCE San Juan Short Term Group 1-FEMA RFI-April 2026.xlsx"
3. A&E costs included in this project will be reduced from this project and obligated under the FAASSt Project #335168, A&E, as shown in the table above. The A&E project was obligated to track and account for costs associated with individual FAASSt projects. This project is part of Donor FAASSt 136271 – MEPA078 Puerto Rico Electrical Power Authority (PREPA) Island Wide FAASSt Project.
4. Equipment and material costs included in this project will be reduced from this project and obligated under FAASSt Project #673691, Equipment and Materials, as shown in the table above. Only the base cost of equipment and/or material will be reduced from this project (not labor). All costs associated with Planning, Management, General Conditions, and Contingencies will remain in this project.
5. This version includes both 406 HMP and 428 PA costs, with one positive amount and the other negative. They cannot be processed in the same version, so two separate versions are required. Version 1 will obligate the positive funds (whether 406 HMP or 428), and Version 2 (amendment) will de-obligate the negative portion. This guidance applies only to Sub-FAASSt transactions; non-FAASSt transactions remain unchanged. See document file: 'SP 817956 - DR4339PR - Email Confirmation Sub-FAASSt Transaction Guidance.pdf.'"
6. Attachments:
 - A. Appendix A - Structural Pole Analysis
 - B. Appendix B - LUMA Drawings OH Design
 - C. Appendix C - Staging Area
 - D. Appendix D - Right of Way Plan
 - E. Appendix E - Proposed Design KMZ
 - F. Appendix F - Project Considerations
 - G. Appendix G - LUMA LPCE
 - H. Appendix H - Proposed Staging Area Sabana Llana Technical Warehouse
 - I. Appendix I - A&E Reasonable Cost Justification Narrative

406 HMP Scope

Project number:?817956; FAASSt [Feeder Rebuild # 1303-02] (Distribution)] (Transmission) (Distribution)

Damage: 1414781; FAASSt [Feeder Rebuild # 1303-02] (Distribution)

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 from Hurricane Maria. The incident caused damage to the electrical system, such as power generation plants,

transmission and distribution lines, substations, communication systems, buildings, among other damages to the infrastructure owned, operated, and maintained by the Puerto Rico Electric Power Authority (PREPA).

The Method of Repair (MOR) included the replacement of the damaged critical distribution poles, cross-arms, insulators, guy wires, transformers, conductors and all associated hardware needed for the new structure. Feeder 1303-02 is approximately 0.49 miles of three-phase overhead distribution conductor.

In order to minimize the damages in a future event, the Subrecipient proposes as a mitigation measure, increase the structural strength of the poles by replacing round galvanized steel poles with 12-sided galvanized steel poles, increasing the dimensions of the poles concrete foundations, and installing additional guy wires. Additionally, the Subrecipient requested the replacement of the galvanized steel transformers with stainless steel transformers. The implementation of these mitigation measures 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, reduce and/or eliminate future natural disaster damage, the Subrecipient proposed the following mitigation measures:

Mitigation Measures (Replacement)

To avoid damage in a future event, the Subrecipient is proposing as a mitigation measure, increase the strength of the poles by increasing the wind tolerance of all materials to 160mph. 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.

406 Mitigation Scope of Work:

A. Poles:

- 1. To avoid damage in a future event, the Subrecipient proposes as a mitigation measure, increase the strength of the poles by replacing it with a 12-sided, tapered shaft distribution pole to mitigate future damage to the structure due to high wind (160mph). The above mitigation measures will protect and make the affected infrastructure more resistant, stronger, and resilient to similar hazards.
- 2. Replace eighteen (18) 50ft round galvanized steel poles with eighteen (18) new 50ft 12-sided galvanized steel pole, tapered shaft distribution poles.

B. Stainless Steel Transformer (50kVA):

- 1. As a mitigation strategy, 406 HM will fund the additional cost (delta) for replacing transformer material from galvanized steel to high-strength stainless steel transformers. Stainless steel transformers protect life and property and prevent physical damage to PREPA's infrastructure from catastrophic failures caused when corroded transformers fail during a disaster. Stainless steel also withstands the impact of debris better than galvanized steel. By upgrading to this material, the Subrecipient will significantly reduce the chances of electrical malfunctions, insulation breakdowns, transformer failures during future hurricanes and the resulting risk to public and private property and life. This proactive mitigation measure not only ensures a more resilient power grid during and after the next hurricane but also decreases the need for frequent replacements and maintenance, which helps avoid future damage from similar storms and enhances the long-term reliability of Puerto Rico's electrical infrastructure.
- 2. One (1) 50kVA galvanized steel transformers by one (1) 50kVA stainless steel transformers.

Hazard Mitigation Proposal (HMP) Cost

Total Net Hazard Mitigation Cost (Base Cost) =	\$ 25,564.94
+ HM (Recipient A&E, Management & General Conditions) =	\$ 11,683.70
Hazard Mitigation Total Cost =	\$ 37,248.64

Hazard Mitigation Proposal (HMP) Cost Distribution

Equipment and Materials (E&M) =	\$ 20,488.02
Architecture and Engineering (A&E) =	\$ 8,380.84
Construction Cost =	\$ 8,379.77
Hazard Mitigation Total Cost =	\$ 37,248.64

HMP Cost-Effectiveness Calculations:

FEMA's Benefit-Cost Analysis (BCA), methodology evaluates expected risk reduction benefits of a hazard mitigation project and compares those benefits to the cost of the mitigation project. FEMA Public Assistance Program and Policy Guide (PAPPG) Chapter 2, Section VII. C. defines cost effective mitigation as: The Hazard Mitigation Measure is cost effective through an acceptable Benefit Cost Analysis (BCA) with a resulting Benefit Cost Ratio equal to or greater than (1).

The Island Wide Benefit Cost Analysis (IWBCA) created for the PREPA infrastructure defines a maximum potential benefit using the incurred costs of the PREPA FEMA Accelerated Award Strategy (FAASt) fixed cost estimate, the mission assignments utilized for the reconnection effort, and the costs associated with loss of service. This maximum benefit has been developed to fund all mitigation projects from both Public Assistance Hazard Mitigation and the Hazard Mitigation Grant program.

It is the Subrecipient responsibility to maintain a record of approved IWBCA related projects to avoid running out of funds for their Mitigation portion projects. Please see attached IWBCA Package

The cost of the Hazard Mitigation Proposal (HMP) described herein is **\$ 36,248.64**. The cost of this HMP combined with all other proposals (both PA and HMGP) does not exceed the maximum potential benefit and is therefore deemed cost effective by FEMA Public Assistance Program and Policy Guide (PAPPG) V3.1 April 2018, Chapter 2, VII., Section C, BCA Rule. This Hazard Mitigation Proposal meets eligible repair and restoration cost-effective requirements.

***See Mitigation Profile Documents Tab in Grants Manager for complete version of this HMP and supporting documents. (HMP, HMP cost estimate, Supporting documents file).*

6/4/2026: Project came back to the mitigation queue as the Subrecipient made an amendment to the project to relocate the 428 PA and 406 HM scope of works, which requires a reconciliation of funds. Project was reviewed, and HM validated the subrecipient proposed HMP. The HMP with HM Cost Estimate and IWBCA HMP Package were uploaded in Grants Manager. Project is ready for Insurance completion. Note: BCA in Grants Manager calculates the BCR in a different way to the BCA Tool Program. Please refer to 406 Mitigation Profile for BCA detailed information.

Cost

Code	Quantity	Unit	Total Cost	Section
9001	1	Lump Sum	\$3,560,609.24	Uncompleted
3510	1	Lump Sum	(\$1,376,522.26)	Uncompleted
9001	1	Lump Sum	(\$129,625.20)	Uncompleted
9201	1	Lump Sum	\$0.00	Completed

CRC Gross Cost \$2,054,461.78

Total 406 HMP Cost \$36,248.64

Total Insurance Reductions \$0.00

CRC Net Cost \$2,090,710.42

Federal Share (90.00%) \$1,881,639.38

Non-Federal Share (10.00%) \$209,071.04

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.
- 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.
- 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.
- 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.
- 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.
- The Subrecipient provided the estimate for this PW. FEMA validated the estimate and found it to be reasonable for the work to be performed.

Insurance

Additional Information

6/30/2026

No adjustments to be made to the previous insurance coverage determination, no revisions to narrative needed, updated applicant tracker if

needed, providing administrative function and forwarding project for completion.

Jean-Carlo Echevarria, PA Insurance Specialist, CRC Atlantic, Guaynabo P.R.

6/27/2025

Does the Applicant have a Commercial Policy: Yes.

Does the Applicant's Commercial Policy extend coverage for the damage described in this project: No.

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.

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

O&M Requirements

There are no Obtain and Maintain Requirements on **FAASt * [Feeder Rebuild # 1303-02] (Distribution)**.

406 Mitigation

There is no additional mitigation information on **FAASt * [Feeder Rebuild # 1303-02] (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.
- The Subrecipient and/or Subrecipient's contractor must follow the Low Impact Debris Removal Stipulations (LIDRS) outlined in Appendix E of the Project-Specific Programmatic Agreement Among FEMA, the SHPO, ACHP, COR3, and PREPA (PSPA), executed on August 2, 2022.

- 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.
- Additional staging areas and/or work pads within work site area haven't been identified yet. The 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.
- 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 Recipient prior to extracting material. FEMA must review the source for compliance with all applicable federal environmental planning and historic preservation laws and execute orders prior to a subrecipient or their contractor commencing 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 closeout.
- 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. 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. 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.

EHP Additional Info

There is no additional environmental historical preservation on **FAAST * [Feeder Rebuild # 1303-02] (Distribution)**.

Final Reviews

Final Review

Reviewed By LEFRANC-GARCIA, CARLOS L.

Reviewed On 07/15/2026 12:31 PM PDT

Review Comments

FAAST [Feeder Rebuild # 1303-02] (Distribution) work to be performed includes but is not limited to; repair/replace poles/structures, damaged crossarms, broken and obsolete hardware, primary and secondary overhead and/or underground distribution lines, and porcelain insulation. Project has been reviewed, found eligible and reasonable. CLG 07.15.26

Recipient Review

Reviewed By Mulero, Noel

Reviewed On 07/23/2026 9:16 PM PDT

Review Comments

Recipient review completed. Applicant must ensure to compliance with all regulatory requirements, Record of Environmental Consideration (REC) Special Conditions and PA policy. Project is ready for applicant review. This project does not comply with the DOE executive order. This means that FEMA is the lead agency for environmental matters.

Project Signatures

Reviewed By Unsigned

Reviewed On Unsigned

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 \$2,090,710.42 for subaward number 108119 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.

Award Information

EMMIE Imported Version Information

Version #	Eligibility Status	Current Location	Bundle Number	Project Amount	Cost Share	Federal Share Obligated	Date Obligated
No Records							

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 #
1	8/3/2026	\$32,623.77	90%	Accepted	4339DRPRP01081191
0	9/25/2025	\$1,849,015.61	90%	Accepted	4339DRPRP01081191