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

IN RE:	**CASE NO. NEPR-MI-2021-0002**
IN RE: REVIEW OF THE PUERTO RICO ELECTRIC POWER AUTHORITY'S 10-YEAR INFRASTRUCTURE PLAN-DECEMBER 2020	**SUBJECT: Motion Submitting Nine FEMA Approvals of Projects, Request for Confidential Treatment, and Supporting Memorandum of Law**

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

TO THE PUERTO RICO ENERGY BUREAU:

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

I. Submittal of Nine FEMA Approvals and Request for Confidentiality

1. On March 26, 2021, this Honorable Puerto Rico Energy Bureau ("Energy Bureau") issued a Resolution and Order in the instant proceeding, 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, the progress of all ongoing efforts related to the approval of the submitted Projects not yet approved by the Energy Bureau. 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 April 28, 2021, PREPA filed a *Motion in Compliance with the Resolution and Order Entered on April 22, 2021* ("April 28th Motion"). In the April 28th Motion, PREPA submitted forty-six (46) SOWs for T&D Projects that had been submitted to FEMA and COR3, for the Energy Bureau's review and approval. Among the forty-six (46) SOWs submitted, PREPA submitted the "FAASt – Line 36100 – Dos Bocas HP to Monacillos TC (Transmission)"[1], "FAASt Palo Seco SP to Cataño Sect Line-9500 (Transmission)"[2], "FAASt San Juan SP to Cataño Sect Line-8200 (Transmission)"[3] and the "FAASt Ponce TC to Jobos TC Line-100 & 200 (Transmission)"[4] SOWs.

3. On June 8, 2021, the Energy Bureau issued a Resolution and Order ("June 8th Order") in which it determined that most of the projects submitted by PREPA in the April 28th Motion were necessary to improve the system's reliability. Therefore, it approved most of the projects presented in the April 29th Motion, including the "FAASt – Line 36100 – Dos Bocas HP to Monacillos TC (Transmission)", "FAASt Palo Seco SP to Cataño Sect Line-9500 (Transmission)", "FAASt San Juan SP to Cataño Sect Line-8200 (Transmission)" and the "FAASt Ponce TC to Jobos TC Line-100 & 200 (Transmission)" SOWs. The Energy Bureau also ordered PREPA 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. 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

[1] Also referred to as the "FAASt – Line 36100 (115kV) – Bayamón to Monacillos (Transmission)" in the FEMA Cost Approval.
[2] Also referred to as the "FAASt [Palo Seco SP to Cataño Sect 38kV Line- 9500] (Transmission)" in the FEMA Cost Approval.
[3] Also referred to as the "FAASt -38kV Line 8200 – San Juan SP to Cataño Sect Line (Transmission)" in the FEMA Cost Approval.
[4] Also referred to as the "FAAST Ponce TC to Salinas Urbano TC- 38kV 100 & 200 (Transmission)" in the FEMA Cost Approval.

(28) 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 (28) SOWs, LUMA submitted the "Line 3100 Monacillos TC to Daguao TC"[5] SOW.

5. On August 20, 2021, the Energy Bureau issued a Resolution and Order ("August 20th Order") in which it determined that the projects submitted by LUMA in the July 8th Motion were necessary to improve the system's reliability. Therefore, it approved the projects presented in the July 8th Motion, including the "Line 3100 Monacillos TC to Daguao TC" 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. 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 FEMA. Among the twenty-nine (29) SOWs, LUMA submitted the "Telecom Infrastructure" and "38 kV Transmission Priority Poles and Structures Replacements" SOWs.

7. 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 "Telecom Infrastructure", "38 kV Transmission Priority Poles and Structures Replacements" SOWs. The

[5] Also referred to as "FAASt [TL 3100 Monacillos TC to Sabana Llana TC] (Transmission)" in the FEMA Cost Approval.

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.

8. On July 29, 2022, LUMA filed a *Motion Submitting Four Scopes of Work and Updated List of Projects and Request for Confidentiality and Supporting Memorandum* ("July 29th Motion") whereby it submitted four (4) SOWs for the Energy Bureau's review and approval prior to submitting them to COR3 and FEMA. The SOWs submitted by LUMA included the "Transmission and Distribution Automation Program Installation of Intelligent Reclosers, Single Phase Reclosers and Fault Current Indicators" T&D Project.

9. On August 25, 2022, the Energy Bureau issued a Resolution and Order ("August 25th Order") that determined that the SOWs for T&D projects submitted by LUMA in the July 29th Motion were necessary to improve the system's reliability. Therefore, it approved all of the projects presented in the July 29th Motion, including the "Transmission and Distribution Automation Program Installation of Intelligent Reclosers, Single Phase Reclosers and Fault Current Indicators" T&D Project. 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 receipt of such approval.

10. On November 7, 2023, LUMA filed the *Motion Submitting One Scope of Work, Request for Confidentiality and Supporting Memorandum of Law* ("November 7th Motion"), whereby LUMA submitted the "Transmission and Distribution Automation Program Installation of Three Phase Reclosers, Single Phase Reclosers and Fault Circuit Indicators and Feeder Headend Protection Devices" SOW for the Energy Bureau's approval.

11. On November 27, 2023, the Energy Bureau issued a Resolution and Order ("November 27th Order") whereby it approved the "Transmission and Distribution Automation Program Installation of Three Phase Reclosers, Single Phase Reclosers and Fault Circuit Indicators and Feeder Headend Protection Devices" SOW and 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.

12. As shown in Exhibit 5 of the Motion filed on July 31, 2024, *Motion Submitting Three Amended Scopes of Work, and One Scope of Work, an Updated Project List, and Request for Confidentiality and Supporting Memorandum of Law*, and most recently in Exhibit 1 of the Motion filed on October 27, 2025, *Motion Submitting LUMA's Consolidated List with Costs Incurred for Obligated Projects*, the "Transmission and Distribution Automation Program Installation of Intelligent Reclosers, Single Phase Reclosers and Fault Current Indicators" and "Transmission and Distribution Automation Program Installation of Three Phase Reclosers, Single Phase Reclosers and Fault Circuit Indicators and Feeder Headend Protection Devices" SOWs were divided into separate groups, which include the "FAASt [Automation Program Group 34] (Distribution)" T&D Project.

13. Similarly, the "Telecom Infrastructure" and "38 kV Transmission Priority Poles and Structures Replacements" SOWs were divided into separate groups, which include the "FAAST [Telecom Infrastructure – Group B] (Telecommunication)", and the "FAAST [Priority Pole Replacement Program (Line 2700 Aguadilla Hospital Distrito Sect – Mora TC)] (Transmission) and "FAASt [Priority Pole Replacement Program (Line 4800 Santa Isabel TC – Toro Negro 1 HP)] (Transmission) T&D Projects.

14. In compliance with the June 8th, August 20th, September 22nd, August 25th, and November 27th Orders, LUMA hereby submits copies of the following approvals by FEMA issued on November 5, 2025: "FAASt - Line 36100 (115kV) - Bayamón to Monacillos (Transmission)", "FAASt [Palo Seco SP to Cataño Sect 38kV Line- 9500] (Transmission)", "FAASt –38kV Line 8200 - San Juan SP to Cataño Sect Line (Transmission)", "FAASt Ponce TC to Salinas Urbano TC- 38kV 100 & 200 (Transmission)", "FAASt [TL 3100 Monacillos TC to Sabana Llana TC] (Transmission)", "FAASt [Telecom Infrastructure – Group B] (Telecommunication)", "FAASt [Priority Pole Replacement Program (Line 2700 Aguadilla Hospital Distrito Sect – Mora TC)] (Transmission)", "FAASt [Priority Pole Replacement Program (Line 4800 Santa Isabel TC – Toro Negro 1 HP)] (Transmission)", and "FAASt [Automation Program Group 34] (Distribution)" T&D Projects. *See* **Exhibit 1**[6] to this Motion. The document contains FEMA's approvals and includes the costs obligated for each Project.

15. LUMA is submitting herein a redacted public version of the FEMA approvals (**Exhibit 1**) protecting confidential information associated with Critical Energy Infrastructure Information ("CEII"). As explained in this Motion, portions of the FEMA approvals of the T&D 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

[6] Please note that **Exhibit 1** has digitalization and table format issues, which are found on the documents as issued by FEMA.

16. 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 (2025). 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).

17. 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).

18. 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.

19. 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 that 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.

20. 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).

21. 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

22. The FEMA approvals included in **Exhibit 1** contain portions of CEII that, under relevant federal law and regulations, are protected from public disclosure. LUMA stresses that the FEMA approvals with CEII warrant confidential treatment to protect critical infrastructure from threats that could undermine the system and negatively affect electric power services to the detriment of the interests of the public, customers, and citizens of Puerto Rico. In several proceedings, this Energy Bureau has considered and granted requests by PREPA to submit CEII under seal of confidentiality.[7] In at least two Data Security and Physical Security proceedings,[8]

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

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

this Energy Bureau, *motu proprio*, has conducted proceedings confidentially, thereby recognizing the need to protect CEII from public disclosure.

23. Similarly, the Energy Bureau has granted LUMA's requests for confidential treatment of portions of the 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.

24. 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.

25. 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").[9] 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).[10]

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

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

[10] CII includes the following types of information:

25. Portions of the 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 identified as confidential in this paragraph is not common knowledge and is not made publicly available. Therefore, it is respectfully submitted that, on balance, the public interest in protecting CEII weighs in favor of protecting the relevant portions of the FEMA approvals with CEII in **Exhibit 1** from disclosure, given the nature and scope of the details included in those portions of the Exhibit.

26. Based on the above, LUMA respectfully submits that portions of the FEMA approvals should be designated as CEII. This designation is a reasonable and necessary measure to protect the specific location of the energy facilities listed or discussed in the 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

(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.

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 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 - Line 36100 (115kV) - Bayamón to Monacillos (Transmission)	Pages 1-2, 14	Critical Energy Infrastructure Information, 18 C.F.R. § 388.113; 6 U.S.C. §§ 671-674.	November 10, 2025
Exhibit 1	FAASt [Palo Seco SP to Cataño Sect 38kV Line- 9500] (Transmission)	Pages 1-2, 4, 15	Critical Energy Infrastructure Information, 18 C.F.R. § 388.113; 6 U.S.C. §§ 671-674.	November 10, 2025
Exhibit 1	FAASt –38kV Line 8200 - San Juan SP to Cataño Sect Line (Transmission)	Pages 1-3, 13	Critical Energy Infrastructure Information, 18 C.F.R. § 388.113; 6 U.S.C. §§ 671-674.	November 10, 2025
Exhibit 1	FAASt Ponce TC to Salinas Urbano TC-38kV 100 & 200 (Transmission)	Pages 1-2, 11	Critical Energy Infrastructure Information, 18 C.F.R. § 388.113; 6 U.S.C. §§ 671-674.	November 10, 2025

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 [TL 3100 Monacillos TC to Sabana Llana TC] (Transmission)	Pages 1-2, 13	Critical Energy Infrastructure Information, 18 C.F.R. § 388.113; 6 U.S.C. §§ 671-674.	November 10, 2025
Exhibit 1	FAASt [Telecom Infrastructure – Group B] (Telecommunication)	Pages 1-2, 10, 15	Critical Energy Infrastructure Information, 18 C.F.R. § 388.113; 6 U.S.C. §§ 671-674.	November 10, 2025
Exhibit 1	FAASt [Priority Pole Replacement Program (Line 2700 Aguadilla Hospital Distrito Sect – Mora TC)] (Transmission)	Pages 1-3, 6, 11	Critical Energy Infrastructure Information, 18 C.F.R. § 388.113; 6 U.S.C. §§ 671-674.	November 10, 2025
Exhibit 1	FAASt [Priority Pole Replacement Program (Line 4800 Santa Isabel TC – Toro Negro 1 HP)] (Transmission)	Pages 1-3, 6, 10	Critical Energy Infrastructure Information, 18 C.F.R. § 388.113; 6 U.S.C. §§ 671-674.	November 10, 2025
Exhibit 1	FAASt [Automation Program Group 34] (Distribution)	Pages 1, 3-16	Critical Energy Infrastructure Information, 18 C.F.R. § 388.113; 6 U.S.C. §§ 671-674.	November 10, 2025

WHEREFORE, LUMA respectfully requests that the Energy Bureau **take notice** of the aforementioned; **accept** the copies of the FEMA approvals attached herein as **Exhibit 1**; and **grant** the request for confidential treatment of **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, jfr@sbgblaw.com, José J. Díaz Alonso, jdiaz@sbgblaw.com, and Francisco Santos, francisco-santos@genera-pr.com.

In San Juan, Puerto Rico, on this 10th day of November 2025.

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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

v0

General Info

Project #	167446 **P/W #** 11307	**Project Type**	Specialized
Project Category	F - Utilities	**Applicant**	PR Electric Power Authority (000-UA2QU-00)
Project Title	FAASt - Line 36100 (115kV) - Bayamon to Monacillos (Transmission)	**Event**	4339DR-PR (4339DR)
Project Size	Large	**Declaration Date**	9/20/2017
Activity Completion Date	9/20/2027	**Incident Start Date**	9/17/2017
		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 #429483; FAASt - Line 36100 - Dos Bocas HP to Monacillos TC

General Facility Information:

- **Facility Type:** Power generation, transmission, and distribution facilities
- **Facility:** Line 36100 - Dos Bocas HP to Monacillos TC
- **Facility Description:** Line 36100 starts at the Dos Bocas Hydroelectric plant and runs east to Monacillos TC. Most of the construction along this line segment consists of wood multi-pole guyed structures with some interspersed self-supporting steel monopoles. Part of this segment carries distribution underbuild and traverses mountainous terrain.
- **Approx. Year Built:** 1980
- **Start GPS Latitude/Longitude:** [redacted]
- **End GPS Latitude/Longitude:** [redacted]

Final Scope

429483 **FAASt - Line 36100 - Dos Bocas HP to Monacillos TC**

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"). 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." SOP at 4.

This document contains the detailed SOW for FEMA PA Project No. 167446, Line 36100 Bayamon to Monacillos under DR-4339-PR Public

Assistance. The document provides a detailed description of the project, scope of PA construction activities to be completed, common Environmental Planning and Historic Preservation (“EHP”) review information, proposed hazard mitigation measures, and project cost estimates. LUMA is seeking approval from COR3 and FEMA for PA funding to repair, restore, or replace the eligible facilities.

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 Transmission and Distribution (“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 project will (1) remove 2 of the 81 existing structures and (2) remove and replace 52 of the remaining 79 existing structures along Transmission Line 36100. This will include their foundations, framing, insulators, load break switches (manual and automated), conductors, guy wires, anchoring, grounding assemblies, and other associated components. The poles to be replaced are of varying build, including wood guyed structures, interspersed self-supporting steel poles, steel lattice towers, and concrete monopoles. LUMA will also conduct necessary vegetation removals at the project sites along the line. Please refer to Appendix E (TL-36100 BayamonMonacillos_Structure List_11202024) for specific details regarding each of the 81 poles.

Facilities List

The following table identifies the start and end GPS coordinates of the TL 36100 segment from Bayamon to Monacillos TC.

Line Segment	Line Number	GPS Start	GPS End	Voltage (kV)
Bayamon to Monacillos	36100	[redacted]	[redacted]	115

The facility is 7.43 mile, 115-kilovolt (“kV”) transmission line that is currently supported by 81 structures with underbuilt distribution and third-party attachments. The type of poles supporting the line varies along its length and includes wood poles, steel monopoles, steel lattice towers, and concrete poles. The above table identifies the GPS start and end locations of this project.

A list of the poles to be replaced can be found Appendix E (TL-36100 BayamonMonacillos_Structure List_11202024).

Project Area Map with Boundaries of Construction

Please see the attached maps identified as Appendix B (TL-36100 Bayamon-Monacillos Aerial Map) and Appendix D (TL-36100 Bayamon-Monacillos Structure KMZ_10282024).

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.

Description of Proposed 428 Work to be Performed

The work to be performed for Line 36100 from Bayamon to Monacillos Transmission Center (“TC”) consists of first removing two of the 81 existing structures to improve spacing. Next, LUMA will remove and replace 52 of the 79 remaining transmission poles on existing line. This includes replacement of the existing conductors and hardware, structures, guy anchoring, foundations, and overhead ground wire (“OHGW”).

The proposed project includes the repair and restoration of disaster-damaged components to the approved codes and standards detailed in Section 9.2 below. The following infrastructure is addressed in this SOW:

Transmission Line

The existing 115-kV line runs from Bayamon to Monacillos TC, spanning a length of 7.43 miles. two existing structures will be removed and 52 poles and structures, including foundations, guying, insulators, and associated attachment hardware will be removed and replaced across the entire alignment. The line will remain along its existing route and within the existing rights of way ("ROW"). Please refer to (1) Appendix E (TL-36100 Bayamon-Monacillos_Structures List_11202024) for a list of structures and (2) Appendix D (TL-36100 BayamonMonacillos_Structure KMZ_10282024) for the KMZ file.

1. Structures: Two structures will be removed and 52 of the remaining 79 structures will be removed and replaced with new steel poles.

    a) Remove 54 structures consisting of

        i. 1ea concrete pole

        ii. 18ea concrete self-supporting and guyed transmission poles

        iii. 17ea 1-pole and 3-pole wood transmission structures

        iv. 1ea self-support steel pole

        v. 6ea steel transmission poles

        vi. 11ea existing steel lattice towers

    b) Install the following 52 new steel round poles (see also Appendix E – TL 36100 Bayamon-Monacillos Structures List_11202024 for the list of existing and proposed structures)

        i. 4ea - steel galvanized, 12-sided, tapered shaft, Double circuit dead end engineered DE1, for transmission

        ii. 8 ea- steel galvanized, 12-sided, tapered shaft, single circuit engineered tangent structure, for transmission.

        iii. 7ea - steel galvanized, 12-sided, tapered shaft, Double circuit dead end engineered DE1, for transmission

        iv. 9 ea- steel galvanized, 12-sided, tapered shaft, single circuit engineered tangent structure DE2, for transmission.

        v. 2 ea- steel galvanized, 12-sided, tapered shaft, single circuit engineered dead-end DE3, for transmission

        vi. 4 ea- steel galvanized, 12-sided, tapered shaft, Double circuit engineered tangent structure, for transmission.

        vii. 7 ea- steel galvanized, 12-sided, tapered shaft, Double circuit dead end engineered DE2, for transmission

        viii. 7 ea- steel galvanized, 12-sided, tapered shaft, engineered double circuit dead end DE3, for transmission

        ix. 1 ea- steel galvanized, 12-sided, tapered shaft, engineered double circuit dead end DE4, for transmission

        x. 3 ea- steel galvanized, 12-sided, tapered shaft, double circuit dead end engineered 3-pole DE1, for transmission

2. Foundations: Install 52 concrete foundation (fixed-end caisson piles designed for varying soil conditions). Structures 1, 2, 4, 7, 9, 10, 11, 12, 13, 14, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 52, 53, 63, 64, 65, 66, and 67 will all have concrete foundations. Please see Appendix J (Foundation Schedule).

3. OHGW: Remove and replace existing OHGW with 40,000 linear ft of new 144-strand optical ground wire ("OPGW").

4. Guys, Anchors, and Hardware: For quantities review please see Appendix G (TL-36100 (Seg 1) Bayamon-Monacillos LPCE_2025-05-30

(Rev 6 Full 428)).

Vegetation Scope of Work

The following is the full scope of vegetation clearing for this project that will be performed under LUMA's vegetation clearing program. As instructed by FEMA Public Assistance leadership, LUMA is submitting the full scope of vegetation clearance, for this line segment, as a § 428 cost in this DSOW. As instructed, following obligation, LUMA will submit an amendment to move the costs related to vegetation to 406 HM.

Parameters for Performing 428 Vegetation Cleaning

As a result of DR-4339-PR, vegetation surrounding T&D assets are falling onto T&D assets and interfering with the safe and reliable operation of the assets. The vegetation at present is currently causing outages when vegetation comes in contact with the T&D assets. To mitigate the future damage across T&D assets and protect the 428 repairs and replacement along the T&D assets, clearing vegetation materials is required. This clearing scope of work is to directly reduce the potential of future, similar damages to the T&D system by clearing vegetative materials that pose an immediate threat to the power transmission lines, and identify corrective actions related to clearing vegetation (consisting of shrubs, branches, limbs, stumps, bamboo, and trees that are directly impacting the resilience and productivity of the power grid) applicable to the existing PREPA electrical grid within Region 1 (San Juan) of Puerto Rico.

The scope includes LUMA requesting a vendor perform verification of facility/asset information and location and performing condition assessments to determine the extent and method of the vegetation work required. The vendor's assessment is reviewed by an arborist and data analyst that then conduct a site visit and walk the feeder in order to validate and certify the vendor's assessment. The assessment provides the most appropriate method of remediation for the line segment, preparing work orders for executing the necessary work, by ways of tree felling, mechanical vegetation remediation, vegetative debris disposal via chipping, mulching, hauling, and recycling where applicable. If the work to be done is not adjacent to an existing road, LUMA's contractor tree crews will minimize environmental disturbance by having vegetation crews hike by foot in and out of our existing easement.

The scope of Vegetation Clearance is limited in two ways. First, not all vegetation will be completely removed. PREPA's T&D easements are populated with millions of plants but only some have the conditions, growth characteristics, and/or locations that make them incompatible with safe and reliable energy delivery service. Recognizing the diversity of species in tropical ecosystems, the general strategy for Vegetation Clearing is to control incompatible species while encouraging the growth of compatible species. Compatible species may, on occasion, need control if their height or density impedes the necessary line of sight for inspections or access to perform resilience work. Please refer to Appendices A and B for lists of protected flora species and incompatible flora species expected to be encountered during project performance.

The following terms, when used in this document, shall have the meaning described below:

• Compatible Species – Compatible species are those that are congruent with the intended use of the site. They include small trees, shrubs, and herbaceous vegetation that are not expected to grow into conflict with overhead conductors.

• Incompatible Species – Incompatible species are those that are not congruent with the intended use of the site. They include tall growing trees and other plant forms (e.g., bamboo and palms) with the potential to conflict with overhead conductors.

PREPA Regulation 7282 prohibits climbing plants, shrubs, creepers (vines), and bamboo within the easement. Trees or plants with roots that could damage buried installations are also prohibited. Any trees, shrubs, or plants planted in violation of Regulation 7282 will be uprooted, removed, or cut down. Vegetation within the easement cannot obstruct overhead lines. The branches of trees planted outside the easement must not obstruct free passage of the power lines.

Second, Vegetation Clearance of Compatible Species will be limited to work that is necessary to directly reduce the potential of future, similar damage to the T&D system that exceeds what is necessary to simply clear vegetation to access facilities and carry out repairs. This means that LUMA will clear only that vegetation with the potential to encroach on safety and access clearances established in LUMA's VMP (Vegetation Management Plan), which may be less than the full width of the easement. PREPA Regulation 7282 permits compatible vegetation (but not trees) to be planted in easements, provided that the following vertical distances identified in the table below are measured from the highest part of the vegetation within the easement to the lowest conductor of the power line be maintained.

PREPA Regulation 7282 provides these clearances for conductor safety, but LUMA has determined they do not go far enough to allow full access to and maintenance of infrastructure in the easement. LUMA's VMP, discussed below, provides the clearances to be used for its Vegetation Clearance Program.

The following terms, when used in this document, shall have the meaning described below:

• Clearance - The minimum distance between two conductors, between conductors and their support or other objects, or between conductors and the ground. According to the National Electrical Safety Code ("NESC"), clearances are the minimum distances required between an energized conductor or appliance and a structure, building, or surface. Minimum separation distances are established by in the NESC and PREPA's rules and procedures (See Technical Communication 12-02, attached). This term is not synonymous with easement. Clearances can be met without being within an easement. Clearance requirements must be met both when PREPA builds its facilities, as well as when a third[1]party builds a structure. Clearances, in both cases, must be complied with by regulation, regardless of whether an easement exists.

• Easement – An easement is the right to use property owned by another for a specific purpose. An easement for electrical power lines provides PREPA, and LUMA as its agent, various rights including: reasonable access to the electric infrastructure to provide maintenance, repair, expand, Regulation 7282 also includes requirements governing the type of vegetation that may be planted within these easements, and some of the activities and rights granted to PREPA related to vegetation management.

The actual easement width for a particular line may differ from the recommendations in Regulation 7282 and can be determined by consulting the certified easement as recorded in the Property Registry or filed with PREPA/LUMA Department of Lands and Permit

• NESC Rule 218 provides that, "Vegetation that may damage un-grounded supply conductors should be pruned or removed. Vegetation Management should be performed as experience has shown necessary."

Based on all of the above, LUMA's VMP defines the vegetation clearing standards LUMA is implementing through its Vegetation Clearance program. All Incompatible Species will be cleared from the recommended easement width applicable to the type of line segment, as listed above. In addition, both Compatible and Incompatible Species (whether originating from inside or outside the easement) with the potential to encroach on the conductor will be cleared horizontally For Urban Single Circuit 115kV overhead power lines, Regulation 7282 recommends the following minimum widths for easements: or operate. PREPA's Regulation 7282 (Feb. 24, 2007) describes the minimum requirements that easements must meet for PREPA infrastructure, and the rights afforded to PREPA by easement.

For Urban Single Circuit 115kV overhead power lines, Regulation 7282 recommends the following minimum widths for easements:

Easement Clearing Widths for Single Circuit 115 kV Overhead Transmission Lines (feet)			
Construction Type	Area	Easement Clearing	Conductor Clearing
Simple Circuit	Urban	30'	20'

Vegetation Clearing Methods

Vegetation will be pruned according to ANSI A300 (Part 1) – 2017 Tree, Shrub, and Other Woody Plant Management – Standard Practices (Pruning). These ANSI A300 Standard Practices are outlined in Appendix N ANSI A300 – Pruning Standards, which includes tree inspection, tools and equipment, pruning cuts, pruning objectives, pruning types, specialty pruning, palm pruning, and utility pruning standard practices. These standards provide guidance on how and where to prune vegetation to achieve clearances and maintain a healthy plant.

Vegetation With the Potential to Encroach Within 20 Feet of Conductor — Compatible or Incompatible

In all cases, LUMA's vegetation clearing contractors will be required to perform clearing activities in a manner consistent with ANSI A300, NESC, and Regulation 7282 alignment with Resolution 4987, Organic Law 83 (amended version), PREPA Technical Communication 12-02, and LUMA's VMP.

• Any vegetation species—whether Compatible or Incompatible—that have the potential (when at full size) to encroach within 20 feet of the conductor will be cleared using one of the methods discussed below

• Tree removal: Qualified line clearance crews will work at ground level, climb trees from ground level, or use aerial platforms to remove the portion of the tree that is above ground, leaving the stump in place.

• Severing of vines: Vines will be severed by qualified line clearance crews at the base with an airgap created between the root system and the portion of the vine climbing on the structure. The upper portion of the vine remains attached and is not removed.

• Cutting: Cutting typically involves the removal of small diameter species by hand. Qualified line clearance crews will work at ground level, climb trees from ground level, or use aerial platforms to remove vegetation.

- Vegetation mastication: also known as mulching, slash-busting, or brush-cutting, involves technique for reducing the size of vegetation and downed material in forests. It involves grinding, shredding, or chopping vegetation into smaller pieces, which are then left on the site as mulch.

All Other Incompatible Species within the Recommended Easement Width

All other Incompatible Species will be cleared from the full width of the recommended easement width. The clearing methods described above (tree removal, severing of vines, cutting, and vegetation mastication) will be utilized.

In rare cases where LUMA encounters significant resistance from landowners or stakeholders to remediate vegetation, LUMA will work with landowners or stakeholders to determine if incompatible and compatible species can be pruned to mitigate the hazard to the lines instead of being completely removed.

Vegetation Originating Outside the Easement

Where vegetation outside or along the boundary of the easement has the potential to interfere with the operation of power transmission lines, it will be managed to achieve appropriate clearance around the conductors and lines to protect from future damage. For Rural Single Phase 115kV transmission lines, this requires a clearance distance of 20 feet from all conductors per LUMA's VMP. The clearing methods described above (tree removal, severing of vines, cutting, and vegetation mastication) will be utilized where possible within the easement, in addition to:

- Tree pruning: Qualified line clearance crews from an aerial platform or while climbing within a crown of trees to prune the tree. All pruning work wounds the tree. Done poorly, pruning can result in an exaggerated regrowth response by adversely altering tree architecture and increasing exposure to decay organisms that can weaken the tree. These adverse consequences increase the likelihood of tree-initiated faults causing system interruptions and customer outages. Proper arboriculture techniques will be utilized.

- Mechanical Vegetation Control: mechanical vegetation control uses mechanical machinery to clear out dense weed infestations at facilities or to clear brush and vegetation. Mechanical vegetation control includes mowing and cutting. The following general guidelines apply to mechanical control methods:

    - Targeted clearing will be completed – avoiding the removal of vegetation that is providing slope stability or erosion control unless necessary.

    - Only trained operators will be permitted to use mechanical/heavy equipment (mowers, chainsaws, mulchers).

In cases where following ANSI A300 best practices for vegetation clearing and pruning required beyond 20 feet, the maximum distance cleared will not exceed an additional 3 feet from set clearing distance. Diagrams illustrating these clearing distances are provided as attachments within Grants Portal.

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. Consensus-based codes, per FEMA's (Public Assistance Alternative Procedures (section 428) Guide for Permanent Work FEMA-4339-DR-PR (Feb. 2020).

2. Industry standards per FEMA Recovery Policy FP-104-009-5, Version 2, Implementing section 20601 of the 2018 Bipartisan Budget Act through the Public Assistance Program.

3. FEMA Recovery Interim Policy FP-104-009-11 Version 2.1, Consensus-Based Codes, Specifications, and Standards for Public Assistance.

4. LUMA's latest Design Criteria Document (DCD) 4751-001-V04, Functional Specifications Revision 3 (Jul. 8, 2022), which aggregates the design considerations of most of the consensus-based codes, specifications, and standards listed in FEMA Recovery Interim Policy 104-009-11 Version 2.1 (Dec. 20, 2019).

Applicable codes and standards will be identified and incorporated into the plans and specifications.

FEMA PAPPG v.3.1 states, "Hazard mitigation is any sustained action taken to reduce or eliminate long-term risk to people and property from natural hazards and their effects." Subrecipient intends to amend this DSOW upon finalizing its plans to lessen or eliminate long-term risk to people and property from future natural hazards and their effects.

As requested by FEMA Public Assistance leadership, LUMA is submitting the full scope of vegetation clearance for this line segment as a § 428 cost in this DSOW. FEMA leadership requested that, following obligation, LUMA submit an amendment to move the costs related to vegetation to 406 HM.

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.

Ground disturbance will occur for the following: foundations, new poles, and the installation of temporary construction matting at all structures in the Easement. The matting will cover an area of 50 foot ("ft") by 50 ft around the structures and a 16-ft wide access road. Refer to Appendix D (TL-36100 Bayamon-Monacillos_Structure KMZ_10282024) for ground disturbance details.

? 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 removal for a 50-foot by 50-foot area will be needed to remove existing structures and to install new poles, to the extent those areas were not cleared by previously mentioned work under FAASt no 728827 . Reference Appendix I (TL-36100 Bayamon-Monacillos_Access Road Draft), Appendix M (TL-36100 Bayamon-Monacillos-Construction Access Road Vegetation Impact), and Appendix F (TL-36100 Bayamon-Monacillos Vegetation Removal Reference Document_Rev2).

? 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.

1. Construction Debris: The types of debris that will be removed from the site during the demolition process are insulated and bare aluminum and copper cables, PVC (polyvinyl chloride) conduits, concrete, metal scrap, construction waste, wood. The debris will be separated and taken to a waste disposal facility; however, the exact waste disposal facility is not known at this time.

2. Hazardous Materials: PCBs (polychlorinated biphenyls), oil from the transformers and breakers, sealants, and chemical wastes will be handled and disposed of at an authorized waste disposal facility.

3. Poles: Pole disposal will be performed per applicable local and federal regulations.

? Staging areas 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.). 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.). Reference Appendix I (Access Road Plan), Appendix D (Structure KMZ), Appendix M (Construction Access Road Vegetation Impact), and Appendix F (Access Road Vegetation Removal Reference Document).

1. Access Roads: There are 22 construction access roads required for this scope of work. Please refer to Appendix K (TL 36100 Bayamon-Monacillos_Structure and Access Road KMZ_10282024) and Appendix I (TL-36100 Bayamon-Monacillos_Access Road Draft) for a description of the access roads to be utilized for this project.

2. Staging Area: An on-site staging area will be located within the perimeter of the fence line. The exact location will be provided in a forthcoming design update.

? 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).

1. Fill, gravel, and sand materials will be obtained from a preferred vendor

? 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.

Not Applicable

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 design information. Below are three cost estimates, one for construction, telecommunications, and for vegetation. The total of the Line Rebuild amounts to

$37,449,552.60 For a more detailed cost estimate refer to appendix/appendices identified below. Please refer to Appendix G (TL-36100 (Seg 1) Bayamon-Monacillos LPCE_2025-06-04 (Rev 7 Full 428)

Transmission Line Construction PCE

COST ESTIMATE			
Cost Element	**428**	**406**	**PROJECT TOTAL**
PLANNING	**$1,767,998.04**	**$-**	**$1,767,998.04**
MANAGEMENT	**$1,188,751.47**	**$-**	**$1,188,751.47**
Line 36100 (115kV) - Bayamon to Monacillos	**$27,354,785.94**	**$-**	**$27,354,785.94**
GENERAL CONDITIONS	**$ 1,576,605.39**	**$-**	**$ 1,576,605.39**
COST TOTALS	**$31,888,140.84**	**$-**	**$31,888,140.84**
DEDUCTIONS	**TOTAL INSURANCE PROCEEDS RECEIVED**		**$**
FAASt ALLOCATIONS	FAAST PROJECT # 167446 - 428		$28,846,383.33
	FAAST PROJECT # 167446 – 406 HM		$-
	FAAST PROJECT #167446 Total		**$28,846,383.33**
	FAASt A&E # 335168 - 428		$2,956,749.51
	FAASt A&E # 335168 – 406 HM		$-
	FAASt A&E # 335168 TOTAL		**$2,956,749.51**
	FAASt E&M # 673691- 428		$85,008.00
	FAASt E&M # 673691 – 406 HM		$-
	FAASt E&M # 673691 TOTAL		**$85,008.00**

Telecommunications PCE

Refer to Appendix H (TL-36100 (Seg 1) Bayamon to Monacillos Telecom CE _2025-05-30 (Rev 2 Full 428))

COST ESTIMATE			
Cost Element	**428**	**406**	**PROJECT TOTAL**
PLANNING	**$227,531.25**	**$-**	**$227,531.25**
MANAGEMENT	**$190,113.74**	**$-**	**$190,113.74**
LPCE TLine 36100 (Seg. 1) Monacillo to Bayamon FEMA Present	**$3,802,400.59**	**$-**	**$3,802,400.59**
GENERAL CONDITIONS	**$ 196,800.00**	**$-**	**$ 196,800.00**
COST TOTALS	**$4,416,845.58**	**$-**	**$4,416,845.58**
DEDUCTIONS	**TOTAL INSURANCE PROCEEDS RECEIVED**		**$**
FAASt ALLOCATIONS	FAAST PROJECT # 167446 - 428		$3,999,200.59
	FAAST PROJECT # 167446 – 406 HM		$-
	FAAST PROJECT #167446 Total		**$3,999,200.59**
	FAASt A&E # 335168 - 428		$417,644.99
	FAASt A&E # 335168 – 406 HM		$-
	FAASt A&E # 335168 TOTAL		**$417,644.99**
	FAASt E&M # 673691- 428		$-
	FAASt E&M # 673691 – 406 HM		$-
	FAASt E&M # 673691 TOTAL		**$-**

Vegetation Clearing PCE, refer to Copy of 115kv - 36100 Bayamon to Monacillos VEG Clearing 7.18.25.xlsx

COST ESTIMATE			
Cost Element	**428**	**406**	**PROJECT TOTAL**
PLANNING	**$33,835.48**	**$-**	**$33,835.48**
MANAGEMENT	**$53,601.93**	**$-**	**$53,601.93**
115kv – 36100 Bayamon to Monacillos VEG Cleaning	**$1,008,740.47**	**$-**	**$1,008,740.47**
GENERAL CONDITIONS	**$ 48,388.26**	**$-**	**$ 48,388.26**
COST TOTALS	**$1,144,566.14**	**$-**	**$1,144,566.14**

DEDUCTIONS	TOTAL INSURANCE PROCEEDS RECEIVED	$
FAASt ALLOCATIONS	FAAST PROJECT # 167446 - 428	$1,110,730.66
	FAAST PROJECT # 167446 – 406 HM	$-
	FAAST PROJECT #167446 Total	**$1,110,730.66**
	FAASt A&E # 335168 - 428	$33,835.48
	FAASt A&E # 335168 – 406 HM	$-
	FAASt A&E # 335168 TOTAL	**$33,835.48**
	FAASt E&M # 673691- 428	$-
	FAASt E&M # 673691 – 406 HM	$-
	FAASt E&M # 673691 TOTAL	**$-**

Work To Be Completed (WTBC): $37,449,552.56

A&E Deduction (Global A&E FAASt 335168): - $3,408,229.98

E&M Deduction (Global E&M FAASt 673691): -$85,008.00

Project Total Cost: $33,956,314.58

Project Notes:

1. Refer to detailed SOW provided in document “DR4339PR-167446 - Line 36100 Bayamon to Monacillos DSOW - (Rev4)_428 version - signed.pdf”

2. Refer to detailed cost estimate provided in document “LPCE TLine 36100 (Seg. 1) Monacillo to Bayamon FEMA Presentation Telecom Estimate 2025-05-30 (Rev 2 - Full 428).xlsx”,“LPCE TLine 36100 (Seg. 1) Monacillo to Bayamon 2025-06-04 (Rev 7 -Full 428).xlsx” and “Copy of 115kv - 36100 Bayamon to Monacillos VEG Clearing 7.18.25.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:

- 167446-Appendix A - TL-36100 Bayamon-Monacillos Approved Vendor List
- 167446-Appendix B – TL-36100 Bayamon-Monacillos Aerial Map
- 167446-Appendix C – TL36100 Bayamon-Monacillos P&P IFB Draft 01
- 167446-Appendix D – TL-36100 Bayamon-Monacillos Structure KMZ_10282024

- 167446-Appendix E – TL-36100 Bayamon-Monacillos_Structure List_11202024
- 167446-Appendix F – TL-36100 Bayamon-Monacillos Access Road Vegetation Removal Reference Document_Rev02
- 167446-Appendix G– TL-36100 (Seg 1) Bayamon-Monacillos LPCE_2025- 06-04 (Rev 7 Full 428)
- 167446-Appendix H – TL-36100 (Seg 1) Bayamon-Monacillos Telecom CE_2025-05-30 (Rev 2 Full 428)
- 167446-Appendix I – TL-36100 Bayamon-Monacillos Access Road Draft 1 of 2_10282024
- 167446-Appendix I – TL-36100 Bayamon-Monacillos Access Road Draft 2 of 2_10282024
- 167446-Appendix J– TL-36100 Bayamon-Monacillos Foundation Schedule_1112024
- 167446-Appendix K – TL-36100 Bayamon-Monacillos_ Structure and Access Road KMZ
- 167446-Appendix L – TL 36100 (Seg 1) Bayamon-Monacillos Vegetation CE__2025-06-03 (Rev 2 Full 428)
- 167446-Appendix M – TL 36100 Bayamon-Monacillos Construction Access Road Vegetation Impact
- 167446-Appendix M – TL36100 ANSI A300-Prunning Standards
- 167446-Appendix O – TL 36100 Bayamon-Monacillos Pruning Clearance Guideline 115kV

406 HMP Scope

It was agreed with subrecipient this project will be moved forward in Version 0, without hazard Mitigation funds. Is the responsibility from the sub-applicant complete the field assessments to establish the after and before report of clearance and the project office folder including all the expenses incurred on the project: (labor, material, workmanship, contractors and office expenses directly related to the project). The subrecipient must ensure that the work is executed with reasonable use of resources and costs, using the most cost-effective method. Once the sub-applicants complete the vegetation clearance activities, the information will be submitted to FEMA for the validation and future reimbursement of the PA 406 funds to the main FAASt.

Cost

Code	Quantity	Unit	Total Cost	Section
9001	1	Lump Sum	$37,449,552.56	Uncompleted
9001	1	Lump Sum	($85,008.00)	Uncompleted
3510	1	Lump Sum	($3,408,229.98)	Uncompleted
9201	1	Lump Sum	$0.00	Completed

CRC Gross Cost	$33,956,314.58
Total 406 HMP Cost	$0.00
Total Insurance Reductions	$0.00
CRC Net Cost	$33,956,314.58
Federal Share (90.00%)	$30,560,683.13
Non-Federal Share (10.00%)	$3,395,631.45

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

Insurance

Additional Information

7/25/2025

GENERAL INFORMATION

Event: DR4339-PR

Project: SP 167446

Category of Work: Cat F - Utilities

Applicant: PR Electric Power Authority

Event Type: Hurricane / Hurricane Maria

Cause of Loss: Wind / Wind Driven Rain

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

COMMERCIAL INSURANCE INFORMATION

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

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

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

Mapfre Praico Insurance Company (1398178000644)

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

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

Policy Limits: $300,000,000.00

RCV or ACV: Replacement Cost Value

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

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

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

Damaged Inventory (DI) #429483:

FAASt - Line 36100 - Dos Bocas HP to Monacillos TC

Location: Line 36100 - Dos Bocas HP to Monacillos TC

GPS Coordinates: [redacted]

Cause of Loss: Wind / Wind Driven Rain

Prior Obtain and Maintain Requirement:

No prior insurance requirements were found for this facility.

Reduction(s):

No insurance reduction will be applied to this project as coverage is not anticipated. An anticipated insurance reduction of $193,746,436.00 was applied to FAAST project #136271 for anticipated insurance proceeds for Hurricane Maria losses. For ease of reference, please see table of

insurance allocations: "PREPA Allocation Plan – All Disasters" file.

Obtain and Maintain Requirement:

No Obtain & Maintain Requirement is being mandated for the FAASt - Line 36100 - Dos Bocas HP to Monacillos TC because the facility does not meet the definition of building, equipment, contents, or vehicle.

Insurance Proceeds Statement:

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

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

Standard Insurance Comments

FEMA Policy 206-086-1
PART 2: Other Insurance-Related Provisions. (Sections 312 and 406(d) of the Stafford Act)

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

1. Before FEMA approves assistance for a property, an applicant must provide FEMA with information about any actual or anticipated insurance settlement or recovery it is entitled to for that property.

2. FEMA will reduce assistance to an applicant by the amount of its actual or anticipated insurance proceeds.

3. Applicants must take reasonable efforts to recover insurance proceeds that they are entitled to receive from their insurer(s).

…

5. If an applicant has an insurance requirement from a previous event:

a. FEMA will reduce assistance by the actual or anticipated insurance proceeds, or the amount of insurance required in the previous disaster, whichever is greater.

b. FEMA will only consider insolvent insurers, legal fees, or apportionment of proceeds as described in Section VII, Part 2(A)(3) and (4) when the applicant's anticipated or actual insurance proceeds are higher than the amount of insurance required in the previous disaster.

Olga Renta, PA Insurance Specialist

CRC Atlantic, Guaynabo, PR

O&M Requirements

There are no Obtain and Maintain Requirements on **FAASt - Line 36100 (115kV) - Bayamon to Monacillos (Transmission)**.

406 Mitigation

There is no additional mitigation information on **FAASt - Line 36100 (115kV) - Bayamon to Monacillos (Transmission)**.

Environmental Historical Preservation

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

EHP Conditions

- Any change to the approved scope of work will require re-evaluation for compliance with NEPA and other Laws and Executive Orders.
- This review does not address all federal, state and local requirements. Acceptance of federal funding requires recipient to comply with all federal, state and local laws. Failure to obtain all appropriate federal, state and local environmental permits and clearances may jeopardize funding.
- If ground disturbing activities occur during construction, applicant will monitor ground disturbance and if any potential archaeological resources are discovered, will immediately cease construction in that area and notify the State and FEMA.
- 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.
- ***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 re-establish a right-of-way, for particular transmission facilities in the Territory as specified in the Order. On August 15, 2025, DOE reissued the Order to direct PREPA to also perform asset management, including component refurbishment and replacement. 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. Consequently, in consideration of Section 202(c)(3) of the FPA and aligned with the Order, FEMA has incorporated all available information and data for this project pertaining to applicable environmental laws and regulations into this REC for documentation purposes, but FEMA has neither reviewed, nor made a determination, regarding the project's compliance with any applicable environmental laws or regulations.

EHP Additional Info

There is no additional environmental historical preservation on **FAASt - Line 36100 (115kV) - Bayamon to Monacillos (Transmission)**.

Final Reviews

Final Review

Reviewed By LEFRANC-GARCIA, CARLOS L. **Reviewed On** 10/06/2025 4:06 PM PST

Review Comments

The proposed project will remove 2 of the 81 existing structures and remove and replace 52 of the remaining 79 existing structures along Transmission Line 36100. This will include their foundations, framing, insulators, load break switches (manual and automated), conductors, guy wires, anchoring, grounding assemblies, and other associated components. PREPA intends to develop 406 HM proposals, EHP considerations and vegetation management proposal for the repair of Transmission Line during the 30% design phase. Requirements will be incorporated into the final design and construction documents. Project Total Cost: $33,956,314.58. Reviewed, found eligible and reasonable. CLG 10.06.2025

Recipient Review

Reviewed By Mulero, Noel **Reviewed On** 10/07/2025 9:31 PM PST

Review Comments

Recipient review completed. The applicant did not submit a mitigation proposal in this version; the mitigation proposal will be made in a future amendment. 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

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 $33,956,314.58 for subaward number 11307 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

Version Information

Version #	Eligibility Status	Current Location	Bundle Number	Project Amount	Cost Share	Federal Share Obligated	Date Obligated
0	Pending	In Review		$0.00	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 #
0	11/5/2025	$30,560,683.13	90%	Accepted	4339DRPRP00113071

Department of Homeland Security
Federal Emergency Management Agency

v0

General Info

Project #	176913 **P/W #** 11432	**Project Type**	Specialized
Project Category	F - Utilities	**Applicant**	PR Electric Power Authority (000-UA2QU-00)
Project Title	FAASt [Palo Seco SP to Catano Sect 38kV Line- 9500] (Transmission)	**Event**	4339DR-PR (4339DR)
Project Size	Large	**Declaration Date**	9/20/2017
Activity Completion Date	9/20/2027	**Incident Start Date**	9/17/2017
		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 #448057; FAASt Palo Seco SP to Catano Sect Line-9500

General Facility Information:

- **Facility Type:** Power generation, transmission, and distribution facilities
- **Facility:** Palo Seco SP to Catano Sect Line-9500
- **Facility Description:** The Line 9500 are part of the 3.4 circuit miles of overhead transmission line from Palo Seco SP to Catano Sect.
- **Approx. Year Built:** 1980
- **Start GPS Latitude/Longitude:** [redacted]
- **End GPS Latitude/Longitude:** [redacted]

Final Scope

448057 **FAASt Palo Seco SP to Catano Sect Line-9500**

Introduction

The purpose of this document is to submit for approval the Detailed Scope of Work (SOW) to COR3 and FEMA for the Transmission Line 9500 Project under DR-4339-PR Public Assistance. The document provides a description of the project including scope, schedule, and cost estimates as well as Environmental & Historical Preservation ("EHP") requirements. LUMA Energy is seeking approval from FEMA for project funding to repair, restore, or replace the eligible facility for Transmission Line 9500.

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

Facilities

The facilities listed below are part of the 3.6 circuit miles of overhead transmission line from Palo Seco Steam Plant to Catano Sectionalizer. Line 9500 is part of the Near-Term Group #2-22-Transmission Existing (38 kV).

The existing 38 kV transmission line runs north to south between Palo Seco SP to Cataño Sect., in the metro area. The scope includes the following segments:

1) Palo Seco SP to Cataño Sect., approximately 2.6 miles in length and

2) 3-Way tap west of Cataño Sect. to the prison GOAB- Carcel Regional de Bayamon, approximately 1.0 miles in length.

The line segments are supported by 151 structures consisting of wood, steel, and concrete poles structures, having existing underbuilt distribution and third-party attachments.

TL-9500 Rebuild will include:

Partial Feeder 1806-03

Partial Feeder 1801-05

Partial Feeder 1801-01

The Distribution Bayamon Short Term Group 2 project has overlapping distribution facilities to be replaced on L9500, specifically feeders 1801-01 and 1801-05. The overlapping distribution facilities (45 locations) will be completed as part of the Bayamon Short Term Group 2 project.

Name	Line Number	Poles to be replaced	GPS Start	GPS End	Voltage Level (kV)	Construction Date
Palo Seco SP to Catano Sect. 1801	9500	115	[redacted]		38	Information not available
3-Way tap west of Cataño Sect. to the Bayamon Prison substation 1888 to Including 3-way tap pole	9500	29			38	Information not available
3-Way tap east of Institution 705 to Bayamon Prison substation 1890 Not including 3- way tap pole	9500	9			38	Information not available

Project Scope of Work

Below includes a breakdown of the replacement of the existing conductors and hardware, several structures, guys anchoring, foundations and Overhead Ground Wire (OHGW). For TL9500 see the “Proposed 428 Public Assistance Scope of Work” including Vegetation Cleaning

Scope" followed by descriptions of each work type specific to the Scope of Work for this group.

FEMA PAPPG v.3.1 states, "Hazard mitigation is any sustained action taken to reduce or eliminate long-term risk to people and property from natural hazards and their effects." Subrecipient intends to amend this DSOW upon finalizing its plans to lessen or eliminate long-term risk to people and property from future natural hazards and their effects.

Proposed 428 Public Assistance Scope of Work

Palo Seco SP to Catano Sect. Structures Scope:

Line Name	Total Poles	Replace	Reinforce	Reuse
Line 9500	151	151	0	0

Detail Description for Planned Field Work

Transmission Line:

• The existing structures, foundations, guying, insulators, conductor, and associated attachment hardware will be replaced across the entire alignment. The line will remain along Its existing route and within the existing right of way (ROW).

• Optical Ground Wire (OPGW): Upgrade the existing OHGW and 96-strand OPGW with a new 144-strand OPGW.

○ Refer to Appendix N – TL-9500 38kV Structures List Rev.3

○ Refer to Appendix O – TL-9500 Structures kmz.

• Existing concrete structures are to be replaced with new steel structures. ○ Remove 151 structures.

○ Install 151 new steel structures to be installed are 12-sided. ▪ Electrical utility pole, steel galvanized, tapered shaft, 75'.

• Existing concrete pole structures will be analyzed to ensure that the structure and its components conform to the new codes and standards applicable to the infrastructure and the design criteria.

Hardware:

• Enhanced hardware package to accommodate larger conductor size and meet higher wind loading (160 mph) requirements.

• Insulators will be replaced with polymer.

Access Roads:

• 38kV Line 9500 is in an industrial-urban area between the municipalities of Cataño, Bayamon, and Toa Baja. Appendix L-9500 Routes of Structures Access Map depicts proposed paths ("Structure Access Paths") to access structures that cannot be accessed from a road.

• See attached 176913-DR4339-TL-9500- Appendix T-Routes of Structures Access which shows new access routes needed for construction. ○ Refer to Appendix L - TL-9500 Routes of Structure Access Map

- Refer to Appendix N - TL-9500 38kV Structures List Rev.3

Debris Removal/Staging Area:

• The type of debris that is expected in the process of demolition are concrete, metal scrap, domestic, construction waste, and wood. The debris will be separated and taken to an approved waste disposal facility as required by applicable federal and state regulations.

• Staging areas will be located at different sites along the transmission line. Palo Seco SP Warehouse (GPS Coordinates; [redacted]) located at the premises of the Palo Seco SP, will serve as the main warehouse to store line materials and as an assembly point.

- Refer to Appendix K for TL-9500 Staging Area Rev.1

Hazardous Material:

• The possible hazardous materials that can be found in the transmission line are Polychlorinated Biphenyls (PCBs), Lead, Sulfur Hexafluoride (SF6) Gas, Oil from the transformer and breakers, chemicals used for construction fuel, sealants, and other chemical wastes typical of a construction site. These hazardous materials will be handled and disposed of according to the applicable federal and state regulations.

• These products and their residues will be stored in special covered areas for disposal by an authorized company and provided with temporary spill controls until collected. All chemical containers will be tightly sealed and stored when in use. Excess chemicals will not be discharged to the storm sewer system, but properly disposed of, according to the manufacturer's instructions.

• Transformers and pole disposal will be handled according to the applicable federal and state regulations. LUMA will provide actual disposal locations and quantities.

• The removal of the transformers will include testing of the existing oil for PCB's levels. All PCB-containing materials will be handled and disposed of as per environmental regulations.

Water crossing/wetlands:

• According to the National Wetlands Inventory Map published by the U.S. Fish and Wildlife Service, there are four wetland areas that could be affected by the proposed construction work:

- Refer to Appendix H for TL-9500 Wetland Study

Ground Disturbance:

• Ground disturbance is based on the installation of temporary construction matting at all structures, encompassing an area of 50 ft by 50 ft around the structures and a 16 ft wide access road.

- Refer to Appendix L – TL-9500 Routes of Structure Access Map

Fill, gravel, sand, etc.:

• Fill, Gravel, and Sand materials will be obtained from an approved supplier.

List of Equipment to be used:

• Skid Steer, Excavator, Dump trucks, Manlifts, 120-Ton Motor Crane, Boom Trucks, 45-ton Crane, Zoom Boom, Air compressor, Truck Digger, Water truck, Pump Truck, Concrete Vibrator, Oil Tanker, Filtering Machine, and Flatbed platform.

• Vegetation will be removed utilizing a machete, chainsaw, electric pruner, telescopic pole pruner, bucket truck, and/or chipper.

• All equipment used will comply with Tier 4 EPA Emission Standard, if available.

Specific List of Permits Required:

• Environmental Compliance Determination (DEA) from Oficina de Gerencia de Permisos (OGPe).

• Department of Transportation and Public Works (DTOP) endorsement

• Excavation and Demolition Notification in Department of Transportation and Public Works. (DTOP)

• Toa Baja Municipality Notification

• Cataño Municipality Notification

• Bayamón Municipality Notification

• Hazardous and non-Hazardous Waste Disposal Permit EQB/DPNR

• Erosion Control and Sedimentation Prevention Plan (Plan CES) - EQB / DPNR.

• Departamento de Recursos Naturales Notification-DRNA

• Instituto de Puerto Rican Culture (ICP) Notification

LUMA will provide proof of all permits as a Condition of FEMA Record of Environmental Considerations.

Proposed 428 Program Scope of Work

The transmission system's main objective is to provide efficient and reliable interconnection of generation sources with the load centers distributed throughout the island. LUMA Transmission Grid connects Power Generation Plants, Transmission Centers, Sectionalizers and Distribution Substations through a complex and extensive network of lines, all dependent upon one another.

It is imperative that LUMA rebuild and harden its interdependent transmission system to FEMA consensus-based codes and standards and harden to more stringent standards included in LUMA's

Transmission Design Criteria Document, thereby making it more resilient to new hurricane wind loading criteria. The main goal is to reduce the vulnerability and fragility of the interconnected system and improve the resiliency of the power system transmission grid by reducing the potential of future similar damage to the system, thus minimizing the risk of power loss during disaster events.

LUMA has included 428 measures in its preliminary design that meet these new, higher, standards described above. These standards may include increasing the resiliency of transmission structures and hardware in higher risk exposed areas and more robust structures that can withstand higher wind speeds in vulnerable regions on the island. As part of the 428 initiatives,

Key examples of transmission 428 measures designed to increase resilience in the system include the following:

• Conductor:

○ Use 1000 to 1600 kcmil conductor instead of 210 to 636 kcmil to provide greater strength and resistance to wind-borne debris, and to allow for load to be shifted in emergency events without conductor damage.

○ Replacement of existing OHGW and 96-strand OPGW with a new 144-strand OPGW. OPGW will not be duplicated in the IT/OT scope of work and serve as 428.

Adding this will allow for remote monitoring and operation of the substations providing real-time information for things such as flooding, fire, or component failure allowing for a faster and more reliable grid restoration minimizing loss of power service after a major weather event. These capabilities will reduce response time and help to prevent those issues from similar damage to the infrastructure.

• Foundations:

- Fixed end caisson piles designed for varying soil conditions.
- Foundations mitigate against future structure damage from wind (160 mph) and flooding.
- The number of poles that require concrete foundations are 151. For more information, see Appendix N-TL9500 38kV Structures List Rev.3.

428 Scope of Work

The following is the full scope of vegetation clearing for this project that will be performed under LUMA's vegetation clearing program. As instructed by FEMA Public Assistance leadership, LUMA is submitting the full scope of vegetation clearance, for this line segment, as a § 428 cost in this DSOW. As instructed, following obligation, LUMA will submit an amendment to move the costs related to vegetation to 406 HM.

Parameters for Performing 428 Vegetation Cleaning

As a result of DR-4339-PR, vegetation surrounding T&D assets are falling onto T&D assets and interfering with the safe and reliable operation of the assets. The vegetation at present is currently causing outages when vegetation is in contact with the T&D assets. To mitigate the future damage across T&D assets and protect the 428 repairs and replacement along the T&D assets, clearing vegetation materials will be required. This 428 scope of work is to directly reduce the potential of future, similar damages to the T&D system by clearing vegetative materials that pose an immediate threat to the power transmission lines, and identification for corrective actions related to clearing vegetation (consisting of shrubs, branches, limbs, stumps, bamboo, and trees that are directly impacting the resilience and productivity of the power grid) applicable to the existing PREPA electrical grid within Region 1 (San Juan) and Region 3 (Bayamon) of Puerto Rico.

The extent and execution of this scope includes performing verification of facilities, assets and condition assessments for determining the most appropriate remediation, preparing work orders for executing the necessary vegetation remediation, by ways of tree felling, vegetation remediation, mechanical vegetation remediation, vegetative debris disposal via chipping, mulching, hauling, and recycling where applicable in easements of the PREPA power Transmission and Distribution lines. For this project version, LUMA is not planning to construct access roads. If the work to be done is not adjacent to an existing road, our contractor tree crews will minimize environmental disturbance by utilizing vegetation crews hiking by foot in and out of our existing easement.

Regulation 7282 requires that only shrubs and plants (no trees) be planted within the Easement under power lines. Climbing plants and vines, as well as bamboo, are prohibited from being planted within an easement. The branches of trees planted outside the easement must not obstruct free passage of the power lines. The National Electrical Safety Code (NESC) and PREPA 's Comprehensive Vegetation Management Plan establish the minimum required distances, both vertical and horizontal, between an energized conductor or device and any structure, building, or surface. Vegetation clearing will be restricted to removing any vegetation that interferes with these clearances. For power transmission lines at 38kV, NESC and PREPA 's Comprehensive Vegetation Management Plan defines the safety clearance limits as 12 feet. By law, any trees, shrubs, or plants planted in violation of Regulation 7282 may be uprooted, removed, or cut down in accordance with the provisions of Regulation 7282 – for both compatible and incompatible species.

For 38 kV transmission lines, all Incompatible vegetation species will be cleared from the full width of the safety clearance limit or at the certified easement width, whichever is wider. Compatible vegetation species will be cleared in compliance with NESC, PREPA 's Comprehensive Vegetation Management, and Regulation 7282 which means that any vegetation species with the potential to encroach within 12 feet of the conductors at full size will be removed. Easement clearing widths for the 38 kV Transmission lines safety limits is 12 feet and all certified easement widths for 38kV from LUMA Land Records office will be used for clearing.

Industry standard practices will determine how the work will be performed. A healthy tree is less likely to fall over in a storm and damage overhead lines; therefore, vegetation will be pruned according to ANSI A300 (Part 1) – 2017 Tree, Shrub, and Other Woody Plant Management – Standard Practices (Pruning). These ANSI A300 Standard Practices are outlined within Appendix V – ANSI 300 – Pruning Standards

which including tree inspection, tools and equipment, pruning cuts, pruning objectives, pruning types, specialty pruning, palm pruning, and utility pruning standard practices. Vegetation that is improperly pruned could become susceptible to disease and decay, resulting in a hazard to both the line and public safety. ANSI A300 standards are intended as guides for federal, state, municipal and private authorities including property owners, property managers, and utilities in the drafting of their maintenance specifications; it was developed by Tree Care Industry Association and maintained by a consensus of various industry stakeholders through periodically reviewing and updating the guidelines. These standards provide guidance on how and where to prune vegetation to achieve clearances and maintain a healthy plant. In all cases, Subrecipient's authorized representative's vegetation clearing contractors will be required to perform clearing activities in a manner consistent with ANSI A300, NESC, and Regulation 7282 alignment with Resolution 4987, Organic Law 83 (amended version), Communication 12-02, and PREPA 's Comprehensive Management Plan establishing standard Distribution easement widths.

Scope of Work Inside Easement-Compatible Species

Compatible vegetation species will be cleared consistent with the distances identified in NESC, PREPA 's Comprehensive Vegetation Management Plan, and Regulation 7282, which means that any species with the potential to encroach within 12 feet of the conductors at full size will be removed using the same methods discussed above. Even though the distances identified in NESC and Regulation 7282 are vertical clearances, Compatible Species encroaching on the conductors from any direction can pose a hazard to the line. Therefore, the 12-foot clearance is being applied to both vertical and horizontal clearances of the conductor

In rare cases where Subrecipient's authorized representative encounters significant resistance from landowners or stakeholders to remediate vegetation, Subrecipient's authorized representative will work with landowners or stakeholders to determine if Incompatible and Compatible Species can be pruned to mitigate the hazard to the lines instead of being completely removed.

Scope of Work Inside Easement – Incompatible Species

For the power transmission lines, all Incompatible Species will be cleared from the full width of the Easement. "Clearing" in this context includes the following activities: tree removal, severing of vines, cutting, and vegetation mastication. The following clearing methods will be utilized:

Tree removal: Qualified line clearance crews will work at ground level, climb trees from ground level, or use aerial platforms to remove the portion of the tree that is above ground, leaving the stump in place.

Severing of vines: Vines will be severed by qualified line clearance crews at the base with an airgap created between the root system and the portion of the vine climbing on the structure. The upper portion of the vine remains attached and is not removed.

Cutting: Cutting typically involves the removal of small diameter species by hand. Qualified line clearance crews will work at ground level, climb trees from ground level, or use aerial platforms to remove vegetation.

Vegetation mastication: also known as mulching, slash-busting, or brush-cutting, involves technique for reducing the size of vegetation and downed material in forests. It involves grinding, shredding, or chopping vegetation into smaller pieces, which are then left on the site as mulch.

Scope of Work Outside Easement – Species Growing into the Easement

There is the potential for vegetation outside or along the boundary of the Easement to interfere with the operation of power transmission lines. Appropriate clearances around the conductors must be achieved to protect the lines from future damage. For 38kV Transmission lines, Subrecipient's authorized representative has established a clearance distance of 12 feet from all conductors. This distance is consistent with the vertical distance established in NESC, PREPA 's Comprehensive Vegetation Management Plan, and Regulation 7282. If there are species encroaching on the 12-foot clearance outside or along the boundary of the easement, these species will be pruned to obtain at least 12 feet of clearance from the conductors at the time clearance work occurs. In cases where following ANSI A300 best practices require clearance beyond 12 feet, the maximum distance cleared will not exceed 15 feet. Diagrams illustrating these clearing distances are provided as attachments within Grants Portal.

Tree pruning: Qualified personnel work from an aerial platform or while climbing within a crown of trees to prune the tree. All pruning work wounds the tree. Done poorly, pruning can result in an exaggerated regrowth response by adversely altering tree architecture and increasing exposure to decay organisms that can weaken the tree. These adverse consequences increase the likelihood of tree-initiated faults causing system interruptions and customer outages. Proper arboriculture techniques will be utilized. The following clearing methods will be utilized:

Tree removal: Qualified line clearance crews work at ground level or on aerial platforms to remove the portion of the tree that is above ground, leaving the stump in place.

Severing of vines: Vines will be severed at the base with an airgap created between the root system and the portion of the vine climbing on the structure. Vines are severed and treated by a qualified worker at ground level. The upper portion of the vine remains attached and is not removed.

Cutting: Cutting typically involves the removal of small diameter Incompatible Species by hand.

Vegetation mastication: also known as mulching, slash-busting, or brush-cutting, involves technique for reducing the size of vegetation and downed material in forests. It involves grinding, shredding, or chopping vegetation into smaller pieces, which are then left on the site as mulch.

Type of Project

1. **Restoration to Codes/Standards:** Restores the facilities to pre-disaster function and approved codes/standards.

2. **Improved Project**: Restores the pre-disaster function of the facilities and incorporates improvements including any:

a. Other improvements, not required by codes and standards.

b. Changes in facility size, capacity, dimension, or footprint.

3. **Alternate Project:** Does not restore the pre-disaster function of the damaged facility(s).

Choose One (Restoration, Improved or Alternate) If improved, provide changes in facility size, capacity, dimension, or footprint. If alternate, provide rationale for recommendation.
Restoration to Codes and standards
This work will follow FEMA (Public Assistance Alternative Procedures (Section 428) Guide for Permanent Work FEMA-4339-DR-PR February 2020)

Codes and Standards

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

1. Consensus-based codes, per FEMA (Public Assistance Alternative Procedures (Section 428) Guide for Permanent Work FEMA-4339-DR-PR February 2020).

2. Industry standards per FEMA Recovery Policy FP-104-009-5, Version 2, Implementing Section 20601 of the 2018 Bipartisan Budget Act through the Public Assistance Program.

3. FEMA Recovery Interim Policy FP-104-009-11 Version 2.1, Consensus-Based Codes, Specifications, and Standards for Public Assistance.

4. LUMA's latest Design Criteria Document (DCD) which aggregates the design considerations of the vast majority of the consensus-based codes, specifications, and standards listed in FEMA Recovery Interim Policy 104-009-11 Version 2.1 (December 20, 2019).

Project Schedule

Milestone	Target Date
FEMA Obligation of Funds	September 2025
Permitting and Environmental	December 2026
Construction	December 2026
In-Service-Date	December 2028

Note: This schedule is subject to change based on various factors including Project and Contracts approvals.

Project Estimate

The estimated costs (Class 3 Accuracy +/-30%) to complete the project are captured in the tables below. The total of the line Rebuild combined with the Telecom and Vegetation Cleaning scopes amounts to $**38,481,827.47**

The Lodging & per Diem Line item combining scopes do not equal combining execution timelines as the work is done by different crews.

The cost estimate was developed utilizing preliminary Architectural and Engineering design information and may be subject to change. LUMA has allocated 10% of the project cost for the mitigation of potential known risks.

- Refer to Appendix G - TL-9500 LPCE Project Cost Estimate Power_06.05.2025
- Refer to Appendix S - TL-9500 LPCE Project Cost Estimate Telecom_05.22.2025
- Refer to Appendix V - TL-9500 Detailed Cost Estimate Vegetation_05.30.2025 (refer to project note 3)

Power

COST ESTIMATE			
Cost Element	**428**	**406**	**PROJECT TOTAL**
PLANNING	**$2,697,773.89**	**$-**	**$2,697,773.89**
MANAGEMENT	**$1,402,405.23**	**$-**	**$1,402,405.23**
(A&E) – Project Management	$394,673.14	**$-**	$394,673.14
(A&E) – Construction Management	$526,230.86		$526,230.86

(A&E) – Contracting, Procurement & Contract Administration	$218,385.80		$218,385.80
(A&E) – Projects Controls (Scheduling, Estimating, Support, Cost Control, Risk, Document Control & Reporting)	$263,115.43		$263,115.43
GENERAL CONDITIONS	**$ 1,544,463.92**	**$-**	**$ 1,544,463.92**
COST TOTALS	**$32,581,584.05**	**$-**	**$32,581,584.05**
DEDUCTIONS	**TOTAL INSURANCE PROCEEDS RECEIVED**		**$**
FAASt ALLOCATIONS	FAAST PROJECT # 176913 - 428		$28,190,262.05
	FAAST PROJECT # 176913 – 406 HM		$-
	FAAST PROJECT # 76971 Total		**$28,190,262.05**
	FAASt A&E # 335168 - 428		$4,100,179.12
	FAASt A&E # 335168 – 406 HM		$-
	FAASt A&E # 335168 TOTAL		**$4,100,179.12**
	FAASt E&M # 673691- 428		$291,142.88
	FAASt E&M # 673691 – 406 HM		$-
	FAASt E&M # 673691 TOTAL		**$291,142.88**

Telecom

COST ESTIMATE			
Cost Element	**428**	**406**	**PROJECT TOTAL**
PLANNING	**$303,367.52**	**$-**	**$303,367.52**
MANAGEMENT	**$253,246.13**	**$-**	**$253,246.13**
Tline 9500 Palo Seco SP to Catano Sect Telecom Sec	**$5,094,733.84**	**$-**	**$5,094,733.84**
GENERAL CONDITIONS	**$ 232,230.54**	**$-**	**$ 232,230.54**
Sale Tax	$19,886.57		$19,886.57
Municipal Construction Tax	$212,343.97		$212,343.97
COST TOTALS	**$5,883,578.03**	**$-**	**$5,883,578.03**
DEDUCTIONS	**TOTAL INSURANCE PROCEEDS RECEIVED**		**$**
FAASt ALLOCATIONS	FAAST PROJECT # 176913 - 428		$5,320,244.38
	FAAST PROJECT # 176913 – 406 HM		$-

	FAAST PROJECT # 76971 Total	**$5,320,244.38**
	FAASt A&E # 335168 - 428	$556,613.65
	FAASt A&E # 335168 – 406 HM	$-
	FAASt A&E # 335168 TOTAL	**$556,613.65**
	FAASt E&M # 673691- 428	$6,720.00
	FAASt E&M # 673691 – 406 HM	$-
	FAASt E&M # 673691 TOTAL	**$**6,720.00

Vegetation Clearing PCE, refer document Project Note 3

Project	Line	LUMA Miles	LUMA Cost Per Mile 6/26/2025	% Vegetation in feeder	Buffer acceptance	Total percentage	PA Agreement	FEMA Total Cost	3% Basic Construction Services (A&E)	Total Project Cost without A&E
176913	9500	3.6	$216,929.46	1.94%	10%	2.13%	2.13%	$16,665.39	$499.96	$16,165.43

Cost estimate section:

Project Cost Summary, 428 Version 0:

Work to be Completed (WTBC): $ 38,481,827.47

A&E Deduction (Global A&E FAASt 335168): -$4,657,292.73

E&M Deduction (Global E&M FAASt 673691): -$297,862.88

Project Total: $33,526,671.86

Project Cost Estimate Notes:

1. Refer to detailed SOW provided in document labeled: “176913-DR4339PR-Detailed SOW-TL 9500 Palo Seco SP to Cataño Sect-Rev11-6.13.2025.pdf”

2. Refer to detailed Cost Estimate provided in document labeled: “176913-DR4339PR-APPENDIX G-TL 9500 LPCE Project cost Estimate Power_06.05.2025.xlsx” & “176971-DR4339PR-APPENDIX-M_TL9500 LCPE Project Cost Estimate Telecom_05.22.25.xlsx”

3. Vegetation cost was clarified by the PA Field Leadership. The cost was modified accordingly. Refer to the labeled document: SP176913 - DR4339PR - Vegetation Cost Clarification (updated - 07.03.2025)

4. 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 in the table above. The A&E project was obligated to track and account for costs 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. 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 Group 21 Automation Program FAASt 757662.

6. This project is part of Donor FAASt 136271 – MEPA078 Puerto Rico Electrical Power Authority (PREPA) Island Wide FAASt Project 136271.

7. For Attachments refer to:

- 176913-DR4339PR-APPENDIX A – TL-9500 Approved Supplier List
- 176913-DR4339PR-APPENDIX B – TL-9500 Structure Location Map
- 176913-DR4339PR-APPENDIX C – TL-9500 Preliminary Engineering Design
- 176913-DR4339PR-APPENDIX D – TL-9500 FEMA EHP Soil Boring Plan
- 176913-DR4339PR-APPENDIX E – TL-9500 Existing Site Plan
- 176913-DR4339PR-APPENDIX F – Consent to Federal Funding Letter- FEMA/COR3
- 176913-DR4339PR-APPENDIX G – TL-9500 LPCE Project Cost Estimate Power_06.05.2025
- 176913-DR4339PR-APPENDIX H – TL-9500 Wetland Study
- 176913-DR4339PR-APPENDIX J – TL-9500 Soil Boring Map
- 176913-DR4339PR-APPENDIX K – TL-9500 Staging Area Rev. 1
- 176913-DR4339PR-APPENDIX L – TL-9500 Routes of Structure Access Map
- 176913-DR4339PR-APPENDIX M – Access _Paths_9500 kmz
- 176913-DR4339PR-APPENDIX N – TL-9500 38kV Structures List Rev.3
- 176913-DR4339PR-APPENDIX O – TL-9500 Structures kmz
- 176913-DR4339PR-APPENDIX P – TL-9500 Fill Borrow Memo 072219_signed
- 179613-DR4339PR-APPENDIX S – TL-9500 LPCE Project Cost Estimate Telecom_05.22.2025
- 179613-DR4339PR-APPENDIX T – TL-9500 Routes of Structure Access Map kmz
- 176913-DR4339PR-APPENDIX O-TL 9500 Detailed Cost Estimate Vegetation_05.30.2025.xlsx
- 179613-DR4339PR-APPENDIX V – ANSI A300-Pruning Standards TL9500

406 HMP Scope

It was agreed with subrecipient this project will be moved forward in Version 0, without hazard Mitigation funds. Is the responsibility from the sub-applicant complete the field assessments to establish the after and before report of clearance and the project office folder including all the expenses incurred on the project: (labor, material, workmanship, contractors and office expenses directly related to the project). The subrecipient must ensure that the work is executed with reasonable use of resources and costs, using the most cost-effective method. Once the sub-applicants complete the vegetation clearance activities, the information will be submitted to FEMA for the validation and future reimbursement of the PA 406 funds to the main FAASt.

Cost

Code	Quantity	Unit	Total Cost	Section
3510	1	Lump Sum	($4,657,292.73)	Uncompleted
9001	1	Lump Sum	$38,481,827.47	Uncompleted
9001	1	Lump Sum	($297,862.88)	Uncompleted

CRC Gross Cost	$33,526,671.86
Total 406 HMP Cost	$0.00
Total Insurance Reductions	$0.00
CRC Net Cost	$33,526,671.86
Federal Share (90.00%)	$30,174,004.68
Non-Federal Share (10.00%)	$3,352,667.18

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

7/3/2025

GENERAL INFORMATION

Event: DR4339-PR

Project: SP 176913

Category of Work: Cat F - Utilities

Applicant: PR Electric Power Authority

Event Type: Hurricane / Hurricane Maria

Cause of Loss: Wind / Wind Driven Rain

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

COMMERCIAL INSURANCE INFORMATION

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

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

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

Mapfre Praico Insurance Company (1398178000644)

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

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

Policy Limits: $300,000,000.00

RCV or ACV: Replacement Cost Value

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

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

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

Damaged Inventory (DI) #448057:

FAASt Palo Seco SP to Catano Sect Line-9500

Location: Palo Seco SP to Catano Sect Line-9500

GPS Coordinates: [redacted]

Cause of Loss: Wind / Wind Driven Rain

Prior Obtain and Maintain Requirement:

No prior insurance requirements were found for this facility.

Reduction(s):

No insurance reduction will be applied to this project as coverage is not anticipated. An anticipated insurance reduction of $193,746,436.00 was applied to FAAST project #136271 for anticipated insurance proceeds for Hurricane Maria losses. For ease of reference, please see table of insurance allocations: "PREPA Allocation Plan – All Disasters" file.

Obtain and Maintain Requirement:

No Obtain & Maintain Requirement is being mandated for the FAASt Palo Seco SP to Catano Sect Line-9500 because the facility does not meet the definition of building, equipment, contents, or vehicle.

Insurance Proceeds Statement:

FEMA acknowledges that the Applicant is in negotiations with their insurance carrier at the time of the FEMA insurance review and might have received partial settlements. In accordance with 44 CFR §206.250-253, in the absence of an actual settlement, anticipated insurance recoveries will be deducted from this project

based on Applicant's insurance policy limits. FEMA subsequently adjusts the eligible costs based on the actual amount of insurance proceeds the Applicant receives after a final settlement.

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

Standard Insurance Comments

FEMA Policy 206-086-1
PART 2: Other Insurance-Related Provisions. (Sections 312 and 406(d) of the Stafford Act)

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

1. Before FEMA approves assistance for a property, an applicant must provide FEMA with information about any actual or anticipated insurance settlement or recovery it is entitled to for that property.

2. FEMA will reduce assistance to an applicant by the amount of its actual or anticipated insurance proceeds.

3. Applicants must take reasonable efforts to recover insurance proceeds that they are entitled to receive from their insurer(s).

…

5. If an applicant has an insurance requirement from a previous event:

a. FEMA will reduce assistance by the actual or anticipated insurance proceeds, or the amount of insurance required in the previous disaster, whichever is greater.

b. FEMA will only consider insolvent insurers, legal fees, or apportionment of proceeds as described in Section VII, Part 2(A)(3) and (4) when the applicant's anticipated or actual insurance proceeds are higher than the amount of insurance required in the previous disaster.

Jorge Parrilla, PA Insurance Specialist

CRC Atlantic, Guaynabo, PR

O&M Requirements

There are no Obtain and Maintain Requirements on **FAASt [Palo Seco SP to Catano Sect 38kV Line- 9500] (Transmission)** .

406 Mitigation

There is no additional mitigation information on **FAASt [Palo Seco SP to Catano Sect 38kV Line- 9500] (Transmission)** .

Environmental Historical Preservation

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

EHP Conditions

- Any change to the approved scope of work will require re-evaluation for compliance with NEPA and other Laws and Executive Orders.
- This review does not address all federal, state and local requirements. Acceptance of federal funding requires recipient to comply with all federal, state and local laws. Failure to obtain all appropriate federal, state and local environmental permits and clearances may jeopardize funding.
- If ground disturbing activities occur during construction, applicant will monitor ground disturbance and if any potential archaeological resources are discovered, will immediately cease construction in that area and notify the State and FEMA.

- 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.
- 9. In the event a PR boa and VI boa is found dead within the project footprint, the Federal Agency and the Recipient must contact the Service to appropriately dispose the animal. 10. Should the forms of take reach the amount of exempted take (Table 6-1) during the Action, the Federal Agency and the Recipient shall terminate the authorized activities and contact the Service within 24 hours in order to reinitiate consultation. The Service and the Federal Agency and the Recipient will re-consult to determine whether authorized activities should continue as proposed and whether modifications or stipulations are warranted. 11. 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 in order to reinitiate consultation. The Service and the Federal Agency and the Recipient will re-consult to determine whether authorized activities should continue as proposed and whether modifications or stipulations are warranted. 12. The contact information for the Service must be followed: Fish and Wildlife Biologist: Jan P. Zegarra at jan_zegarra@fws.gov, 786-933-1451; Endangered Species Program Coordinator: Jose Cruz at Jose_Cruz-Burgos@fws.gov, 305-304-1386. All reporting must be submitted at caribbean_es@fws.gov.
- The Applicant must provide documentation at close-out that proves completion of required Conservation Measures.
- Amended Programmatic Biological Opinion (Version 1.1) Mandatory Terms and Conditions from the Programmatic Biological Opinion for the PR Boa and the Virgin Island Boa Terms & Conditions (T&C) 1. 1. Inform all project personnel about the potential presence of the PR and VI boa in areas where the proposed work will be conducted and provide training session on PR and VI boa identification. A preconstruction meeting will be conducted to inform all project personnel about the need to avoid harming these species. 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 movements, the boundaries of the project area and areas to be excluded and protected will be clearly marked in the project plan and in the field in order to avoid further habitat degradation outside of the AA. 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), a 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 AA. 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 harm's way as the result of the habitat disturbance (see #6). 4. For VI boas, once the 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, the 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 AA and on harm's way, the action will stop at that area and information recorded (see #5). If a PR or VI boa is located within harm's way, all attempts will be made to immediately safely capture the animal (refer to T&C 2). PR boas will be safely captured and relocated at least 1km within suitable habitat (forested) 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 and designated personnel and will not harm or injure the captured boa. If any VI boa is found, do not relocate. Capture and temporary hold the individual accordingly (refer to T&C 2). Contact the Puerto Rico Department of Natural and Environmental Resources (PRDNER) Rangers immediately if in Puerto Rico (787-724-5700, 787-230-5550, 787-771-1124) or contact the USVI Department of Planning and Natural Resources (DPNR), Division of Wildlife, immediately if in St. Thomas (340-775-6762, 340-773-1082). The Action may continue at other work sites within the AA where no PR and VI boas have been found. If immediate relocation of PR boa by the project biologist or designated personnel is not an option, project related activities at this area will stop until the boa moves out of harm's way on its own or call the Puerto Rico Department of Natural and Environmental Resources (PRDNER) Rangers for safe capture and relocation of the animal (787-724- 5700, 787-230-5550, 787-771-1124). The potential use of the PRDNER staff for these purposes should be coordinated with them at least 30 days before the project starts. If a PR boa is captured by the PRDNER, record the name of the PRDNER staff and information on where the PR boa will be relocated. 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 AA. 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 (refer to T&C 2). If not possible, the animal will be left alone until it leaves the vehicle or machine by itself. 8. 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 farthest away

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.

- Terms & Conditions (T&C) 2: Standard procedures while capturing, handling, transporting, temporary holding, relocating and tracking PR and VI boas in order to minimize the risk of injury and mortality to the species. A. The Federal Agency and the Recipient shall identify who will capture PR or VI boas and assess and determine if a boa has been injured as a result of project activities, and if it is in need of veterinary care or rehabilitation. If an injured PR boa or VI boa is in need of veterinary care or rehabilitation, the Federal Agency and the Recipient shall immediately seek veterinary care for the animal and inform the Service within 24 hours of the event. B. The Federal Agency must ensure that any permitted individuals, contractor, recipients or cooperators follow proper procedures and methods for capturing, handling, temporary holding, relocating of the PR and VI boa. The following procedures will be followed: i. All PR and VI boas shall be handled safely to avoid injury. The preferred method of capture is by hand, although a snake hook or stick may also be used if snake is uncatchable by hand, or in order to help move the snake into a safer position for capture. ii. All PR and VI boas may be temporarily held during and/or relocation purposes. Boas will be handled as little as possible, and they shall not be kept for more than three days since the day of capture. Temporary holding of boas will be in burlap bags (1 boa per bag) and/or secured containers, which must be placed in cool dry areas that are not in direct sunlight or extreme temperatures. Burlap bags shall be placed inside a container with other boas each inside their own burlap bag and labeled properly. All containers shall be well-ventilated and with a secure lid to avoid boas from escaping. iii. Only qualified, experienced personnel, with a required State and Federal applicable permits may place PIT tag injections. PIT tags may be subcutaneously injected mid-body using sterile syringes. When injecting tags, keep needle parallel to the boa's body and do not force the needle into the muscle tissue or between the ribs. Snakes greater than 400 mm (15.7 in) in length, but that weigh less than 100 grams (3.5 oz), may be PIT tagged with a 5 mm (0.19 in.) PIT tag. An 8 mm (0.31 in) PIT tag may be used for all snakes that weigh over 100 grams (3.5 oz). iv. The Federal Agency and the Recipient and/or contractors shall obtain all necessary permit(s) from the corresponding State agency for capturing, handling, transporting, temporary keeping, relocating and tracking PR and VI boas.
- Monitoring and Reporting (M&R) Requirements In order to monitor the impacts of incidental take, the Federal Agency and the Recipient must report the progress of the Action and its impact on the species to the Service as specified in the ITS (50 CFR §402.14(i)(3)). This section provides the specific instructions for such monitoring and reporting (M&R), including procedures for handling and disposing of any PR and VI boas killed or injured. These M&R requirements are mandatory. As necessary and appropriate to fulfill this responsibility, the Action Agency must require any permittee, contractor, or grantee to accomplish the M&R through enforceable terms that the Action Agencies include in the permit, contract, or grant document. Such enforceable terms must include a requirement to immediately notify the Service if the amount or extent of incidental take specified in this incidental take statement (ITS) is exceeded during Actions' implementation. M&R 1. A. For all PR and VI boa sightings (dead or alive), the Action Agency shall ensure that an effective monitoring and reporting method is established. Reporting shall include the following and should injury or mortality occur during the Action, the Federal Agency and the Recipient shall contact the Service within 24 hours of the event: i. Date, time and location (latitude/longitude) of the sightings and relocation sites. ii. Size, weight and sex (if possible) of the PR and VI boa. iii. A photograph of the snake as found or after capture. iv. Description of how and what caused the take in the case of injury or death. v. Description of any additional conservation measures that may be implemented to further avoid and minimize take.
- M&R 2. Disposition of Dead or Injured boas A. Disposition of dead animals must be immediately coordinated with the Service for appropriate disposal of the animal. B. The Service may require some dead specimens of PR boa and VI boa. If requested, the Federal Agency and the Recipient shall coordinate the delivery of such specimen to the Service. C. In case of an injured boa, the Federal Agency and the Recipient must contact the Service immediately to coordinate for veterinary care, if needed.
- All borrow or fill material must come from pre-existing stockpiles, material reclaimed from maintained roadside ditches (provided the designed width or depth of the ditch is not increased), or commercially procured material from a source existing prior to the event. For any FEMA-funded project requiring the use of a non-commercial source, or a commercial source that was not permitted to operate prior to the event (e.g., a new pit, agricultural fields, road ROWs, etc.) in whole or in part, regardless of cost, the Applicant must notify FEMA and the Recipient prior to extracting material. FEMA must review the source for compliance with all applicable federal environmental planning and historic preservation laws and executive orders prior to a Sub-recipient or their contractor beginning borrow extraction. Consultation and regulatory permitting may be required. Non-compliance with this requirement may jeopardize receipt of federal funding. Documentation of borrow sources utilized is required at close-out and must include fill type (private, commercial, etc.), name, fill site GPS coordinates (not of the company/governmental office), address, and type of material. FEMA requires that an archaeologist, who meets the Secretary of the Interior (SOI) Qualification Standards (36 CFR Part 61) for archaeology, be present to monitor all ground disturbance activities related with the replacements of poles and construction of their new concrete foundations with FID numbers #11543568, #11543564, #11543540, #11543525, #11543524, #11543322, and #11543318, along the State Road PR-869, Palmas Ward, municipality of Cataño (See Enclosure 2 for complete Archeological Monitoring Plan). In the event that historically or archaeologically significant materials (or evidence thereof) are discovered during the implementation of this project, the subrecipient and the recipient shall proceed as indicated in Stipulation III.B. of the Project-Specific 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. 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.
- 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.

- 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.
- Executive Order 11988 - Floodplain Conditions for TL 9500: 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.
- Executive Order 11990 - Wetlands Conditions for TL 9500: The Applicant shall ensure best management practices are implemented to prevent erosion and sedimentation to surrounding, nearby or adjacent wetlands. To ensure that wetlands are not adversely impacted, per the Clean Water Act and Executive Order 11990, equipment storage and staging of construction materials and machinery must be in a location that would prevent erosion and sedimentation.
- Endangered Species Act (ESA) Conditions for the Puerto Rican Boa (Chilabothrus inornatus) for TL 9500. Part 1. a. Inform all project personnel about the potential presence of the PR boa in areas where the proposed work will be conducted. A pre-construction meeting should be conducted to inform all project personnel about the need to avoid harming the species as well as penalties for harassing or harming PR boas. An educational poster or sign with photo or illustration of the species should be displayed at the project site. b. Prior to any construction activity, including removal of vegetation and earth movements, the boundaries of the project and areas to be excluded and protected should be clearly marked in the project plan and in the field in order to avoid further habitat degradation into forested and conservation areas. c. Once areas are clearly marked, and prior to the use of heavy machinery and any construction activity (including removal of vegetation and earth movement), a biologist or project personnel with experience on this species should survey the areas to be cleared to verify the presence of any PR boa within the work area. d. If a PR boa is found within any of the working or construction areas, activities should stop at that area and information recorded (see #e). Do not capture the boa. If boas need to be moved out of harm's way, designated personnel shall immediately contact the Puerto Rico Department of Natural and Environmental Resources (PRDNER) Rangers for safe capture and relocation of the animal: (787) 999-2200 ext. 2911. If immediate relocation is not an option, project-related activities at that area must stop until the boa moves out of harm's way on its own. Activities at other work sites, where no boas have been found after surveying the area, may continue.
- Endangered Species Act (ESA) Conditions for the Puerto Rican Boa (Chilabothrus inornatus) for TL 9500. Part 2. e. For all boa sightings (dead or alive), record the time and date of the sighting and the specific location where it was found. PR boa data should also include a photo of the animal (dead or alive), site GPS coordinates, the time and date, and comments on how the animal was detected and its behavior. f. If a PR boa is captured by PRDNER personnel, record the name of that person and information on where the PR boa will be taken. This information should be reported to the Service. g. Measures should be taken to avoid and minimize PR boa casualties by heavy machinery or motor vehicles being used on site. Any heavy machinery left on site (staging) or near potential PR boa habitat (within 50 meters of potential boa habitat), needs to be thoroughly inspected each morning before work starts to ensure that no boas have sheltered within engine compartments or other areas of the equipment. If PR boas are found within vehicles or equipment, do not capture the animal, and let it move on its own or call PRDNER Rangers for safe capture and relocation of the animal (see #d). If not possible, the animal should be left alone until it leaves the vehicle on its own. h. PR boas may seek shelter in debris piles. Measures should be taken to avoid and minimize boa casualties associated with sheltering in debris piles as a result of project activities. Debris piles should be placed far away from forested areas. Prior to moving, disposing or shredding, debris piles should be carefully inspected for the presence of boas. If debris piles will be left on site, we recommend they be placed in areas that will not be disturbed in the future. i. If a dead PR boa is found, immediately cease all work in that area and record the information accordingly (see #e). If the PR boa was accidentally killed as part of the project actions, please include information on what conservation measures had been implemented and what actions will be taken to avoid further killings. A dead boa report should be sent by email to the Service at Caribbean_es@fws.gov, within 48 hours of the event. j. Projects must comply with all state laws and regulations. Please contact the PRDNER for further guidance.

EHP Additional Info

There is no additional environmental historical preservation on **FAASt [Palo Seco SP to Catano Sect 38kV Line- 9500] (Transmission)** .

Final Reviews

Final Review

Reviewed By LEFRANC-GARCIA, CARLOS L. **Reviewed On** 10/14/2025 12:26 PM PST

Review Comments

The existing structures (151), foundations, guying, insulators, conductor, and associated attachment hardware will be replaced across the entire alignment and removing vegetation across the ROW. The total cost of the project is $33,526,671.86. Project has been reviewed, found eligible and reasonable. Subrecipient is responsible for complying with all grants and subgrant conditions.

Recipient Review

Reviewed By Mulero, Noel **Reviewed On** 10/16/2025 2:52 PM PST

Review Comments

Recipient review completed. The applicant did not submit a mitigation proposal in this version; the mitigation proposal will be made in a future amendment. 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

Award Information

Version Information

Version #	Eligibility Status	Current Location	Bundle Number	Project Amount	Cost Share	Federal Share Obligated	Date Obligated
0	Pending	In Review		$0.00	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 #
0	11/5/2025	$30,174,004.68	90%	Accepted	4339DRPRP00114321

Department of Homeland Security
Federal Emergency Management Agency

v0

General Info

Project #	176971 **P/W #** 11373	**Project Type**	Specialized
Project Category	F - Utilities	**Applicant**	PR Electric Power Authority (000-UA2QU-00)
Project Title	FAASt –38kV Line 8200 - San Juan SP to Catano Sect Line (Transmission)	**Event**	4339DR-PR (4339DR)
Project Size	Large	**Declaration Date**	9/20/2017
Activity Completion Date	9/20/2027	**Incident Start Date**	9/17/2017
		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 #448386; FAASt - Line 8200 - San Juan SP to Catano Sect Line

General Facility Information:

- **Facility Type:** Power generation, transmission, and distribution facilities
- **Facility:** Line 8200 - San Juan SP to Catano Sect Line
- **Facility Description:** 8200 (38kV) is part of the four (4) circuit miles of overhead transmission line from San Juan SP to Catano Sect and to multiple taps.
- **Approx. Year Built:** 1980
- **Start GPS Latitude/Longitude:** [redacted]
- **End GPS Latitude/Longitude:** [redacted]

Final Scope

448386 **FAASt - Line 8200 - San Juan SP to Catano Sect Line**

Introduction

The purpose of this document is to submit for approval the Detailed Scope of Work ("SOW") to COR3 and FEMA for the 38kV Line 8200 - SAN JUAN SP - CATAÑO SECT project ("Line 8200") under DR-4339- PR Public Assistance. The document provides a description of the project including scope, schedule, and cost estimates as well as Environmental & Historical Preservation ("EHP") requirements. LUMA Energy is seeking approval from COR3 and FEMA for project funding to repair, restore, or replace the eligible facilities for Line 8200.

LUMA submits this Detailed SOW pursuant to the T&D O&M 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 Appendix F which collectively provides the necessary consent for LUMA Energy, as an agent of PREPA, to undertake work in connection with any Federal Funding requests related to the T&D System submitted to FEMA.

Facilities

The facilities listed below are part of the 4.0-mile long 38-kilovolt (kV) overhead Transmission Line (TL) 8200 from Cataño Sect. to San Juan Steam Plant. The existing TL contains a three-way tap near the intersection of Avenida El Caño and Highway 28. The line is routed between San Juan SP, Amelia Sect and Cataño Sect., in the Metropolitan Area. Project scope includes the following segments:

1) San Juan SP to Three-Way Tap, approximately 1.2 miles in length

2) Three-Way Tap to Amelia Sect., approximately 0.56 miles in length, and

3) Three-Way Tap to Cataño Sect., approximately 2.24 miles in length.

These line segments are supported by 119 steel and concrete single poles, with 50 structures having existing underbuilt distribution and/or third-party attachments.

TL-8200 Rebuild scope will include distribution feeders as listed below: No overlapping scope with the Distribution Rebuild Program has been identified.

Partial Feeder 1521-01

Partial Feeder 1803-01

Partial Feeder 1803-02

Partial Feeder 1803-03

Partial Feeder 1803-04

Partial Feeder 1910-01

Name	GPS Start	GPS End	# Of Poles to be Replaced	# Of Poles to be Reinforced	# Of Poles to be Reused	# Of New Poles (New Location)	Phase	Voltage Level	Construction Date
Cataño Sect. To San Juan SP	[redacted]	[redacted]	50	38	2		3	38 kV	1964
Pole (Marginal Road 165) to Amelia Substation	[redacted]	[redacted]	29						
NA10	[redacted]	[redacted]				1			
Total Poles			79	38	2	1			

Project Scope of Work

Below includes a breakdown of the replacement of the existing conductors and hardware, several structures, guys anchoring, foundations and Overhead Ground Wire (OHGW). For TL8200 see the “Proposed 428 Public Assistance Scope of Work” including Vegetation Cleaning Scope” followed by descriptions of each work type specific to the Scope of Work for this group.

FEMA PAPPG v.3.1 states, "Hazard mitigation is any sustained action taken to reduce or eliminate longterm risk to people and property from natural hazards and their effects." Subrecipient intends to amend this DSOW upon finalizing its plans to lessen or eliminate long-term risk to people and property from future natural hazards and their effects.

Proposed 428 Public Assistance Scope of Work

Catano Sect. to San Juan team Plant Structures Scope.

Line Name	Total Poles	Replace	Reinforce	Reuse	New
Line 8200	120	79	38	2	1

Transmission Line

- The existing structures, foundations, guying, insulators, conductor, and associated attachment hardware will be replaced across the entire alignment. The line will remain along its existing route and within the existing right of way (ROW).
- Optical Ground Wire (OPGW): Upgrade the OHGW and 96-strand OPGW with a new 144- strand OPGW.
    - Refer to Appendix N – TL-8200 38kV Structures List Rev. 2
    - Refer to Appendix O – TL-8200 Structures KMZ_Rev.1
- Existing concrete poles structures are to be replaced with new steel structures.
- Existing steel structures will be analyzed to ensure that the structure and its components conform to the new codes and standards applicable to the infrastructure and the design criteria.

Hardware:

- Enhanced hardware package to accommodate larger conductor size and meet higher wind loading (160 mph) requirements.
- Insulators will be replaced with polymer.

Access Roads:

- The entrance to the transmission line will be used as the main access road and is located at Road 2 km 9.2 Bayamón.
    - Refer to Appendix B for Aerial Photo Map of the access road to the transmission line.
    - Refer to Appendix B - TL-8200 Aerial Photo Map
    - Refer to Appendix M - TL-8200 Access_Paths_8200 kmz o Refer to Appendix N - TL-8200 38kV Structures List_Rev.2

Debris Removal/Staging Area:

- The types of debris expected in the process of demolition are concrete, metal scrap, domestic and construction waste, and wood. The debris will be separated and taken to an approved waste disposal facility as required by applicable federal and state regulations. Location of the facility will be informed to FEMA with supporting documentation at close-out.
- The main staging area will be located at LUMA's Palo Seco Main Warehouse (GPS Coordinates: [redacted]). An additional staging area will be located at Cataño Sect. Substation (GPS Coordinates: [redacted]) as per Appendix K - TL8200 Staging Area Rev2.The ROW inside the premises of the TL8200 will serve as an assembly point for all the materials to be installed.
    - Refer to Appendix K for TL-8200 Staging Area Rev.2

Hazardous Material:

- The possible hazardous materials that can be found in the transmission line are Polychlorinated Biphenyls (PCBs), Lead, Sulfur Hexafluoride (SF6) Gas, Oil from the transformer and breakers, chemicals used for construction fuel, sealants, and other chemical wastes typical of a construction site. These hazardous materials will be handled and disposed of according to the applicable federal and state regulations.

- These products and their residues will be stored in special covered areas for disposal by an authorized company and provided with temporary spill controls until collected. All chemical containers will be tightly sealed and stored when in use. Excess chemicals will not be discharged to the storm sewer system, but properly disposed of, according to the manufacturer's instructions.

- Transformers and pole disposal will be handled according to the applicable federal and state regulations. LUMA will provide actual disposal locations and quantities at close-out.

- The removal of the transformers will require evidence or testing of the existing oil for PCB levels. All PCB-containing materials will be handled and disposed of as per state and federal environmental regulations.

Water crossing/wetlands:

- The eastern portion of the L8200 corridor is in a highly developed urban, commercial, and industrial setting, while the western portion is found in wetlands associated mostly with a large lake. A total of two wetlands sites (Site 1 and Site 2) were specifically evaluated to verify if the proposed construction work could affect any of these locations. In Site 1, two electrical poles were found in a small (< 1/10 acre) ponded area that has been colonized by hydric plant species. Work associated with these structures should be performed from the dirt road. If there is a need to encroach into the ponded area to perform construction work, this activity may require a Nationwide permit from the USACE. Site 2 is located in a private parcel next to PR-22. These herbaceous wetlands are separated from the expressway by a cyclone fence and an upland vegetated shoulder that is approximately 11-m wide.

    - Refer to Appendix H for TL-8200 Wetland Study

Ground Disturbance:

- Ground disturbance is based on the installation of temporary construction matting at all structures, encompassing an area of 50 ft by 50 ft around the structures and a 16 ft wide access road.

    - Refer to Appendix L – TL-8200 Routes of Structure Access Map
    - Refer to Appendix M - TL-8200 Access_Paths_8200 kmz
    - Refer to Appendix N - TL-8200 38kV Structures List_Rev.2

Fill, gravel, sand, etc.:

- Fill, Gravel, and Sand materials will be obtained from an approved supplier.

    - List of Equipment to be used:

- Skid Steer, Excavator, Dump trucks, Manlifts, 120-ton Motor Crane, Boom Trucks, 45-ton Crane, Zoom Boom, Air compressor, Truck Digger, Water truck, Pump Truck, Concrete Vibrator, Oil Tanker, Filtering Machine, and Flatbed platform.

- Vegetation will be removed utilizing a machete, chainsaw, electric pruner, telescopic pole pruner, bucket truck, and/or chipper.

- All equipment used will comply with Tier 4 EPA Emission Standard, if available.

Specific List of Permits Required:

- Environmental Compliance Determination (DEA) from Oficina de Gerencia de Permisos (OGPe)
- Department of Transportation (DTOP) Endorsement
- Excavation and Demolition Notification in the Department of Transportation and Public Works Agency (DTOP)
- Construction Permit (OGPe)
- Guaynabo Municipality Notifications.
- Cataño Municipality Notifications

- San Juan Municipality Notifications
- Bayamón Municipality Notifications
- Hazardous and Non-Hazardous Waste Disposal Permit EQB/DPNR
- Erosion Control and Sedimentation Prevention Plan (Plan CES) - EQB/DPNR
- Departamento de Recursos Naturales-DRNA

LUMA will provide proof of all permits as a Condition of FEMA Record of Environmental Considerations.

Proposed 428 Program Scope of Work

The transmission system's main objective is to provide efficient and reliable interconnection of generation sources with the load centers distributed throughout the island. LUMA Transmission Grid connects Power Generation Plants, Transmission Centers, Sectionalizers and Distribution Substations through a complex and extensive network of lines, all dependent upon one another.

It is imperative that LUMA rebuild and harden its interdependent transmission system to FEMA consensus-based codes and standards and harden to more stringent standards included in LUMA's Transmission Design Criteria Document, thereby making it more resilient to new hurricane wind loading criteria. The main goal is to reduce the vulnerability and fragility of the interconnected system and improve the resiliency of the power system transmission grid by substantially reducing the potential of future similar damage to the system, thus minimizing the risk of power loss during disaster events.

LUMA has included 428 measures in its preliminary design that meets these new, higher standards described above. These standards may include increasing the resiliency of transmission structures and hardware in higher risk exposed areas and more robust structures that can withstand higher wind speeds in vulnerable regions on the island. As part of the 428 initiatives.

Key examples of transmission 428 measures designed to increase resilience in the system include the following:

- Guying/Anchoring:
    - Additional guy wires and strength to sustain additional loads, enhancing structure stability
- Conductor:
    - Use 1000 to 1600 kcmil conductor instead of 210 to 636 kcmil to provide greater strength and resistance to wind-borne debris and will allow for the load to be shifted in emergency events without conductor damage.
    - Replacement of existing OHGW and OPGW with a new 144-strand OPGW. OPGW will not be duplicated in the IT/OT scope of work.as 428 . Adding this will allow for remote monitoring and operation of the substations providing real-time information for things such as flooding, fire, or component failure allowing for a faster and more reliable grid restoration minimizing loss of power service after a major weather event. These capabilities will reduce response time and help to prevent those issues from similar damage to the infrastructure.
- Foundations:
    - Fixed-end caisson piles designed for varying soil conditions.
    - Foundations mitigate against future structure damage from wind (160 mph) and flooding.
    - The number of poles that require concrete foundations is 80. For more information, see Appendix N – TL-8200 38kV Structures List Rev2

428 Vegetation Scope

The following is the full scope of vegetation clearing for this project that will be performed under LUMA's vegetation clearing program. As instructed by FEMA Public Assistance leadership, LUMA is submitting the full scope of vegetation clearance, for this line segment, as a § 428 cost in this DSOW. As instructed, following obligation, LUMA will submit an amendment to move the costs related to vegetation to 406 HM.

Parameters for Performing 428 Vegetation Cleaning

As a result of DR-4339-PR, vegetation surrounding T&D assets are falling onto T&D assets and interfering with the safe and reliable operation of the assets. The vegetation at present is currently causing outages when vegetation is in contact with the T&D assets. To mitigate the future damage across T&D assets and protect the 428 repairs and replacement along the T&D assets, clearing vegetation materials will be required. Scope of work is to directly reduce the potential of future, similar damages to the T&D system by clearing vegetative materials that pose an immediate threat to the power transmission lines, and identification for corrective actions related to clearing vegetation (consisting of shrubs, branches, limbs, stumps, bamboo, and? trees that are directly impacting the resilience and productivity of the power grid) applicable to the existing PREPA electrical grid within Region 1 (San Juan) and Region 3 (Bayamon) of Puerto Rico.?

The scope includes performing verification of facility/asset information and location and performing condition assessments to determine the extent and method of the vegetation work required. The vendor's assessment is reviewed by an arborist and data analyst that conduct a site visit and walk the feeder in order to validate and certify the vendor's assessment. The assessment provides the most appropriate method of remediation, preparing work orders for executing the necessary work, by ways of tree felling, mechanical vegetation remediation, vegetative debris disposal via chipping, mulching, hauling, and recycling where applicable. For this project version, LUMA will not construct access roads. If the work to be done is not adjacent to an existing road, our contractor tree crews will minimize environmental disturbance by utilizing vegetation crews hiking by foot in and out of our existing easement.

Regulation 7282 requires that only shrubs and plants (no trees) be planted within the Easement under power lines. Climbing plants and vines, as well as bamboo, are prohibited from being planted within an easement. The branches of trees planted outside the easement must not obstruct free passage of the power lines. The National Electrical Safety Code (NESC) and LUMA's Vegetation Management Plan establish the minimum required distances, both vertical and horizontal, between an energized conductor or device and any structure, building, or surface. Vegetation clearing will be restricted to removing any vegetation that interferes with these clearances. For power transmission lines at 38kV, NESC and LUMA's Vegetation Management Plan defines the safety clearance limits as 12 feet. By law, any trees, shrubs, or plants planted in violation of Regulation 7282 may be uprooted, removed, or cut down in accordance with the provisions of Regulation 7282 – for both compatible and incompatible species.

For 38 kV transmission lines, all Incompatible vegetation species will be cleared from the full width of the safety clearance limit or at the certified easement width, whichever is wider. Compatible vegetation species will be cleared in compliance with NESC, LUMA's Vegetation Management, and Regulation 7282 which means that any vegetation species with the potential to encroach within 12 feet of the conductors at full size will be removed. Easement clearing widths for the 38 kV Transmission lines safety limits is 12 feet and all certified easement widths for 38kV from LUMA Land Records office will be used for clearing.

Industry standard practices will determine how the work will be performed. A healthy tree is less likely to fall over in a storm and damage overhead lines; therefore, vegetation will be pruned according to ANSI A300 (Part 1) – 2017 Tree, Shrub, and Other Woody Plant Management – Standard Practices (Pruning). These ANSI A300 Standard Practices are outlined within Appendix U – ANSI 300 – Pruning Standards which including tree inspection, tools and equipment, pruning cuts, pruning objectives, pruning types, specialty pruning, palm pruning, and utility pruning standard practices. Vegetation that is improperly pruned could become susceptible to disease and decay, resulting in a hazard to both the line and public safety. ANSI A300 standards are intended as guides for federal, state, municipal and private authorities including property owners, property managers, and utilities in the drafting of their maintenance specifications; it was developed by Tree Care Industry Association and maintained by a consensus of various industry stakeholders through periodically reviewing and updating the guidelines. These standards provide guidance on how and where to prune vegetation to achieve clearances and maintain a healthy plant. In all cases, Subrecipient's authorized representative's vegetation clearing contractors will be required to perform clearing activities in a manner consistent with ANSI A300, NESC, and Regulation 7282 alignment with Resolution 4987, Organic Law 83 (amended version), Communication 12-02, and LUMA's Vegetation Management Plan establishing standard Distribution easement widths.

Scope of Work Inside Easement-Compatible Species

Compatible vegetation species will be cleared consistent with the distances identified in NESC, LUMA's Vegetation Management Plan, and Regulation 7282, which means that any species with the potential to encroach within 12 feet of the conductors at full size will be removed using the same methods discussed above. Even though the distances identified in NESC and Regulation 7282 are vertical clearances, Compatible Species encroaching on the conductors from any direction can pose a hazard to the line. Therefore, the 12-foot clearance is being applied to both vertical and horizontal clearances of the conductor.

In rare cases where Subrecipient's authorized representative encounters significant resistance from landowners or stakeholders to remediate vegetation, Subrecipient's authorized representative will work with landowners or stakeholders to determine if Incompatible and Compatible Species can be pruned to mitigate the hazard to the lines instead of being completely removed.

Scope of Work Inside Easement – Incompatible Species

For the power transmission lines, all Incompatible Species will be cleared from the full width of the Easement. "Clearing" in this context includes the following activities: tree removal, severing of vines, cutting, and vegetation mastication.?? The following clearing methods will be utilized:

Tree removal: Qualified line clearance crews will work at ground level, climb trees from ground level, or use aerial platforms to remove the portion of the tree that is above ground, leaving the stump in place.

Severing of vines: Vines will be severed by qualified line clearance crews at the base with an airgap created between the root system

and the portion of the vine climbing on the structure. The upper portion of the vine remains attached and is not removed.?

Cutting: Cutting typically involves the removal of small diameter species by hand. Qualified line clearance crews will work at ground level, climb trees from ground level, or use aerial platforms to remove vegetation.

Vegetation mastication: also known as mulching, slash-busting, or brush-cutting, involves technique for reducing the size of vegetation and downed material in forests. It involves grinding, shredding, or chopping vegetation into smaller pieces, which are then left on the site as mulch.

Scope of Work Outside Easement – Species Growing into the Easement?

There is the potential for vegetation outside or along the boundary of the Easement to interfere with the operation of power transmission lines. Appropriate clearances around the conductors must be achieved to protect the lines from future damage. For 38kV Transmission lines, Subrecipient's authorized representative has established a clearance distance of 12 feet from all conductors. This distance is consistent with the vertical distance established in NESC, LUMA's Vegetation Management Plan, and Regulation 7282. If there are species encroaching on the 12-foot clearance outside or along the boundary of the easement, these species will be pruned to obtain at least 12 feet of clearance from the conductors at the time clearance work occurs. In cases where following ANSI A300 best practices require clearance beyond 12 feet, the maximum distance cleared will not exceed 15 feet. Diagrams illustrating these clearing distances are provided as attachments within Grants Portal.

Tree pruning: Qualified personnel work from an aerial platform or while climbing within a crown of trees to prune the tree. All pruning work wounds the tree. Done poorly, pruning can result in an exaggerated regrowth response by adversely altering tree architecture and increasing exposure to decay organisms that can weaken the tree. These adverse consequences increase the likelihood of tree-initiated faults causing system interruptions and customer outages. Proper arboriculture techniques will be utilized. The following clearing methods will be utilized:

Tree removal: Qualified line clearance crews work at ground level or on aerial platforms to remove the portion of the tree that is above ground, leaving the stump in place. Severing of vines: Vines will be severed at the base with an airgap created between the root system and the portion of the vine climbing on the structure. Vines are severed and treated by a qualified worker at ground level. The upper portion of the vine remains attached and is not removed.

Cutting: Cutting typically involves the removal of small diameter Incompatible Species by hand.

Vegetation mastication: also known as mulching, slash-busting, or brush-cutting, involves technique for reducing the size of vegetation and downed material in forests. It involves grinding, shredding, or chopping vegetation into smaller pieces, which are then left on the site as mulch.

Project Estimate

The estimated costs (Class 3 Accuracy +/-30%) to complete the project are captured in the tables below. The total of the line Rebuild combined with the Telecom and Vegetation Cleaning scopes amounts to $24,915,978.46

The Lodging & per Diem Line item combining scopes do not equal combining execution timelines as the work is done by different crews.

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 costs for the mitigation of potential known risks.

- Refer to Appendix G - TL-8200 Detailed Cost Estimate Power_06.04.2025
- Refer to Appendix S - TL-8200 Detailed Cost Estimate Telecom_05.30.2025
- Refer to Appendix T - TL-8200 Detailed Cost Estimate Vegetation_05.30.2025

Power

COST ESTIMATE			
Cost Element	**428**	**406**	**PROJECT TOTAL**
PLANNING	**$1,646,064.80**	**$-**	**$1,646,064.80**

MANAGEMENT	**$845,354.84**	**$-**	**$845,354.84**
Tline 8200 - San Juan to Catano Sect	**$16,248,191.50**	**$-**	**$16,248,191.50**
GENERAL CONDITIONS	**$ 900,218.52**	**$-**	**$ 900,218.52**
COST TOTALS	**$19,639,829.66**	**$-**	**$19,639,829.66**
DEDUCTIONS	**TOTAL INSURANCE PROCEEDS RECEIVED**		**$**
FAASt ALLOCATIONS	FAAST PROJECT # 176971 - 428		$17,034,726.66
	FAAST PROJECT # 176971 – 406 HM		$-
	FAAST PROJECT # 76971 Total		**$17,034,726.66**
	FAASt A&E # 335168 - 428		$2,491,419.64
	FAASt A&E # 335168 – 406 HM		$-
	FAASt A&E # 335168 TOTAL		**$2,491,419.64**
	FAASt E&M # 673691- 428		$113,683.36
	FAASt E&M # 673691 – 406 HM		$-
	FAASt E&M # 673691 TOTAL		**$113,683.36**

Telecom

COST ESTIMATE			
Cost Element	**428**	**406**	**PROJECT TOTAL**
PLANNING	**$438,964.00**	**$-**	**$438,964.00**
MANAGEMENT	**$181,551.91**	**$-**	**$181,551.91**
Tline 8200 San Juan to Catano	**$4,048,154.60**	**$-**	**$4,048,154.60**
GENERAL CONDITIONS	**$ 173,619.60**	**$-**	**$ 173,619.60**
COST TOTALS	**$4,842,289.88**	**$-**	**$4,842,289.88**
DEDUCTIONS	**TOTAL INSURANCE PROCEEDS RECEIVED**		**$**
FAASt ALLOCATIONS	FAAST PROJECT # 176971 - 428		$4,215,053.97
	FAAST PROJECT # 176971 – 406 HM		$-
	FAAST PROJECT # 76971 Total		**$4,215,053.97**
	FAASt A&E # 335168 - 428		$620,515.91
	FAASt A&E # 335168 – 406 HM		$-

	FAASt A&E # 335168 TOTAL	**$620,515.91**
	FAASt E&M # 673691- 428	$6,720.00
	FAASt E&M # 673691 – 406 HM	$-
	FAASt E&M # 673691 TOTAL	**$6,720.00**

Vegetation, refer to project note 3

Project	Line	LUMA Miles	LUMA Cost Per Mile 6/26/2025	% Vegetation in feeder	Buffer acceptance	Total percentange	PA Agreement	FEMA Total Cost	3% Basic Construction Services (A&E)	Total Project Cost without A&E
176971	8200	4	$216,929.46	30.49%	10%	33.54%	50.0%	$433,858.92	$13,015.77	$420,843.15

Work To Be Completed (WTBC): $24,915,978.46

A&E Deduction (Global A&E FAASt 335168): - $3,124,951.32

E&M Deduction (Global E&M FAASt 673691): -$120,403.36

Project Total Cost: $21,670,623.78

Project Notes:

1. Refer to detailed SOW provided in document "176971-DR4339PR DSOW TL 8200 San Juan SP to Catano Rev 9 2025-06-13 19_46.pdf"
2. Refer to detailed cost estimate provided in document "TLine 8200 San Juan to Cataño FEMA Presentation Telecom Estimate 2025-05-30 (Rev 1 - Full 428).xlsx" and "LPCE TLine 8200 San Juan to Cataño 2025-05-30 (Full 428) (Rev 5).xlsx".
3. Vegetation cost was clarified by the PA Field Leadership. The cost was modified accordingly. Refer to the labeled document: SP176971 - DR4339PR - Vegetation Cost Clarification (updated 07.03.2025).
4. This project is part of Donor FAASt 136271 – MEPA078 Puerto Rico Electrical Power Authority (PREPA) Island Wide FAASt Project 136271.
5. Architectural and Engineering (A&E) costs are deducted given previously obligated Global A&E Project for the subject FAASt PREPA work (see project: 335168 - FAASt A&E PREPA).
6. Equipment and material costs included in this project will be reduced from this project and obligated under FAASt Project #673691, Equipment and Materials.
7. For Attachments refer to:
    - 176971-DR4339PR-APPENDIX A – TL-8200 Approved Supplier List
    - 176971-DR4339PR-APPENDIX B – TL-8200 Aerial Photo Map
    - 176971-DR4339PR-APPENDIX C – TL-8200 Engineering Design
    - 176971-DR4339PR-APPENDIX D – TL-8200 FEMA EHP Doc Boring
    - 176971-DR4339PR-APPENDIX E – TL-8200 Existing Site Plan
    - 176971-DR4339PR-APPENDIX F – Consent to Federal Funding Letter- FEMA/COR3
    - 176971-DR4339PR-APPENDIX G – TL-8200 Detailed Cost Estimate Power_06.04.2025
    - 176971-DR4339PR-APPENDIX H – TL-8200 Wetland Study

- 176971-DR4339PR-APPENDIX J – TL-8200 Soil Boring Map
- 176971-DR4339PR-APPENDIX K – TL-8200 Staging Area Rev.2
- 176971-DR4339PR-APPENDIX L – TL-8200 Routes of Structure Access Map
- 176971-DR4339PR-APPENDIX M – TL-8200 Access_Paths_8200 kmz
- 176971-DR4339PR-APPENDIX N – TL-8200 38kV Structures List_Rev.2
- 176971-DR4339PR-APPENDIX O – TL-8200 Structures kmz_Rev.1
- 176971-DR4339PR-APPENDIX P – Fill Borrow Memo 072219_signed
- 176971-DR4339PR-APPENDIX S – TL-8200 Detailed Cost Estimate Telecom_05.30.2025
- 176971-DR4339PR-APPENDIX T – TL-8200 Detailed Cost Estimate Vegetation_05.30.2025
- 176971-DR4339PR-APPENDIX U – ANSI A300 Pruning Standards TL8200

Cost estimate section:

(Total Cost Estimate - FAASt Project 136271) - **$24,915,978.46**

(A&E Deduction - FAASt Project 335168 Global A&E PREPA) - **$3,124,951.32 (negative)**

(E&M Deduction - FAASt Project 673691) - $**120,403.36 (negative)**

406 HMP Scope

It was agreed with subrecipient this project will be moved forward in Version 0, without hazard Mitigation funds. Is the responsibility from the sub-applicant complete the field assessments to establish the after and before report of clearance and the project office folder including all the expenses incurred on the project: (labor, material, workmanship, contractors and office expenses directly related to the project). The subrecipient must ensure that the work is executed with reasonable use of resources and costs, using the most cost-effective method. Once the sub-applicants complete the vegetation clearance activities, the information will be submitted to FEMA for the validation and future reimbursement of the PA 406 funds to the main FAASt.

Cost

Code	Quantity	Unit	Total Cost	Section
9001	1	Lump Sum	$24,915,978.46	Uncompleted
3510	1	Lump Sum	($3,124,951.32)	Uncompleted
9001	1	Lump Sum	($120,403.36)	Uncompleted

CRC Gross Cost	$21,670,623.78
Total 406 HMP Cost	$0.00
Total Insurance Reductions	$0.00
CRC Net Cost	$21,670,623.78
Federal Share (90.00%)	$19,503,561.41
Non-Federal Share (10.00%)	$2,167,062.37

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

10/10/2025

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.

7/2/2025

GENERAL INFORMATION

Event: DR4339-PR

Project: SP 176971

Category of Work: Cat F - Utilities

Applicant: PR Electric Power Authority

Event Type: Hurricane / Hurricane Maria

Cause of Loss: Wind / Wind Driven Rain

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

COMMERCIAL INSURANCE INFORMATION

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

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

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

Mapfre Praico Insurance Company (1398178000644)

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

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

Policy Limits: $300,000,000.00

RCV or ACV: Replacement Cost Value

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

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

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

Damaged Inventory (DI) #448386:

FAASt - Line 8200 - San Juan SP to Catano Sect Line

Location: Line 8200 - San Juan SP to Catano Sect Line

GPS Coordinates: [redacted]

Cause of Loss: Wind / Wind Driven Rain

Prior Obtain and Maintain Requirement:

No prior insurance requirements were found for this facility.

Reduction(s):

No insurance reduction will be applied to this project as coverage is not anticipated. An anticipated insurance reduction of $193,746,436.00 was applied to FAAST project #136271 for anticipated insurance proceeds for Hurricane Maria losses. For ease of reference, please see table of insurance allocations: "PREPA Allocation Plan – All Disasters" file.

Obtain and Maintain Requirement:

No Obtain & Maintain Requirement is being mandated for the FAASt - Line 8200 - San Juan SP to Catano Sect Line because the facility does not meet the definition of building, equipment, contents, or vehicle.

Insurance Proceeds Statement:

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

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

Standard Insurance Comments

FEMA Policy 206-086-1
PART 2: Other Insurance-Related Provisions. (Sections 312 and 406(d) of the Stafford Act)

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

1. Before FEMA approves assistance for a property, an applicant must provide FEMA with information about any actual or anticipated insurance settlement or recovery it is entitled to for that property.

2. FEMA will reduce assistance to an applicant by the amount of its actual or anticipated insurance proceeds.

3. Applicants must take reasonable efforts to recover insurance proceeds that they are entitled to receive from their insurer(s).

…

5. If an applicant has an insurance requirement from a previous event:

a. FEMA will reduce assistance by the actual or anticipated insurance proceeds, or the amount of insurance required in the previous disaster, whichever is greater.

b. FEMA will only consider insolvent insurers, legal fees, or apportionment of proceeds as described in Section VII, Part 2(A)(3) and (4) when the applicant's anticipated or actual insurance proceeds are higher than the amount of insurance required in the previous disaster.

Jorge Parrilla, PA Insurance Specialist

CRC Atlantic, Guaynabo, PR

O&M Requirements

There are no Obtain and Maintain Requirements on **FAASt –38kV Line 8200 - San Juan SP to Catano Sect Line (Transmission)**.

406 Mitigation

There is no additional mitigation information on **FAASt –38kV Line 8200 - San Juan SP to Catano Sect Line (Transmission)**.

Environmental Historical Preservation

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

EHP Conditions

- Any change to the approved scope of work will require re-evaluation for compliance with NEPA and other Laws and Executive Orders.
- This review does not address all federal, state and local requirements. Acceptance of federal funding requires recipient to comply with all federal, state and local laws. Failure to obtain all appropriate federal, state and local environmental permits and clearances may jeopardize funding.
- If ground disturbing activities occur during construction, applicant will monitor ground disturbance and if any potential archaeological resources are discovered, will immediately cease construction in that area and notify the State and FEMA.
- 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.
- 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.
- Terms & Conditions 1. Endangered Species Act (ESA) Conditions for the Puerto Rican Boa (Chilabothrus inornatus) for TL 8200. Part 1 1. Inform all project personnel about the potential presence of the PR and VI boa in areas where the proposed work will be conducted and provide training session 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. 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 movements, the boundaries of the project area and areas to be excluded and protected will be clearly marked in the project plan and in the field in order to avoid further habitat degradation outside of the AA. 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), a 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 AA. 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 harm's way as the result of the habitat disturbance (see #6). 4. For VI boas, once the 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).
- Terms & Conditions 1. Endangered Species Act (ESA) Conditions for the Puerto Rican Boa (Chilabothrus inornatus) for TL 8200. Part 2 6. If any PR or VI boa (dead or alive) is found within the AA and on harm's way, the action will stop at that area and information recorded (see #5). If a PR or VI boa is located within harm's way, all attempts will be made to immediately safely capture the animal (refer to T&C 2). PR boas will be safely captured and relocated at least 1km within suitable habitat (forested) 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 and designated personnel and will not harm or injure the captured boa. If any VI boa is found, do not relocate. Capture and temporary hold the individual accordingly (refer to T&C 2). Contact the Puerto Rico Department of Natural and Environmental Resources (PRDNER) Rangers immediately if in Puerto Rico (787-724-5700, 787-230-5550, 787-771-1124) or contact the USVI Department of Planning and Natural Resources (DPNR), Division

of Wildlife, immediately if in St. Thomas (340-775-6762, 340-773-1082). The Action may continue at other work sites within the AA where no PR and VI boas have been found. If immediate relocation of PR boa by the project biologist or designated personnel is not an option, project related activities at this area will stop until the boa moves out of harm's way on its own or call the Puerto Rico Department of Natural and Environmental Resources (PRDNER) Rangers for safe capture and relocation of the animal (787-724-5700, 787-230-5550, 787-771-1124). The potential use of the PRDNER staff for these purposes should be coordinated with them at least 30 days before the project starts. If a PR boa is captured by the PRDNER, record the name of the PRDNER staff and information on where the PR boa will be relocated. 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 AA. 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 (refer to T&C 2). If not possible, the animal will be left alone until it leaves the vehicle or machine by itself. 8. 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 farthest away 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.

- Terms & Conditions 1. Endangered Species Act (ESA) Conditions for the Puerto Rican Boa (Chilabothrus inornatus) for TL 8200. Part 3 9. In the event a PR boa and VI boa is found dead within the project footprint, the Federal Agency and the Recipient must contact the Service to appropriately dispose the animal. 10. Should the forms of take reach the amount of exempted take (Table 6-1) during the Action, the Federal Agency and the Recipient shall terminate the authorized activities and contact the Service within 24 hours in order to reinitiate consultation. The Service and the Federal Agency and the Recipient will re-consult to determine whether authorized activities should continue as proposed and whether modifications or stipulations are warranted. 11. 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 in order to reinitiate consultation. The Service and the Federal Agency and the Recipient will re-consult to determine whether authorized activities should continue as proposed and whether modifications or stipulations are warranted 12. The contact information for the Service: all reporting must be submitted at caribbean_es@fws.govmailto:caribbean_es@fws.gov or via phone at (786) 244-0081.
- Terms & Conditions 2. Endangered Species Act (ESA) Conditions for the Puerto Rican Boa (Chilabothrus inornatus) for TL 8200. The Service requires the Federal Agency to follow standard procedures while capturing, handling, transporting, temporary holding, relocating and tracking VI boas in order to minimize the risk of injury and mortality to the species. A. The Federal Agency and the Recipient shall identify who will capture PR or VI boas and assess and determine if a boa has been injured as a result of project activities, and if it is in need of veterinary care or rehabilitation. If an injured PR boa or VI boa is in need of veterinary care or rehabilitation, the Federal Agency and the Recipient shall immediately seek veterinary care for the animal and inform the Service within 24 hours of the event. B. The Federal Agency must ensure that any permitted individuals, contractor, recipients or cooperators follow proper procedures and methods for capturing, handling, temporary holding, and relocating of the PR and VI boa. The following procedures will be followed: i. All PR and VI boas shall be handled safely to avoid injury. The preferred method of capture is by hand, although a snake hook or stick may also be used if snake is uncatchable by hand, or in order to help move the snake into a safer position for capture. ii. All PR and VI boas may be temporarily held during and/or relocation purposes. Boas will be handled as little as possible, and they shall not be kept for more than three days since the day of capture. Temporary holding of boas will be in burlap bags (1 boa per bag) and/or secured containers, which must be placed in cool dry areas that are not in direct sunlight or extreme temperatures. Burlap bags shall be placed inside a container with other boas each inside their own burlap bag and labeled properly. All containers shall be well-ventilated and with a secure lid to avoid boas from escaping. iii. The Federal Agency and the Recipient and/or contractors shall obtain all necessary permit(s) from the corresponding State agency for capturing, handling, transporting, temporary keeping, and relocating PR and VI boas.
- Monitoring and Reporting Requirements. Endangered Species Act (ESA) Conditions for the Puerto Rican Boa (Chilabothrus inornatus) for TL 8200. M&R 1. The Federal Agency and the Recipient will ensure that incidental take levels will be minimal. A. For all PR and VI boa sightings (dead or alive), the Action Agency shall ensure that an effective monitoring and reporting method is established. Reporting shall include the following and should injury or mortality occurred during the Action, the Federal Agency and the Recipient shall contact the Service within 24 hours of the event: i. Date, time and location (latitude/longitude) of the sightings and relocation sites. ii. Size, weight and sex (if possible) of the PR and VI boa. iii. A photograph of the snake as found or after capture. iv. Description of how and what caused the take in the case of injury or death. v. Description of any additional conservation measures that may be implemented to further avoid and minimize take. M&R 2. Disposition of Dead or Injured boas A. Disposition of dead animals must be immediately coordinated with the Service for appropriate disposal of the animal. B. The Service may request some dead specimens of PR boa and all for VI boa. The Federal Agency and the Recipient shall coordinate the delivery of such specimen to the Service. C. In case of an injured boa, the Federal Agency and the Recipient must seek veterinary care for the animal and inform the Service within 24 hours of the event.
- The Applicant must provide documentation at close-out that proves completion of required Conservation Measures.
- -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. -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. -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

- Executive Order 11988 - Floodplain Conditions for TL 8200: Applicant must obtain any required permits from the Puerto Rico Permits Management Office (OGPe) prior to initiating work and comply with any conditions of the permit established by the Planning Board (JP) for constructions in floodplains. All coordination (emails, letters, documented phone calls) pertaining to these activities and compliance must be provided and maintained in the Applicant's permanent files.
- Endangered Species Act (ESA) Conditions for the Ottoschulzia rhodoxylon (Pincho Palo de Rosa) for TL 8200: -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. -Inform all project personnel about the potential presence of plant species in areas where the proposed work will be conducted. A pre-construction meeting shall be conducted to inform all project personnel about the requirement of avoiding harm to the species. An educational poster or sign with photos or illustrations of the species should be displayed at the project site. -Project boundaries, buffer zones and areas to be excluded or protected shall be clearly marked in the project plans and in the field, prior to any construction activity, including removal of vegetation and earth movement. -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. Service's point of contacts: -José 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.
- CWA Conditions for TL8200: The Applicant shall comply with one of the following conditions including any coordination (emails, letters, documented calls) pertaining to these compliance activities must be documented and maintained in the Applicant's permanent files. - Correspondence (email, letter, documented phone conversation, etc. from/with a representative from the U.S. Army Corps of Engineers (USACE) and/or State) indicating that the activity did not require a USACE/State permit authorization (at closeout); OR; - A copy of a permit authorization or compliance letter issued by the USACE/State for the specific project and scope of work. If the issued permit required that a compliance certification be submitted to the USACE following the completion of work, please provide a copy of that compliance certification as well; OR; - All permits or Pre-Construction Notification (PCN) (at closeout).

EHP Additional Info

There is no additional environmental historical preservation on **FAASt –38kV Line 8200 - San Juan SP to Catano Sect Line (Transmission)**.

Final Reviews

Final Review

Reviewed By LEFRANC-GARCIA, CARLOS L. **Reviewed On** 10/17/2025 7:09 PM PST

Review Comments

Project has been reviewed, found eligible and reasonable. Subrecipient is responsible for complying with all grants and subgrant conditions.

Recipient Review

Reviewed By Mulero, Noel **Reviewed On** 10/21/2025 6:55 PM PST

Review Comments

Recipient review completed. It was agreed with subrecipient this project will be moved forward in Version 0, without hazard Mitigation funds. FEMA PA leadership agreed that Applicant will submit an amendment to move the costs PA 406 funds related to Vegetation Clearing Program project. 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

Award Information

Version Information

Version #	Eligibility Status	Current Location	Bundle Number	Project Amount	Cost Share	Federal Share Obligated	Date Obligated
0	Pending	In Review		$15,567,361.00	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 #
0	11/5/2025	$19,503,561.41	90%	Accepted	4339DRPRP00113731

Department of Homeland Security
Federal Emergency Management Agency

v0

General Info

Project #	180052 **P/W #** 11453	**Project Type**	Specialized
Project Category	F - Utilities	**Applicant**	PR Electric Power Authority (000-UA2QU-00)
Project Title	FAASt Ponce TC to Salinas Urbano TC-38kV 100 & 200 (Transmission)	**Event**	4339DR-PR (4339DR)
Project Size	Large	**Declaration Date**	9/20/2017
Activity Completion Date	9/20/2027	**Incident Start Date**	9/17/2017
		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 #448329; FAASt Ponce TC to Jobos TC - 100 & 200 (Transmission)

General Facility Information:

- **Facility Type:** Power generation, transmission, and distribution facilities
- **Facility:** Ponce TC to Jobos TC
- **Facility Description:** Line 100/200 are two 38-kV transmission lines that runs parallel from each other from Ponce TC to Jobos TC mostly on double-circuit structures. Both lines consist of direct embedded concrete poles, direct embedded steel poles, and direct embedded wood structures. These lines have relatively good access as they travel through a lot of urban residential areas near the southern coast of Puerto Rico. Many structures on this segment support telecommunication and distribution wires.
- **Approx. Year Built:** 1980
- **Start GPS Latitude/Longitude:** [redacted]
- **End GPS Latitude/Longitude:** [redacted]

Final Scope

448329 **FAASt Ponce TC to Jobos TC - 100 & 200 (Transmission)**

Introduction

The purpose of this document is to submit the Detailed Scope of Work (SOW) to COR3 and FEMA project 180052 TL 100, 200 Salinas Urbano TC to Ponce TC Project under DR-4339-PR Public Assistance. The document provides a detailed description of the project including the 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.

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

Facilities Description

Transmission lines 100 and 200 are 40.7 miles of overhead transmission line from Ponce TC to Salinas TC. Specific assets along this line include structures (including their foundations), framing and insulators, load break switches (manual and automated), conductors, guy wires, anchoring, and grounding assemblies.

Lines 100 and 200 are 38-kV transmission lines that run parallel to each other from Ponce TC to Salinas TC, mostly on double-circuit structures. Both lines consist of direct-embedded concrete poles, direct[1]embedded steel poles, and direct-embedded wood structures. Many of these structures support telecommunication and distribution wires and are leaning to the north (away from the coast).

There is paved access to these lines as they travel through many urban residential areas near the southern coast of Puerto Rico. Both lines go through Ponce, Juana Diaz, Santa Isabel, and Salinas Municipalities.

Facilities List

The line segments are supported by 1,069 structures consisting of wood, steel, and concrete poles structures, having existing underbuilt distribution and/or third-party attachments. The following table identifies the GPS location of the line segments.

Line Segment	Line Number	GPS Start	GPS End	Voltage (kV)
Ponce TC to Aguilita	100 & 200	[redacted]	[redacted]	38
Aguilita to Salinas Urbanos	100 & 200	[redacted]	[redacted]	38

Project Scope of Work

The scope of work along transmission lines 100 and 200 from Ponce TC to Salinas TC consists of the replacement of the existing conductors and hardware, several structures, guy wires, anchors, foundations, and Overhead Ground Wire (OHGW). Below are descriptions of the eligible “Proposed 428 Public Assistance Scope of Work” and “Vegetation Cleaning Scope” followed by descriptions of each work type.

FEMA PAPPG v.3.1 states, "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 intends to amend this DSOW upon finalizing its plans to lessen or eliminate long-term risk to people and property from future natural hazards and their effects. ** Not applicable at this time **

The proposed restoration includes the repair of eligible disaster damage up to required codes and standards, and the request to upgrade undamaged infrastructure to fully effectuate the function of the system to an approved industry standard. The detailed Scope of Work consists of the repair, removal, and replacement of the following infrastructure to restore this facility to codes and standards:

Line Segment	Damage Number	# of Poles to Replace	# of Poles to Reinforce	# of Poles to Reuse	# of New Poles to be added
Ponce TC to Aguilita	448329	294	0	0	0
Aguilita to Salinas Urbanos	448329	775	0	0	0

Proposed 428 Public Assistance Scope of Work

Transmission Line

1. The existing structures, foundations, guy wires, anchors, insulators, and associated attachment hardware will be replaced. The line will remain along its existing route and within the existing right of way (ROW).

- All existing concrete & wood structures are to be replaced with new, 12-sided, steel structures. All existing concrete & wood structures are to be replaced with new, 12- sided, steel structures.
- Remove 1,069 concrete/wood structures.
- Install 1,069 new 12-sided steel structures.

2. Existing steel structures shall be analyzed to ensure that the structure and its components conform to the new codes and standards applicable to the infrastructure and the design criteria.

3. The replacement of individual structures and components shall follow the design methodology per the Project Design Criteria and shall conform to new codes and standards applicable to the infrastructure.

4. The Preliminary Engineering Design has found that all structures need to be replaced, all existing steel structures shall be analyzed during the Design Phase to validate compliance with the Latest LUMA Design Criteria Document (DCD), and to ensure that the structures and their components conform to the new codes and standards applicable to the infrastructure.

5. Enhanced hardware package to accommodate larger conductor size and meet higher wind loading (160 mph) requirements, mitigating against damage from high winds.

- Install 1,069 for each hardware package.

6. Insulators will be replaced with polymer.

- Install 5,826 each insulator.

7. Replace the existing conductor with new 210 to 636 kcmil.

8. Install 201 wire-miles of conductor

9. Optical Ground Wire (OPGW): Replace existing OHGW with a new 144-strand OPGW.

10. Foundations:

- Fixed-end caisson piles designed for varying soil conditions.
- Foundations mitigate against future structure damage from wind (160 mph) and flooding.
- The number of poles that require concrete foundations is 153.

Concrete Foundations Dimensions		
Width: 5.5 ft	Length: 5.5 ft	Depth: 12 ft

428 Vegetation Clearing

The following is the full scope of vegetation clearing for this project that will be performed under LUMA's vegetation clearing program. As instructed by FEMA Public Assistance leadership, LUMA is submitting the full scope of vegetation clearance for this line segment as a § 428 cost in this DSOW. As instructed, following obligation, LUMA will submit an amendment to move the costs related to vegetation to 406 HM

Parameters for Performing 428 Vegetation Cleaning

The scope includes performing verification of facility/asset information and location, and performing condition assessments to determine the extent and method of the vegetation work required. The vendor's assessment is reviewed by an arborist and data analyst that will conduct a site visit and walk the feeder in order to validate and certify the vendor's assessment. The assessment provides the most appropriate method of remediation, preparing work orders for executing the necessary work, by ways of tree felling, mechanical vegetation remediation, vegetative debris disposal via chipping, mulching, hauling, and recycling where applicable. For this project version, LUMA will not construct access roads. If the work to be done is not adjacent to an existing road, our contractor tree crews will minimize environmental disturbance by utilizing vegetation crews hiking by foot in and out of our existing easement.

Regulation 7282 requires that only shrubs and plants (no trees) be planted within the Easement under power lines. Climbing plants and vines, as well as bamboo, are prohibited from being planted within an easement. The branches of trees planted outside the easement must not obstruct free passage of the power lines. The National Electrical Safety Code (NESC) and LUMA's Vegetation Management Plan establish the minimum required distances, both vertical and horizontal, between an energized conductor or device and any structure, building, or surface. Vegetation clearing will be restricted to removing any vegetation that interferes with these clearances. For power transmission lines at 38kV, NESC defines the safety clearance limits as 12 feet. By law, any trees, shrubs, or plants planted in violation of Regulation 7282 may be uprooted, removed, or cut down in accordance with the provisions of Regulation 7282 – for both compatible and incompatible species.

For 38-kV transmission lines, incompatible vegetation species will be cleared from the full width of the safety clearance limit or at the certified easement width, whichever is wider. Compatible vegetation species will be cleared in compliance with NESC, LUMA's Vegetation Management, and Regulation 7282, which means that any vegetation species with the potential to encroach within 12 feet of the conductors at full size will be removed. Easement clearing widths for the 38kV Transmission lines safety limits is 12 feet and all certified easement widths for 38-kV from LUMA Land Records office will be used for clearing.

Industry standard practices will determine how the work will be performed. A healthy tree is less likely to fall over in a storm and damage overhead lines; therefore, vegetation will be pruned according to ANSI A300 (Part 1) – 2017 Tree, Shrub, and Other Woody Plant Management – Standard Practices (Pruning). These ANSI A300 Standard Practices are outlined within Appendix N (ANSI 300 – Pruning Standards), including tree inspection, tools and

equipment, pruning cuts, pruning objectives, pruning types, specialty pruning, palm pruning, and utility pruning standard practices. Vegetation that is improperly pruned could become susceptible to disease and decay, resulting in a hazard to both the line and public safety. ANSI A300 standards are intended as guides for federal, state, municipal and private authorities including property owners, property managers, and utilities in the drafting of their maintenance specifications. It was developed by Tree Care Industry Association and maintained by a consensus of various industry stakeholders through periodically reviewing and updating the guidelines. These standards provide guidance on how and where to prune vegetation to achieve clearances and maintain a healthy plant. In all cases, Subrecipient's authorized representative's vegetation clearing contractors will be required to perform clearing activities in a manner consistent with ANSI A300, NESC, and Regulation 7282 alignment with Resolution 4987, Organic Law 83 (amended version), Communication 12-02, and LUMA's Vegetation Management Plan establishing standard Distribution easement widths.

Scope of Work Inside Easement-Compatible Species

Compatible vegetation species will be cleared consistent with the distances identified in NESC and Regulation 7282, which means that any species with the potential to encroach within 12 feet of the conductors at full size will be removed using the same methods discussed above. Even though the distances identified in NESC and Regulation 7282 are vertical clearances, Compatible Species encroaching on the conductors from any direction can pose a hazard to the line. Therefore, the 12-foot clearance is being applied to both vertical and horizontal clearances of the conductor.

In rare cases where LUMA encounters resistance from landowners or stakeholders to remediate vegetation, LUMA will work with landowners or stakeholders to determine if Incompatible and Compatible Species can be pruned to mitigate the hazard to the lines instead of being completely removed.

Scope of Work Inside Easement – Incompatible Species

For the power transmission lines, Incompatible Species will be cleared from the full width of the Easement. "Clearing" in this context includes the following activities: tree removal, severing of vines, cutting, and vegetation mastication. The following clearing methods will be utilized:

Tree removal: Qualified line clearance crews will work at ground level, climb trees from ground level, or use aerial platforms to remove the portion of the tree that is above ground, leaving the stump in place.

Severing of vines: Vines will be severed by qualified line clearance crews at the base with an airgap created between the root system and the portion of the vine climbing on the structure. The upper portion of the vine remains attached and is not removed

Cutting: Cutting typically involves the removal of small diameter species by hand. Qualified line clearance crews will work at ground level, climb trees from ground level, or use aerial platforms to remove vegetation.

Vegetation mastication: also known as mulching, slash-busting, or brush-cutting, involves technique for reducing the size of vegetation and downed material in forests. It involves grinding, shredding, or chopping vegetation into smaller pieces, which are then left on the site as mulch.

Scope of Work Outside Easement – Species Growing into the Easement?

There is the potential for vegetation outside or along the boundary of the Easement to interfere with the operation of power transmission lines. Appropriate clearances around the conductors must be achieved to protect the lines from future damage. For 38kV Transmission lines, LUMA has established a clearance distance of 12 feet from all conductors. This distance is consistent with the vertical distance established in NESC and Regulation 7282. If there are species encroaching on the 12-foot clearance outside or along the boundary of the easement, these species will be pruned to obtain at least 12 feet of clearance from the conductors at the time clearance work occurs. In cases where following ANSI A300 best practices require clearance beyond 12 feet, the maximum distance cleared will not exceed 15 feet. Diagrams illustrating these clearing distances are provided as attachments in Grants Portal. The clearing methods described above will be utilized (tree pruning, tree removal, cutting, vegetation mastication).

Tree removal: Qualified line clearance crews will work at ground level, climb trees from ground level, or use aerial platforms to remove the portion of the tree that is above ground, leaving the stump in place.

Severing of vines: Vines will be severed by qualified line clearance crews at the base with an airgap created between the root system and the portion of the vine climbing on the structure. The upper portion of the vine remains attached and is not removed.

Cutting: Cutting typically involves the removal of small diameter species by hand. Qualified line clearance crews will work at ground level, climb trees from ground level, or use aerial platforms to remove vegetation.

Vegetation mastication: also known as mulching, slash-busting, or brush-cutting, involves technique for reducing the size of vegetation and downed material in forests. It involves grinding, shredding, or chopping vegetation into smaller pieces, which are then left on the site as mulch.

Scope Notes:

1. Equipment to be used includes Skid Steer, Excavator, Hydrovacs, 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 listed above will comply with Tier 4 EPA Emission Standards.

2. Fill, gravel, and sand materials will be obtained from a preferred vendor as referenced in the Approved Supplier List Directory PR. LUMA will retain and make available for review the documentation provided by material suppliers.

3. The construction of access roads is not required for this scope of work. All work for this program will be performed within the current electrical right-of-way for each of the municipalities. Poles are near to and accessible from the roads. (Refer to Appendix H (TL 100, 200 Salinas Urbano TC to Ponce TC Structure Access Road Map).

4. Staging areas have been identified and submitted earlier with the CRDR Phase 1 Level 2 review

5. The type of debris disposal that will be removed during the demolition process are insulated and bare aluminum and copper cables, PVC conduits, concrete, metal scrap, construction waste, wood, etc. The debris will be separated and taken to an authorized waste disposal facility in compliance with applicable federal, state and local laws and regulations.

6. Prior to the start of any demolition activities, inspections will be conducted by a trained and certified contractor for the presence of lead-based paint-containing materials.

7. Hazardous materials in the project include PCBs, oil from the transformer and breakers, and chemicals used for construction fuel. Any hazardous materials will be handled and disposed of according to applicable state and federal regulations.

8. Transformers and pole disposal will be handled in accordance with all applicable state and federal regulations.

9. The transformer removal will require testing of the existing oil for PCB levels, drain oil, and delivery to the approved waste disposal site, as per applicable environmental regulations.

10. Soil testing will be required for the project design. The boring plan was previously submitted in March 2023

11. A geotechnical report will be conducted to determine if soil stabilization measures are required.

12. . Ground disturbance will occur for the following: ground grid, foundation, new pole installations and the installation of temporary construction matting at all structures in the ROW, encompassing an area of 50 ft by 50 ft around the structures and a 16 ft wide access road. Refer to Appendix H (TL 100, 200 Salinas Urbano TC to Ponce TC Structure Access Road Map).

13. The brushing of vegetation will be limited to a 10 ft radius that surrounds the surface of the pole without exceeding the width of the easement. The vegetation removal process will be managed according to applicable federal and state regulations.

14. Required temporary erosion control and protection measures to mitigate erosion or environmental risk will be installed as required by local and federal regulatory agencies prior to construction activities.

15. Specific List of Permits Required:

i. Environmental Compliance Determination in Oficina de Gerencia de Permisos (OGPe).

ii. Department of Transportation (DTOP) Endorsement.

iii. Consolidated General Permit – Department of Natural and Environmental Resources (DNER).

iv. Salinas, Santa Isabel, Juana Diaz and Ponce Municipality Notifications.

v. Excavation and Demolition Notification in the Department of Transportation and Public Works Agency (DTOP).

vi. Lead Permit - DNER and Hazardous Waste Disposal Permit – DNER.

Project Estimate

The estimated costs (compliant with Class 3 Accuracy +/-30%) to complete the project are captured in the table(s) below. The total of the line rebuild combined with the telecom and vegetation clearing -amounts to $92,303,101.82. The cost estimates were 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. For more details refer to LUMA LPCEs referenced below.

Refer to Appendix E (LT 100, 200 Ponce TC to Jobos TC Detailed Cost Estimate 2025-05-14)

COST ESTIMATE			
Cost Element	**428**	**406**	**PROJECT TOTAL**
PLANNING	**$4,811,176.82**	**$-**	**$4,811,176.82**

MANAGEMENT	**$1,762,517.77**	**$-**	**$1,762,517.77**
T line 100 and 200 Ponce TC to Salinas Urbano	**$62,216,693.12**	**$-**	**$62,216,693.12**
GENERAL CONDITIONS	**$ 3,294,809.46**	**$-**	**$ 3,294,809.46**
COST TOTALS	**$72,085,197.17**	**$-**	**$72,085,197.17**
DEDUCTIONS	**TOTAL INSURANCE PROCEEDS RECEIVED**		**$**
FAASt ALLOCATIONS	FAAST PROJECT # 180052 - 428		$56,115,085.62
	FAAST PROJECT # 180052 – 406 HM		$-
	FAAST PROJECT # 76971 Total		**$56,115,085.62**
	FAASt A&E # 335168 - 428		$6,573,694.59
	FAASt A&E # 335168 – 406 HM		$-
	FAASt A&E # 335168 TOTAL		**$6,573,694.59**
	FAASt E&M # 673691- 428		$9,396,416.96
	FAASt E&M # 673691 – 406 HM		$-
	FAASt E&M # 673691 TOTAL		**$9,396,416.96**

Refer to Appendix F (TL 100, 200 Ponce TC to Jobos TC Detailed Tele Estimate 2025-04-30)

COST ESTIMATE			
Cost Element	**428**	**406**	**PROJECT TOTAL**
PLANNING	**$934,265.06**	**$-**	**$934,265.06**
MANAGEMENT	**$842,482.57**	**$-**	**$842,482.57**
T line 100 and 200 Ponce TC to Salinas Urbano	**$16,864,548.52**	**$-**	**$16,864,548.52**
GENERAL CONDITIONS	**$ 931,803.03**	**$-**	**$ 931,803.03**
COST TOTALS	**$19,573,099.18**	**$-**	**$19,573,099.18**
DEDUCTIONS	**TOTAL INSURANCE PROCEEDS RECEIVED**		**$**
FAASt ALLOCATIONS	FAAST PROJECT # 180052 - 428		$17,779,551.55
	FAAST PROJECT # 180052 – 406 HM		$-
	FAAST PROJECT # 76971 Total		**$17,779,551.55**
	FAASt A&E # 335168 - 428		$1,776,747.63
	FAASt A&E # 335168 – 406 HM		$-
	FAASt A&E # 335168 TOTAL		**$1,776,747.63**

	FAASt E&M # 673691- 428	$16,800.00
	FAASt E&M # 673691 – 406 HM	$-
	FAASt E&M # 673691 TOTAL	**$16,800.00**

(TL 100, 200 Ponce TC to Jobos TC Vegetation Cost Estimate

Vegetation Clearing PCE, refer document Project Note 3

Project	Line	LUMA Miles	LUMA Cost Per Mile 6/26/2025	% Vegetation in feeder	Buffer accep-tance	Total percentage	PA Agreement	FEMA Total Cost	3% Basic Construction Services (A&E)	Total Project Cost without A&E
180052	100/200	45.48	$216,929.46	5.90%	10%	6.49%	6.49%	$644,805.47	$19,344.16	$625,461.30

FEMA Cost Summary Table

Description	WTBC	A&E	E&M	Total Cost
Refer to Appendix E (LT 100, 200 Ponce TC to Jobos TC Detailed Cost Estimate 2025-05-14)	$ 72,085,197.17	$ 6,573,694.59	$ 9,396,416.96	$ 56,115,085.62
Refer to Appendix F (TL 100, 200 Ponce TC to Jobos TC Detailed Tele Estimate 2025-04-30)	$ 19,573,099.18	$ 1,776,747.63	$ 16,800.00	$ 17,779,551.55
Refer to Appendix M (TL 100, 200 Ponce TC to Jobos TC Vegetation Cost Estimate Rev.7.03.2025)	$ 644,805.47	$ 19,344.16		$ 625,461.31
Totals	**$ 92,303,101.82**	**$ 8,369,786.38**	**$ 9,413,216.96**	**$ 74,520,098.48**

Project Cost Summary, 428 Version 0:

Work to be Completed (WTBC): $ 92,303,101.82

A&E Deduction (Global A&E FAASt 335168): -$8,369,786.38

E&M Deduction (Global E&M FAASt 673691): -$9,413,216.96

Project Total: $74,520,098.48

Project Cost Estimate Notes:

1. Refer to detailed SOW provided in document labeled: “180052-DR4339-PR DSOW rev 4 Line 100-200 2025-08-15 12_32.pdf”

2. Refer to detailed Cost Estimate provided in document labeled: “LPCE TLine 100 & 200 (Seg 1+2) Ponce TC to Salinas Urbano 2025-05-14 (Rev 6) (FULL 428).xlsx” & “LPCE T-Line 100, 200 (Seg 1 + 2) Telecom Estimate From Ponce to Salinas Urbano 2025-04-30.xlsx”

3. Vegetation cost was clarified by the PA Field Leadership. The cost was modified accordingly. Refer to the labeled document: SP176913 - DR4339PR - Vegetation Cost Clarification (updated 07.03.2025)

4. 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 in the table above. The A&E project was obligated to track and account for costs 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. 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 Group 21 Automation Program FAASt 757662.

6. This project is part of Donor FAASt 136271 – MEPA078 Puerto Rico Electrical Power Authority (PREPA) Island Wide FAASt Project 136271.

7. For Attachments refer to:

- 180052-DR4339PR- Appendix A - TL 100, 200 Salinas Urbano TC to Ponce TC Approved Supplier List
- 180052-DR4339PR- Appendix B - TL 100, 200 Salinas Urbano TC to Ponce TC Aerial Photo Map
- 180052-DR4339PR- Appendix C - TL 100, 200 Salinas Urbano TC to Ponce TC Engineering Design
- 180052-DR4339PR- Appendix D - TL 100, 200 Salinas Urbano TC to Ponce TC Consent to Federal Funding Letter FEMA/COR3
- 180052-DR4339PR- Appendix E - TL 100, 200 Salinas Urbano TC to Ponce TC Detailed Cost Estimate 2025-05-14
- 180052-DR4339PR- Appendix F - TL 100, 200 Salinas Urbano TC to Ponce TC Detailed Tele Estimate 2025-04-30
- 180052-DR4339PR- Appendix G - TL 100, 200 Salinas Urbano TC to Ponce TC Wetland Study
- 180052-DR4339PR- Appendix H - TL 100, 200 Salinas Urbano TC to Ponce TC Structure Access Road Map
- 180052-DR4339PR- Appendix I - TL 100, 200 Salinas Urbano TC to Ponce TC Structures List
- 180052-DR4339PR- Appendix J - TL 100, 200 Salinas Urbano TC to Ponce TC Fill Borrow Memo - TL 100, 200 Salinas Urbano TC to Ponce TC
- 180052-DR4339PR- Appendix L - TL 100, 200 Salinas Urbano TC to Ponce TC HMP Narrative
- 180052-DR4339PR- Appendix N - TL 100, 200 Salinas Urbano TC to Ponce TC ANCI 300 Pruning Standards
- 180052-DR4339PR- Appendix M - TL 100, 200 Salinas Urbano TC to Ponce TC Vegetation Cost Estimate rev.06.23.2025

406 HMP Scope

This project came to HM queue as a Version 0 project to allow EHP to perform the Record Environmental Consideration (REC) evaluation including the boring plans to it. At this moment there is no Hazard Mitigation (HM) opportunity. HM opportunities will be evaluated on a newer version.

Cost

Code	Quantity	Unit	Total Cost	Section
9001	1	Lump Sum	$92,303,101.82	Uncompleted
9001	1	Lump Sum	($9,413,216.96)	Uncompleted
3510	1	Lump Sum	($8,369,786.38)	Uncompleted
9201	1	Lump Sum	$0.00	Completed

CRC Gross Cost	$74,520,098.48
Total 406 HMP Cost	$0.00
Total Insurance Reductions	$0.00
CRC Net Cost	$74,520,098.48
Federal Share (90.00%)	$67,068,088.64
Non-Federal Share (10.00%)	$7,452,009.84

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.

Insurance

Additional Information

10/2/2025

GENERAL INFORMATION

Event: DR4339-PR

Project: SP 180052

Category of Work: Cat F - Utilities

Applicant: PR Electric Power Authority

Event Type: Hurricane / Hurricane Maria

Cause of Loss: Wind / Wind Driven Rain

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

COMMERCIAL INSURANCE INFORMATION

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

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

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

Mapfre Praico Insurance Company (1398178000644)

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

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

Policy Limits: $300,000,000.00

RCV or ACV: Replacement Cost Value

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

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

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

Damaged Inventory (DI) #448329:

FAASt Ponce TC to Jobos TC - 100 & 200 (Transmission)

Location: Ponce TC to Jobos TC

GPS Coordinates: [redacted]

Cause of Loss: Wind / Wind Driven Rain

Prior Obtain and Maintain Requirement:

No prior insurance requirements were found for this facility.

Reduction(s):

No insurance reduction will be applied to this project as coverage is not anticipated. An anticipated insurance reduction of $193,746,436.00 was applied to FAAST project #136271 for anticipated insurance proceeds for Hurricane Maria losses. For ease of reference, please see table of insurance allocations: "PREPA Allocation Plan – All Disasters" file.

Obtain and Maintain Requirement:

No Obtain & Maintain Requirement is being mandated for the FAASt Ponce TC to Jobos TC - 100 & 200 (Transmission) because the facility does not meet the definition of building, equipment, contents, or vehicle.

Insurance Proceeds Statement:

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

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

when an applicant demonstrates that it has taken reasonable efforts to recover insurance proceeds that it is entitled on a case-by-case basis.

Standard Insurance Comments

FEMA Policy 206-086-1
PART 2: Other Insurance-Related Provisions. (Sections 312 and 406(d) of the Stafford Act)

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

1. Before FEMA approves assistance for a property, an applicant must provide FEMA with information about any actual or anticipated insurance settlement or recovery it is entitled to for that property.

2. FEMA will reduce assistance to an applicant by the amount of its actual or anticipated insurance proceeds.

3. Applicants must take reasonable efforts to recover insurance proceeds that they are entitled to receive from their insurer(s).

…

5. If an applicant has an insurance requirement from a previous event:

a. FEMA will reduce assistance by the actual or anticipated insurance proceeds, or the amount of insurance required in the previous disaster, whichever is greater.

b. FEMA will only consider insolvent insurers, legal fees, or apportionment of proceeds as described in Section VII, Part 2(A)(3) and (4) when the applicant's anticipated or actual insurance proceeds are higher than the amount of insurance required in the previous disaster.

Jorge Parrilla, PA Insurance Specialist

CRC Atlantic, Guaynabo, PR

O&M Requirements

There are no Obtain and Maintain Requirements on **FAASt Ponce TC to Salinas Urbano TC- 38kV 100 & 200 (Transmission)**.

406 Mitigation

There is no additional mitigation information on **FAASt Ponce TC to Salinas Urbano TC- 38kV 100 & 200 (Transmission)**.

Environmental Historical Preservation

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

EHP Conditions

- Any change to the approved scope of work will require re-evaluation for compliance with NEPA and other Laws and Executive Orders.
- This review does not address all federal, state and local requirements. Acceptance of federal funding requires recipient to comply with all federal, state and local laws. Failure to obtain all appropriate federal, state and local environmental permits and clearances may jeopardize funding.
- If ground disturbing activities occur during construction, applicant will monitor ground disturbance and if any potential archaeological resources are discovered, will immediately cease construction in that area and notify the State and FEMA.

EHP Additional Info

There is no additional environmental historical preservation on **FAASt Ponce TC to Salinas Urbano TC- 38kV 100 & 200 (Transmission)**.

Final Reviews

Final Review

Reviewed By LEFRANC-GARCIA, CARLOS L. **Reviewed On** 10/06/2025 4:13 PM PST

Review Comments

The proposed project lines 100 and 200 are 40.7 miles of overhead transmission line from Ponce TC to Salinas TC (38-kV). Both lines consist of direct-embedded concrete poles, direct [1] embedded steel poles, and direct-embedded wood structures. Many of these structures support telecommunication and distribution wires and are leaning to the north (away from the coast). There is paved access to these lines as they travel through many urban residential areas near the southern coast of Puerto Rico. Both lines go through Ponce, Juana Diaz, Santa Isabel, and Salinas Municipalities. The line segments are supported by 1,069 structures consisting of wood, steel, and concrete poles structures, having existing underbuilt distribution and/or third-party attachments. Project Total Cost: $74,520,098.48. Reviewed,found eligible and reasonable. CLG 10.06.2025

Recipient Review

Reviewed By Mulero, Noel **Reviewed On** 10/06/2025 10:03 PM PST

Review Comments

Recipient review completed. The applicant did not submit a mitigation proposal in this version; the mitigation proposal will be made in a future amendment. 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

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 $74,520,098.48 for subaward number 11453 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

Version Information

Version #	Eligibility Status	Current Location	Bundle Number	Project Amount	Cost Share	Federal Share Obligated	Date Obligated
0	Pending	In Review		$0.00	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 #
0	11/5/2025	$67,068,088.64	90%	Accepted	4339DRPRP00114531

Department of Homeland Security
Federal Emergency Management Agency

v0

General Info

Project #	334470 **P/W #** 11708	**Project Type**	Specialized
Project Category	F - Utilities	**Applicant**	PR Electric Power Authority (000-UA2QU-00)
Project Title	FAASt [TL 3100 Monacillos TC to Sabana Llana TC] (Transmission)	**Event**	4339DR-PR (4339DR)
Project Size	Large	**Declaration Date**	9/20/2017
Activity Completion Date	9/20/2027	**Incident Start Date**	9/17/2017
		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 #661590; FAASt Line 3100 Monacillos TC to Daguao TC

General Facility Information:

- **Facility Type:** Power generation, transmission, and distribution facilities
- **Facility:** Line 3100 Monacillos TC to Daguao TC
- **Facility Description:** The facilities are part of the 57.4 circuit miles of overhead transmission line for 38kV Line 3100 from Monacillos TC to Daguao TC. The specific facilities included in this proposed project are structures (including their foundations), framing and insulators, load break switches (manual and automated), conductors, guy wires, anchoring, grounding assemblies, and any other associated components. Most of the construction along this line segment consists of wood monopole guyed structures with some interspersed self-supporting steel and concrete monopoles. This line primarily traverses urban areas between Monacillos TC substation and Daguao TC substation
- **Approx. Year Built:** 1980
- **Start GPS Latitude/Longitude:** [redacted]
- **End GPS Latitude/Longitude:** [redacted]

Final Scope

661590 **FAASt Line 3100 Monacillos TC to Daguao TC**

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 de?nes the activities that will be performed using Public Assistance ("PA") funding.

According to the SOP, FEMA "anticipates that [SOW] submissions might include preliminary designsincluding 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 No. 334470, TL 3100 Monacillos TC to Sabana Llana TC under DR-4339-PR. The document provides a detailed description of the project, scope of PA construction activities, common Environmental Planning and Historic Preservation

("EHP") review information, and project cost estimates. LUMA is seeking approval from COR3 and FEMA for PA funding to repair, restore, or replace the eligible facilities.

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 Transmission and Distribution ("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 project will replace 273 poles of TL 3100's poles after clearing vegetation. The pole replacement will also include replacing pole foundations, framing and insulators, load break switches (manual and automated), conductors, guy wires, anchors, grounding assemblies, and components described in **section 9.0** below.

FACILITIES LIST

7.1 FACILITIES LIST – BUILDINGS AND SUBSTATIONS

Not Applicable.

7.2 FACILITIES LIST – OTHER FACILITIES

The facility is an 11.09 mile, 38-kilovolt ("kV") transmission line that runs through the San Juan metropolitan area from the Monacillos Transmission Center ("TC") to the Sabana Llana TC. The transmissionline is currently supported by 273 poles with underbuilt distribution and third-party attachments. The types of poles supporting the line vary along its length and include 69 wood poles, 37 steel poles, and 167 concrete poles. A list of the poles to be replaced can be found **Appendix F** (TL3100 Monacillos TC to Sabana Llana Structures List).

The table below identi?es the start and end GPS coordinates of the TL-3100 segment.

Line Segment	Line Number	GPS Start	GPS End	Voltage (kV)
Monacillos TC – Sabana Llana TC	**3100**	[redacted]	[redacted]	**38**

PROJECT AREA MAP WITH BOUNDARIES OF CONSTRUCTION

Please see the attached maps identi?ed as TL3100 Monacillos TC to Sabana Llana TC Aerial Photo Map at **Appendix B**, TL3100 Monacillos TC to Sabana Llana TC Staging Area at **Appendix H**, and TL3100 Monacillos TC to Sabana Llana TC Structure Access Road Map at **Appendix I**.

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** ___.

9.1 DESCRIPTION OF PROPOSED § 428 WORK TO BE PERFORMED

The work to be performed for Line 3100 from the Monacillos TC to the Sabana Llana TC consists of replacing the existing 273 poles and their related foundations, guy wires and achors, insulators, conductors, and associated attachment hardware with 243 poles. The line will remain along its existing route and rights of way. Please refer to **Appendix J** (TL3100 Monacillos TC to Sabana Llana Structures List) for a full list of poles and each of their respective coordinates, material, type, and other project information. The project will also involve replacing the existing overhead ground wire ("OHGW") and Optical Ground Wire ("OPGW) with 144-strand optical ground wire.

9.1.1. Transmission Lines

The proposed project includes the repair and restoration of disaster-damaged components to the LUMA Transmission Design Criteria, and the approved codes and standards detailed in **Section 9.2** below. The following infrastructure is addressed in this SOW:

1. Remove

a. 69 wood poles
b. 37 steel poles
c. 167 concrete poles

2. Install 243 new 12-sided steel galvanized, tapered shafter poles:

a. 113 – 65'(LUMA Custom 65-SS-M5281)
b. 12 – 90' (LUMA Custom 90-SS-M10740)
c. 13 – 70' (LUMA 70S13)
d. 6 – 70' (LUMA 70S21)
e. 1 – 70' (LUMA 70S35)
f. 46 – 75' (LUMA Custom 75-SS-M7184)
g. 1 – 85' (LUMA 85S35)
i. 51 – 85' (LUMA 85S20)

3. Insulators: Remove and replace existing **1,524 glass**, ceramic, and polymer insulators with new polymer insulators.

4. OHGW: Remove and replace existing OHGW with 40,000 linear ft of new 144-strand optical ground wire ("OPGW").

5. Guy Wires: Install additional guy wires.

6. Foundations

a. Construct ?xed-end caisson piles designed for varying soil conditions and 160 mph winds.
b. The number of poles that require new foundations is 168. The table below describes the dimensions of the concrete foundations.

Foundations		
Width: 5.5 ft	Length: 5.5 ft	Depth: 12 ft

9.1.2. Vegetation Scope of Work

The following is the full scope of vegetation clearing for this project that will be performed under LUMA's vegetation clearing program. As instructed by FEMA Public Assistance leadership, LUMA is submitting the full scope of vegetation clearance, for this line segment, as a § 428 cost in this DSOW. As instructed, following obligation, LUMA will submit an amendment to move the costs related to vegetation to 406 HM.

1. Parameters for Performing Vegetation Clearing

As a result of DR-4339-PR, vegetation surrounding T&D assets are falling onto T&D assets and interfering with the safe and reliable operation of the assets. The vegetation at present is currently causing outages when vegetation is in contact with the T&D assets. To mitigate the future damage across T&D assets and protect the 428 repairs and replacement along the T&D assets, clearing vegetation materials will be required. This scope of work is to directly reduce the potential of future, similar damages to the T&D system by clearing vegetative materials that pose an immediate threat to the power transmission lines, and identi?cation for corrective actions related to clearing vegetation (consisting of shrubs, branches, limbs, stumps, bamboo, and trees that are directly impacting the resilience and productivity of the power grid) applicable to the existing PREPA electrical grid within Region 1 (San Juan) of Puerto Rico.

The scope includes performing veri?cation of facility/asset information and location and performing condition assessments to determine the extent and method of the vegetation work required. The vendor's assessment is reviewed by an arborist and data analyst that conduct a site visit and walk the feeder in order to validate and certify the vendor's assessment. The assessment provides the most appropriate method of remediation, preparing work orders for executing the necessary work, by ways of tree felling, mechanical vegetation remediation, vegetative debris disposal via chipping, mulching, hauling, and recycling where applicable. For the vegetation clearing scope LUMA will not construct access roads.

Regulation 7282 requires that only shrubs and plants (no trees) be planted within the Easement under power lines. Climbing plants and vines, as well as bamboo, are prohibited from being planted within an easement. The branches of trees planted outside the easement must not obstruct free passage of the power lines. The National Electrical Safety Code (NESC) and LUMA's Vegetation Management Plan establish the minimum required distances, both vertical and horizontal, betweenan energized conductor or device and any structure, building, or surface. Vegetation clearing will be restricted to removing any vegetation that interferes with these clearances. For power transmission lines at 38 kV, NESC and LUMA's Vegetation Management Plan de?nes the safety clearance limits as 15 feet. By law, any trees, shrubs, or plants planted in violation of Regulation 7282 may be uprooted, removed, or cut down in accordance with the provisions of Regulation 7282 – for both Compatible and Incompatible Species.

For 38-kV transmission lines, incompatible vegetation species will be cleared from the full width of the safety clearance limit or at the certi?ed easement width, whichever is wider. Compatible vegetation species will be cleared in compliance with NESC, LUMA's Vegetation Management, and Regulation 7282, which means that any vegetation species with the potential to encroach within 15 feet of the conductors at full size will be removed. Easement clearing widths for the 38-kV transmission lines safety limits are 15 feet and all certi?ed easement widths for 38-kV transmission lines from LUMA Land Records Of?ce will be used for clearing.

Industry standard practices will determine how the work will be performed. A healthy tree is less likely to fall over in a storm and damage overhead lines; therefore, vegetation will be pruned according to ANSI A300 (Part 1) – 2017 Tree, Shrub, and Other Woody Plant Management – Standard Practices (Pruning). These ANSI A300 Standard Practices are outlined within **Appendix P** (ANSI 300 – Pruning Standards), which include tree inspection, tools and equipment, pruning cuts, pruning objectives, pruning types, specialty pruning, palm pruning, and utility pruning standard practices. Vegetation that is improperly pruned could become susceptible to disease and decay, resulting in a hazard to both the line and public safety. ANSI A300 standards are intended as guides for federal, state, municipal, and private authorities including property owners, property managers, and utilities in the drafting of their maintenance speci?cations. It was developed by the Tree Care Industry Association and the guidelines are maintained, reviewed and updated by a consensus of various industry stakeholders. The standards provide guidance on how and where to prune vegetation to achieve clearances and maintain a healthy plant. In all cases,

Subrecipient's authorized representative's vegetation clearing contractors will be required to perform clearing activities in a manner consistent with ANSI A300, NESC, and Regulation 7282.

2. Scope of Work Inside Easement – Compatible Species

Compatible vegetation species will be cleared consistent with the distances identi?ed in NESC and Regulation 7282, which means that any species with the potential to encroach within 15 feet of the conductors at full size will be removed using the same methods discussed above. Even though the distances identi?ed in NESC and Regulation 7282 are vertical clearances, Compatible Species encroaching on the conductors from any direction can pose a hazard to the line. Therefore, the 15-foot clearance is being applied to both vertical and horizontal clearances of the conductor.

In rare cases where LUMA encounters resistance from landowners or stakeholders to remediate vegetation, LUMA will work with landowners or stakeholders to determine if Incompatible and Compatible Species can be pruned to mitigate the hazard to the lines instead of being completely removed.

3. Scope of Work Inside Easement – Incompatible Species

For the power transmission lines, Incompatible Species will be cleared from the full width of the Easement.Clearing in this context includes the following activities: tree removal, severing of vines, cutting, and vegetation mastication.

c. Tree removal: Quali?ed line clearance crews will work at ground level, climb trees from ground level, or use aerial platforms to remove the portion of the tree that is above ground, leaving the stump in place.

d. Severing of vines: Vines will be severed by quali?ed line clearance crews at the base with an airgap created between the root system and the portion of the vine climbing on the structure. The upper portion of the vine remains attached and is not removed.

e. Cutting: Cutting typically involves the removal of small diameter species by hand. Quali?ed line clearance crews will work at ground level, climb trees from ground level, or use aerial platforms to remove vegetation.

f. Vegetation mastication: Also known as mulching, slash-busting, or brush-cutting, vegetation mastication involves technique for reducing the size of vegetation and downed material in forests. It involves grinding, shredding, or chopping vegetation into smaller pieces, which are then left on the site as mulch.

4. Scope of Work Outside Easement – Species Growing into the Easement

There is the potential for vegetation outside or along the boundary of the Easement to interfere with the operation of power transmission lines. Appropriate clearances around the conductors must be achieved to protect the lines from future damage. For 38-kV transmission lines, LUMA has established a clearance distance of 15 feet from all conductors. This distance is consistent with the vertical distance established in NESC and Regulation 7282. If there are species encroaching on the 15-foot clearance outside or along the boundary of the easement, these species will be pruned to obtain at least 15 feet of clearance from the conductors at the time clearance work occurs. In cases where following ANSI A300 best practices require clearance beyond 15 feet, the maximum distance cleared will not exceed 18 feet. Diagrams illustrating these clearing distances are provided, Reference **Appendix P** (Pruning Clearance Guideline). The clearing methods described above will be utilized (tree pruning, tree removal, cutting, vegetation mastication).

CODES AND STANDARDS

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

1. Consensus-based codes, per FEMA's (Public Assistance Alternative Procedures (section 428) Guide for Permanent Work FEMA-4339-DR-PR (Feb. 2020).
2. Industry standards per FEMA Recovery Policy FP-104-009-5, Version 2, Implementing section 20601 of the 2018 Bipartisan Budget Act through the Public Assistance Program.

3. FEMA Recovery Interim Policy FP-104-009-11 Version 2.1, Consensus-Based Codes, Specifications, and Standards for Public Assistance.

4. LUMA's latest Design Criteria Document(DCD) 4751-001-V04, Functional SpecificationsRevision 3 (Jul. 8, 2022), which aggregates the design considerations of most of the consensus-based codes, specifications, and standards listed in FEMA Recovery Interim Policy 104-009-11 Version 2.1 (Dec. 20, 2019).

Applicable codes and standards will be identified and incorporated into the plans and specifications.

406 HAZARD MITIGATION PROPOSAL

FEMA PAPPG v.3.1 states, "Hazard mitigation is any sustained action taken to reduce or eliminate long-term risk to people and property from natural hazards and their effects." Subrecipient intends to amend this DSOW upon finalizing its plans to lessen or eliminate long- term risk to people and property from future natural hazards and their effects.

** Not applicable at this time **

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.
Ground disturbance will occur for the following: foundations, new poles, and the installation of temporary construction matting at all structures in the ROW. The matting will cover an area of 50 foot ("ft") by 50 ft around the structures.

__ **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.

Vegetation removal for a 50-foot by 50-foot area for construction matting inside the easement will be needed to remove existing structures and to install new poles, to the extent those areas were not cleared by previously mentioned work under FAASt no 728827 .

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) ?nal debris disposal location; and (4) ?nal debris disposal method.

1. **Constructions Debris**: The types of debris that will be removed from the site during the demolition process are insulated and bare aluminum and copper cables, PVC (polyvinyl chloride) conduits, concrete, metal scrap, construction waste, wood. The debris will be separated and taken to a waste disposal facility; however, the exact waste disposal facility is not known at this time.
2. **Hazardous Materials:** PCBs (polychlorinated biphenyls), oil from the transformers and breakers, sealants, and chemical wastes will be handled and disposed of at an authorized waste disposal facility.

3. **Poles:** Pole disposal will be performed per applicable local and federal regulations.

X **Staging areas 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.). 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.).

1. **Access Roads:** The construction of access roads is not required for this scope of work as the poles are near the roads and are site accessible from the existing ROWs in which all work will be performed. Refer to **Appendix I** (TL3100 Monacillos TC to Sabana Llana TC Structure Access Road Map).
2. **Staging Area:** The staging area will be inside the existing Monacillos TC and will serve as an assembly point for all the materials to be installed. Refer to **Appendix H** (TL3100 Monacillos TC to Sabana Llana TC Staging Area).

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

1. Fill, gravel, and sand materials will be obtained from a preferred vendor

__ **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.

Not Applicable

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 design information. Below are three cost estimates, one for construction, telecommunications, and for vegetation. The total of the Line Rebuild amounts to **$50,020,220.30.** For a more detailed cost estimate refer to appendix/appendices identified below.

Transmission Line Construction PCE

Please refer to **Appendix E** (TL 3100 Monacillos TC to Sabana Llana TC Detailed Cost Estimate).

COST ESTIMATE			
Cost Element	**428**	**406**	**PROJECT TOTAL**
PLANNING	$2,214,649.92	$-	$2,214,649.92
MANAGEMENT	$1,906,217.45	$-	$1,906,217.45

Tline 3100 Monacillos SS to Sabana Llana SS (Seg. 1)	**$37,174,268.86**	**$-**	**$37,174,268.86**
GENERAL CONDITIONS	**$ 2,154,942.50**	**$-**	**$ 2,154,942.50**
COST TOTALS	**$43,450,078.23**	**$-**	**$43,450,078.23**
DEDUCTIONS	**TOTAL INSURANCE PROCEEDS RECEIVED**		**$ -**
	DE-OBLIGATION FASST IF APPLICABLE?		**$ -**
FAASt ALLOCATIONS	FAAST PROJECT # 334470 - 428		$40,156,764.02
	FAAST PROJECT # 334470 – 406 HM		$-
	FAAST PROJECT # 334470 Total		**$40,156,764.02**
	FAASt A&E # 335168 - 428		$2,334,109.31
	FAASt A&E # 335168 – 406 HM		$-
	FAASt A&E # 335168 TOTAL		**$2,334,109.31**
	FAASt E&M # 673691- 428		$959,204.90
	FAASt E&M # 673691 – 406 HM		$-
	FAASt E&M # 673691 TOTAL		**$959,204.90**

Telecommunications PCE

Please refer to **Appendix F** (TL3100 Monacillos TC to Sabana Llana TC Detailed Tele Estimate).

COST ESTIMATE			
Cost Element	**428**	**406**	**PROJECT TOTAL**
PLANNING	**$336,330.92**	**$-**	**$336,330.92**
MANAGEMENT	**$321,607.22**	**$-**	**$321,607.22**
Tline 3100 Monacillos SS to Sabana Llana SS Telecom (Seg. 1)	**$5,617,290.93**	**$-**	**$5,617,290.93**
GENERAL CONDITIONS	**$ 294,913.00**	**$-**	**$ 294,913.00**
COST TOTALS	**$6,570,142.07**	**$-**	**$6,570,142.07**

DEDUCTIONS	**TOTAL INSURANCE PROCEEDS RECEIVED**	**$ -**
	DE-OBLIGATION FASST IF APPLICABLE?	**$ -**
FAASt ALLOCATIONS	FAAST PROJECT # 334470 - 428	$6,174,671.85
	FAAST PROJECT # 334470 – 406 HM	$-
	FAAST PROJECT # 334470 Total	**$6,174,671.85**
	FAASt A&E # 335168 - 428	$388,750.22
	FAASt A&E # 335168 – 406 HM	$-
	FAASt A&E# 335168 TOTAL	**$388,750.22**
	FAASt E&M # 673691- 428	$6,720.00
	FAASt E&M # 673691 – 406 HM	$-
	FAASt E&M# 673691 TOTAL	**$6,720.00**

Vegetation Clearing PCE, see project note 3.

Please refer to **Appendix O** (TL 3100 Monacillos TC to Sabana Llana TC Vegetation Removal Cost Estimate).

Project	Line	LUMA Miles	LUMA Cost Per Mile 6/26/2025	% Vegetation in feeder	Buffer acceptance	Total percentange	PA Agreement	FEMA Total Cost	3% Basic Construction Services (A&E)	Total Project Cost without A&E
334470	3100	7.42	$216,929.46	47.17%	10%	51.89%	50.0%	$804,808.30	$24,144.25	$780,664.05

Project Cost Summary, 428 Version 0:

Description	WTBC	A&E	E&M	Total Cost
Refer to Appendix E (TL 3100 Monacillos TC to Sabana Llana TC Detailed Cost Estimate)	$ 43,450,078.23	$ 2,334,109.31	$ 959,204.90	$ 40,156,764.02
Refer to Appendix F (TL3100 Monacillos TC to Sabana Llana TC Detailed Tele Estimate).	$ 6,570,142.07	$ 388,750.22	$ 6,720.00	$ 6,174,671.85
Refer to Appendix O (TL 3100 Monacillos TC to Sabana Llana TC Vegetation Removal Cost Estimate).	$ 804,808.30	$ 24,144.25		$ 780,664.05
Totals	**$ 50,825,028.60**	**$ 2,747,003.78**	**$ 965,924.90**	**$ 47,112,099.92**

Project Cost Summary, 428 Version 0:

Work to be Completed (WTBC): $ 50,825,028.60

A&E Deduction (Global A&E FAASt 335168): -$2,747,003.78

E&M Deduction (Global E&M FAASt 673691): -$965,924.90

Project Total: $47,112.099.92

Project Notes:

1. Refer to detailed SOW provided in document labelled "*334470-DR4339PR Detailed SOW-TL3100 Monacillos TC to Sabana Llana - 428 Only (1st EHP RFI) - signed.pdf*".

.2. Refer to detailed cost estimate provided in document "*334470-DR4339PR-LPCE TLine 3100 (1st Seg.) Monacillos SS to Sabana Llana SS 2025-07-23 (Rev 8 full 428).xlsx*", and "*334470-DR4339PR-LPCE TLine 3100 (Seg. 1) Monacillos SS to Sabana Llana SS Telecom Sec 2025-07-23 (Rev 2 - Full 428).xlsx*".

3. This project is part of a FAAST project, please reference 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 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. Lodging and Per Diem is part of all three costs estimates and will not have duplicity as we expect work to be done by separate crews represented in three different cost estimates.

7. For reference documents Appendix A thru Q, see files labeled:

ATTACHMENTS/APPENDICES

334470-DR4339PR-APPENDIX A - TL3100 Monacillos TC to Sabana Llana TC Approved Supplier List

334470-DR4339PR-APPENDIX B - TL3100 Monacillos TC to Sabana Llana TC Aerial Photo Map

334470-DR4339PR-APPENDIX C - TL3100 Monacillos TC to Sabana Llana TC Engineering Design

334470-DR4339PR-APPENDIX D - TL3100 Monacillos TC to Sabana Llana TC Consent to Federal Funding Letter- FEMA/COR3

334470-DR4339PR-APPENDIX E -TL 3100 Monacillos TC to Sabana Llana TC Detailed Cost Estimate - 2025-5-30

334470-DR4339PR-APPENDIX F - TL3100 Monacillos TC to Sabana Llana TC Detailed Tele Estimate – 2025-5-30

334470-DR4339PR-APPENDIX G - TL3100 Monacillos TC to Sabana Llana TC Wetland Study

334470-DR4339PR-APPENDIX H - TL3100 Monacillos TC to Sabana Llana TC Staging Area

334470-DR4339PR-APPENDIX I - TL3100 Monacillos TC to Sabana Llana TC Structure Access Road Map

334470-DR4339PR-APPENDIX J - TL3100 Monacillos TC to Sabana Llana Structures List Seg.1

334470-DR4339PR-APPENDIX K - TL3100 Monacillos TC to Sabana Llana Fill Borrow Memo 072219_signed

334470-DR4339PR-APPENDIX L - TL3100 Monacillos TC to Sabana Llana Project Considerations

334470-DR4339PR-APPENDIX M - TL3100 Monacillos TC to Sabana Llana HMP

334470-DR4339PR-APPENDIX O - TL3100 Monacillos TC to Sabana Llana TC Detailed Vegetation Estimate – 2025-6-12

334470-DR4339PR-APPENDIX P- TL3100 Monacillos TC to Sabana Llana TC – ANSI 300 – Pruning

334470-DR4339PR-APPENDIX Q - TL3100 Monacillos TC to Sabana Llana TC KMZ Seg.1

406 HMP Scope

It was agreed with subrecipient this project will be moved forward in Version 0, without hazard Mitigation funds. Is the responsibility from the sub-applicant complete the field assessments to establish the after and before report of clearance and the project office folder including all the expenses incurred on the project: (labor, material, workmanship, contractors and office expenses directly related to the project). The subrecipient must ensure that the work is executed with reasonable use of resources and costs, using the most cost-effective method. Once the sub-applicants complete the vegetation clearance activities, the information will be submitted to FEMA for the validation and future reimbursement of the PA 406 funds to the main FAASt.

Cost

Code	Quantity	Unit	Total Cost	Section
9001	1	Lump Sum	$50,825,028.60	Uncompleted
9001	1	Lump Sum	($965,924.90)	Uncompleted
3510	1	Lump Sum	($2,747,003.78)	Uncompleted

CRC Gross Cost	$47,112,099.92
Total 406 HMP Cost	$0.00
Total Insurance Reductions	$0.00
CRC Net Cost	$47,112,099.92
Federal Share (90.00%)	$42,400,889.93
Non-Federal Share (10.00%)	$4,711,209.99

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

10/2/2025

GENERAL INFORMATION

Event: DR4339-PR

Project: SP 334470

Category of Work: Cat F - Utilities

Applicant: PR Electric Power Authority

Event Type: Hurricane / Hurricane Maria

Cause of Loss: Wind / Wind Driven Rain

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

COMMERCIAL INSURANCE INFORMATION

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

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

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

Mapfre Praico Insurance Company (1398178000644)

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

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

Policy Limits: $300,000,000.00

RCV or ACV: Replacement Cost Value

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

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

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

Damaged Inventory (DI) #661590:

FAASt Line 3100 Monacillos TC to Daguao TC

Location: Line 3100 Monacillos TC to Daguao TC

GPS Coordinates: [redacted]

Cause of Loss: Wind / Wind Driven Rain

Prior Obtain and Maintain Requirement:

No prior insurance requirements were found for this facility.

Reduction(s):

No insurance reduction will be applied to this project as coverage is not anticipated. An anticipated insurance reduction of $193,746,436.00 was applied to FAAST project #136271 for anticipated insurance proceeds for Hurricane Maria losses. For ease of reference, please see table of insurance allocations: "PREPA Allocation Plan – All Disasters" file.

Obtain and Maintain Requirement:

No Obtain & Maintain Requirement is being mandated for the FAASt Line 3100 Monacillos TC to Daguao TC because this facility does not meet the definition of building, equipment, contents, or vehicle.

Insurance Proceeds Statement:

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

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

Standard Insurance Comments

FEMA Policy 206-086-1
PART 2: Other Insurance-Related Provisions. (Sections 312 and 406(d) of the Stafford Act)

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

1. Before FEMA approves assistance for a property, an applicant must provide FEMA with information about any actual or anticipated insurance settlement or recovery it is entitled to for that property.

2. FEMA will reduce assistance to an applicant by the amount of its actual or anticipated insurance proceeds.

3. Applicants must take reasonable efforts to recover insurance proceeds that they are entitled to receive from their insurer(s).

…

5. If an applicant has an insurance requirement from a previous event:

a. FEMA will reduce assistance by the actual or anticipated insurance proceeds, or the amount of insurance required in the previous disaster, whichever is greater.

b. FEMA will only consider insolvent insurers, legal fees, or apportionment of proceeds as described in Section VII, Part 2(A)(3) and (4) when the applicant's anticipated or actual insurance proceeds are higher than the amount of insurance required in the previous disaster.

Jorge Parrilla, PA Insurance Specialist

CRC Atlantic, Guaynabo, PR

O&M Requirements

There are no Obtain and Maintain Requirements on **FAASt [TL 3100 Monacillos TC to Sabana Llana TC] (Transmission)**.

406 Mitigation

There is no additional mitigation information on **FAASt [TL 3100 Monacillos TC to Sabana Llana TC] (Transmission)**.

Environmental Historical Preservation

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

EHP Conditions

- Any change to the approved scope of work will require re-evaluation for compliance with NEPA and other Laws and Executive Orders.
- This review does not address all federal, state and local requirements. Acceptance of federal funding requires recipient to comply with all federal, state and local laws. Failure to obtain all appropriate federal, state and local environmental permits and clearances may jeopardize funding.
- If ground disturbing activities occur during construction, applicant will monitor ground disturbance and if any potential archaeological resources are discovered, will immediately cease construction in that area and notify the State and FEMA.
- 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.
- Endangered Species Act (ESA) Conditions applicable to boring sites B11 to B17, B19 to B22, B24, B25, B33, B38, B40, B47, B55, B56, B73, B76, B82, B86, B87 to B89, B94, B95, B98, B102, B104 to B109, B111, B113, B114, B116, B119, B122, B125) Chilabothrus inornatus (Puerto Rican boa), and the Virgin Islands tree boa (boring sites B-73, B-82 and B-89) Part 3: 11. 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 in order to reinitiate consultation. The Service and the Federal Agency and the Recipient will re-consult to determine whether authorized activities should continue as proposed and whether modifications or stipulations are warranted 12. The contact information for the Service must be followed: Fish and Wildlife Biologist: Jan P. Zegarra at jan_zegarra@fws.gov, 786-933-1451; Endangered Species Program Coordinator: Jose Cruz at Jose_Cruz-Burgos@fws.gov, 305-304-1386. All reporting must be submitted at caribbean_es@fws.gov.
- Endangered Species Act (ESA) Conditions applicable to boring sites B11 to B17, B19 to B22, B24, B25, B33, B38, B40, B47, B55, B56, B73, B76, B82, B86, B87 to B89, B94, B95, B98, B102, B104 to B109, B111, B113, B114, B116, B119, B122, B125) Chilabothrus inornatus (Puerto Rican boa), and the Virgin Islands tree boa (boring sites B-73, B-82 and B-89) Part 1: T&C 1 (RPM 1). The Service and the Federal Agency will ensure take levels do not exceed levels anticipated in this PBO. 1. Inform all project personnel about the potential presence of the PR and VI boa in areas where the proposed work will be conducted and provide training session 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. 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 movements, the boundaries of the project area and areas to be excluded and protected will be clearly marked in the project plan and in the field in order to avoid further habitat degradation outside of the AA. 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), a 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 AA. 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 harm's way as the result of the habitat disturbance (see #6). 4. For VI boas, once the 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, the time and date of the relocation, and comments on how the animal was detected and its behavior.
- Endangered Species Act (ESA) Conditions applicable to boring sites B11 to B17, B19 to B22, B24, B25, B33, B38, B40, B47, B55, B56, B73, B76, B82, B86, B87 to B89, B94, B95, B98, B102, B104 to B109, B111, B113, B114, B116, B119, B122, B125) Chilabothrus inornatus (Puerto Rican boa), and the Virgin Islands tree boa (boring sites B-73, B-82 and B-89) Part 2: 6. If any PR or VI boa (dead or alive) is found within the AA and on harm's way, the action will stop at that area and information recorded (see #5). If a PR or VI boa is located within harm's way, all attempts will be made to immediately safely capture the animal (refer to T&C 2). PR boas will be safely captured and relocated at least 1km within suitable habitat (forested) 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 and designated personnel and will not harm or injure the captured boa. If any VI boa is found, do not relocate. Capture and temporary hold the individual accordingly (refer to T&C 2). Contact the Puerto Rico Department of Natural and Environmental Resources (PRDNER) Rangers immediately if in Puerto Rico (787-724-5700, 787-230-5550, 787-771-1124) or contact the USVI Department of Planning and Natural Resources (DPNR), Division of Wildlife, immediately if in St. Thomas (340-775-6762, 340-773-1082). The Action may continue at other work sites within the AA where no PR and VI boas have been found. If immediate relocation of PR boa by the project biologist or designated personnel is not an option, project related activities at this area will stop until the boa moves out of harm's way on its own or call the Puerto Rico Department of Natural and Environmental Resources (PRDNER) Rangers for safe capture and relocation of the

animal (787-724-5700, 787-230-5550, 787-771-1124). The potential use of the PRDNER staff for these purposes should be coordinated with them at least 30 days before the project starts. If a PR boa is captured by the PRDNER, record the name of the PRDNER staff and information on where the PR boa will be relocated. 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 AA. 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 (refer to T&C 2). If not possible, the animal will be left alone until it leaves the vehicle or machine by itself. 8. 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 farthest away 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. 9. In the event a PR boa and VI boa is found dead within the project footprint, the Federal Agency and the Recipient must contact the Service to appropriately dispose the animal. 10. Should the forms of take reach the amount of exempted take (Table 6-1) during the Action, the Federal Agency and the Recipient shall terminate the authorized activities and contact the Service within 24 hours in order to reinitiate consultation. The Service and the Federal Agency and the Recipient will re-consult to determine whether authorized activities should continue as proposed and whether modifications or stipulations are warranted.

- Endangered Species Act (ESA) Conditions applicable to boring sites B11 to B17, B19 to B22, B24, B25, B33, B38, B40, B47, B55, B56, B73, B76, B82, B86, B87 to B89, B94, B95, B98, B102, B104 to B109, B111, B113, B114, B116, B119, B122, B125) Chilabothrus inornatus (Puerto Rican boa), and the Virgin Islands tree boa (boring sites B-73, B-82 and B-89) Part 4: T&C 2 (RPM 2). The Service requires the Federal Agency to follow standard procedures while capturing, handling, transporting, temporary holding, relocating and tracking VI boas in order to minimize the risk of injury and mortality to the species. A. The Federal Agency and the Recipient shall identify who will capture PR or VI boas and assess and determine if a boa has been injured as a result of project activities, and if it is in need of veterinary care or rehabilitation. If an injured PR boa or VI boa is in need of veterinary care or rehabilitation, the Federal Agency and the Recipient shall immediately seek veterinary care for the animal and inform the Service within 24 hours of the event. B. The Federal Agency must ensure that any permitted individuals, contractor, recipients or cooperators follow proper procedures and methods for capturing, handling, temporary holding, relocating of the PR and VI boa. The following procedures will be followed: i. All PR and VI boas shall be handled safely to avoid injury. The preferred method of capture is by hand, although a snake hook or stick may also be used if snake is uncatchable by hand, or in order to help move the snake into a safer position for capture. ii. All PR and VI boas may be temporarily held during and/or relocation purposes. Boas will be handled as little as possible, and they shall not be kept for more than three days since the day of capture. Temporary holding of boas will be in burlap bags (1 boa per bag) and/or secured containers, which must be placed in cool dry areas that are not in direct sunlight or extreme temperatures. Burlap bags shall be placed inside a container with other boas each inside their own burlap bag and labeled properly. All containers shall be well-ventilated and with a secure lid to avoid boas from escaping. iii. Only qualified, experienced personnel, with a required State and Federal applicable permits may place PIT tag injections. PIT tags may be subcutaneously injected mid-body using sterile syringes. When injecting tags, keep needle parallel to the boa's body and do not force the needle into the muscle tissue or between the ribs. Snakes greater than 400 mm (15.7 in) in length, but that weigh less than 100 grams (3.5 oz), may be PIT tagged with a 5 mm (0.19 in.) PIT tag. An 8 mm (0.31 in) PIT tag may be used for all snakes that weigh over 100 grams (3.5 oz). iv. The Federal Agency and the Recipient and/or contractors shall obtain all necessary permit(s) from the corresponding State agency for capturing, handling, transporting, temporary keeping, relocating and tracking PR and VI boas.
- Endangered Species Act (ESA) Conditions applicable to boring sites B11 to B17, B19 to B22, B24, B25, B33, B38, B40, B47, B55, B56, B73, B76, B82, B86, B87 to B89, B94, B95, B98, B102, B104 to B109, B111, B113, B114, B116, B119, B122, B125) Chilabothrus inornatus (Puerto Rican boa), and the Virgin Islands tree boa (boring sites B-73, B-82 and B-89) Part 5: M&R 1. The Federal Agency and the Recipient will ensure that incidental take levels will be minimal. A. For all PR and VI boa sightings (dead or alive), the Action Agency shall ensure that an effective monitoring and reporting method is established. Reporting shall include the following and should injury or mortality occurred during the Action, the Federal Agency and the Recipient shall contact the Service within 24 hours of the event: i. Date, time and location (latitude/longitude) of the sightings and relocation sites. ii. Size, weight and sex (if possible) of the PR and VI boa. iii. A photograph of the snake as found or after capture. iv. Description of how and what caused the take in the case of injury or death. v. Description of any additional conservation measures that may be implemented to further avoid and minimize take. M&R 2. Disposition of Dead or Injured boas A. Disposition of dead animals must be immediately coordinated with the Service for appropriate disposal of the animal. B. The Service may request some dead specimens of PR boa and all for VI boa. The Federal Agency and the Recipient shall coordinate the delivery of such specimen to the Service. C. In case of an injured boa, the Federal Agency and the Recipient must seek veterinary care for the animal and inform the Service within 24 hours of the event.
- Endangered Species Act (ESA) Condition: The Applicant must provide documentation at close-out that proves completion of required Conservation Measures.
- EXECUTIVE ORDER 11988: FLOODPLAINS MANAGEMENT: Condition applicable to B-47, B-56, B-70, B-77, B-117, B-119, B-120, B-125, B-15, B-25, B-28, B-29, B-30, B-31, B-35, B-36, B-37, B-38, B-42, B-44, B-45, B-46, B-49, B-51, B-52, B-53, B-54, B-55, B-57, B-69, B-73, B-78, B-81, B-82, B-83, B-88, B-102, B-104, B-105, and B-116. 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.

- Debris may not be staged, stored, or disposed of in the floodplain without obtaining a letter/permit from the state or local floodplain administrator prior to initiating work.
- Previous conditions apply for Version (0) reviewed and completed on 09/27/2024
- "Previous conditions apply for Version (0) reviewed and completed on 09/27/2024".
- "Previous conditions apply for Version (0) reviewed and completed on 09/27/2024".
- Environmental Review Project 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 re-establish a right-of-way, for particular transmission 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. 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.
- Previous condition for "additional staging areas" applies for Version (0) reviewed and completed on 09/27/2024.
- 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.

EHP Additional Info

There is no additional environmental historical preservation on **FAASt [TL 3100 Monacillos TC to Sabana Llana TC] (Transmission)**.

Final Reviews

Final Review

Reviewed By LEFRANC-GARCIA, CARLOS L. **Reviewed On** 10/06/2025 4:12 PM PST

Review Comments

he proposed project will replace 273 poles of TL 3100's poles after clearing vegetation. The pole replacement will also include replacing pole foundations, framing and insulators, load break switches (manual and automated), conductors, guy wires, anchors, grounding assemblies, and components. The facility is an 11.09 mile, 38-kilovolt ("kV") transmission line that runs through the San Juan metropolitan area from the Monacillos Transmission Center ("TC") to the Sabana Llana TC. The types of poles supporting the line vary along its length and include 69 wood poles, 37 steel poles, and 167 concrete poles. Project Total Cost: $47,112,099.92. Reviewed, found eligible and reasonable. 10.06.2025

Recipient Review

Reviewed By Mulero, Noel **Reviewed On** 10/07/2025 7:32 PM PST

Review Comments

Recipient review completed. The applicant did not submit a mitigation proposal in this version; the mitigation proposal will be made in a future amendment. 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

Award Information

Version Information

Version #	Eligibility Status	Current Location	Bundle Number	Project Amount	Cost Share	Federal Share Obligated	Date Obligated
0	Pending	In Review		$0.00	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 #
0	11/5/2025	$42,400,889.93	90%	Accepted	4339DRPRP00117081

Department of Homeland Security
Federal Emergency Management Agency

v0

General Info

Project #	678800 **P/W #** 11425	**Project Type**	Specialized
Project Category	F - Utilities	**Applicant**	PR Electric Power Authority (000-UA2QU-00)
Project Title	FAASt [Telecom Infrastructure – Group B] (Telecommunication)	**Event**	4339DR-PR (4339DR)
Project Size	Large	**Declaration Date**	9/20/2017
Activity Completion Date	9/20/2027	**Incident Start Date**	9/17/2017
		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 #1237892; FAASt [Telecom Infrastructure – Group B]

General Facility Information:

- **Facility Type:** Communication
- **Facility:** Telecom Infrastructure – Group B
- **Facility Description:** Group B is composed of 5 sites which are Atalaya, El Gato, Isabela Plata 1, La Santa, and Manatí TC. These sites have a telecommunication building and lattice self-supported tower. All sites have a generator and gasoline tank. The sites have good access with asphalt or concrete paving.
- **Approx. Year Built:** 1967
- **GPS Latitude/Longitude:** [redacted]

Final Scope

1237892 **FAASt [Telecom Infrastructure – Group B]**

Introduction

The purpose of this document is to submit for approval the detailed Scope of Work ("SOW") to COR3 and FEMA for the Sites on Group B Telecom Tower under DR-4339-PR Public Assistance. The document provides a description of the project including scope, schedule, and cost estimates as well as Environmental & Historical Preservation ("EHP") requirements and proposed 406 hazard mitigation work. LUMA is seeking approval from COR3 and FEMA for project funding to repair, restore, or replace the eligible facilities.

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

The Sites on Group B telecom tower suffered structural damage due to the severe weather conditions caused by Hurricane Maria. The improvement of the Sites on Group B tower will provide a hardened telecommunications network that will alleviate damage from future weather related events, to increase reliability and resiliency. The capability enhancements will include the first responder and emergency response communications, greater resilience of the internal telecommunications network, an enhanced microwave and fiber network, and a network control center, to improve centralized monitoring and control over facilities and IT traffic.

Description	Municipality	Latitude	Longitude

Atalaya	Añasco	[redacted]		[redacted]	
El Gato	Morovis				
Isabela Planta	Isabela				
La Santa	Cayey				
Manati TC	Manati				

Project Scope of Work Atalaya Site

Proposed 428 Public Assistance Scope of Work:

o Engineering assessments to evaluate the existing tower and telecommunication building conditions, and the cost of this project will depend greatly on these assessments.

o Prepare a structural assessment for the existing telecommunication tower.

o Remove and replace 200 ft Self-Supported Lattice Tower,

Ground disturbance:

- 12 micro piles of 8 in (diameter of the pile) x 55 ft (depth), and
- three pile cap of 7.67 ft x 7.67 ft x 2.5 ft.

o Remove and replace 40 kW Power Generator

o Remove and replace 583 ft (1 ft x 3 ft) chain link fence with a ground disturbance 64.78 CY in compliance with LUMA Engineering Standard 4801.016. Refer to row 26, 83 and 89 of LPCE Appendix A.

o Remove and replace 34 ft of barbed wire of access gates.

o Construct a 180 ft x 5 ft x 4ft perimeter retention wall of 8ft (height) along the rear side of the yard to prevent future landslides.

o Remove and replace Generator's electric meters and transfer switch.

o Remove and replace one 3 ton split A/C unit.

o Remove and replace a 36 in x 72 in security (Anti-thief & fire resistance) door with a listed security hardware.

o Remove and replace one approved automatic smoke detection system for battery room.

o Pressure washes and clean of 1,660 sqft interior and exterior building walls areas, walls and floors.

o Apply 830 sqft external building wall with one coat of primer and 2 coats of paint apply proper treatment. Includes repair cracks on walls.

o Apply 830 sqft internal building wall with one coat of primer and 2 coats of paint apply proper treatment. Includes repair cracks on walls.

o Remove and replace 427 sqft floor tiles based on Ceramic tile, floors, glazed, thin set, 8 in x 8 in.

o Repair and seal 347 LF floor slab cracks

o Remove and replace 3 doors with 3 frames in the building.

o Remove and replace 6 interior luminaries and 10 exterior luminaries.

o Remove and replace 10 security cameras including the receiver.

o Remove and replace 80 ft ice bridge with 12 direct burial footings of 1ft (Ø)x 3.7 ft, with a ground disturbance of 1.3 CY, in compliance of LUMA Specification 4402.005.

o Remove and replace 25.5 in x 25.5 in, 12-Port entry port panel in compliance to LUMA Specification 4452.028.

o Remove cables that are not in function, organize 1,000 ft of the remaining cables.

Proposed 406 Hazard Mitigation Grant Program Scope of Work:

• Install a Power Management Attachment to the Generator's transfer switch as a hazard mitigation measure. This attachment provides the utility the ability to remotely manage the generator to prevent over-usage during emergency situations.

LPCE Row #	Description	406 Cost
77	Install a Power Management Attachment for Generator	$6,2

Estimate - Atalaya Site

The cost estimate to complete the work has been generated at a class 3 level, which is between (+/-30%) of the final project cost. The estimate includes materials, construction labor and equipment, engineering, management, and contingencies. LUMA has identified risks and allowances for mitigating potential known risks.

Please refer to Appendix A for detailed Cost Estimate. A summary cost estimate for all five sites is provided at the end of this scope of work.

Project Scope of Work El Gato Site

Proposed 428 Public Assistance Scope of Work:

o Engineering assessments to evaluate the existing tower and telecommunication building conditions, and the cost of this project will depend greatly on these assessments.
o Prepare a structural assessment for the existing telecommunication tower.
o Remove and replace existing 200 ft Self-Supported Lattice Tower,
Ground disturbance:
• 12 micro piles of 8 in (diameter of the pile) x 55 ft (depth), and
• three pile cap of 7.67 ft x 7.67 ft x 2.5 ft.
• Remove concrete slab - 1,685 SF X 4in
o Remove and replace a chain link fence of 331ft.
Ground Disturbance:
• The fence has a concrete foundation 1 ft x 3 ft (depth). Refer to rows 25, 88, and 98 of LPCE Appendix A.
o Remove and replace 14 ft of barbed wire of access gates.
o Remove and replace the Generator's electric meters and transfer switch.
o Remove and replace one 3 Ton Split A/C unit.
o Remove and replace a 36 in x 72 in security (Anti-thief & fire resistance) door with a listed security hardware.
o Remove and replace one approved automatic smoke detection system for battery room.
o Pressure washes and cleaning of 3,560 sqft Interior and exterior building walls areas, walls and floors.
o Apply 1,780 sqft external building wall with one coat of primer and 2 coats of paint apply proper treatment. Includes repair cracks on walls.
o Apply 1,780 sqft internal building wall with one coat of primer and 2 coats of paint apply proper treatment. Includes repair cracks on walls.
o Remove and replace 382 sqft of stairs and floor tiles.
o Repair and seal 198 LF floor slab cracks.
o Removal and replacement of 2 doors with 2 frames in the building.
o Remove and replace 2 louvers in the building.
o Remove and replace of 6 interior luminaries, 10 exterior luminaries
o Remove and replace of 10 security cameras including receiver.
o Remove and replace entry port and ice bridge.
o Remove and replace 385 sqft of waterproof roofing treatment.

Proposed 406 Hazard Mitigation Scope of Work:

• Install a 1,685 sqft, 6-inch-thick concrete slab at the site to support tower foundations and prevent water erosion.

• Install 385 sqft self-leveling 6100 psi, 1/2" thick concrete on roof to prevent water intrusion.

• Install a Power Management Attachment to the Generator's transfer switch as a hazard mitigation measure. This attachment provides the utility the ability to remotely manage the generator to prevent over-usage during emergency situations. (LPCE Item #90)

LPCE Row #	Description	406 Cost
28	1,685 sqft X 6" 31.2 [AR1] CY Site Concrete Slab (Structural concrete, in place, slab on grade (3500 psi), 6" thick, includes forms (4 uses), Grade 60 rebar, concrete (Portland cement Type I), and placing, excludes finishing)	
29	385 sqft Roof concrete leveling (Cement topping, portland cement based, self-leveling, pumped, 6100 psi, 1/2" thick)	
85	Install a Power Management Attachment for Generator	

Estimate – El Gato Site

Cost estimates to complete the work have been generated at a class 3 level, which is between (+/-30%) of the final project cost. The estimate includes materials, construction labor and equipment, engineering, management, and contingencies. LUMA has identified risks and allowances for the mitigation of potential known risks.

Please refer to Appendix A for detailed Cost Estimate. A summary cost estimate for all five sites is provided at the end of this scope of work.

Total 406 Hazard Mitigation Cost Estimate **$ 10,693.63**

Project Scope of Work Isabela Planta Site

Proposed 428 Public Assistance Scope of Work:

o Engineering assessments to evaluate the existing tower and telecommunication building conditions, and the cost of this project will depend greatly on these assessments.

o Prepare a structural assessment for the existing telecommunication tower.

o Remove and replace 200 ft Self-Supported Lattice Tower, including structural elements and components kits to restore tower security.

o Remove and replace 40 kW Power Generator

o Remove and replace a chain link fence of 242 ft x1 ft x 3 ft, with 26.89 CY of ground disturbance, in compliance with LUMA Engineering Standard 4801.016.

o Remove and replace 20 ft of barbed wire of access gates.

o Remove and replace Generator's electric meters and transfer switch.

o Remove and replace one 3 Ton Split A/C unit.

o Remove and replace a 36x72 in security (Anti-thief & fire resistance) door with a listed security hardware.

o Remove and replace one approved automatic smoke detection system for battery room.

o Pressure washes and cleaning of 1224 sqft interior and exterior building walls areas, walls, floors, and stairs.

o Apply 612 sqft internal building wall with one coat of primer and 2 coats of paint apply proper treatment. Includes repair cracks on walls.

o Remove and replace of 273 sqft floor tiles.

o Repair and seal 612 LF of floor slab cracks

o Remove and replace of 1 door with 1 frame in the building.

o Remove and replace of 6 interior luminaries, 10 Exterior luminaries

o Remove and replace of 10 security cameras including receiver.

o Construct Base course drainage layers, aggregate base course for roadways and large paved areas, crushed stone base, compacted, crushed 1-1/2" stone base, with approximately 15 ft x 180 ft x .67 ft with a ground disturbance of 67 CY.

o Identify and remove 1,000 LF cables that are not in function, organize remaining cables.

Proposed 406 Hazard Mitigation Grant Program Scope of Work:

• Install a Power Management Attachment to the Generator's transfer switch as a hazard mitigation measure. This attachment provides the utility the ability to remotely manage the generator to prevent over-usage during emergency situations.

LPCE Row #	Description	406 Cost
80	Install a Power Management Attachment for Generator	$6,252.60

Estimate – Isabela Planta

Cost estimates to complete the work have been generated at a class 3 level, which is between (+/-30%) of the final project cost. The estimate includes materials, construction labor and equipment, engineering, management, and contingencies. LUMA has identified risks and allowances for the mitigation of potential known risks.

Please refer to Appendix A for detailed Cost Estimate. A summary cost estimate for all five sites is provided at the end of this scope of work.

Total 406 Hazard Mitigation Cost Estimate $ 6,252.60

Project Scope of Work La Santa Site

Proposed 428 Public Assistance Scope of Work:
o Engineering assessments to evaluate the existing tower and telecommunication building conditions, and the cost of this project will depend greatly on these assessments.
o Prepare a structural assessment for the existing telecommunication tower.
o Remove and replace existing 200 ft Self-Supported Lattice Tower
Ground disturbance:
• 12 micro piles of 8 in (diameter of the pile) x 55 ft (depth), and
• three pile cap of 7.67 ft x 7.67 ft x 2.5 ft.
o Remove and replace 80 kW Power Generator.
o Remove and replace a chain link fence of 180ft x1ft x 3ft, with 20 CY of ground disturbance.
o Remove and replace 20 ft of barbed wire of access gates.
o Remove and replace the Generator's electric meters and transfer switch.
o Remove and replace one 3 Ton Split A/C unit.
o Remove and replace a 36x72 in security (Anti-thief & fire resistance) door with listed security hardware.
o Remove and replace one approved automatic smoke detection system for battery room.
o Pressure washes and cleaning of 1,780 sqft interior and exterior building walls areas, walls, floors, and stairs.
o Apply 1,780 sqft external building wall with one coat of primer and 2 coats of paint apply proper treatment. Includes repair cracks on walls.
o Apply 2,436 sqft (1,780 sqft on wall and 656 for ceiling) internal building wall with one coat of primer and 2 coats of paint apply proper treatment. Includes repair cracks on walls.
o Remove and replace 656 sqft of stairs and floor tiles.
o Repair and seal 180 LF of floor slabs cracks
o Remove and replace 2 doors and 2 frames in the building.
o Remove and replace 4 windows in the building.
o Remove and replace 6 interior luminaries, 10 Exterior luminaries
o Remove and replace 10 security cameras including receiver.
o Structural concrete, in place, slab on grade (3500 psi), 6" thick, includes forms (4 uses), Grade 60 rebar, concrete (Portland cement Type I), and placing, excludes finishing 20CY.
o Construct Base course drainage layers, aggregate base course for roadways and large paved areas, crushed stone base, compacted, crushed 1-1/2" stone base, with approximately 19.15 ft x 40.40 ft x .67 ft with a ground disturbance of 19.11 CY.
o Remove and replace 20 LF entry port and ice bridge.

Proposed 406 Hazard Mitigation Grant Program Scope of Work:

• Install a Power Management Attachment to the Generator's transfer switch as a hazard mitigation measure. This attachment provides the utility the ability to remotely manage the generator to prevent over-usage during emergency situations.

LPCE Row #	Description	406 Cost
94	Install a Power Management Attachment for Generator	$6,252.60

Estimate – La Santa Site

Cost estimates to complete the work have been generated at a class 3 level, which is between (+/-30%) of the final project cost. The estimate includes materials, construction labor and equipment, engineering, management, and contingencies. LUMA has identified risks and allowances for the mitigation of potential known risks.

Please refer to Appendix A for detailed Cost Estimate. A summary cost estimate for all five sites is provided at the end of this scope of work.

Total 406 Hazard Mitigation Cost Estimate $ 6,252.60

Project Scope of Work Manati TC Site

Proposed 428 Public Assistance Scope of Work:

o Engineering assessments to evaluate the existing tower and telecommunication building conditions, and the cost of this project will depend greatly on these assessments.
o Prepare a structural assessment for the existing telecommunication tower.
o Remove and replace a 120 ft tower with 200FT Self-Supported Lattice Tower
Ground disturbance:
• 28.11 cubic yd volume from 12 micro piles of 8 in (diameter of the pile) x 55 ft (depth),
• three pile cap of 7.67 ft x 7.67 ft x 2.5 ft.
o Remove and replace 40 kW Power Generator
o Remove and replace 174ft perimeter chain link fence.
o Remove and replace 20 ft of barbed wire of access gates.
o Remove and replace a chain link fence of 220ft x1ft x 3ft, with 24.44 CY of ground disturbance, in compliance with LUMA Engineering Standard 4801.016.
o Remove and replace the Generator's electric meters and transfer switch.
o Remove and replace one 3 Ton A/C unit.
o Remove and replace 4 doors 36 in x72 in security (Anti-thief & fire resistance) door with a listed security hardware.
o Remove and replace one approved automatic smoke detection system for battery room.
o Pressure washes and cleaning of 2,140 sqft exterior building walls areas, walls, floors, and stairs.
o Apply 1,070 sqft external building wall with one coat of primer and 2 coats of paint apply proper treatment. Includes repair cracks on walls.
o Apply 1,452 (1070 sqft on wall and 382 for ceiling) sqft internal building wall with one coat of primer and 2 coats of paint apply proper treatment. Includes repair cracks on walls.
o Removal and replacement of 382 sqft of stairs and floor tiles.
o Repair and seal 250 LF of floor slab cracks.
o Remove and replace 4 doors and 4 frames in the building.
o Remove and replace 2 louvers in the building.
o Remove and replace 6 interior luminaries, 10 Exterior luminaries
o Remove and replace 10 security cameras including receiver.

Proposed 406 Hazard Mitigation Grant Program Scope of Work:

• Install a Power Management Attachment to the Generator's transfer switch as a hazard mitigation measure. This attachment provides the utility the ability to remotely manage the generator to prevent over-usage during emergency situations.

ICE Row #	Description	406 Cost
89	Install a Power Management Attachment for Generator	

Estimate – Manati TC

Cost estimates to complete the work have been generated at a class 3 level, which is between (+/-30%) of the final project cost. The estimate includes materials, construction labor and equipment, engineering, management, and contingencies. LUMA has identified risks and allowances for the mitigation of potential known risks.

Please refer to Appendix A for detailed Cost Estimate. A summary cost estimate for all five sites is provided at the end of this scope of work.

Total 406 Hazard Mitigation Cost Estimate **$ 6,252.60**

Project Scope Notes

These notes apply to the proposed work for all five sites.

Debris Removal:
• This project consists of bringing the tower facilities and telecommunication building to current codes and standards via repair or replacement. The debris will be separated and taken to an approved waste disposal facility according to norms and rules of the State Federal Regulations.

Staging Area:
• The main staging area will be located inside the premises of the Telecom Sites and surrounding areas will be designated for material assembly, debris collection, tool store and parking as shown in Appendix B. Appendix B has an aerial photograph of each site, with coordinates and measurements for each staging area at each site.

Equipment to use:
• Crane, excavator, concrete mixer, and an electric winch.

Hazardous Material:
• Asbestos and lead testing were performed at each site. (Refer to Appendix E). Hazardous materials will be handled and disposed of according to local and federal regulations. LUMA will provide actual disposal locations and quantities.

Ground Disturbance:
• All project construction activities will take place within the existing Telecom Sites boundary. The impacted area is described in the §428 scope of work provided, above, for each site.

Summary Cost Estimate Group B Tower Sites

COST ESTIMATE			
Cost Element	**428**	**406**	**PROJECT TOTAL**
PLANNING	**$ 2,140,218.96**	**$ 8,103.92**	**$ 2,148,322.88**
Permitting and Assessments	$ 101,659.36	$ 345.99	$ 102,005.35
Environmental Documentation & Management	$ 1,347,122.24	$ 5,357.76	$ 1,352,480.00
Engineering Services & Design	$ 691,437.36	$ 2,400.17	$ 693,837.53
MANAGEMENT	**$ 688,574.14**	**$ 2,383.52**	**$ 690,957.66**

Project Management	$ 193,782.59	$ 670.79	$ 194,453.38
Construction Management	$ 258,376.78	$ 894.40	$ 259,271.18
Contracting, Procurement & Contract Administration	$ 107,226.37	$ 371.15	$ 107,597.52
Projects Controls (Scheduling, Estimating, Support, Cost Control, Risk, Document Control & Reporting)	$ 129,188.40	$ 447.18	$ 129,635.58
Telecom Infrastructura Group B	**$ 12,504,051.44**	**$ 43,237.17**	**$ 12,547,288.61**
FEMA Project Name: Telecom Infrastructure - Atalaya TC, FAAST#: 678800, material, labor and equipment.	$ 2,630,933.69	$ 6,252.60	$ 2,637,186.29
FEMA Project Name: Telecom Infrastructure Group B EL Gato Tower Site, FAAST#: 678800, material, labor and equipment.	$ 2,278,821.70	$ 10,693.63	$ 2,289,515.33
Telecom Infrastructure Group B Isabela Planta Tower Site , FAAST#: 678800, material, labor and equipment.	$ 849,349.18	$ 6,252.60	$ 855,601.78
FEMA Project Name: Telecom Infrastructure Group B La Santa Tower Site, FAAST#: 678800, material, labor and equipment.	$ 2,322,919.23	$ 6,252.60	$ 2,329,171.83
FEMA Project Name: Telecom Infrastructure - Manati TC, FAAST#: 678800, material, labor and equipment..	$ 2,185,844.50	$ 6,252.60	$ 2,192,097.10
Start Up/Commissioning	$ 154,029.31	$ 524.24	$ 154,553.55
Construction Trespass	$ 51,517.83	$ -	$ 51,517.83
Transportation Expenses	$ 51,343.11	$ 174.72	$ 51,517.83
Security (Field 24 hr)	$ 92,417.58	$ 314.54	$ 92,732.12
Insurance	$ 207,426.15	$ 705.99	$ 208,132.14
Contingency	$ 1,291,883.97	$ 4,472.05	$ 1,296,356.02
Escalation	$ 387,565.19	$ 1,341.60	$ 388,906.79

GENERAL CONDITIONS	**$ 644,878.00**	**$ 2,171.23**	**$ 647,049.23**
Sales Tax	$ 131,446.95	$ 423.69	$ 131,870.64
Municipal Construction Tax	$ 513,431.05	$ 1,747.54	$ 515,178.59
COST TOTALS	**$ 15,977,722.54**	**$ 55,895.84**	**$ 16,033,618.38**
DEDUCTIONS	**TOTAL INSURANCE PROCEEDS RECEIVED**		**$ -**
	DE-OBLIGATION TO FAASt IF APPLICABLE		**$ -**
FAASt ALLOCATIONS	FAAST PROJECT # 678800 - 428		$ 13,148,929.44
	FAAST PROJECT # 678800 - 406 HM		$ 55,895.84
	FAAST PROJECT # 678800 TOTAL:		**$ 13,204,825.28**
	FAASt A&E # 335168 - 428		$ 2,828,793.10
	FAASt A&E # 335168 - 406 HM		$ 10,487.44
	FAASt A&E # 335168 TOTAL		**$ 2,839,280.54**
	FAASt E&M #673691 - 428		$ -
	FAASt E&M #673691 - 406 HM		$ -
	FAASt E&M #673691 TOTAL		**$ -**

Project Cost Summary, 428 Version 0:

Work to be Completed (WTBC): $ 15,977,722.54

A&E Deduction (Global A&E FAASt 335168): -$2,828,793.10

E&M Deduction (Global E&M FAASt 673691): -$0.00

Project Total: $13,148,929.44

Project Notes:

1. Refer to detailed SOW provided in document labeled: "678800 - DR4339PR Detailed Scope of Work Telecom Infrastructure – Group B - Rev 7.2 Signed.pdf."

2. Refer to detailed Cost Estimate provided in document labeled: “678800 - DR4339PR Appendix A - LUMA Project Cost Estimate (LPCE) Rev 7-3-2025.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 in the table above. The A&E project was obligated to track and account for costs associated with individual FAASt projects.

4. This project is part of Donor FAASt 136271 – MEPA078 Puerto Rico Electrical Power Authority (PREPA) Island Wide FAASt Project.697.

5. No equipment and material (E&M) will be reduced in this project. For details see document file: "SP678800 - DR4339PR - E&M Email Clariication.pdf"

Attachments
DR-4339-PR APPENDIX A - LUMA Project Cost Estimate (LPCE) Rev 7-3-2025
DR-4339-PR APPENDIX B - Staging Area Telecom Group B
DR-4339-PR APPENDIX C - Technical Specifications
DR-4339-PR APPENDIX D - Consent to funding PREPA and P3A
DR-4339-PR APPENDIX E - Asbestos and Lead Certifications
DR-4339-PR APPENDIX F - Site Boundaries
DR-4339-PR APPENDIX G - Kohler Industrial Generator Set Accessories
DR-4339-PR APPENDIX H - Generator Quotation

406 HMP Scope

Project number: 678800 FAASt [Telecom Infrastructure – Group B] (Telecommunication)

Damage #1237892; FAASt [Telecom Infrastructure – Group B]

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

Location: Añasco, Morovis, Isabela, Cayey and Manatí, Puerto Rico

GPS Latitude/Longitude: [redacted]

Hazard Mitigation Narrative

Puerto Rico's electrical grid suffered severe disruptions following Hurricane Maria in September 2017, with widespread damage to transmission and distribution systems. Communications infrastructure was simultaneously devastated, creating a systemic failure that significantly impeded recovery efforts across the island. This communications breakdown generated an unmanageable backlog of service requests while critically hampering emergency response and recovery operations, exposing fundamental vulnerabilities in the island's infrastructure resilience.

The Sites on Group B telecom tower suffered structural damage due to the severe weather conditions caused by Hurricane Maria. The improvement of the Sites on Group B tower will provide a hardened telecommunications network that will alleviate damage from future weather-related events, to increase reliability and resiliency. The capability enhancements will include the first responder and emergency response communications, greater resilience of the internal telecommunications network, an enhanced microwave and fiber network, and a network control center, to improve centralized monitoring and control over facilities and IT traffic.

The Sites on Group B with his respective coordinates are:

Atalaya	Añasco	[redacted]	
El Gato	Morovis		
Isabela Planta	Isabela		
La Santa	Cayey		
Manati TC	Manati		

Hazard Mitigation Proposal (HMP) Scope of Work:

Mitigation Measures

At Group B telecommunications sites 406, comprehensive hazard mitigation measures are being implemented to enhance infrastructure resilience against severe weather events. The proposed scope includes installing a Remote Power Management system to monitor generator status remotely, preventing system overload during emergencies in all the five locations. Additionally, correct the roof slope using self-leveling concrete to improve drainage and prevent water damages to the roof waterproofing system; and reinforced concrete slab to support tower foundations and prevent water erosion at El Gato site. These strategic improvements represent a forward-thinking approach to protecting critical telecommunications infrastructure against future natural hazards while ensuring operational continuity for emergency services.

406 Mitigation Scope of Work:

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

1. **All Sites (Atalaya, El Gato, Isabela Planta, La Santa and Manati TC)**:

   a) Installation of 1 each Power Management Attachment to the Generator's transfer switch for each site. This attachment provides the utility the ability to remotely manage the generator to prevent over-usage during emergency situations.

2. **El Gato Site**:

   a) Install a 1,685 sqft, 6-inch-thick concrete slab at the site to support tower foundations and prevent water erosion.

   b) Install 385 sqft self-leveling 6100 psi, 1/2" thick concrete on roof to prevent water intrusion.

Hazard Mitigation Proposal (HMP) Cost:

Total Net Hazard Mitigation Cost (Base Cost) =	$43,237.17
+ HM (Applicant A&E, Management & General Conditions) =	$12,658.67
Hazard Mitigation Total Cost =	**$55,895.84**

Hazard Mitigation Proposal (HMP) Cost Distribution:

Equipment and Materials (E&M) =	$ 0.00
Architecture and Engineering (A&E =	$10,487.44
Construction Cost =	$45,408.40
Hazard Mitigation Total Cost =	**$55,895.84**

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 $55,895.84 (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	$0.00	Completed
9001	1	Lump Sum	$15,977,722.54	Uncompleted
3510	1	Lump Sum	($2,828,793.10)	Uncompleted

CRC Gross Cost	$13,148,929.44
Total 406 HMP Cost	$55,895.84
Total Insurance Reductions	$0.00
CRC Net Cost	$13,204,825.28
Federal Share (90.00%)	$11,884,342.76
Non-Federal Share (10.00%)	$1,320,482.52

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

9/25/2025

GENERAL INFORMATION

Event: DR4339-PR

Project: SP 678800

Category of Work: Cat F - Utilities

Applicant: PR Electric Power Authority

Event Type: Hurricane / Hurricane Maria

Cause of Loss: Wind / Wind Driven Rain

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

COMMERCIAL INSURANCE INFORMATION

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

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

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

Mapfre Praico Insurance Company (1398178000644)

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

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

Policy Limits: $300,000,000.00

RCV or ACV: Replacement Cost Value

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

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

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

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

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

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

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

Damaged Inventory (DI) #1237892:

FAASt [Telecom Infrastructure – Group B]

Location Description: Telecom Infrastructure – Group B

GPS Coordinates: [redacted]

Cause of Loss: Wind / Wind Driven Rain

SOV / Schedule #: "Sub-Stations"

SOV / Schedule Amount: $1,345,700,000.00

Applicable Deductible Amount: $25,000,000.00

Damage Inventory Amount: $13,204,825.28 (CRC Gross Cost $ 13,148,929.44 + HMP Cost $55,895.84)

Prior Obtain and Maintain Requirement:

No prior insurance requirements were found for this facility.

Reduction(s):

No insurance reduction will be applied to this project. An anticipated insurance reduction of $193,746,436.00 was applied to FAAST project #136271 for

anticipated insurance proceeds for Hurricane Maria losses. For ease of reference, please see table of insurance allocations: "PREPA Allocation Plan – All Disasters" file.

Obtain and Maintain Requirement:

An Obtain & Maintain Requirement is being required forBuilding, for the peril of Wind (all wind associated losses including "wind driven rain") for the FAASt [Telecom Infrastructure – Group B] - Atalaya in the amount of $1,753,686.90 (CRC Gross Cost$3,981,431.68 – Uninsurable Items $2,237,080.21 + Insurable HMP Cost $9,335.43). Please see "SP678800-DR4339PR- LUMA Cost Est-Ins" file.

An Obtain & Maintain Requirement is being required forBuilding, for the peril of Wind (all wind associated losses including "wind driven rain") for the FAASt [Telecom Infrastructure – Group B] – El Gatoin the amount of $1,811,291.70 (CRC Gross Cost$3,490,221.90 – Uninsurable Items $1,695,169.03 + Insurable HMP Cost $16,238.83). Please see "SP678800-DR4339PR- LUMA Cost Est-Ins" file.

An Obtain & Maintain Requirement is being required forBuilding, for the peril of Wind (all wind associated losses including "wind driven rain") for the FAASt [Telecom Infrastructure – Group B] – Isabela Plantain the amount of $1,221,010.00 (CRC Gross Cost$1,538,784.49 – Uninsurable Items $328,995.92 + Insurable HMP Cost $11,221.43). Please see "SP678800-DR4339PR- LUMA Cost Est-Ins" file.

An Obtain & Maintain Requirement is being required forBuilding, for the peril of Wind (all wind associated losses including "wind driven rain") for the FAASt [Telecom Infrastructure – Group B] –La Santain the amount of $1,870,241.21 (CRC Gross Cost$3,550,957.02 – Uninsurable Items $ $1,690,139.19 + Insurable HMP Cost $9,423.38). Please see "SP678800-DR4339PR- LUMA Cost Est-Ins" file.

An Obtain & Maintain Requirement is being required forBuilding, for the peril of Wind (all wind associated losses including "wind driven rain") for the FAASt [Telecom Infrastructure – Group B] –Manatiin the amount of $1,950,734.71 (CRC Gross Cost$3,416,327.45 – Uninsurable Items $1,475,269.51 + Insurable HMP Cost $9,676.77). Please see "SP678800-DR4339PR- LUMA Cost Est-Ins" file.

Insurance Proceeds Statement:

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

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

Standard Insurance Comments

FEMA Policy 206-086-1
PART 2: Other Insurance-Related Provisions. (Sections 312 and 406(d) of the Stafford Act)

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

1. Before FEMA approves assistance for a property, an applicant must provide FEMA with information about any actual or anticipated insurance settlement or recovery it is entitled to for that property.

2. FEMA will reduce assistance to an applicant by the amount of its actual or anticipated insurance proceeds.

3. Applicants must take reasonable efforts to recover insurance proceeds that they are entitled to receive from their insurer(s).

…

5. If an applicant has an insurance requirement from a previous event:

a. FEMA will reduce assistance by the actual or anticipated insurance proceeds, or the amount of insurance required in the previous disaster, whichever is greater.

b. FEMA will only consider insolvent insurers, legal fees, or apportionment of proceeds as described in Section VII, Part 2(A)(3) and (4) when the applicant's anticipated or actual insurance proceeds are higher than the amount of insurance required in the previous disaster.

FEMA Policy 206-086-1
H. Subsequent Assistance. When a facility that received assistance is damaged by the same hazard in a subsequent disaster:

1. If the applicant failed to maintain the required insurance from the previous disaster, then the facility is not eligible for assistance in any subsequent disaster.

2. Upon proof that the applicant maintained its required insurance, FEMA will reduce assistance in the subsequent disaster by the amount of insurance required in the previous disaster regardless of:

a. The amount of any deductible or self-insured retention the applicant assumed (i.e., "retained risk").

…

4. If the applicant's anticipated or actual insurance proceeds are higher than the amount of insurance required in the previous disaster, FEMA will reduce assistance by that amount in accordance with Section VII, Part 2(A) of this policy.

Obtain and Maintain Requirements:

44 CFR § 206.253 Insurance requirements for facilities damaged by disasters other than flood.

(a) Prior to approval of a Federal grant for the restoration of a facility and its contents which were damaged by a disaster other than flood, the recipient shall notify the Regional Administrator of any entitlement to insurance settlement or recovery for such facility and its contents. The Regional Administrator shall reduce the eligible costs by the actual amount of insurance proceeds relating to the eligible costs.

(b)

(1) Assistance under section 406 of the Stafford Act will be approved only on the condition that the recipient obtain and maintain such types and amounts of insurance as are reasonable and necessary to protect against future loss to such property from the types of hazard which caused the major disaster. The extent of insurance to be required will be based on the eligible damage that was incurred to the damaged facility as a result of the major disaster. The Regional Administrator shall not require greater types and extent of insurance than are certified as reasonable by the State Insurance Commissioner.

(2) Due to the high cost of insurance, some applicants may request to insure the damaged facilities under a blanket insurance policy covering all their facilities, an insurance pool arrangement, or some combination of these options. Such an arrangement may be accepted for other than flood damages. However, if the same facility is damaged in a similar future disaster, eligible costs will be reduced by the amount of eligible damage sustained on the previous disaster.

(c) The Regional Administrator shall notify the recipient of the type and amount of insurance required. The recipient may request that the State Insurance Commissioner review the type and extent of insurance required to protect against future loss to a disaster-damaged facility, the Regional Administrator shall not require greater types and extent of insurance than are certified as reasonable by the State Insurance Commissioner.

(d) The requirements of section 311 of the Stafford Act are waived when eligible costs for an insurable facility do not exceed $5,000. The Regional Administrator may establish a higher waiver amount based on hazard mitigation initiatives which reduce the risk of future damages by a disaster similar to the one which resulted in the major disaster declaration which is the basis for the application for disaster assistance.

(e) The recipient shall provide assurances that the required insurance coverage will be maintained for the anticipated life of the restorative work or the insured facility, whichever is the lesser.

(f) No assistance shall be provided under section 406 of the Stafford Act for any facility for which assistance was provided as a result of a previous major disaster unless all insurance required by FEMA as a condition of the previous assistance has been obtained and maintained.

Final Obtain and Maintain requirement amount will be determined during the closeout process after the final actual eligible costs to repair or replace the insurable facility have been determined.

FEMA Policy 206-086-1

F. Timeframes for Obtaining Insurance. FEMA will only approve assistance under the condition that an applicant obtains and maintains the required insurance.

The applicant must document its commitment to comply with the insurance requirement with proof of insurance.

If an applicant cannot insure a facility prior to grant approval (for example, if a building is being reconstructed), the applicant may provide a letter of commitment stating that they agree to the insurance requirement and will obtain the types and extent of insurance required, followed at a later date by proof of insurance once it is obtained. In these cases, the applicant should insure the property:

a. When the applicant resumes use of or legal responsibility for the property (for example, per terms of construction contract or at beneficial use of the property); or

b. When the scope of work is complete.

FEMA and the recipient will verify proof of insurance prior to grant closeout to ensure the applicant has complied with the insurance requirement.

An applicant should notify FEMA—in writing through the recipient—of changes to their insurance which impact their ability to satisfy the insurance requirement after it provides proof of insurance to FEMA. This includes changes related to self-insurance. If an applicant fails to do this, FEMA may de-obligate assistance and not provide assistance in a future disaster.

Jorge Parrilla, PA Insurance Specialist

CRC Atlantic, Guaynabo, PR

O&M Requirements

Insured Peril	Item Type	Description	Required Coverage Amount

Insured Peril	Item Type	Description	Required Coverage Amount
Wind	Building	An Obtain & Maintain Requirement is being required for Building, for the peril of Wind (all wind associated losses including "wind driven rain") for the FAASt [Telecom Infrastructure – Group B] - Atalaya in the amount of $1,753,686.90.	$1,753,686.90
Wind	Building	An Obtain & Maintain Requirement is being required for Building, for the peril of Wind (all wind associated losses including "wind driven rain") for the FAASt [Telecom Infrastructure – Group B] – El Gato in the amount of $1,811,291.70.	$1,811,291.70
Wind	Building	An Obtain & Maintain Requirement is being required for Building, for the peril of Wind (all wind associated losses including "wind driven rain") for the FAASt [Telecom Infrastructure – Group B] – Isabela Planta in the amount of $1,221,010.00.	$1,221,010.00
Wind	Building	An Obtain & Maintain Requirement is being required for Building, for the peril of Wind (all wind associated losses including "wind driven rain") for the FAASt [Telecom Infrastructure – Group B] – La Santa in the amount of $1,870,241.21.	$1,870,241.21
Wind	Building	An Obtain & Maintain Requirement is being required for Building, for the peril of Wind (all wind associated losses including "wind driven rain") for the FAASt [Telecom Infrastructure – Group B] – Manati in the amount of $1,950,734.71.	$1,950,734.71

406 Mitigation

There is no additional mitigation information on **FAASt [Telecom Infrastructure – Group B] (Telecommunication)**.

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 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.
- 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.

- Endangered Species Act (ESA) Conditions for the Puerto Rican Boa (Chilabothrus inornatus) for Atalaya Substation; El Gato Substation; Isabela Planta Substation; La Santa Substation; and Manati TC Substation: 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 harm's 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 harm's 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 reinitiate 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 reinitiate 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 Service's Point of Contact (POC) is José 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
- Endangered Species Act (ESA). The below conservation measures apply to the following species: Patagioenas Inornata Wetmorei (Puerto Rican Plain Pigeon) and Accipiter striatus venator (Puerto Rican Sharp-shinned hawk) for La Santa Substation: 1. 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. During breeding seasons (see below), nest surveys shall be conducted if a project occurs within the range of any of the species listed above and if habitat for those species will be impacted by the proposed actions. Nest searches must be conducted by qualified personnel with the appropriate permits from the Puerto Rico Department of Natural and Environmental Resources (PRDNER) prior to start of work. If nesting activity is detected, all construction activities or human disturbance must be avoided within a 50-meter buffer around any nest(s) found within the project area. This avoidance strategy must be kept until fledglings successfully leave the nest(s) permanently. Outside the breeding season no nest surveys are required, but if a nest is encountered, all construction activities or human disturbance must be avoided within a 50-meter buffer around that nest(s). This avoidance strategy must be kept until fledglings successfully leave the nest(s) permanently. Furthermore, if any of the species indicated above is observed (e.g., foraging, resting) within the project area, avoid any disturbance to the individual(s) and do not flush the bird until it leaves on its own. Nesting seasons: -Puerto Rican plain pigeon: April-September. -Puerto Rican shap-shineed hawk: December-June. For all nest sightings, the Applicant must record the time and date of the sighting and the specific location where it was found. All sightings and incidental lethal take reports should be sent to the USFWS Caribbean Ecological Services Field Office at Caribbean_es@fws.gov. For questions, the Point of Contact (POC) is José Cruz-Burgos, Endangered Species Program Coordinator, and can be contacted at: . Mobile: 305-304-1386 . Office phone: 786-244-0081 . Office Direct Line: 939-320-3120 . Email: jose_cruz-burgos@fws.gov
- The Applicant must provide documentation at close-out that proves completion of required Conservation Measures.
- -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 roads/embankments: All construction material and debris deposited in eroded embankments must be removed before start of work. Final disposal of bituminous and any non-recyclable debris materials resulting from the restoration and demolition activities must take place at an authorized sanitary landfill. Noncompliance with these requirements may jeopardize receipt of federal funds.

- Applicant is required to obtain a Source of Emission Permit (PFE) from Puerto Rico Department of Natural and Environmental Resources (PR DNER) or General Permit for Emergency Power Generators (PG-GE) from the PR Office of Permits Management (OGPe) prior to construction and operation of the proposed source of emissions. Documentation of DNER and other state, local or federal guideline compliance, may be required as a condition of closeout.

EHP Additional Info

There is no additional environmental historical preservation on **FAASt [Telecom Infrastructure – Group B] (Telecommunication)**.

Final Reviews

Final Review

Reviewed By LEFRANC-GARCIA, CARLOS L. **Reviewed On** 10/07/2025 3:51 AM PST

Review Comments

This version 0 is composed of 5 sites, which are Atalaya, El Gato, Isabela Planta, La Santa, and Manatí TC. These sites have a telecommunication building and lattice self-supported tower. All sites have a generator and fuel tank. The sites have good access to asphalt or concrete pavement. The Sites on Group B telecom tower suffered structural damage due to the severe weather conditions caused by Hurricane Maria. The improvement of the Sites on Group B tower will provide a hardened telecommunications network that will alleviate damage from future weather-related events, to increase reliability and resiliency. CRC Gross Cost: $13,148,929.44 Total 406 HMP Cost: $55,895.84 - Reviewed, found eligible and reasonable. CLG 10.06.25

Recipient Review

Reviewed By Mulero, Noel **Reviewed On** 10/07/2025 10:21 PM PST

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

Award Information

Version Information

Version #	Eligibility Status	Current Location	Bundle Number	Project Amount	Cost Share	Federal Share Obligated	Date Obligated
0	Pending	In Review		$0.00	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 #
0	11/5/2025	$11,884,342.76	90%	Accepted	4339DRPRP00114251

Department of Homeland Security
Federal Emergency Management Agency

v0

General Info

Project #	749072 **P/W #** 11877	**Project Type**	Specialized
Project Category	F - Utilities	**Applicant**	PR Electric Power Authority (000-UA2QU-00)
Project Title	FAASt [Priority Pole Replacement Program (Line 2700 Aguadilla Hospital Distrito Sect – Mora TC)] (Transmission)	**Event**	4339DR-PR (4339DR)
		Declaration Date	9/20/2017
Project Size	Large	**Incident Start Date**	9/17/2017
Activity Completion Date	9/20/2027	**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 #454629; FAASt [Transmission Priority Pole Replacement Program Line 2700 Aguadilla Hospital Distrito Sect – Mora TC]

General Facility Information:

- **Facility Type:** Power generation, transmission, and distribution facilities
- **Facility:** Line 2700
- **Facility Description:** The facilities listed below are part of the 8.2 circuit miles of overhead transmission for 38kV Line 2700 from Aguadilla Hospital Distrito Sect – Mora TC segment.
- **Approx. Year Built:** 1980
- **Start GPS Latitude/Longitude:** [redacted]
- **End GPS Latitude/Longitude:** [redacted]

Final Scope

454629

FAASt [Transmission Priority Pole Replacement Program Line 2700 Aguadilla Hospital Distrito Sect – Mora TC]

Introduction

The purpose of this document is to submit for approval the Detailed Scope of Work (SOW) to COR3 and FEMA for project 749072 Transmission Priority Pole Replacement Program Line 2700 Aguadilla Hospital Distrito Sect – Mora TC Project under DR-4339-PR Public Assistance. The document provides a detailed description of the project including scope, schedule, and cost estimates as well as Environmental and Historical Preservation (EHP) requirements and proposed 406 hazard mitigation work. LUMA Energy is seeking approval from COR3 and FEMA for project funding to repair, restore, or replace the eligible facilities.

LUMA submits this Detailed SOW pursuant to the Transmission and Distribution Operations & Maintenance Agreement between Puerto Rico Electric Power Authority (PREPA), the Puerto Rico Public-Private Partnerships Authority (P3A) and LUMA Energy,

and in accordance with the Consent to Federal Funding Letter issued by PREPA and P3A and provided herein as Appendix D which collectively provides the necessary consent for LUMA Energy, as an 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

The facilities listed below are part of the 8.2 circuit miles of overhead transmission for 38kV Line 2700 from Aguadilla Hospital Distrito Sect – Mora TC segment. This line is a Near-Term rebuild priority identified by LUMA. However, these structures were identified as having System Remediation Plan ("SRP") issues and were considered degraded during a High-Level Assessment ("HLA"). Due to the degraded condition of these structures, they will be replaced through the Transmission Priority Pole Replacement Program on an expedited basis.

Facilities List

The line segments are supported by 8 structures consisting of wood, steel, and concrete poles structures, having existing underbuilt distribution and/or third-party attachments. The following table identifies the GPS location of the line segments.

Line Segment	Line Number	GPS Start	GPS End	Voltage (kV)
Aguadilla Hospital Distrito Sect - Mora TC	2700	[redacted]		38

Project Scope of Work

The scope of work for Line 2700 from Aguadilla Hospital Distrito Sect – Mora TC will consist of the replacement of hardware, the poles identified in Appendix B, guys and anchors, and foundations for TL2700. LUMA seeks both § 428 Public Assistance and § 406 Hazard Mitigation funding for this work.

Line Segment	Damage	# of Poles to Replace	#of Poles to Reinforce	# of Poles to Reuse	# of New Poles to be Added
Aguadilla Hospital Distrito Sect – Mora TC	454629	8	0	0	0

The table below identifies the location of the poles to be replace in this scope of work:

Pole	FID	Lat	Long
1	21251213	[redacted]	
2	16977756		
3	17036472		
4	16980583		
5	20366913		
6	20414359		
7	20414442		

8	20414447	[redacted]	[redacted]

Proposed 428 Public Assistance Scope of Work

The specific tasks necessary for the completion of the scope of work for the LUMA Transmission Pole Replacement Program are detailed below:

1. Remove 8 wood poles and replace with 8 steel round poles.
    a. Poles to be installed are:
        i. 7 x 70' galvanized steel round poles
        ii. 1 x 85' galvanized steel round poles.

2. Poles and components will be installed per the design methodology per the Project Design Criteria. They will conform to new codes and standards that are applicable to the infrastructure.

3. Remove and replace 27 existing ceramic Insulators with polymer horizontal post insulators

Scope notes

1. Equipment to be used include Skid Steer, Excavator, Hydrovacs, 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. All equipment used will comply with Tier 4 EPA Emission Standards, If available.

2. Fill, gravel, and sand materials will be obtained from a preferred vendor as referenced in the Approved Supplier List Directory PR (see Appendix A – Approved Supplier List).

3. The construction of access roads is not required for this scope of work. All work for this program will be performed within the current electrical right-of-way for each of the municipalities. Poles are near the roads and are site accessible. (Refer to Appendix F - Project Considerations).

4. All materials will be stored and dispatched from the assigned LUMA's Regional Warehouse. Refer to Warehouse Locations. No additional or temporary staging areas are required to store materials or disposal. No vegetation clearing will be required. The existing Regional Warehouse to be utilized as a staging area for this project is the Mayagüez Region Warehouse (A61), whose coordinates are [redacted].

5. The types of debris to be removed during the demolition process are, but not limited to insulated and bare aluminum and copper cables, PVC conduits, concrete, metal scrap, construction waste, wood, etc. The debris will be separated and taken to an approved waste disposal facility.

6. Polychlorinated Biphenyls (PCBs), oil from the transformer and sealants, and other chemical wastes typical of a construction site will be handled and disposed of according to the applicable state and federal regulations.

7. 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 [Project # 727562] FAASt [Region Mayagüez] High Density (Vegetation). The vegetation removal process will be managed in accordance with federal and state regulations.
    a. Specific List of Permits Required:
        i. Department of Transportation and Public Works ("DTOP") Endorsements & Municipality Notifications.
        ii. Excavation and Demolition Notification in DTOP.

For Proposed 406 Hazard Mitigation Scope of Work, refer to 406 Mitigation Profile.

Project Cost Estimate

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. LUMA has allocated 10% of the project cost to mitigate risks. For more details refer to Appendix E for Detailed Cost Estimate – Aguadilla Hospital Distrito Sect – Mora TC.

COST ESTIMATE			
Cost Element	**428**	**406**	**PROJECT TOTAL**
PLANNING	$62,492.70	$4,151.95	$66,644.65
MANAGEMENT	$47,801.07	$3,175.83	$50,976.90
Transmission Pole Replacement and Critical Repairs L2700 Aguadilla Hospital Distrito SECT to Mora TC, FAAST#:749072	$747,580.62	$49,707.22	$797,287.84
GENERAL CONDITIONS	$39,055.39	$2,594.80	$41,650.19
COST TOTALS	**$896,929.78**	**$59,629.80**	**$956,559.58**
DEDUCTIONS	**TOTAL INSURANCE PROCEEDS RECEIVED**		**$-**
	DE-OBLIGATION TO FAASt IF APPLICABLE		**$-**
FAASt ALLOCATIONS	FAAST PROJECT # 749072 - 428		**$767,377.79**
	FAAST PROJECT # 749072 - 406HM		**$59,629.80**
	FAAST PROJECT #749072 TOTAL:		**$827,007.59**
	FAASt A&E # 335168 - 428		**$73,616.34**
	FAASt A&E # 335168 - 406 HM		**$4,890.99**
	FAASt A&E # 335168 TOTAL		**$78,507.33**

	FAASt E&M #673691 - 428	**$55,935.65**
	FAASt E&M #673691 - 406 HM	**$9,604.35**
	FAASt E&M #673691 TOTAL	**$65,540.00**

Work to be Completed (WTBC): $ 896,929.78

A&E Deduction (Global A&E FAASt 335168): -$73,616.34

E&M Deduction (Global E&M FAASt 673691): -$55,935.65

Project Total: $767,377.79

Project Notes:

1. Refer to detailed SOW provided in document labeled: "*749072-DR4339PR-Detailed SOW-T-Pole TL2700 Aguadilla Distrito Sect – Mora TC Rev6_signed.pdf*"

2. Refer to detailed Cost Estimate provided in document labeled: "*749072-DR4339PR-Appendix E - Detailed Cost Estimate TL 2700 Rev 7.xlsx*"

3. A&E cost 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 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 project is part of Donor FAASt 136271 – MEPA078 Puerto Rico Electrical Power Authority (PREPA) Island Wide FAASt Project.697.

ATTACHMENTS

APPENDIX A – Approved Supplier List

APPENDIX B - General Arrangement

APPENDIX C – Engineering Plans

APPENDIX D - Consent to Federal Funding Letter - FEMA COR3

APPENDIX E - Detailed Cost Estimate REV. 04

APPENDIX F – Project Considerations

APPENDIX G – Cost Effective Hazard Mitigation Measures

APPENDIX H – Hazard Mitigation Narrative

APPENDIX I – Staging Area Mayagüez Region

406 HMP Scope

Project Number: 749072

Damage #454629; FAASt [Transmission Priority Pole Replacement Program Line 2700 Aguadilla Hospital Distrito Sect – Mora TC]

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

Location: Aguadilla and Isabela, Puerto Rico

GPS Latitude/Longitude: ([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 "loss of power" from Hurricane Maria. The incident caused damage to the electrical system, such as the power generation plants, transmission and distribution lines, substations, communication systems, buildings, among other damages to the infrastructures owned, operated, and maintained by the Puerto Rico Electric Power Authority (PREPA).

☐ **Project #749072 FAASt [Priority Pole Replacement Program (Line 2700 Aguadilla Hospital Distrito Sect – Mora TC]**

-

The Method of Repair (MOR) included the replacement of the damaged critical distribution poles (wood, concrete or galvanized), insulators, and all associated hardware needed for the new structure. The facilities listed below are part of the 8.2 circuit miles of overhead transmission for 38kV Line 2700 from Aguadilla Hospital Distrito Sect – Mora TC segment. This line is a Near-Term rebuild priority identified by LUMA. However, these structures were identified as having System Remediation Plan ("SRP) issues and were considered degraded during a High-Level Assessment ("HLA"). Due to the degraded condition of these structures, they will be replaced through the Transmission Priority Pole Replacement Program on an expedited basis. Later, the remainder of the line will be rebuilt, except for the structures that would already have been replaced through this project and in alignment with LUMA codes and standards.

In order to minimize the damages in a future event, the sub-recipient proposes as a mitigation measure to increase the strength of the poles by adding concrete foundations and strength of the poles by replacing it with steel galvanized, 12-sided, tapered shaft distribution poles to mitigate future damage due to high wind (160mph). Note: The FEMA Accelerated Award Strategy (FAASt) MOR included the PREPA distribution standards and specifications that were based on a 145mph sustained winds. However, the new PREPA Standard 2021 updates the design-criteria to a 160mph sustained winds resistant. The 160mph wind tolerance mitigation measure, will protect and make the affected infrastructure more resistant, stronger, and resilient to similar hazards.

Hazard Mitigation Proposal (HMP) Scope of Work:

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

Mitigation Measures *(Replacement)*

To avoid damage in a future event, the sub-recipient proposes as a mitigation measure to 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. Refer to Appendix J: Section VI.D.1 of the PAPPG V5.

- Replace **7ea** 70ft round galvanized steel pole of 145mph windspeed resistance ASCE/SEI 48-19 with **7ea** 70ft steel galvanized, 12-sided, tapered shaft distribution pole to increase the strength of the pole by increasing the wind tolerance by design to 160mph.

- Replace **1ea** 85ft round galvanized steel pole of 145mph windspeed resistance ASCE/SEI 48-19 with **1ea** 85ft steel galvanized, 12-sided, tapered shaft distribution pole to increase the strength of the pole by increasing the wind tolerance by design to 160mph.

Mitigation Measures (*Supplement*)

To avoid damage in a future event, the sub-recipient proposes as a mitigation measure to increase the strength of the poles by adding concrete foundations to mitigate future damage to the structures due to high wind (160mph) and flooding. 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.3 of the PAPPG V5.

- Install five (5ea) new concrete base foundation for four (4ea) 70ft 12-sided galvanized steel pole and one (1ea) 85ft 12-sided galvanized steel pole = **30.93 CY**.

    - {[(5/2)^2*3.14*13.5] - [(2.1/2)^2*3.14*13.5]} /27 = 7.99 CY
    - {[(4.5/2)^2*3.14*11] - [(2.1/2)^2*3.14*11]} /27 = 4.98 CY
    - {[(3.5/2)^2*3.14*15.5] - [(3/2)^2*3.14*15.5]}/27 = 1.98 CY
    - {[(6/2)^2*3.14*11] - [(2.1/2)^2*3.14*11]} / 27 = 9.79 CY
    - {[(4.5/2)^2*3.14*13.5] - [(2.1/2)^2*3.14*13.5]}]/27 = 6.19 CY

- Included with the foundation:
    - Corrugated metal pipe as the form for the foundation.
    - Crushed stone base.

(III) Hazard Mitigation Proposal (HMP) Cost

Total Net Hazard Mitigation Cost (Base Cost) =	$ 47,770.13
+ HM (Recipient A&E, Management & General Conditions) =	$ 11,859.67
Hazard Mitigation Total Cost =	**$59,629.81**

(IV) Hazard Mitigation Proposal (HMP) Cost Distribution

Equipment and Materials (E&M) =	$ 9,604.35
Architecture and Engineering (A&E) =	$ 4,890.99
Construction Cost =	$45,134.46
Hazard Mitigation Total Cost =	**$59,629.81**

(V) 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 $59,629.81 (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	($73,616.34)	Uncompleted
9001	1	Lump Sum	$896,929.78	Uncompleted
9001	1	Lump Sum	($55,935.65)	Uncompleted
9201	1	Lump Sum	$0.00	Completed

CRC Gross Cost	$767,377.79
Total 406 HMP Cost	$59,629.81
Total Insurance Reductions	$0.00
CRC Net Cost	$827,007.60
Federal Share (90.00%)	$744,306.84
Non-Federal Share (10.00%)	$82,700.76

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

Insurance

Additional Information

9/8/2025

GENERAL INFORMATION

Event: DR4339-PR

Project: SP 749072

Category of Work: Cat F - Utilities

Applicant: PR Electric Power Authority

Event Type: Hurricane / Hurricane Maria

Cause of Loss: Wind / Wind Driven Rain

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

COMMERCIAL INSURANCE INFORMATION

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

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

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

Mapfre Praico Insurance Company (1398178000644)

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

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

Policy Limits: $300,000,000.00

RCV or ACV: Replacement Cost Value

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

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

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

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

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

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

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

Damaged Inventory (DI) #454629:

FAASt [Transmission Priority Pole Replacement Program Line 2700 Aguadilla Hospital Distrito Sect – Mora TC]

Location Description: Aguadilla Hospital Distrito Sect – Mora TC segment.

GPS Coordinates: [redacted]

Cause of Loss: Wind / Wind Driven Rain

SOV / Schedule #: Not Insured

SOV / Schedule Amount: $0.00

Applicable Deductible Amount: $0.00

Damage Inventory Amount: $827,007.60 (CRC Gross Cost $767,377.79 + HMP Cost $59,629.81)

Prior Obtain and Maintain Requirement:

No prior insurance requirements were found for this facility.

Reduction(s):

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

Obtain and Maintain Requirement:

No Obtain & Maintain Requirement is being mandated for FAASt [Transmission Priority Pole Replacement Program Line 2700 Aguadilla Hospital Distrito Sect – Mora TC] because facility does not meet the definition of building, equipment, contents, or vehicle.

Insurance Proceeds Statement:

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

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

Standard Insurance Comments

FEMA Policy 206-086-1
PART 2: Other Insurance-Related Provisions. (Sections 312 and 406(d) of the Stafford Act)

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

1. Before FEMA approves assistance for a property, an applicant must provide FEMA with information about any actual or anticipated insurance settlement or recovery it is entitled to for that property.

2. FEMA will reduce assistance to an applicant by the amount of its actual or anticipated insurance proceeds.

3. Applicants must take reasonable efforts to recover insurance proceeds that they are entitled to receive from their insurer(s).

…

5. If an applicant has an insurance requirement from a previous event:

a. FEMA will reduce assistance by the actual or anticipated insurance proceeds, or the amount of insurance required in the previous disaster, whichever is greater.

b. FEMA will only consider insolvent insurers, legal fees, or apportionment of proceeds as described in Section VII, Part 2(A)(3) and (4) when the applicant's anticipated or actual insurance proceeds are higher than the amount of insurance required in the previous disaster.

Jorge Parrilla, PA Insurance Specialist

O&M Requirements

There are no Obtain and Maintain Requirements on **FAASt [Priority Pole Replacement Program (Line 2700 Aguadilla Hospital Distrito Sect – Mora TC)] (Transmission)**.

406 Mitigation

There is no additional mitigation information on **FAASt [Priority Pole Replacement Program (Line 2700 Aguadilla Hospital Distrito Sect – Mora TC)] (Transmission)**.

Environmental Historical Preservation

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

EHP Conditions

- Any change to the approved scope of work will require re-evaluation for compliance with NEPA and other Laws and Executive Orders.
- This review does not address all federal, state and local requirements. Acceptance of federal funding requires recipient to comply with all federal, state and local laws. Failure to obtain all appropriate federal, state and local environmental permits and clearances may jeopardize funding.
- If ground disturbing activities occur during construction, applicant will monitor ground disturbance and if any potential archaeological resources are discovered, will immediately cease construction in that area and notify the State and FEMA.
- 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 plan 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.
- ESA 1: The Applicant must provide documentation at close-out that proves completion of required Conservation Measures.
- ESA 2: 34. The Puerto Rican harlequin butterfly (Atlantea tulita) for TL 2700: a. The contractor must inform all personnel about the potential presence of the Puerto Rican harlequin butterfly and its host plant, prickly bush (Oplonia spinosa), in the project areas. A pre-work meeting should inform all project personnel about the need to avoid harming this butterfly and its

occupied host plant. 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. Educational material (e.g., posters, flyers, or signs with photos or illustrations of all the life stages of the Puerto Rican harlequin butterfly (i.e., eggs, caterpillar, chrysalids, and adult, and its host plant) should be prepared and available to all personnel for reference. b. Before starting any project activity, including removal of vegetation and earth movement, the contractor must clearly delineate the boundaries of the working area in the field to avoid unnecessary habitat impacts. Once the project areas are clearly marked, and before any work activity, including site preparation, personnel with knowledge and ability to identify the Puerto Rican harlequin butterfly (all life stages) and the prickly bush must survey the areas where the work will be performed for the presence of the species and its host plant. It is important to note that the Puerto Rican harlequin butterfly can be observed year-round in all life stages; thus, oviposition (egg-laying) may occur at any time during the year. c. If the prickly bush is present on the project site, try to avoid cutting the plant, even if no eggs, caterpillars, or chrysalids are present. d. If there is no prickly bush within the project area, but the butterfly is observed flying within the project area, do not harass, harm, pursue, wound, kill, trap, capture, collect, or attempt to engage in any such conduct, the species. e. Adult butterflies are often observed flying near the host plant as part of their mating behavior and for laying eggs. Project-related activities must stop if the prickle bush is found in the project area and the Puerto Rican harlequin butterfly is observed flying in that same area. A temporary 50-meter (164 feet) buffer zone of no activity or human disturbance should be established and clearly marked around that prickly bush until the butterfly moves out on its own.

- ESA 3: f. Once the Puerto Rican harlequin butterfly has moved away, within a period of 24 to 36 hours, a search of the prickly bush that has been buffered should be conducted to determine the presence of any eggs, caterpillars, or chrysalids of the butterfly on the plant. The contractor or the Applicant should send a report of the observation and its findings to caribbean_es@fws.gov after the 36-hour search is concluded. g. If, after the initial search or after the 24 to 36-hour search, any life stage of the Puerto Rican harlequin butterfly is found in the prickly bush, take the following actions: - Clearly mark the host plant with flagging tape. - Establish a 10-meter (32-foot) buffer zone around the bush for its protection. - Eggs are typically found on the prickly bushs newly grown, tender branches. Once the egg hatch, the caterpillar moves and feeds throughout the bush. Therefore, avoid cutting off the prickly bush within the project site even if no eggs, caterpillars, or chrysalids are present. - Work within the 10-meter buffered area may resume when no signs of any live life stage of the butterfly are detected, which usually takes approximately 60 to 120 days. h. For all Puerto Rican harlequin butterfly sightings (all life stages), the time and date of the sighting and the specific location where the butterfly was found must be recorded. Data should also include a photo of the butterfly (if possible) and the habitat where it was observed, site GPS coordinates, and comments on how the butterfly was detected and its behavior. All Puerto Rican harlequin butterfly sighting reports should be sent to the Service's Caribbean Ecological Service Field Office at caribbean_es@fws.gov. j. For questions regarding the Puerto Rican harlequin butterfly, the Point of Contacts are: - Jose Cruz-Burgos, Endangered Species Coordinator: Mobile: 305-304-1386 Office phone: 786-244-0081 Office Direct Line: 939-320-3120 Email: jose_cruz-burgos@fws.gov - Carlos Pacheco, Fish and Wildlife Biologist Mobile: 786-847-5951 Office Direct Line: 939-320-3113 Email: carlos_pacheco@fws.gov
- RCRA 1: The Applicant shall handle, manage, and dispose of all types of hazardous waste in accordance with requirements of local, state, and federal laws, regulations, and ordinances. In addition, the Applicant shall ensure that all debris is separated and disposed of in a manner consistent with the PR DNER guidelines at a permitted site or landfill. The contractor/applicant will be responsible for the proper disposition of construction debris in authorized landfills providing the name, location, coordinates and permits of the facility to the corresponding authorities. 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.

EHP Additional Info

There is no additional environmental historical preservation on **FAASt [Priority Pole Replacement Program (Line 2700 Aguadilla Hospital Distrito Sect – Mora TC)] (Transmission)**.

Final Reviews

Final Review

Reviewed By LEFRANC-GARCIA, CARLOS L. **Reviewed On** 10/06/2025 1:14 PM PST

Review Comments

The facilities listed in this project are part of the 8.2 circuit miles of overhead transmission for 38kV Line 2700 from Aguadilla Hospital Distrito Sect – Mora TC segment. This line is a Near-Term rebuild priority identified by LUMA. However, these structures were identified as having System Remediation Plan (“SRP) issues and were considered degraded during a High-Level Assessment (“HLA”). Due to the degraded condition of these structures, they will be replaced through the Transmission Priority Pole Replacement Program on an expedited basis. CRC Gross Cost: $767,377.79, 406 HMP cost: $59,629.81, CRC Net Cost: $827,007.60, Federal Share (90%): $774,306.84. Reviewed, found eligible and reasonable. CLG 10.06.25

Recipient Review

Reviewed By Mulero, Noel **Reviewed On** 10/07/2025 8:41 PM PST

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

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 $827,007.60 for subaward number 11877 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

Version Information

Version #	Eligibility Status	Current Location	Bundle Number	Project Amount	Cost Share	Federal Share Obligated	Date Obligated
0	Pending	In Review		$189,251.19	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 #
0	11/5/2025	$744,306.84	90%	Accepted	4339DRPRP00118771

Department of Homeland Security
Federal Emergency Management Agency

v0

General Info

Project #	750150 **P/W #** 107970	**Project Type**	Specialized
Project Category	F - Utilities	**Applicant**	PR Electric Power Authority (000-UA2QU-00)
Project Title	FAASt [Priority Pole Replacement Program (Line 4800 Santa Isabel TC – Toro Negro 1 HP)] (Transmission)	**Event**	4339DR-PR (4339DR)
		Declaration Date	9/20/2017
Project Size	Large	**Incident Start Date**	9/17/2017
Activity Completion Date	9/20/2027	**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 #920197; FAASt [Line 4800 - Santa Isabel TC - Toro Negro 1 HP]

General Facility Information:

- **Facility Type:** Power generation, transmission, and distribution facilities
- **Facility:** Line 4800 - Santa Isabel TC - Toro Negro 1 HP
- **Facility Description:** The feeder 1117-11 (13.2kV) consists of poles and structures (including their foundations), framing and insulators, load break switches (manual and automated), capacitor banks, voltage regulators, transformers (including lightning arresters and fuse cut-outs), conductors, guy wires, anchoring, grounding assemblies, underground cable, underground cable systems, fault interrupting equipment (fuses, reclosers, and sectionalizers), and any other associated components.
- **Approx. Year Built:** 1970
- **Location Description:** The facilities listed below are part of the 12 circuit miles of overhead transmission for the 38kV Line 4800 Santa Isabel T.C. - Toro Negro 1 HP segment. The line segments are supported by one (1) structure consisting of wood, steel, and concrete pole structures. It has existing underbuilt distribution and/or third-party attachments.
- **GPS Latitude/Longitude:** [redacted]

Final Scope

920197 **FAASt [Line 4800 - Santa Isabel TC - Toro Negro 1 HP]**

INTRODUCTION

The purpose of this document is to submit for approval the Detailed Scope of Work (DSOW) to COR3 and FEMA for project 750150 Transmission Priority Pole Replacement Program Line 4800 Santa Isabel TC – Toro Negro 1 HP Project under DR-4339-PR Public Assistance. The document provides a detailed description of the project including scope, schedule, and cost estimates as well as Environmental and Historical Preservation ("EHP") requirements and proposed 406 hazard mitigation work. LUMA Energy is seeking approval from COR3 and FEMA for project funding to repair, restore, or replace the eligible facilities.

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

Facilities Description

The facilities listed below are part of the 12-circuit miles of overhead transmission for the 38kV Line 4800 Santa Isabel T.C. - Toro Negro 1 HP segment. This line is a Near-Term rebuild priority identified by LUMA. However, in the System Remediation Plan ("SRP") these structures were identified as having issues and were considered degraded during a High-Level Assessment ("HLA"). Due to the degraded condition of these structures, they will be replaced through the Transmission Priority Pole Replacement Program on an expedited basis. Later, the remainder of the line will be rebuilt, except for the structures that would already have been replaced through this project and in alignment with LUMA codes and standards.

Facilities List

The line segments are supported by one (1) structure consisting of wood, steel, and concrete pole structures. It has existing underbuilt distribution and/or third-party attachments. The following table identifies the GPS location of the line segments.

Line Segment	Line Number	GPS Start	GPS End	Voltage (kV)
Santa Isabel TC – Toro Negro 1 HP	4800	[redacted]	[redacted]	38kV

Below is a table that identifies the location of the pole in the scope of work of this project.

Pole	FID	Lat	Long
1	29876005	[redacted]	[redacted]

PROJECT SCOPE OF WORK

The scope of work for Line 4800 from Santa Isabel TC – Toro Negro 1 HP consists of the replacement of hardware, the poles identified in **Appendix B**, guys anchoring and foundations for TL4800 "Proposed 428 Public Assistance Scope of Work" and "Proposed 406 Hazard Mitigation Program Scope of Work".

The proposed restoration includes the repairs of eligible disaster damage up to required codes and standards that must be addressed to fully effect the restoration of disaster-damaged components to restore the function of the system to an approved industry standard. This Detailed Scope of Work consists of the repair, removal and replacement of the following infrastructure:

Line Segment	Damage Number	# of Poles to Replace	# of Poles to Reinforce	# of Poles to Reuse	# of New Poles to be added
Santa Isabel TC – Toro Negro 1 HP	920197	1	0	0	0

Proposed 428 Public Assistance Scope of Work

The specific tasks that are necessary for the completion of the scope of work for the LUMA Transmission Pole Replacement Program are detailed below:

1. Remove and replace a 1 (one) wood pole and replace with a new 70' galvanized steel round pole.

2. Pole and components will be installed by design methodology and the Project Design Criteria. They will conform to new codes and standards that are applicable to the infrastructure.

3. Remove and replace Ceramic Insulators with polymer with 3 polymer horizontal post insulators.

Scope Notes

1) **Equipment required** include Skid Steer, Excavator, Hydrovacs, Dump trucks, Man lifts, 120-ton Motor Crane, Boom Trucks, 45-ton Crane, Zoom Boom, Air compressor, Truck Digger, and Concrete Vibrator. All equipment to be used will comply with Tier 4 EPA Emission Standards, If available.

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

3) The construction of **access roads** is not required for this scope of work. All work for this program will be performed within the current electrical right-of-way for each of the municipalities. Poles are near the roads and are site accessible. (Refer to ***Appendix F - Project Considerations***).

4) The existing Regional Warehouse to be utilized as a **staging area** for this project is the Santa Isabel District Warehouse (A42), whose coordinates are [redacted]. No additional or temporary staging areas are required to store materials or disposal.

5) The **type of debris** that will be removed during the demolition process are insulated and bare aluminum and copper cables, PVC conduits, concrete, metal scrap, construction waste, wood, etc. The debris will be separated and taken to an authorized waste disposal facility.

6) 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 **[Project #727530] FAASt [Region Ponce] High Density (Vegetation)**. The vegetation removal process will be managed in accordance with federal and state regulations.

Specific List of Permits Required:

• Department of Transportation and Public Works ("DTOP") Endorsements & Municipality Notifications.

• Excavation and Demolition Notification to DTOP.

• LUMA will provide proof of all permits.

Proposed 406 Hazard Mitigation Scope of Work

The transmission system's main objective is to provide efficient and reliable interconnection of generation sources with the load centers distributed throughout the island. LUMA's transmission grid connects power generation plants, transmission centers, sectionalizers, and distribution substations through a complex and extensive network of lines, all dependent upon one another.

The 406 Hazard Mitigation measures designed to increase resilience in the system include the following:

Poles:

• Replace 1 round steel pole of 145mph windspeed resistance ASCE/SEI 48-19 with new (S8) galvanized steel, 12-sided, tapered shaft distribution pole to increase the strength of the pole by increasing the wind tolerance by design to 160mph.

Foundations:

Construct a concrete foundation. Concrete Backfill Direct Embed type foundation.

• This foundation is designed to mitigate future structure damage from wind (160 mph) and flooding.

• One pole requires a concrete foundation.

• Excavation for foundation: 4’ diameter x 10’ depth. For further information see ***APPENDIX F - Project Considerations***.

Concrete Foundations Dimensions

For more detailed information, please refer to **Appendix H – Hazard Mitigation Narrative**.

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 known risks. For more details refer to ***Appendix E – Detailed Cost***.

COST ESTIMATE			
Cost Element	**428**	**406**	**PROJECT TOTAL**
PLANNING	$9,975.73	$540.52	$10,516.25
MANAGEMENT	$15,754.16	$853.60	$16,607.76
Transmission Pole Replacement and Critical Repairs 38 KV L 4800 Santa Isabel TC to Torno Negro 1 HP, FAAST#:750150	$120,088.41	$6,509.41	$126,597.82
GENERAL CONDITIONS	$5,929.32	$321.27	$6,250.59
COST TOTALS	**$151,747.62**	**$8,224.80**	**$159,972.42**
DEDUCTIONS	**TOTAL INSURANCE PROCEEDS RECEIVED**		**$-**
	DE-OBLIGATION TO FAASt IF APPLICABLE		**$-**

FAASt ALLOCATIONS	FAAST PROJECT # 750150 - 428	**$125,923.56**
	FAAST PROJECT # 750150 - 406HM	**$8,224.80**
	FAAST PROJECT #750150 **TOTAL:**	**$134,148.36**
	FAASt A&E # 335168 - 428	**$19,852.40**
	FAASt A&E # 335168 - 406 HM	**$1,075.68**
	FAASt A&E # 335168 TOTAL	**$20,928.08**
	FAASt E&M #673691 - 428	**$5,971.66**
	FAASt E&M #673691 - 406 HM	**$1,473.34**
	FAASt E&M #673691 TOTAL	**$7,445.00**

Work to be Completed (WTBC): $ 151,747.62

A&E Deduction (Global A&E FAASt 335168): -$19,852.40

E&M Deduction (Global E&M FAASt 673691): -$5,971.66

Project Total: $125,923.56

Project Cost Estimate Notes:

1. Refer to detailed SOW provided in document labeled: "*750150-DR4339PR-Detailed SOW-T-Pole TL4800 Santa Isabel TC - Toro Negro 1 HP Rev 5_signed.pdf*"

2. Refer to detailed Cost Estimate provided in document labeled: "*750150-DR4339PR-Appendix E - Detailed Cost Estimate TL4800 Santa Isabel TC to Toro Negro HP Rev 6.xlsx*"

3. A&E cost 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 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 project is part of Donor FAASt 136271 – MEPA078 Puerto Rico Electrical Power Authority (PREPA) Island Wide FAASt Project.697.

ATTACHMENTS

APPENDIX A - Approved Supplier List

APPENDIX B - General Arrangement

APPENDIX C - Engineering Plans

APPENDIX D - Consent to Federal Funding Letter - FEMA COR3

APPENDIX E - Detailed Cost Estimate

APPENDIX F - Project Considerations

APPENDIX G - Cost Effective Hazard Mitigation Measures

APPENDIX H - Hazard Mitigation Narrative

APPENDIX I – Staging Area Plan TL 4800

406 HMP Scope

Project Number: 750150

Damage #920197; FAASt [Priority Pole Replacement Program (Line 4800 Santa Isabel TC – Toro Negro 1 HP)].

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

Location: Santa Isabel, 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 "loss of power" from Hurricane Maria. The incident caused damage to the electrical system, such as the power generation plants, transmission and distribution lines, substations, communication systems, buildings, among other damages to the infrastructures owned, operated, and maintained by the Puerto Rico Electric Power Authority (PREPA).

The Method of Repair (MOR) included the replacement of the damaged critical distribution pole (wood), cross-arms, insulators, and all associated hardware needed for the new structure. The facilities listed below are part of the 12-circuit miles of overhead transmission for the 38kV Line 4800 Santa Isabel T.C. - Toro Negro 1 HP segment. This line is a Near-Term rebuild priority identified by LUMA. However, in the System Remediation Plan ("SRP") these structures were identified as having issues and were considered degraded during a High-Level Assessment ("HLA"). Due to the degraded condition of these structures, they will be replaced through the Transmission Priority Pole Replacement Program on an expedited basis. Later, the remainder of the line will be rebuilt, except for the structures that would already have been replaced through this project and in alignment with LUMA codes and standards.

In order to minimize the damages in a future event, the sub-recipient proposes as a mitigation measure to increase the strength of the poles by replacing it with a with new steel galvanized, 12-sided, tapered shaft distribution pole to mitigate future damage to the structure due to high wind (160mph). Note: The FEMA Accelerated Award Strategy (FAASt) MOR included the PREPA distribution standards and specifications that were based on a 145mph sustained winds. However, the new PREPA Standard 2021 updates the design-criteria to a 160mph sustained winds resistant. The 160mph wind tolerance mitigation measure, will protect and make the affected infrastructure more resistant, stronger, and resilient to similar hazards.

Hazard Mitigation Proposal (HMP) Scope of Work:

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

Mitigation Measures *(Replacement)*

To avoid damage in a future event, the sub-recipient proposes as a mitigation measure to 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. Refer to Appendix J: Section VI.D.1 of the PAPPG V5.

- Replace **1ea** round steel pole of 145mph windspeed resistance ASCE/SEI 48-19 with new steel galvanized, 12-sided, tapered shaft distribution pole to increase the strength of the pole by increasing the wind tolerance by design to 160mph.

Mitigation Measures *(Supplement)*

To avoid damage in a future event, the sub-recipient proposes as a mitigation measure to increase the strength of the poles by adding concrete foundations to mitigate future damage to the structures due to high wind (160mph) and flooding. 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.3 of the PAPPG V5.

- Install one (1ea) concrete base foundation for one (1ea) 70 ft 12-sided galvanized steel pole.
  - [(4/2)^2*3.14*10) - (2/2)^2*3.14*10]/27 = 3.43CY x 1 base = **3.43 CY.**

(III) Hazard Mitigation Proposal (HMP) Cost

Total Net Hazard Mitigation Cost (Base Cost) =	$6,240.69
+ HM (Recipient A&E, Management & General Conditions) =	$1,984.11
Hazard Mitigation Total Cost =	**$8,224.80**

(IV) Hazard Mitigation Proposal (HMP) Cost Distribution

Equipment and Materials (E&M) =	$1,473.34
Architecture and Engineering (A&E) =	$1,075.69
Construction Cost =	$5,675.77
Hazard Mitigation Total Cost =	**$8,224.80**

(IV) 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 $8,224.80 (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
9001	1	Lump Sum	$151,747.62	Uncompleted
3510	1	Lump Sum	($19,852.40)	Uncompleted
9001	1	Lump Sum	($5,971.66)	Uncompleted

CRC Gross Cost	$125,923.56
Total 406 HMP Cost	$8,224.80
Total Insurance Reductions	$0.00
CRC Net Cost	$134,148.36
Federal Share (90.00%)	$120,733.53
Non-Federal Share (10.00%)	$13,414.83

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

Insurance

Additional Information

9/5/2025

GENERAL INFORMATION

Event: DR4339-PR

Project: SP 750150

Category of Work: Cat F - Utilities

Applicant: PR Electric Power Authority

Event Type: Hurricane / Hurricane Maria

Cause of Loss: Wind / Wind Driven Rain

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

COMMERCIAL INSURANCE INFORMATION

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

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

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

Mapfre Praico Insurance Company (1398178000644)

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

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

Policy Limits: $300,000,000.00

RCV or ACV: Replacement Cost Value

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

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

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

Damaged Inventory (DI) #920197:

FAASt [Line 4800 - Santa Isabel TC - Toro Negro 1 HP]

Location: Line 4800 - Santa Isabel TC - Toro Negro 1 HP

GPS Coordinates: [redacted]

Cause of Loss: Wind / Wind Driven Rain

Prior Obtain and Maintain Requirement:

No prior insurance requirements were found for this facility.

Reduction(s):

No insurance reduction will be applied to this project as coverage is not anticipated. An anticipated insurance reduction of $193,746,436.00 was applied to FAAST project # 136271 for anticipated insurance proceeds for Hurricane Maria losses. For ease of reference, please see table of insurance allocations: "*PREPA Allocation Plan – All Disasters"* file.

Obtain and Maintain Requirement:

No Obtain & Maintain Requirement is being mandated for the FAASt [Line 4800 - Santa Isabel TC - Toro Negro 1 HP] because the facility does not meet the definition of building, equipment, contents, or vehicle._

Insurance Proceeds Statement:

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

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

Standard Insurance Comments

FEMA Policy 206-086-1
PART 2: Other Insurance-Related Provisions. (Sections 312 and 406(d) of the Stafford Act)

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

1. Before FEMA approves assistance for a property, an applicant must provide FEMA with information about any actual or anticipated insurance settlement or recovery it is entitled to for that property.

2. FEMA will reduce assistance to an applicant by the amount of its actual or anticipated insurance proceeds.

3. Applicants must take reasonable efforts to recover insurance proceeds that they are entitled to receive from their insurer(s).

…

5. If an applicant has an insurance requirement from a previous event:

a. FEMA will reduce assistance by the actual or anticipated insurance proceeds, or the amount of insurance required in the previous disaster, whichever is greater.

b. FEMA will only consider insolvent insurers, legal fees, or apportionment of proceeds as described in Section VII, Part 2(A)(3) and (4) when the applicant's anticipated or actual insurance proceeds are higher than the amount of insurance required in the previous disaster.

Patricia A. Perez, PA Insurance Specialist, CRC Atlantic, Guaynabo, PR

O&M Requirements

There are no Obtain and Maintain Requirements on **FAASt [Priority Pole Replacement Program (Line 4800 Santa Isabel TC – Toro Negro 1 HP)] (Transmission)**.

406 Mitigation

There is no additional mitigation information on **FAASt [Priority Pole Replacement Program (Line 4800 Santa Isabel TC – Toro Negro 1 HP)] (Transmission)**.

Environmental Historical Preservation

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

EHP Conditions

- Any change to the approved scope of work will require re-evaluation for compliance with NEPA and other Laws and Executive Orders.
- This review does not address all federal, state and local requirements. Acceptance of federal funding requires recipient to comply with all federal, state and local laws. Failure to obtain all appropriate federal, state and local environmental permits and clearances may jeopardize funding.
- If ground disturbing activities occur during construction, applicant will monitor ground disturbance and if any potential archaeological resources are discovered, will immediately cease construction in that area and notify the State and FEMA.
- 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.
- 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.
- 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 harm's 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 harm's 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 reinitiate 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 reinitiate 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 Service's Point of Contact (POC) is José 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 Email: Caribbean_es@fws.gov or jose_cruz-burgos@fws.gov

- 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.

EHP Additional Info

There is no additional environmental historical preservation on **FAASt [Priority Pole Replacement Program (Line 4800 Santa Isabel TC – Toro Negro 1 HP)] (Transmission)**.

Final Reviews

Final Review

Reviewed By Diaz Rodriguez, Sheila M. **Reviewed On** 09/25/2025 7:34 PM PST

Review Comments

This project has been reviewed, found eligible and cost reasonable, and it is ready to continue the award process.

Recipient Review

Reviewed By Mulero, Noel **Reviewed On** 09/30/2025 8:22 PM PST

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

Award Information

Version Information

Version #	Eligibility Status	Current Location	Bundle Number	Project Amount	Cost Share	Federal Share Obligated	Date Obligated

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 #
0	11/5/2025	$120,733.53	90%	Accepted	4339DRPRP01079701

Department of Homeland Security
Federal Emergency Management Agency

v0

General Info

Project #	757699 **P/W #** 108040	**Project Type**	Specialized
Project Category	F - Utilities	**Applicant**	PR Electric Power Authority (000-UA2QU-00)
Project Title	FAASt [Automation Program Group 34] (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
		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 #1399061; FAASt [Automation Program Group 34: Arecibo Feeders: 7701-02, 8010-02, 8101-01, 8101-04, 8101-05] (Distribution)

General Facility Information:

- **Facility Type:** Power generation, transmission, and distribution facilities
- **Facility:** Automation Program Group 34
- **Facility Description:** Arecibo Feeders: 7701-02, 8010-02, 8101-01, 8101-04, 8101-05
- **Approx. Year Built:** 1980
- **Start GPS Latitude/Longitude:** [redacted]
- **End GPS Latitude/Longitude:** [redacted]

Final Scope

1399061

FAASt [Automation Program Group 34: Arecibo Feeders: 7701-02, 8010-02, 8101-01, 8101-04, 8101-05] (Distribution)

2.1 Introduction

This document is to submit for approval a Detailed Scope of Work ("DSOW") to COR3 and FEMA for the Transmission and Distribution Automation Program under DR-4339-PR Public Assistance. The document provides a description of the project, including scope, schedule, and cost estimates. LUMA Energy is seeking approval from COR3 and FEMA for project funding to repair, restore, or replace the eligible facilities.

LUMA submits this DSOW according to the Transmission and Distribution Operations & Maintenance Agreement between Puerto Rico Electric Power Authority ("PREPA"), the Puerto Rico Public-Private Partnerships Authority ("P3A"), and LUMA Energy, and following the Consent to Federal Funding Letter issued by PREPA and P3A. These collectively provide the necessary consent for LUMA Energy, as agent of PREPA, to undertake work in connection with any Federal Funding requests related to the Transmission and Distribution System submitted to FEMA.

2.2 Background

In order to rebuild the entire electrical grid, the Transmission & Distribution Automation Program ("Program") installs advanced technology equipment *(i.e.,* reclosers and communicating fault current indicators) to reduce service interruptions to the electrical grid caused by disaster-related

damage. Although the intent is to deploy automation equipment throughout PREPA's transmission and distribution ("T&D") system, the Program is broken into multiple projects being implemented across the island on both transmission and distribution systems. The multiple projects within this Program are designed to fortify the electrical system's resilience, safeguard its infrastructure, and enhance service reliability. The individual projects are interconnected and enhance each other, but each can also be implemented independent of the other, and each confers benefits independently. Automation is necessary to restore the T&D systems. The 3.5 million residents throughout Puerto Rico are dependent upon the successful completion of the Program and its ability to sustain the power grid in future disasters.

Project 757699 is one of the Program's distribution-level projects. It installs hardened poles, advanced technology equipment (specifically three-phase reclosers and communicating fault current indicators), and online protection devices to reduce service interruptions to the distribution grid that could be caused by disaster-related damage. Implementing the three-phase reclosers, their communication kits and the communicating fault current indicators is critical for the Energy Management System ("EMS") and related components to function at their full capabilities and mitigate the loss of service and potential damage to the grid during future hurricanes. This project is necessary for the EMS to maintain the continuity of the distribution power grid on Feeders 7701- 02, 8010-02, 8101-01, 8101-04, and 8101-05.

Key components of this project are (1) pole replacement, (2) the three-phase reclosers and single phase reclosers, and (3) the communicating fault current indicators. Each of these components and their benefit to the grid are described further below:

(1) Pole Replacement to Accommodate the Installation of Reclosers

The addition of three-phase reclosers imposes additional load on poles due to the weight and operational components of the devices and also increases the wind area exposed to extreme weather conditions, such as hurricanes, thereby augmenting the structural load these poles must withstand. Pole loading analysis will be used to determine whether a recloser pole and/or pole adjacent to the recloser will maintain structural integrity. If not, higher-class (strength) structures/poles made of steel or concrete will be installed to comply with codes and standards. This includes adjacent poles *(i.e.,* poles that are on either side of the recloser pole supporting the overhead line conductors). Any new structure and foundation will be designed to LUMA design and industry standards so they can support the pole, recloser, and its attachments.

In addition, LUMA is using a per-location approach to pole replacement because of the intricate dynamics of deploying three-phase reclosers. Furthermore, the integration of more connections, switches, and related infrastructure often necessitates taller poles to meet phase spacing and circuit-to-circuit spacing requirements. LUMA will replace all wood poles where three-phase reclosers are being installed, irrespective of their current condition, to address the compounded

structural demands and spacing prerequisites, ensuring the resilience and reliability of the electrical grid infrastructure.

(2) Feeder Reclosers

Reclosers are sophisticated devices that remotely detect faults within distribution lines, enable the isolation of circuit breakers linked to those faults-whether due to independent failures or breakdowns-and facilitate the swift restoration of power, often within milliseconds. This project will install three-phase and single-phase reclosers.

Three-Phase Recloser: A three-phase recloser is a protection device that is used on three-phase distribution feeders with high fault currents at the location. It is a single device with three switches that can open to interrupt fault currents and automatically reclose to restore power. Three-phase reclosers are communication-ready to enable remote control and visualization. The recloser's wireless communication capability will provide connectivity to LUMA's EMS so the system operator knows their status and can remotely control them. Deployment of the wireless communication devices includes configuration, testing, and commissioning of the wireless communication device, all networking devices, data acquisition, and control systems that form the connectivity path of the recloser to the EMS.

Implementation of three-phase reclosers will preserve the continuity of electric services by pre empting or minimizing disruptions. The three-phase reclosers can be triggered remotely and provide data back to the operations center, enabling LUMA to prioritize restoration activities, reduce customer outage time, and minimize the potential for cascading infrastructure damage. Installation of the three-phase reclosers and associated hardware is critical for the EMS and associated components to function with full capabilities and to prevent loss of service and potential damage from future disasters. In this project, LUMA will install eight three-phase reclosers.

Single-Phase Reclosers: A single-phase recloser is a single protection device with one switch that can open to interrupt fault currents and automatically reclose to restore power. A single-phase recloser performs the same functions as a three-phase recloser, but it does not have the ability to communicate with the EMS. This project will install single-phase reclosers on single-phase or two-phase distribution feeders and distribution lines branching from the feeder. Single-phase reclosers will also be used on feeders with three phases iffault currents are low at the location. In this project, LUMA will install a total of 38 single-phase reclosers.

(3) Communicating Fault Current Indicators

Install communicating fault current indicators ("cFCI") at strategic locations to improve the outage management, restoration, and recovery process, specifically by decreasing the time required to detect and locate faults. cFCIs operate independently of the feeder reclosers. cFCIs help identify permanent and incipient faults in the distribution system and collect voltage and current data, which can be used to detect system imbalance, prevent future issues due to harmonics, and help build a predictive failure model.

Data sent to the EMS aids the grid operator in making decisions on operations, management, and restoration. The cFCI can be programmed to send automatic notifications/alarms based on user set parameters. This allows for quick dispatch of field crews to specific sections of the feeders and reduces the total restoration time during an outage event. Installation of the three-phase reclosers and the communicating fault current indicators (communications ready) is critical for the EMS to efficiently mitigate the loss of service and potential damages in future

disasters.

This project's scope does not contain fiber optics or communication capability that is included in other projects. This project will use cellular technology for communications with the operations center. LUMA is using cellular communications service only for reclosers and their associated hardware. The lack of fiber optics as a method of transmitting information, does not prevent or limit the monitoring capabilities of the reclosers and cFCIs or the automation capabilities of the reclosers on this feeder, nor does it prohibit the incorporation of fiber optics at a later date.

3.0 Facilities

3.1 Facilities Description

The facilities listed below are part of PREPA's electric distribution system. All feeders originate from a substation (GPS Start) and serve customers along the route to various locations (GPS End). The coordinates shown below represent the mainline backbone of the feeders at issue in this project.

To avoid duplication of work across projects, LUMA reviewed the FIDs identified for work across distribution programs. The analysis did not identify any poles on these feeders, where LUMA is installing Distribution Automation (DA) devices, that require disaster-related replacement. Accordingly, LUMA has not initiated any rebuild projects for these feeders under the Distribution Rebuild Program (also referred to as the D-Line Program). LUMA also confirmed that none of the poles on these feeders, which will be replaced under the Pole and Conductor Repair Program (also referred to as the D-Pole Program), will be replaced again under the DA Program.

To further address any concerns regarding the duplication of work across other proposed or planned Hurricane Maria distribution projects, LUMA provides Appendix D, which contains a list of all FIDs on the feeder upon which FEMA-eligible work will be performed and the associated proposed scope of work under each distribution program. Please refer to the ***APPENDIX D- LUMA Active Projects*** to show no duplication of scope elements.

3.2 Facilities List

Name	Feeder Number	GPS Start	GPS End
Arecibo	7701-02	[redacted]	
Arecibo	8010-02		
Arecibo	8101-01		
Arecibo	8101-04		
Arecibo	8101-05		

Note: Please refer to **APPENDIX C** - ***Project Considerations*** for a list of all GPS locations that this project will impact.

4.0 Project Scope of Work

Below is the "Proposed 428 Public Assistance Scope of Work" for feeders of this group.

4.1 Proposed 428 Public Assistance Scope of Work

Feeder 7701-02

POLE FID	Coordinates Lat, Long	Existing (Remove)	428 Replacement	Scope of work
20651814	[redacted]	(35 FT STREETLIGHT CONCRETE POLE) (K-2) (STL-10) (K-2) (STL-10)	(50 FT S8 STEEL POLE) (S-6) (K-2) (STL-10) (REC-2-2)	•Remove and dispose 35' streetlight concrete Pole. • Replace with a 50' S8 12- Sided Galvanized steel pole. •Install Primary framing. • Install (1) three-phase recloser 7701-02A in radial circuit. •Install and commission radio communication kit for three-phase recloser. • Use existing secondary • To feed recloser from source side. • Remove, dispose and re ace secondary framing. • Remove, dispose and rep lace streetlight.
POLE FID		(Remove)	428 Replacement	Scope of work
NEW POLE	[redacted]	NONE	(45 FT S5.7 STEEL POLE) (S-6) (REC-3-C)	• Install a new 45' S5.7 12- sided g pole. • Install Primary framing. • Install (3) single-phase recloser 2
20652065	[redacted]	(40 FT H3 CONCRETE POLE) (CP-C6-XARM) (K-7-2) (STL-10)	(45 FT S5.7 STEEL POLE) (CP-C6-XARM) (K-7-2) (STL-10) (REC-3-C)	• Remove and dispose 40 ft h3 concrete pole. • Re ace with 45' S5.7 12- Sided ga pole. • Install (3) Single-phase recloser 2 • Remove, dispose and re ace prim secondary Framing. • Remove, dispose and re ace stree
17516236	[redacted]	(ASSY-1509 (QTY=3)	(LABOR TO CLOSE JUMPERS (QTY=3))	•Remove and dispose (3) fuses. •labor to close jumpers.
NEW POLE	[redacted]	NONE	(45 FT S5.7	•Install a new 45' S5.7 12-

	[redacted]		STEEL POLE)	Sided galvanized steel
			(CP-C6-XARM)	pole.
			(REC-3-C)	•Install Primary framing.
				•Install (3) Single-phase
				recloser 200a.
20651605	[redacted]	(35 FT H3	(45 FT S5.7	•Remove and dispose 35 ft
		CONCRETE	STEEL POLE)	h3 concrete pole.
		POLE) (CP-C6-XARM)	(CP-C6-XARM)	•Replace with 45' S5.7 12- Sided Ga
		(ASSY-1509 (QTY=3)) (42" CROSSARM)		pole. •Install (3) single-phase recloser 200
				•Remove, dispose and
				replace primary Framing.
				•Remove and dispose 42"
				crossarm.
				•Remove and dispose (3)
				Fuses
12136877	[redacted]	NONE	(LABOR, cFCI	•Install (3) Communicating
			(QTY=3)	Fault Current Indicators.
20651730		NONE	(LABOR, cFCI	•Install (3) Communicating
			(QTY=3)	Fault Current Indicators.

Feeder 8010-02

	Coordinates Lat, Long			
POLE FID		**Existing (Remove)**	**428 Replacement**	**Scope of work**

22453418	[redacted]	(40 FT C5 WOOD POLE) (S-1) (STL-10) (K-1) (E-1-2-3) (F-1-3)	(50 FT S8 STEEL POLE) (S-6) (STL-10) (K-6) (REC-2-2)	•Remove and dispose 40 ft c5 v •Re ace with 50' S8 12- Sided g pole. •Install 1 kva transformer (7.62 source side. •Install (1) Three-Phase reclose •Install and commission radio co three-phase recloser •Remove, dispose, and re ace p secondary framing. •Remove and dispose dow nguy •Remove, dispose and re ace streetlight.
22470492		(ASSY-1509 (QTY=3)) (42"CROSSARM)	(LABOR TO CLOSE JUMPERS (QTY=3))	•Remove and dispose (3) fuses. •labor to close jumpers
22470515		(40 FT C3 WOOD POLE) (CP-C1) (K-7-B)	(50 FT S8 STEEL POLE) (CP-C6-XARM) (K-7-B) (REC-2-1)	•Remove and dispose 40 ft c3 v •Re ace with 50' S8 12- Sided g pole. •Install 1 kva transformer (7.62 source side. •Install (1) three-phase reclose •Install and commission radio co three-phase recloser. •Remove, dispose and re ace p secondary framing.
1001767464		(40 FT C3 WOOD POLE) (CP-C5-XARM) (E- 1-2-3) (F-1-3)	(50 FT S8 STEEL POLE) (CP-C7-VERT) (ASSY 1509(QTY=3) (ASSY 1505 FIG.A(QTY=3) (LABOR, SOLID CUTOUT BLADES(QTY=3))	•Remove and dispose 40 ft c3 w •Replace with 50' S8 12- sided g pole. •Install (3) solid cutout blades in • Remove, dispose, and replace p •Remove and dispose dow nguy
22472132		(ASSY-1509 (QTY=3)) (42" CROSSARM)	(LABOR TO CLOSE JUMPERS(QTY=3))	•Remove and dispose (3) fuse.
22470889		(ASSY-1509 (QTY=3))	(LABOR TO CLOSE JUMPERS(QTY=3))	•Remove and dispose (3) fuses.

POLE FID	Coordinates Lat, Long	Existing(Remove)	428 Replacement	Scope of work
22471969	[redacted]	(ASSY-1509 (QTY=3))	(LABOR TO CLOSE JUMPERS(QTY=3))	•Remove and dispose (3) fuses.
1000331871		(ASSY-1509 (QTY=3))	(LABOR TO CLOSE JUMPERS(QTY=3))	•Remove and dispose (3) fuses.

NEW POLE	[redacted]		NONE	(50 FT S8 STEEL POLE) (CPC6-XARM) (K-5) (REC-2) (3/0 TPX (QTY=150FT)) (266ACSR (QTY=200FT)	• Install new 50' S8 12- sided g pole. •Install primary framing. • Install secondary framing. • Install tri ex from source side 22702862. • Install (1) three-phase reclose • Install and commission comm for the three-phase recloser.
22702862			(ASSY-1509 (QTY=3)) (42"CROSSARM)	(K-5) (LABOR TO CLOSE JUMPERS(QTY=3))	•Remove and dispose 42' Crossa •Remove and dispose (3) fuses. •labor to close jumpers
22455471			(ASSY-1509 (QTY=2))	(LABOR TO CLOSE JUMPERS(QTY=2))	•Remove and dispose (2) fuses.
1001767011			(ASSY-1509 (QTY=3)) (42" CROSSARM)	(LABOR TO CLOSE JUMPERS(QTY=3))	•Remove and dispose (3) fuses.
22453017			(ASSY-1509 (QTY=3)) (42"CROSSARM)	(LABOR TO CLOSE JUMPERS(QTY=3))	•Remove and dispose (3) fuses.
22453078			(ASSY-1509 (QTY=3))	(LABOR TO CLOSE JUMPERS(QTY=3))	•Remove and dispose (3) fuses.
22469128			(ASSY- 1509(QTY=3)) (42" CROSSARM)	(REC-3-C) (ASSY1505 FIG C)	•Remove and dispose (3) fuses •Remove and dispose 42" Cross •Install (3) Single-Phase Reclose
2246985			(ASSY 1509 (QTY=2))	(LABOR TO CLOSE JUMPERS(QTY=2))	•Remove and dispose (2) fuses •labor to close jumpers. •Remove 42" Crossarm.
22469666			(ASSY-1509(QTY=2)) (42" CROSSARM)	(LABOR TO CLOSE JUMPERS(QTY=2))	•Remove and dispose (2) fuses •labor to close jumpers.
22469289			(ASSY1509(QTY=3)) (42" CROSSARM)	(LABOR TO CLOSE JUMPERS(QTY=3))	•Remove and dispose (3) fuses •Remove and dispose 42" Cross
22096105			NONE	(LABOR, cFCI (QTY=3)	•Install (3) Communicating Fault Current In
22457658			NONE	(LABOR, cFCI (QTY=3)	•Install (3) Communicating Fault Current In

Feeder 8101-01

POLE FID	Coordinates Lat, Lon	Existing Remove	428 Replacement	Scope of work
16426790	[redacted]	(45 FT C2 WOOD POLE) (CP-C1) (K-7-4) (STL-10)	(50 FT S8 STEEL POLE) (CPC6-XARM) (K-7-4) (STL-10)	•Remove and dispose 45 ft c2 wood po •Replace with 50' S8 12- sided galvaniz •Install triplex From source side pole fid three-phase recloser 8101-01A Installa •Install (1) three-phase recloser 8101-0 •Install and Commission radio communic phase recloser. •Remove, dispose, and re ace primary a Framings. •Remove, dispose, and re ace streetlight •labor to remove and transfer (2) Transf pole fid: 1642632.
		(T-3-2)		

			(REC-2)	
16427066	[redacted]	(ASSY-1509	(LABOR TO	•Remove and dispose 42"
		(QTY=2))	CLOSE	Crossarm
		(42"CROSSARM)	JUMPERS (QTY=2))	•Remove and dispose (3) Fuses.
				• Labor to closer jumpers.
16426324		(45 FTC2	(50 FT S8 STEEL	•Remove and dispose 45' c2
		WOOD POLE) (CP-C1) (K-7FIG. A) (STL-10) (T-1)	POLE) (CP-C12-XARM) (K-7 FIG. A) (STL-10) (T-3-2) (ASSY 1505 FIG. C) (CUTOUT BLADES(QTY=3)	•wood pole. •Re ace with 50' S8 12- Sided galvanize •Install stand-off Bracket • assembly. •Install (3) cutout Blades. •Remove, dispose, and Re ace Primary and secondary Framing.
				•Remove, dispose and
				Re ace streetlight.
				•Remove and dispose
				existing transformer.
				•Install (2) transformers from
				Pole Fid: 16426790.
16426276	[redacted]	(35 FT C4	(45 FT S5.7	•Remove and dispose 35'
		WOOD POLE)	STEEL POLE)	wood pole. Replace with 45'
		(CP-C6XARM)	(CP-C6-XARM)	S5.7 12-sided galvanized
		(K-5)	(K-5) (STL-10)	steel pole.
		(STL-10) (E-1-2-3) (F-1-3)	(REC-3-C)	•Remove, dispose, and replace primary a Framings.
				• Remove, dispose, and
				Replace streetlight.
				•Remove and dispose
				Downguy and anchor.

				•Install (3) Single-Phase
				Recloser 200a

POLE FID	Coordinates Lat, Lon	Existing	428 Replacement	Scope of work
16426426	[redacted]	Remove (35 FT C4	(50 FT S8 STEEL	•Remove and dispose 35 ft c4 wood pol
		WOOD POLE)	POLE)	•Replace with 50' S8 12- Sided galvanize •Install standoff Bracket assembly. •Install (2) Fuse Cutout ades
		(CP-C12-	(CP-C12-XARM)	• Remove, dispose, and Re ace Primary a Framing.
		XARM)	(K-7-4)	• Remove, dispose, and Re ace streetligh •Remove and dispose down guy and anc
		(STL-10)	(STL-10)	• Remove and dispose (2) fuses.
		(K-7-4)	(CUTOUT	
		(E-1-2-3)	BLADES(QTY=2))	
		(F-1-3)		
1001940153	[redacted]	(45 FT C2	(50 FT S8 STEEL	• Remove and dispose 45 ft
		WOOD	POLE)	c2 wood pole.
		POLE) (CP-B12) (K-5) (T-3) (E-1-2-3 (QTY=2) F-1-3(QTY=2)	(CP-B6) (K-5) (T-3) (REC-3-A)	• Replace with 50' S8 12- Sided galvanize • Install (1) single-phase recloser 200a. •Remove, dispose, and replace
				Primary and secondary
				Framing.
				•Remove, dispose, and
				replace transformer cluster.
				• Remove and dispose
				downguys and anchors.
				•Remove and dispose (1)
				fuse.
16425415	[redacted]	50 FT H4	(50 FT S8 STEEL	•Remove and dispose 50' h4

	[redacted]	CONCRETE	POLE)	concrete pole.
		POLE) (S-6) (S-7-1) (STL-10) (K-7-B)	(S-6) (S-5) (STL-10) (K-7-B) (REC-3-C) (E-1-2-3) (F-1-3)	•Re ace with 50' S8 12- Sided galvanize •Install down guy. •Install Anchor. •Install (3) single-phase recloser 200a.
				• Remove, dispose and
				re ace primary and
				secondary Framings.
				•Remove, dispose, and
				Re ace streetlight.
				•Remove and dispose (1)
				Fuse.
19982147	[redacted]	(45 FT H4	(50 FT S8 STEEL	•Remove and dispose 45 ft
		CONCRETE	POLE)	h4 concrete pole.
		POLE) (S-6)	(S-6) (S-5) (STL-10)	•Replace with 50' S8 12- Sided galvanize
		(S-7-1) (STL-10) (K-7-4) (E-1-2-3) (F-1-3)	(K-7-4)(E-1-2-3) (F-1-3) (REC-3-C)	•Install (3) single-phase recloser 200a. •Remove, dispose and
				replace primary and
				secondary Framings.
				• Remove, dispose, and
				Replace streetlight.
				•Remove, dispose, and replace Down guy. • Remove, dispose and Replace anchor. •Remove and dispose Fuse.

17777611	[redacted]	NONE	cFCI=3	•Install (3) Communicating
			LABOR	Fault Current Indicators.
16426212		NONE	cFCI=3	•Install (3) Communicating
			LABOR	Fault Current Indicators.

POLE FID	Coordinates Lat, Lon	Existing Remove	428 Replacement	Scope of work
NEW POLE	[redacted]	NONE	(60 FT S8 STEEL	• Install a new 60' S8 12- sided galva • Install (1) three-phase recloser 810 radial circuit. • Install and commission radio co three- phase recloser. • Install primary framing. • Install Secondary framing. • Install tri ex from source side oole f
			POLE)	
			(CP-C6-XARM)	
			(REC-2) (K-5)	
			(3/0 TPX	
			(QTY=200 FT))	
22063904	[redacted]	ASSY-1509 (QTY=3)	(LABOR TO CLOSE	• Remove and dispose (3) fuses. • Labor to close jumpers.
			JUMPERS	
			(QTY=3))	
17777798	[redacted]	(ASSY-1509 (QTY=6)	(K-5) (ASSY-1509 (QTY=6))	▫ Install Secondary framing on exist ▫ Remove, dispose (6) fuses: o Re normally open. o Re ace (3) fuses for Cutout bla
			(ASSY 1505 FIG. C	
			(QTY=2))	
			(CUTOUT	
			BLADES(QTY=3))	
NEW POLE	[redacted]	NONE	(50 FT S8 STEEL	•Install new 50' S8 12-Sided galvani •Install (1) three-phase Recloser 810 •Install and commission radio •Install primary framing. •Install Secondary framing. •Install triplex from source side pole
			POLE)	
			(CP-C6-XARM)	
			(REC-2) (K-5)	
			(3/0 TPX	
			(QTY=200 FT))	

POLE FID	Coordinates Lat, Lon	Existing Remove	428 Replacement	Scope of work
22064617	[redacted]	(35 FT C4	(45 FT S5.7 STEEL	•Adjacent Pole: Remove and dispose 3
		WOOD POLE)	POLE)	•Re ace with 45' S5.7 12- Sided galvar •Install stand-off bracket Assembly.
		(CP-C6-XARM)	(CP-C6-XARM)	•Install (3) cutout blades. •Remove, dispose, and re ace primary Framing.
		(K-7-A)	(K-7-A)	•Remove and dispose down u s and ar
		(E-1-2-3) (F-1-3)	(ASSY-1509	
			(QTY=3))	
			(ASSY 1505 FIG.	
			C) (CUTOUT	
			BLADES(QTY=3))	
22065430	[redacted]	(ASSY-1509	(LABOR TO	•Remove and dispose (3) fuses.
		(QTY=3)	CLOSE JUMPERS (QTY=3)	Labor to close ·umers.
22063880		(50 FT C2	(50 FT S8 STEEL	•Remove and dispose 50' C2 wood pol
		WOOD	POLE)	•Re ace with 50' S8 12- sided galvaniz • Install (2) single-phase recloser 200a
		POLE)	(CP-B5-XARM)	•Remove, dispose, and re ace primary Framings •Labor to install existing transformer.
		(CP-B5-XARM)	(CP-C6-XARM)	•Remove and dispose (2) downguy. Re •Remove and dispose (2) anchor. Re a and dispose (2)
		(CP-C6-XARM)	(T-2) (K-7-B)	Fuses.
		(T-2) (K-7-B)	(E-1-2-3)	
		(E-1-2-3(QTY2)	(F-1-3) (REC-3-B)	
		(F-1-3(QTY=2))		
		(42"		
		CROSSARM)		
22064625	[redacted]	(45 FT H4	(50 FT S8 STEEL	to Remove and dispose 45 ft h4 concre io Replace with 50' S8 12- sided galvani
		CONCRETE	POLE)	io Install (2) Single-phase recloser 200a • Remove, dispose, and replace primar secondary Framings.
		POLE)	(CP-B5)	• Labor to install existing transformer. • Remove, dispose, and Replace anchor.
		(CP-B5)	(CP-C6-XARM) (T-	• Remove and dispose (2) Fuse

		(CP-C6	2) (K-7-4)	
		XARM)	(E-1-2-3) (F-1-3)	
		(T-2)	(REC-3-B)	
		(K-7-4)		
		(E-1-2		
		3(QTY=2)		
		(F-1-		
		3(QTY=2)		
22065218	[redacted]	(ASSY-1509	(REC-3-B)	• Remove and dispose 72" crossarm. • Remove and dispose (4) fuses. Re ac
		(QTY=4))	(ASSY-1509	io Install (2) Single-phase recloser 200a
		(72"CROSSAR	(QTY=2))	
		M)	(ASSY1505 FIG.B)	
22066628	[redacted]	(ASSY1509(O	(REC-3-A)	• Remove and dispose (1) Fuses. • Remove and dispose 42" Crossarm. • Install (1) Single-Phase recloser 200A pole.
		TY=1)		
		(42"CROSSA		
		RM)		

POLE FID	Coordinates Lat, Lon	Existing	428 Replacement	Scope of work
22067228	[redacted]	Remove (ASSY1509(QT Y=2)	(ASSY-1509 (QTY=2))	• Remove and dispose (2) Fuses. Re a Cutout Blades.
			(CUTOUT BLADES	
			(QTY= 2))	
22066761	[redacted]	(35 FT C4 WOOD	(50 FT S8 STEEL POLE)	• Remove and dispose 35 ft c4 wood po • Replace with 50' S8 12- Sided galvani • Install (3) Single-phase recloser 200a. • Install (2) Fuse Cutout Blades. • Install (1) downguy and (1) anchor. • Remove and dispose (2) fuses. • Remove, dispose and replace primary secondary Framing.
		POLE)	(CP-C6-XARM)	
		(CP-C1)	(CP-B5-XARM)	

		(CP-B5)	(K-7-B)	
		(K-7-B)	(STL-10)	
		(STL-10))	(ASSY-1509	
		(E-1-2-	(QTY=2))	
		3(QTY=1)	(1505 FIG. B)	
		(F-1-	(REC-3-C)	
		3(QTY=1))		
		(ASSY 1509		
		(QTY=2))		
		(WOOD		
		CROSSARM)		
22066760	[redacted]	(CP-C1)	N/A	• Remove, dispose and replace primary
30133246		NONE	(LABOR, (LABOR, cFCI(QTY=3)) Install (3) Communicating Fault Current Indicators.	

Feeder 8101-05

POLE FID	Coordinates Lat, Lon	Existing (Remove)	428 Replacement	Scope of work
NEW POLE	[redacted]	NONE	(50 FT S8 STEEL POLE)	• Install a new 50' S8 12- Sid pole. • Install Primary framing. • Install (2) 1 Kva transforme 2.4kv/120v) from source side • Install (1) three-phase Recl • Install and commission radio for three-phase recloser
			(CP-C6-XARM)	
			(REC-2-1)	
19651850	[redacted]	(ASSY-1509 (QTY=3))	(LABOR TO CLOSE JUMPERS (QTY=3))	• Remove and dispose crossa • Remove and dispose (3) fuses. • Close Jumpers.
		(42"CROSSARM)		

17777585	[redacted]	(ASSY-1509 (QTY=3))	(LABOR TO CLOSE JUMPERS (QTY=3))	• Remove and dispose (3) fuses. • Close jumpers.
17777570	[redacted]	(ASSY-1509 (QTY=3)) (42"CROSSARM)	(LABOR TO CLOSE JUMPERS (QTY=3))	• Remove and dispose cross • Remove and dispose (3) fuses.
NEW POLE	[redacted]	NONE	(45 FT S5.7 STEEL POLE)	• Install a new 45' S5.7 12-si steel pole. • Install Primary framing.
			(CP-C6-XARM)	
			(REC-3-C)	
				• Install (3) Single-phase recl
17777619	[redacted]	NONE	(LABOR, cFCI(QTY=3))	• Install (3) Communicating Fa Current Indicators.
17777594		NONE	(LABOR, cFCI(QTY=3)) Install (3) Communicating Fault Current Indicators.	

4.2 Proposed 406 Hazard Mitigation Scope of Work

406 Hazard Mitigation

This version of the project will be fully funded using PA 428 funds. A future version of this project may contain PA 406 HM measures.

Scope Notes:

1) The work will be performed in accordance with the notes below, the Distribution Construction Standards (Concrete Base Standard) and LUMA Overhead Electrical Distribution System Manual V4, and ***APPENDIX C - Project Considerations.***

Pole Replacement

a. Remove and replace poles, including hardware in the same location. If unable to install the replacement in the same location, the pole will be installed within 3 feet.

b. Most pole installations are to replace existing pole locations; there are some new pole locations included in this scope of work. Refer to ***APPENDIX C - Project Considerations,*** column C (soil area and depth impact) for the depths of the poles to be installed.

c. Adjacent poles will be installed, in locations noted in the table above, in conformance with LUMA and industry standards.

d. New guy wire/ anchors are to be installed in compliance with the LUMA Overhead Electrical Distribution System Manual within 3ft from the existing anchor. The maximum distance an anchor will be installed for a 50ft pole is 25ft from the base of the pole, within the right-of-way.

e. 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 vegetation removal process will be managed in accordance with federal

and state regulations. The costs related to vegetation clearance procedures are covered in the following projects:

Feeder	Project Title
8010-02	727540 FAASt [Region 2 -Arecibo Group C] (Vegetation)
7701-02	728827 FAASt [Region 2 -Arecibo Group A] High Density
8101-01	(Vegetation)
8101-04	
8101-05	

f. All existing overhead conductors, poles, assemblies, and attached components will be disconnected, removed, and replaced as outlined in the scope of work. When poles, assemblies, and attached components are not being replaced per the scope of work, all assemblies and components will be re-installed to the pole, with the overhead conductor re-attached to complete the installation and reconstruction of the feeder.

g. All work for this program will be performed within the current electrical right-of-way.

2) Debris will be separated and taken to an authorized waste disposal facility.

3) The construction of **access roads** is not required for this scope of work. Poles are close to the roads and are site accessible.

4) **Staging area** requirements were considered for the new equipment to be installed and the equipment to be retired. All materials will be stored and dispatched from the assigned LUMA's Regional Warehouse. The warehouse assigned to this project is the Quebradillas Warehouse, whose address is #481 Street KM 1.1 Quebradillas, PR. Coordinates are [redacted]. Refer to document Warehouse Locations.

5) Fill, gravel, and sand **materials** will be obtained from an approved supplier as referenced in the document *LUMA Vendor Directory List.*

6) The **equipment** to be used is a *Skid Steer, Excavator, Dump truck, Manlift, 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 trailer.*

7) Specific List of **Permits Required**:

a. Department of Transportation and Public Works - (DTOP) Endorsements & Municipality Notifications

b. Excavation and Demolition Notification in the Department of Transportation and Public Works Agency - (DTOP).

Choose One (Restoration, Improved or Alternate)
Restoration to Codes/Standards: Restores the facility(s) to pre-disaster function and to approved codes and standards.
This work will follow FEMA's Public Assistance Alternative Procedures (Section 428) Guide for Permanent Work FEMA-4339-DR-PR (February 2020).

Note: If preliminary A&E work has not been completed, the type of work designation is considered initial and is based on currently available information. The type of work designation may be revised based on the completed preliminary A&E work results.

5.0 Codes, and Standards

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

1. Consensus-based codes, per FEMA (Public Assistance Alternative Procedures (Section 428)Guide for Permanent Work FEMA-4339-DR-PR February 2020).

2. Industry standards per FEMA Recovery Policy FP-104-009-5, Version 2, Implementing Section 20601 of the 2018 Bipartisan Budget Act through the Public Assistance Program.

3. FEMA Recovery Interim Policy FP-104-009-11 Version 21, Consensus-Based Codes, Specifications, and Standards for Public Assistance.

4. LUMA's latest Design Criteria Document (DCD) which aggregates the design considerations for most of the consensus-based codes, specifications, and standards listed in FEMA Recovery Interim Policy 104-009-11 Version 2.1 (December 20, 2019).

Codes, Specifications, and Standards

Yes, applicable codes and standards will be identified and incorporated into the plans and specifications.

Industry Standards

Yes: applicable industry standards will be identified and incorporated into the plans and specifications.

7.0 Project Schedule

Milestone	Target Date
Start Procurement of Long-Lead Items	April, 2024
FEMA Obligation of Funds	March, 2025
Start Project Construction	April, 2025
In-Service-Date	**December, 2025**

8.0 PROJECT COST ESTIMATE (PCE)

The estimated costs (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 is subject to being updated. LUMA has allocated 10% of the project cost to mitigate known risks. For more details refer to ***APPENDIX B - LUMA Project Cost Estimate.***

COST ESTIMATE			
Cost Element	**428**	**406**	**PROJECT TOTAL**
PLANNING	**$288,570.37**	**$-**	**$288,570.37**
MANAGEMENT	**$173,792.31**	**$-**	**$173,792.31**

Distribution Automation Group 34	**$3,268,624.12**	**$-**	**$3,268,624.12**
GENERAL CONDITIONS	**$171,103.99**	**$-**	**$171,103.99**
COST TOTALS	**$3,902,090.79**	**$-**	**$3,902,090.79**
DEDUCTIONS	**TOTAL INSURANCE PROCEEDS RECEIVED**		**$-**
	DE-OBLIGATION TO FAASt IF APPLICABLE		**$-**
FAASt ALLOCATIONS	FFAST PROJECT # 757699- 428		**$2,755,938.99**
	FAAST PROJECT # 757699 - 406 HM		**$-**
	FAAST PROJECT # 757699-TOTAL:		**$2,755,938.99**
	FAASt A&E # 335168 - 428		**$462,362.68**
	FAASt A&E # 335168 - 406 HM		**$-**
	FAASt A&E # 335168 TOTAL		**$462,362.68**
	FAASt E&M #673691 - 428		**$683,789.12**
	FAASt E&M #673691 - 406 HM		**$-**
	FAASt E&M #673691 TOTAL		**$683,789.12**

DI# 1399061 Work to be Completed (WTBC): **$3,902,090.79**

A&E Deduction (428- FAASt A&E Project # 335168): **-$462,362.68**

Equipment & Material Deduction (428- FAASt E&M Project # 673691): **-$683,789.12**

Project Total Cost: **$2,755,938.99**

Project Cost Estimate notes:

1. Refer to detailed SOW provided in document “For this section see file: " 800361-DR4339PR- DSOW Group 37-Rev. 1.pdf”

2. Refer to detailed cost estimate provided in document “800361-DR4339PR-Cost Estimate-Group 37- Rev. 1.xlsx”.

3. This project is part of a FAAST project, please reference 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 shown 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. 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 Group 34 Automation FAASt 757699.

ATTACHMENTS

757699-DR4339PR-APPENDIX A - Initial Scope of Work
757699-DR4339PR-APPENDIX B - LUMA Project Cost Estimate
757699-DR4339PR-APPENDIX C - Project Considerations
757699-DR4339PR-APPENDIX D - LUMA's Active Project

406 HMP Scope

Mitigation opportunities will be applied in a future version of the Permanent Work Project. In accordance with the Distribution Automation resolution document share with the applicant. The project is ready for Insurance completion.

Cost

Code	Quantity	Unit	Total Cost	Section
9001	1	Lump Sum	$3,902,090.79	Uncompleted
3510	1	Lump Sum	($462,362.68)	Uncompleted
9001	1	Lump Sum	($683,789.12)	Uncompleted
9201	1	Lump Sum	$0.00	Completed

CRC Gross Cost	$2,755,938.99
Total 406 HMP Cost	$0.00
Total Insurance Reductions	$0.00
CRC Net Cost	$2,755,938.99
Federal Share (90.00%)	$2,480,345.10
Non-Federal Share (10.00%)	$275,593.89

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

8/06/2025

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.

Jorge Parrilla, PA Insurance Specialist

CRC Atlantic, Guaynabo, PR

O&M Requirements

There are no Obtain and Maintain Requirements on **FAASt [Automation Program Group 34] (Distribution)**.

406 Mitigation

There is no additional mitigation information on **FAASt [Automation Program Group 34] (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.
- 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. b. 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. 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.
- 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. 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.

- Only for Feeder 8101-01: Applicant must obtain any required permits from the Puerto Rico Permits Management Office (OGPe) prior to initiating work and comply with any conditions of the permit established by the Planning Board (JP) for constructions in floodplains. All coordination (emails, letters, documented phone calls) pertaining to these activities and compliance must be provided and maintained in the Applicant's permanent files.
- The Applicant must provide documentation at close-out that proves completion of required Conservation Measures. Puerto Rican boa (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 harm's 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 harm's 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 reinitiate 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 reinitiate 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 Service's Point of Contact (POC) is José 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 Email: Caribbean_es@fws.gov or jose_cruz-burgos@fws.gov
- The below conservation measures apply to the following species: Puerto Rican parrot (Amazona vittata), Puerto Rican broad-winged hawk (Buteo platypterus brunnescens). 9. 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. During breeding seasons (see below), nest surveys shall be conducted if a project occurs within the range of any of the species listed above and if habitat for those species will be impacted by the proposed actions. Nest searches must be conducted by qualified personnel with the appropriate permits from the Puerto Rico Department of Natural and Environmental Resources (PRDNER) prior to start of work. If nesting activity is detected, all construction activities or human disturbance must be avoided within a 50-meter buffer around any nest(s) found within the project area. This avoidance strategy must be kept until fledglings successfully leave the nest(s) permanently. Outside the breeding season no nest surveys are required, but if a nest is encountered, all construction activities or human disturbance must be avoided within a 50-meter buffer around that nest(s). This avoidance strategy must be kept until fledglings successfully leave the nest(s) permanently. Furthermore, if any of the species indicated above is observed (e.g., foraging, resting) within the project area, avoid any disturbance to the individual(s) and do not flush the bird until it leaves on its own. Nesting seasons: *. Puerto Rican parrot: February-June. *. Puerto Rican broad-winged hawk: December-June For all nest sightings, the Applicant must record the time and date of the sighting and the specific location where it was found. All sightings and incidental lethal take reports should be sent to the USFWS Caribbean Ecological Services Field Office at Caribbean_es@fws.gov. For questions, the Point of Contact (POC) is José Cruz-Burgos, Endangered Species Program Coordinator, and can be contacted at: Mobile: 305-304-1386 Office phone: 786-244-0081 Office Direct Line: 939-320-3120 Email: jose_cruz-burgos@fws.gov
- Puerto Rican harlequin butterfly (Atlantea tulita) The Puerto Rican harlequin butterfly (Atlantea tulita) is endemic to Puerto Rico, occurring in the western portion of the island, in the northern karst region, and in the west-central volcanic-serpentine region. The following measures apply to the Puerto Rican harlequin butterfly through its current range: a. The contractor must inform all personnel about the potential presence of the Puerto Rican harlequin butterfly and its host plant, prickly bush (Oplonia spinosa), in the project areas. A pre-work meeting should inform all project

personnel about the need to avoid harming this butterfly and its occupied host plant. 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. Educational material (e.g., posters, flyers, or signs with photos or illustrations of all the life stages of the Puerto Rican harlequin butterfly (i.e., eggs, caterpillar, chrysalids, and adult, and its host plant) should be prepared and available to all personnel for reference. b. Before starting any project activity, including removal of vegetation and earth movement, the contractor must clearly delineate the boundaries of the working area in the field to avoid unnecessary habitat impacts. Once the project areas are clearly marked, and before any work activity, including site preparation, personnel with knowledge and ability to identify the Puerto Rican harlequin butterfly (all life stages) and the prickly bush must survey the areas where the work will be performed for the presence of the species and its host plant. It is important to note that the Puerto Rican harlequin butterfly can be observed year-round in all life stages; thus, oviposition (egg-laying) may occur at any time during the year.

- c. If the prickly bush is present on the project site, try to avoid cutting the plant, even if no eggs, caterpillars, or chrysalids are present. d. If there is no prickly bush within the project area, but the butterfly is observed flying within the project area, do not harass, harm, pursue, wound, kill, trap, capture, collect, or attempt to engage in any such conduct, the species. e. Adult butterflies are often observed flying near the host plant as part of their mating behavior and for laying eggs. Project-related activities must stop if the prickle bush is found in the project area and the Puerto Rican harlequin butterfly is observed flying in that same area. A temporary 50-meter (164 feet) buffer zone of no activity or human disturbance should be established and clearly marked around that prickly bush until the butterfly moves out on its own.
- f. Once the Puerto Rican harlequin butterfly has moved away, within a period of 24 to 36 hours, a search of the prickly bush that has been buffered should be conducted to determine the presence of any eggs, caterpillars, or chrysalids of the butterfly on the plant. The contractor or the Applicant should send a report of the observation and its findings to caribbean_es@fws.gov after the 36-hour search is concluded. g. If, after the initial search or after the 24 to 36-hour search, any life stage of the Puerto Rican harlequin butterfly is found in the prickly bush, take the following actions: Clearly mark the host plant with flagging tape. Establish a 10-meter (32-foot) buffer zone around the bush for its protection. Eggs are typically found on the prickly bush's newly grown, tender branches. Once the egg hatch, the caterpillar moves and feeds throughout the bush. Therefore, avoid cutting off the prickly bush within the project site even if no eggs, caterpillars, or chrysalids are present. Work within the 10-meter buffered area may resume when no signs of any live life stage of the butterfly are detected, which usually takes approximately 60 to 120 days.
- h. For all Puerto Rican harlequin butterfly sightings (all life stages), the time and date of the sighting and the specific location where the butterfly was found must be recorded. Data should also include a photo of the butterfly (if possible) and the habitat where it was observed, site GPS coordinates, and comments on how the butterfly was detected and its behavior. All Puerto Rican harlequin butterfly sighting reports should be sent to the Service's Caribbean Ecological Service Field Office at caribbean_es@fws.gov. j. For questions regarding the Puerto Rican harlequin butterfly, the Point of Contacts are: o José Cruz-Burgos, Endangered Species Coordinator: Mobile: 305-304-1386 Office phone: 786-244-0081 Office Direct Line: 939-320-3120 Email: jose_cruz-burgos@fws.gov Carlos Pacheco, Fish and Wildlife Biologist Mobile: 786-847-5951 Office Direct Line: 939-320-3113 Email: carlos_pacheco@fws.gov

EHP Additional Info

There is no additional environmental historical preservation on **FAASt [Automation Program Group 34] (Distribution)**.

Final Reviews

Final Review

Reviewed By LEFRANC-GARCIA, CARLOS L. **Reviewed On** 10/10/2025 12:44 PM PST

Review Comments

Project has been reviewed, found eligible and reasonable. Subrecipient is responsible for complying with all grants and subgrant conditions. CLG 10.10.2025

Recipient Review

Reviewed By Mulero, Noel **Reviewed On** 10/10/2025 3:48 PM PST

Review Comments

Recipient review completed. The applicant did not submit a mitigation proposal in this version; the mitigation proposal will be made in a future amendment. 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

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 $2,755,938.99 for subaward number 108040 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

Version Information

Version #	Eligibility Status	Current Location	Bundle Number	Project Amount	Cost Share	Federal Share Obligated	Date Obligated

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 #
0	11/5/2025	$2,480,345.10	90%	Accepted	4339DRPRP01080401