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

MOTION SUBMITTING EIGHTEEN 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 Two 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 July 8, 2021, LUMA filed a *Motion Submitting List of Projects and Twenty-Eight Scopes of Work* ("July 8th Motion"). In the July 8th Motion, LUMA submitted twenty-eight (28) SOWs for T&D Projects for the Energy Bureau's review and approval prior to submitting them to COR3 and FEMA. Among the twenty-eight SOWs, LUMA submitted the "Distribution Feeders – Arecibo Short Term Group 2" and the "Distribution Feeders – San Juan Short Term Group 2" SOWs.

3. On August 21, 2021, the Energy Bureau issued a Resolution and Order that determined that all the SOWs for T&D projects submitted by LUMA in the July 8th Motion were necessary to improve the system's reliability ("August 21st Order"). Therefore, it approved most of the projects presented in the July 8th Motion, including the "Distribution Feeders – Arecibo Short Term Group 2" and the "Distribution Feeders – San Juan Short Term Group 2" SOWs. The Energy Bureau also ordered LUMA to submit a copy of the approval by COR3 and/or FEMA of the Project, which shall contain the costs obligated for each project within ten (10) days of receiving such approval.

4. Then, on August 30, 2021, LUMA filed a *Motion Requesting Clarification of a Portion of the Energy Bureau's Resolution and Order Entered on August 20, 2021, and Submitting Updated List of Transmission and Distribution Projects and Twenty-Nine Scopes of Work* ("August 30th Motion") whereby it submitted twenty-nine (29) SOWs for the Energy Bureau's review and approval prior to submitting them to COR3 and FEMA. The SOWs LUMA submitted included the "Transport Network", "Substation Minor Repairs", "Distribution Pole and Conductor Replacement", and "Distribution Feeders - San Juan Short Term Group 3" T&D Projects.

5. On September 22, 2021, the Energy Bureau issued a Resolution and Order that determined that most of the SOWs for T&D projects submitted by LUMA in the August 30th

Motion were necessary to improve the system's reliability ("September 22nd Order"). Therefore, it approved most of the projects presented in the August 30th Motion, including the "Transport Network", "Substation Minor Repairs", "Distribution Pole and Conductor Replacement", and "Distribution Feeders - San Juan Short Term Group 3" T&D Projects. The Energy Bureau also ordered LUMA to submit a copy of the approval by COR3 and/or FEMA of the Project, which shall contain the costs obligated for each project within ten (10) days of receiving such approval.

6. Thereafter, on 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 ("July 29th Motion"). 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.

7. On August 25, 2022, the Energy Bureau issued a Resolution and 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 ("August 25th Order"). 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.

8. Afterward, on April 24, 2023, LUMA submitted a *Motion Submitting Scope of Work and Request for Confidentiality and Supporting Memorandum of Law* ("April 24th Motion"), whereby it submitted one (1) SOW for the Energy Bureau's review and approval prior to

submitting them to COR3 and FEMA ("April 24th Motion"). The SOW submitted by LUMA was for the "Island-Wide Vegetation Clearing" T&D Project.

9. On May 5, 2023, the Energy Bureau issued a Resolution and Order in which it approved the "Island-Wide Vegetation Clearing" SOW and determined it necessary to improve the system's reliability ("May 5th Order"). Further, the Energy Bureau ordered LUMA to submit a copy of the approval by COR3 and/or FEMA of the projects, which shall contain the costs obligated for each project within ten (10) days of receiving such approval.

10. Then, 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. Moreover, on January 21, 2025, LUMA filed a *Motion Submitting One Scope of Work, Request for Confidentiality and Supporting Memorandum of Law, and Request for Expedited Approval* ("January 21st Motion), whereby LUMA submitted the "System Improvements Plan: Monacillos TC, Sabana Llana TC & Costa Sur TC"[1] T&D Project.

[1] Also titled as "Transformer Replacement in Monacillos TC, Costa Sur TC & Sabana Llana TC (System Improvements Plan)"

13. On February 6, 2025, the Energy Bureau issued a Resolution and Order ("February 6th Order"), whereby it determined the project was necessary to improve the reliability of the system. It thus approved the "System Improvements Plan: Monacillos TC, Sabana Llana TC & Costa Sur TC" SOW and the amount of $44,255,190 for the project.

14. Finally, on February 25, 2025, LUMA filed a *Motion Submitting One Scope of Work, Request for Confidentiality and Supporting Memorandum of Law, and Request for Expedite Approval* ("February 25th Motion"), whereby LUMA submitted the SOW for the "System Improvement Plan: Replacement of Eight Transformers, Metalclad Switchgear, and GIS Repair" T&D Project.

15. On March 24, 2025, the Energy Bureau issued a Resolution and Order ("March 24th Order"), whereby it determined the project was necessary to improve the reliability of the system. Therefore, the Energy Bureau approved the "System Improvement Plan: Replacement of Eight Transformers, Metalclad Switchgear, and GIS Repair" SOW and ordered LUMA to notify the Energy Bureau immediately should the scope of the project change.

16. 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*, the "Substation Minor Repairs" T&D Project is divided into individual projects per region, which includes the "FAASt [Maunabo TC] (Substation)" T&D Project. The "Distribution Pole and Conductor Replacement" SOW is also divided into individual projects per region, which includes the "[Pole and Conductor Repair – Caguas Group 3 - Phase 2] (Distribution)" T&D Project.

17. Similarly, the "Transmission and Distribution Automation Program Installation of Intelligent Reclosers, Single Phase Reclosers and Fault Current Indicators" and the "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 24] (TL/Distribution)", "FAASt [Automation Program Group 31] (Distribution)", "FAASt [Automation Program Group 35] (TL/Distribution)", "FAASt [Automation Program Group 36] (TL/Distribution)", and the "FAASt [Automation Program Group 37] (Distribution)"T&D Projects.

18. The "Island-Wide Vegetation Clearing" SOW was also divided into separate projects, by group, which include the "FAASt [Arecibo Region 2 Line 36400 – Ponce TC to Dos Bocas HP (Vegetation)", "FAASt [San Juan Region 1 Line 36800 – Canóvanas TC to Palmer TC] (Vegetation)", "FAAST [Arecibo Region 2 Line 36100 – Dos Bocas HP to Barrio Pina] (Vegetation)" and "FAASt [Ponce Region 6 Line 39000 – Aguas Buenas to Hacienda San Jose] (Vegetation)" T&D Projects.

19. As shown on the March 24th Order, the "System Improvement Plan: Replacement of Eight Transformers, Metalclad Switchgear, and GIS Repair" SOW is divided into different facilities/projects, which include the "FAASt [Guánica TC] (Substation)" and the "FAASt [Factor Sect 8014 Transformer Replacement] (Substation)".

20. In compliance with the August 21st, September 22nd, August 25th, May 5th, and November 27th Orders, LUMA hereby submits copies of the following approvals by FEMA issued on September 17, 2025: "FAASt [Transport Network Group 1] (Telecommunication)"; "FAASt [Maunabo TC] (Substation)"; "FAASt [Pole and Conductor Repair -Caguas Group 3 Phase 2] (Distribution)"; "FAASt [Automation Program Group 24] (TL/ Distribution)"; "FAASt [Automation Program Group 31] (Distribution)"; "FAASt [Automation Program Group 35] (TL /

Distribution)"; "FAASt [Feeder Rebuild # 8101-03] (Distribution)"[2]; "FAASt [Feeder Rebuild # 1620-02] (Distribution)"[3]; "FAASt [Automation Program Group 36] (TL / Distribution)"; "FAASt [Automation Program Group 37] (Distribution)"; "FAASt [Feeder Rebuild # 1529-15] (Distribution)"[4]; "FAASt [Guánica TC] (Substation)"; "FAASt [Arecibo Region 2 Line 36400 (115Kv) – Ponce TC to Dos Bocas HP] (Vegetation)"; "FAASt [San Juan Region 1 Line 36800 (115kV) – Canóvanas TC to Palmer TC] (Vegetation)"; "FAASt [Arecibo Region 2 Line 36100 (115kV) – Dos Bocas HP to Barrio Pina] (Vegetation)"; "FAASt [Ponce Region 6 Line 39000 (115kV) – Aguas Buenas Substation to Hacienda San Jose] (Vegetation)"; "FAASt [Factor Sect 8014 Transformer Replacement] (Substation)"; and "FAASt [Costa Sur TC Underground Cable Failure Replacement on Transformer Lead Bank #2] (Substation)" T&D Projects. *See* **Exhibit 1**[5] to this Motion. The document contains FEMA's approvals and includes the costs obligated for each Project.

21. 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

[2] Part of the "Distribution Feeders - Arecibo Short Term Group 2" SOW.
[3] Part of the "Distribution Feeders - San Juan Short Term Group 3" SOW.
[4] Part of the "Distribution Feeders - San Juan Short Term Group 2" SOW.
[5] Please note that **Exhibit 1** has digitalization and table format issues, which are found on the documents as issued by FEMA.

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

22. The bedrock provision on the management of confidential information filed before this Energy Bureau, is Section 6.15 of Act 57-2014, known as the "Puerto Rico Energy Transformation and Relief Act." It provides, in pertinent part, that: "[i]f any person who is required to submit information to the [Energy Bureau] believes that the information to be submitted has any confidentiality privilege, such person may request the [Energy Bureau] to treat such information as such […]" 22 LPRA § 1054n. If the Energy Bureau determines, after appropriate evaluation, that the information should be protected, "it shall grant such protection in a manner that least affects the public interest, transparency, and the rights of the parties involved in the administrative procedure in which the allegedly confidential document is submitted." *Id.* § 1054n(a).

23. 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).

24. 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.

25. 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.

26. 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).

27. 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

28. 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.[6] In at least two Data Security and Physical Security proceedings,[7]

[6] *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).

[7] *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.

29. Additionally, this Energy Bureau has granted requests by LUMA to protect CEII in connection with LUMA's System Operation Principles. *See* Resolution and Order of May 3, 2021, table 2 on page 4, Case No. NEPR-MI-2021-0001 (granting protection to CEII included in LUMA's Responses to Requests for Information). Similarly, in the proceedings on LUMA's proposed Initial Budgets and System Remediation Plan, this Energy Bureau granted confidential designation to several portions of LUMA's Initial Budgets and Responses to Requests for Information. *See* Resolution and Order of April 22, 2021, on Initial Budgets, Table 2 on pages 3-4, and Resolution and Order of April 22, 2021, on Responses to Requests for Information, Table 2 on pages 8-10, Case No. NEPR-MI-2021-0004; Resolution and Order of April 23, 2021, on Confidential Designation of Portions of LUMA's System Remediation Plan, table 2 on page 5, and Resolution and Order of May 6, 2021, on Confidential Designation of Portions of LUMA's Responses to Requests for Information on System Remediation Plan, table 2 at pages 7-9, Case No. NEPR-MI-2020-0019.

30. 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.

31. 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.

32. 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").[8]

[8] 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;

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).[9]

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

(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.

[9] CII includes the following types of information:

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

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

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

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

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 [Transport Network Group 1] (Telecommunication)	Pages 1, 2, 6	Critical Energy Infrastructure Information, 18 C.F.R. § 388.113;	September 26, 2025

Document	Name	Pages in which Confidential Information is Found, if applicable	Summary of Legal Basis for Confidentiality Protection, if applicable	Date Filed
			6 U.S.C. §§ 671-674.	
Exhibit 1	FAASt [Maunabo TC] (Substation)	Pages 1-3, 10	Critical Energy Infrastructure Information, 18 C.F.R. § 388.113; 6 U.S.C. §§ 671-674.	September 26, 2025
Exhibit 1	FAASt [Pole and Conductor Repair - Caguas Group 3 Phase 2] (Distribution)	Pages 1, 2, 12	Critical Energy Infrastructure Information, 18 C.F.R. § 388.113; 6 U.S.C. §§ 671-674.	September 26, 2025
Exhibit 1	FAASt [Automation Program Group 24] (TL/ Distribution)	Pages 1, 3-11	Critical Energy Infrastructure Information, 18 C.F.R. § 388.113; 6 U.S.C. §§ 671-674.	September 26, 2025
Exhibit 1	FAASt [Automation Program Group 31] (Distribution)	Pages 1, 3-11	Critical Energy Infrastructure Information, 18 C.F.R. § 388.113; 6 U.S.C. §§ 671-674.	September 26, 2025
Exhibit 1	FAASt [Automation Program Group 35] (TL / Distribution)	Pages 1, 3-10	Critical Energy Infrastructure Information, 18 C.F.R. § 388.113;	September 26, 2025

Document	Name	Pages in which Confidential Information is Found, if applicable	Summary of Legal Basis for Confidentiality Protection, if applicable	Date Filed
			6 U.S.C. §§ 671-674.	
Exhibit 1	FAASt [Feeder Rebuild # 8101-03] (Distribution)	Pages 1-2, 5	Critical Energy Infrastructure Information, 18 C.F.R. § 388.113; 6 U.S.C. §§ 671-674.	September 26, 2025
Exhibit 1	FAASt [Feeder Rebuild # 1620-02] (Distribution)	Pages 1-2, 6, 12	Critical Energy Infrastructure Information, 18 C.F.R. § 388.113; 6 U.S.C. §§ 671-674.	September 26, 2025
Exhibit 1	FAASt [Automation Program Group 36] (TL / Distribution)	Pages 1, 4-11	Critical Energy Infrastructure Information, 18 C.F.R. § 388.113; 6 U.S.C. §§ 671-674.	September 26, 2025
Exhibit 1	FAASt [Automation Program Group 37] (Distribution)	Pages 1, 3-10	Critical Energy Infrastructure Information, 18 C.F.R. § 388.113; 6 U.S.C. §§ 671-674.	September 26, 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 [Feeder Rebuild # 1529-15] (Distribution)	Pages 1-5, 11	Critical Energy Infrastructure Information, 18 C.F.R. § 388.113; 6 U.S.C. §§ 671-674.	September 26, 2025
Exhibit 1	FAASt [Guanica TC] (Substation)	Pages 1-2, 10	Critical Energy Infrastructure Information, 18 C.F.R. § 388.113; 6 U.S.C. §§ 671-674.	September 26, 2025
Exhibit 1	FAASt [Arecibo Region 2 Line 36400 (115Kv) – Ponce TC to Dos Bocas HP] (Vegetation)	Pages 1-2, 6	Critical Energy Infrastructure Information, 18 C.F.R. § 388.113; 6 U.S.C. §§ 671-674.	September 26, 2025
Exhibit 1	FAASt [San Juan Region 1 Line 36800 (115kV) – Canovanas TC to Palmer TC] (Vegetation)	Pages 1-2, 6	Critical Energy Infrastructure Information, 18 C.F.R. § 388.113; 6 U.S.C. §§ 671-674.	September 26, 2025
Exhibit 1	FAASt [Arecibo Region 2 Line 36100 (115kV) – Dos Bocas HP to Barrio Pina] (Vegetation)	Pages 1-2, 6	Critical Energy Infrastructure Information, 18 C.F.R. § 388.113; 6 U.S.C. §§ 671-674.	September 26, 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 [Ponce Region 6 Line 39000 (115kV) – Aguas Buenas Substation to Hacienda San Jose] (Vegetation)	Pages 1, 3, 7	Critical Energy Infrastructure Information, 18 C.F.R. § 388.113; 6 U.S.C. §§ 671-674.	September 26, 2025
Exhibit 1	FAASt [Factor Sect 8014 Transformer Replacement] (Substation)	Pages 1-2, 9	Critical Energy Infrastructure Information, 18 C.F.R. § 388.113; 6 U.S.C. §§ 671-674.	September 26, 2025
Exhibit 1	FAASt [Costa Sur TC Underground Cable Failure Replacement on Transformer Lead Bank #2] (Substation)	Pages 1-2	Critical Energy Infrastructure Information, 18 C.F.R. § 388.113; 6 U.S.C. §§ 671-674.	September 26, 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 counsel for PREPA Alexis Rivera,

arivera@gmlex.net, and to Genera PR LLC, through its counsel of record, Jorge Fernández-Reboredo, jfr@sbgblaw.com, and José J. Díaz Alonso, jdiaz@sbgblaw.com.

In San Juan, Puerto Rico, on this 26th day of September 2025.

DLA Piper (Puerto Rico) LLC
500 Calle de la Tanca, Suite 401
San Juan, PR 00901-1969
Tel. 787-945-9132
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/s/ Yahaira De la Rosa Algarín
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Department of Homeland Security
Federal Emergency Management Agency

v0

General Info

Project #	551963 **P/W #** 11859	**Project Type**	Specialized
Project Category	F - Utilities	**Applicant**	PR Electric Power Authority (000-UA2QU-00)
Project Title	FAASt [Transport Network Group 1] (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 #930991; FAASt [Offices, generation facilities, water dams, substations, and radio sites served by existing wide-area network infrastructure]

General Facility Information:

- **Facility Type:** Communication
- **Facility:** Offices, generation facilities, water dams, substations, and radio sites served by existing wide-area network infrastructure
- **Facility Description:** Puerto Rico Electric Power Authority (PREPA) has Synchronous Optical Network (SONET) and Ethernet nodes that form the current telecommunications wide-area transport network. In total (substations, microwave sites, and data center locations) the communication network will extend to approximately 400 sites. This Operations Technology (OT) network communicates over a combination of fiber and wireless connections, allowing for remote monitoring, control, protection, and engineering access to the electric grid. As part of the rebuilding effort defined in separate SOWs, PREPA will have new fiber cables installed, and wireless infrastructure built-out.
- **Approx. Year Built:** 1970
- **GPS Latitude/Longitude:** [redacted]

Final Scope

930991

FAASt [Offices, generation facilities, water dams, substations, and radio sites served by existing wide-area network infrastructure]

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 551963 - Transport Network Group-1 under DR-4339-PR Public Assistance. The document provides a detailed description of the project, the scope of PA construction activities to be completed, common EHP review information, proposed hazard mitigation measures, and project cost estimates. LUMA is seeking approval from COR3 and FEMA for PA funding for the scope described in this document.

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

PROJECT DESCRIPTION

This project is part of an island-wide effort to restore the Transmission and Distribution Transport Network system, which allows the operation and monitoring of the devices within its substations. This Scope describes the work to be performed within three substation sites of the entire system. Refer to Appendix (G) for the Transport Network Program Description.

The transport network consists of interconnected active nodes supporting remote control and monitoring of transmission and distribution components of the power grid. The work aims to restore impacted transport network equipment while ensuring compliance with program guidelines and industry standards.

The network architecture and topology for the OT network are independent of the IT network infrastructure; the IT infrastructure and related improvements are outside the scope of this SOW. This SOW includes the design and architecture of the key aspects of the overall OT transport network and is represented in the network diagram below. Analysis of the existing infrastructure and the business use case applications and requirements are tightly coupled with the topology design. While the scope of work in this project is specific to three substation sites, the design extends beyond the three sites within the scope of this SOW in order to create a functional network.

Figure 1 below presents a diagram of the network in this scope of work. refer to DSOW to see image. (Refer to document: 551963-DR4339PR Detail Scope of Work Transport Network Group 1 Rev 6 signed.pdf).

FACILITIES

FACILITIES LIST – BUILDINGS AND SUBSTATIONS

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

Facilities	Number	Site Type	GPS Location	Construction Year
Aguas Buenas TC	93725	Grid Core - 2	[redacted]	1996
Sabana Llana TC	91646	Core Aggregation - 3		1982
Monacillo Telecom PCC	T1350	Grid Core -1		1947

428 SCOPE OF WORK

This effort involves the design and installation of the 3-site transport network, including the detailed design, provisioning, testing, and commissioning of the Multiprotocol Label Switching(MPLS) routers, firewalls, and switches that are needed to interconnect

the sites via fiber optic cables. The proposed restoration includes the repairs of eligible disaster damage up to required codes and standards and the request to upgrade undamaged infrastructure that must be improved to fully effectuate the restoration of disaster-damaged components to enable the functioning of the system to approve industry standards. As a result, no disposal o r decommissioning of network equipment is required, except for the removal of one existing HVAC unit, which is not a telecommunications equipment.

The transport network will be upgraded to a modern system that maintains equivalent functionality along with enhanced features to improve OT application transport capability.

9.1.1. Aguas Buenas TC (93725) Substation Scope of Work

The Aguas Buenas Transmission Center (TC) is a critical core site in the network. It aggregatesseveral fiber routes and requires a high hardware tolerance network infrastructure. The scope of work at Aguas Buenas is broken into two functional work streams described as “Network Infrastructure” and “Network Equipment”. The Network Infrastructure scope involves thepreparation of the site to accommodate the new network equipment. The Network Equipmentscope involves the engineering design architecture for the network hardware and their installation, configuration, and integration into the infrastructure.

A. Network Infrastructure Site Scope of Work:

1. Conduct an engineering evaluation and survey the existing transport network infrastructure and telecommunications room. Evaluation includes availability, testing and characterization of fiber optic within telecom room.
2. Develop design and site layout for installation.
3. Remove and decommission one (1) existing HVAC equipment of 60,000 BTUs andreplace with a 96,000 BTU capacity air conditioning unit necessary to provide the required temperature and humidity levels for proper operation and to comply with equipment specifications.
4. Install cable tray section for wiring distribution with all necessary hardware including ground wiring and connections to new cable tray section.
5. Install two (2) "Network Bay I & II" cabinet 84” high x 31.5” wide x 36” deep withall components including 48VDC power distribution panels with load breakers and four (4) horizontal cable managers.
6. Install one (1)"-48VDC Bay" rack 23” wide, with ten (10) 75 Amp rectifiersmodules, three (3) battery shelves and four (4) batteries 12 volts DC, 200 amp/hours rated in each of the three for a total of twelve (12) batteries with three (3) battery breakers (200 amps) in the rectifier with required cables.
7. Install four (4) load breakers 200-Amps and four (4) load breakers 50-Amps in the rectifier
8. Install load breakers in the -48VDC power distribution panels, four (4) 10-ampsload breakers, Twelve (12) 5-amp load breakers.
9. Install eight (8) 20-Amps breakers in the AC panel(s)

B. Network Equipment Scope of Work:

1. Develop site specific engineering and design, including the configuration and troubleshoot procedures.
2. Transport equipment to the site.
3. Install and configure two (2) Grid Core Routers networking equipment to align with system design requirements.
4. Install and configure two (2) Site Aggregation Routers networking equipment to align with system design requirements.
5. Install and configure two (2) Site Firewalls networking equipment align to with system design requirements.
6. Install and configure three (3) Site Switches networking equipment to align with system design requirements.

C. Site and Rack Diagrams: Refer to Appendix H – Rack Diagram and Site Layout.

Network equipment diagram installation and equipment layout per site connectivity diagram.

Sabana Llana TC (Core Aggregation -3) Substation Scope of Work.

Sabana Llana is a critical core aggregation site. The scope of work at Sabana Llana is broken intotwo functional work streams described as “Network Infrastructure” and “Network Equipment”. The Network Infrastructure scope involves the preparation of the

site to accommodate the new network equipment. The Network Equipment scope involves the engineering design architecturefor the network hardware and their installation, configuration, and integration into the infrastructure.

A. Network Infrastructure Site Scope of Work:

1. Conduct an engineering evaluation and survey the existing transport network infrastructure and telecommunications room, including availability, testing, and characterization of fiber optic within telecom room.
2. Develop design and site layout for installation.
3. Perform reorganization and movement of existing equipment and cables to existing racks to make room for the new cabinets and rack.
4. Install two (2) "Network Bay I & II" cabinet 84” high x 31.5” wide x 36” deep with allcomponents including 48VDC power distribution panels with load breakers and four (4) horizontal cable managers.
5. Install one (1)"-48VDC Bay" rack 23” wide, with ten (10) 75 Amp rectifiers modules,three (3) battery shelves and four (4) batteries 12 volts DC, 200 amp/hours rated ineach of the three for a total of twelve (12) batteries with three (3) battery breakers (200 amps) in the rectifier with required cables.
6. Install four (4) load breakers 200-Amps and four (4) load breakers 50-Amps in the rectifier.
7. Install load breakers in the -48VDC power distribution panels, four (4) 10-amps loadbreakers, twelve (12) 5-amp load breakers.
8. Install eight (8) breakers in the AC panel(s).

B. Network Equipment Scope of Work:

1. Develop site specific engineering and design, including the configuration and troubleshoot procedures.
2. Transport equipment to the site.
3. Install and configure two (2) Grid Aggregation Routers networking equipment to align with system design requirements.
4. Install and configure two (2) Site Aggregation Core Routers networking equipment to align with system design requirements.
5. Install and configure two (2) Site Firewalls networking equipment to align with system design requirements.
6. Install and configure Three (3) Site Switches networking equipment to align with system design requirements.

C. Site and Rack Diagrams: Refer to Appendix H - Rack Diagram and Site Layout.

Network equipment diagram installation and equipment layout per site connectivity diagram.

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Monacillo Telecom PCC (Grid Core - 1)

Monacillo is the main core site in the network and is the primary data center interface and aggregation point for all the data services. Additionally, the site will include a Network Management System (NMS) for monitoring the network. The scope of work at Monacillo is broken into two functional work streams described as “Network Infrastructure” and “Network Equipment”. The Network Infrastructure involves the preparation of the site to accommodate thenew network equipment. The Network Infrastructure will be more extensive due to the additionalhardware required to form the core of the network and interface with the OT applications. The Network Equipment is the engineering design architecture for the network hardware and their installation, configuration, and integration into the infrastructure. The proposed work within the building identified as a Historic Building and classified by SHPO as eligible for the NationaRegister of Historic Places will not impact or involve any intervention in the character-defining features of the building. All work will be conducted in a manner that preserves the historical integrity of the structure.

Monacillo Telecom PCC

A. Network Infrastructure Scope of Work:

1. Conduct an engineering evaluation and survey the existing transport network infrastructure and telecommunications room, including availability, testing and characterization of fiber optic within telecom room.
2. Develop design and site layout for installation.
3. Install cable tray section for wiring distribution with all necessary hardware including ground wiring and connections to new cable tray section.

4. Install two (2) "NetwoRk Bay I & II" cabinet 84” high x 31.5” wide x 36” deep with allcomponents including four (2) -48VDC power distribution panels (breaker protection, dual-bus, eight (8) breaker positions per side) with load breakers and four (4) horizontal cable managers.

5. Install load breakers in the -48VDC power distribution panels, eight (8) 15-amp loadbreakers, eight (8) 10-amp load breakers, sixteen (16) 5-amp load breakers.

6. Install one (1)"-48VDC Bay" rack 23” wide, with ten (10) 75 Amp rectifiers modules, six (6) battery shelves and four (4) batteries 12 volts DC, 200 amp/hours rated ineach of the three for a total of twelve (24) batteries with Six (6) battery breakers (200 amps) with required cables.

7. Install two (2) Rectifiers for the "-48VDC Bay" rack with eight (8) positions for rectifier modules.

8. Install one (1)"-48VDC Battery Bay" rack 23” wide, ten (10) battery shelves and four(4) batteries 12 volts DC, 200 amp/hours rated in each of the three for a total of twelve (40) batteries with ten (10) battery breakers (200 amps) with required cables.

9. Install eight (8) load breakers (200 amps) and eight (8) load breakers (70 amps) and four (4) load breakers (50 amps) in the rectifier.

10. Install sixteen (16) 20-Amps breakers in the AC panel(s)

B. Network Equipment Scope of Work:

1. Develop site specific engineering and design, including the configuration and troubleshoot procedures.

2. Transport equipment to site.

3. Install and configure two (2) Network Management system (NMS) Server networkingequipment to align with system design requirements.

4. Install and configure two (2) Site Grid Hosting Switches networking equipment to align with system design requirements.

5. Install and configure two (2) Site Grid Firewalls networking equipment to align with system design requirements.

6. Install and configure two (2) Site OT Core Routers networking equipment to align with system design requirements.

Monacillo Telecom PCC, Network Management System (NMS):

A. Network Infrastructure Scope of Work:

1. Install two (2) "Network Bay I & II" cabinet 84” high x 31.5” wide x 36” deep with allcomponents including four (2) -48VDC power distribution panels (breaker protection, dual-bus, eight (8) breaker positions per side) with load breakers and four (4) horizontal cable managers.

2. Install NMS (Server, App and WRD) hardware and simulated OT network equipment, cabling.

B. Network Equipment Scope of Work:

1. Transport equipment to site.

2. Install and configure two (2) OT Data Center Core Routers networking equipment align with system design requirements.

3. Install and configure two (2) OT Data Center Distribution Switches networkingequipment align with system design requirements.

4. Integration testing, which encompasses routing and end-to-end testing, aims to identify and resolve any existing issues at a site-by-site basis.

5. Perform site-to-site route testing at the network level, along with testing for host/network connectivity and interoperability.

6. Conduct the transition and testing of SCADA/RTU systems, security camerastelephone services, and facilities control panels to ensure seamless end-to-end
communication.

C. Site and Rack Diagrams: Refer to Appendix H - Rack Diagram and Site Layout.

Network equipment diagram installation and equipment layout per site connectivity diagram.

Incidental Activities in Scope:

A. Pre-commissioning and Storage Area:

1. Network equipment and material will be stored for pre-commissioning in a storage area located at LUMA Headquarters 1250 Av. Juan Ponce de León, San Juan, 00907.(Coordinates [redacted]). Refer to Appendix (D). For the first three sites, no staging area is required for material. All equipment will be transported directly to the sites from the pre-commissioning and storage facility.

406 HAZARD MITIGATION PROPOSAL

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

406 HAZARD MITIGATION OPPORTUNITY

LUMA continues to evaluate mitigation alternatives to increase the resiliency for each site and prevent telecommunication service interruptions during an emergency or disaster. Hazard and mitigations proposal will be submitted for 406 funding in a future version of the project.

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. For a more detailed cost estimate refer to the referenced appendix/appendices. Refer to Appendix- E.

COST ESTIMATE			
Cost Element	**428**	**406**	**PROJECT TOTAL**
PLANNING	**$ 505,886.92**	**$ -**	**$ 505,886.92**
Permitting and Assessments	$ 47,324.09	$ -	$ 47,324.09
Environmental Documentation & Management	$ 133,586.84	$ -	$ 133,586.84
Engineering Services & Design	$ 324,975.99	$ -	$ 324,975.99
MANAGEMENT	**$ 330,529.10**	**$ -**	**$ 330,529.10**
Project Management	$ 93,459.50	$ -	$ 93,459.50
Construction Management	$ 126,496.62	$ -	$ 126,496.62
Contracting, Procurement & Contract Administration	$ 50,150.58	$ -	$ 50,150.58
Projects Controls (Scheduling, Estimating, Support, Cost Control, Risk, Document Control & Reporting)	$ 60,422.40	$ -	$ 60,422.40
Aguas Buenas Transport Network Group 1,	**$ 6,280,163.20**	**$ -**	**$ 6,280,163.20**
Aguas Buenas Transport Network Group 1, FAAST#: 551963, material, labor and equipment.	$ 1,086,832.44	$ -	$ 1,086,832.44

Sabana Llana Transport Network Group 1, FAAST#: 551963, material, labor and equipment.	$ 999,819.72	$ -	$ 999,819.72
	$ 2,693,560.49	$ -	$ 2,693,560.49
Monacillo NMS Transport Network Group 1, FAAST#: 551963, material, labor and equipment.	$ 540,527.86	$ -	$ 540,527.86
Start Up/Commissioning	$ 79,811.08	$ -	$ 79,811.08
Insurance	$ 107,478.94	$ -	$ 107,478.94
Contingency	$ 590,865.45	$ -	$ 590,865.45
Escalation	$ 181,267.22	$ -	$ 181,267.22
GENERAL CONDITIONS	**$ 353,300.01**	**$ -**	**$ 353,300.01**
Sales Tax	$ 114,289.39	$ -	$ 114,289.39
Municipal Construction Tax	$ 239,010.62	$ -	$ 239,010.62
COST TOTALS	**$ 7,469,879.23**	**$ -**	**$ 7,469,879.23**
DEDUCTIONS	**TOTAL INSURANCE PROCEEDS RECEIVED**		**$ -**
	DE-OBLIGATION TO FAASt IF APPLICABLE		**$ -**
FAASt ALLOCATIONS	FAAST PROJECT # 551963 - 428		**$ 5,490,296.88**
	FAAST PROJECT # 551963 - 406 HM		**$ -**
	FAAST PROJECT # 551963 TOTAL:		**$ 5,490,296.88**
	FAASt A&E # 335168 - 428		**$ 836,416.02**
	FAASt A&E # 335168 - 406 HM		**$ -**
	FAASt A&E # 335168 TOTAL		**$ 836,416.02**
	FAASt E&M #673691 - 428		**$ 1,143,166.33**
	FAASt E&M #673691 - 406 HM		**$ -**
	FAASt E&M #673691 TOTAL		**$ 1,143,166.33**

Project 551963 Cost Summary, 428 PAAP:

Work to be Completed (WTBC): $7,469,879.23

A&E Deduction, Global A&E 335168: ($836,416.02)

A&E Deduction, Global E&M 673961: ($1,143,166.33)

Project Total (WTBC): $5,490,296.88

Project Notes

1. 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 costs associated with individual FAASt projects.
2. 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.
3. This project is part of Donor FAASt 136271 – MEPA078 Puerto Rico Electrical Power Authority (PREPA) Island Wide FAASt Project.
4. For details on the updated SOW and CE, refer to filenames: *551963-DR4339PR Detail Scope of Work Transport Network Group 1 Rev 6 signed.pdf,* and *551963-DR4339PR Appendix E LPCE Transport Network Group 1 Rev 3-19-2025.xlsx.*
5. Attachments- The following attachments and appendices are provided with this DSOW: Document Description or Filename:

   Appendix A, Aguas Buenas TC Location Map
   Appendix B, Sabana Llana TC Location Map
   Appendix C, Monacillo Telecom PCC Location Map
   Appendix D, Storage Area Floor Plan
   Appendix E, LPCE Transport Network Group 1 Summary
   Appendix F, Consent to Federal Funding Letter
   Appendix G, Transport Network Program Description
   Appendix H, Rack Diagram and Site Layout.

406 HMP Scope

406 Hazard Mitigation measures were not requested by the sub-applicant for this project in Version 0.

Cost

Code	Quantity	Unit	Total Cost	Section
3510	1	Lump Sum	($836,416.02)	Uncompleted
9001	1	Lump Sum	$7,469,879.23	Uncompleted
9001	1	Lump Sum	($1,143,166.33)	Uncompleted
9201	1	Lump Sum	$0.00	Completed

CRC Gross Cost	$5,490,296.88
Total 406 HMP Cost	$0.00
Total Insurance Reductions	$0.00
CRC Net Cost	$5,490,296.88
Federal Share (90.00%)	$4,941,267.20
Non-Federal Share (10.00%)	$549,029.68

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

4/23/2025

GENERAL INFORMATION

Event: DR4339-PR

Project: SP 551963

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: Yes

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

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

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

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

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

Damaged Inventory (DI) #930991:

FAASt [Offices, generation facilities, water dams, substations, and radio sites served by existing wide-area network infrastructure]

Number of damaged locations included in this DI: (3)

Location Description: Various Locations

GPS Coordinates: Various GPS Coordinates

Cause of Loss: Wind / Wind Driven Rain

Applicable Deductible Amount: $25,000,000.00

Prior Obtain and Maintain Requirement:

No prior insurance requirements were found for this facility.

Reduction(s):

No insurance reduction will be applied to this project. 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 for Equipment, for the peril of Wind (all wind associated losses including "wind driven rain" for the FAASt [Offices, generation facilities, water dams, substations, and radio sites served by existing wide-area network infrastructure] - Aguas Buenas TC in the amount of $1,064,360.00. Please see "551963-DR4339PR-Insurance costs per facility" file.

An Obtain & Maintain Requirement is being required for Equipment, for the peril of Wind (all wind associated losses including "wind driven rain" for the FAASt [Offices, generation facilities, water dams, substations, and radio sites served by existing wide-area network infrastructure] – Sabana Llana TC in the amount of $1,037,204.85. Please see "551963-DR4339PR-Insurance costs per facility" file.

An Obtain & Maintain Requirement is being required for Equipment, for the peril of Wind (all wind associated losses including "wind driven rain" for the FAASt [Offices, generation facilities, water dams, substations, and radio sites served by existing wide-area network infrastructure] - Monacillos in the amount of $2,750,078.17. Please see "551963-DR4339PR-Insurance costs per facility" file.

An Obtain & Maintain Requirement is being required for Equipment, for the peril of Wind (all wind associated losses including "wind driven rain" for the FAASt [Offices, generation facilities, water dams, substations, and radio sites served by existing wide-area network infrastructure] – Monacillos NMS in the amount of $638,653.86. Please see "551963-DR4339PR-Insurance costs per facility" 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 $5,000.00. 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.

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

O&M Requirements

Insured Peril	Item Type	Description	Required Coverage Amount
Wind	Equipment	An Obtain & Maintain Requirement is being required for Equipment, for the peril of Wind (all wind associated losses including "wind driven rain" for the FAASt [Offices, generation facilities, water dams, substations, and radio sites served by existing wide-area network infrastructure] - Adjuntas in the amount of $1,197,938.07.	$1,197,938.07
Wind	Equipment	An Obtain & Maintain Requirement is being required for Equipment, for the peril of Wind (all wind associated losses including "wind driven rain" for the FAASt [Offices, generation facilities, water dams, substations, and radio sites served by existing wide-area network infrastructure] – Aguadilla Sect in the amount of $1,059,787.96.	$1,059,787.96
Wind	Equipment	An Obtain & Maintain Requirement is being required for Equipment, for the peril of Wind (all wind associated losses including "wind driven rain" for the FAASt [Offices, generation facilities, water dams, substations, and radio sites served by existing wide-area network infrastructure] – Aguas Buenas TC in the amount of $2,164,915.45.	$2,164,915.45
Wind	Equipment	An Obtain & Maintain Requirement is being required for Equipment, for the peril of Wind (all wind associated losses including "wind driven rain" for the FAASt [Offices, generation facilities, water dams, substations, and radio sites served by existing wide-area network infrastructure] – Alturas de Mayaguez in the amount of $2,164,915.45.	$2,164,915.45

Insured Peril	Item Type	Description	Required Coverage Amount
Wind	Equipment	An Obtain & Maintain Requirement is being required for Equipment, for the peril of Wind (all wind associated losses including "wind driven rain" for the FAASt [Offices, generation facilities, water dams, substations, and radio sites served by existing wide-area network infrastructure] – Arecibo Sect in the amount of $1,197,938.07.	$1,197,938.07
Wind	Equipment	An Obtain & Maintain Requirement is being required for Equipment, for the peril of Wind (all wind associated losses including "wind driven rain" for the FAASt [Offices, generation facilities, water dams, substations, and radio sites served by existing wide-area network infrastructure] – Arecibo tecnica in the amount of $1,197,938.07.	$1,197,938.07
Wind	Equipment	An Obtain & Maintain Requirement is being required for Equipment, for the peril of Wind (all wind associated losses including "wind driven rain" for the FAASt [Offices, generation facilities, water dams, substations, and radio sites served by existing wide-area network infrastructure] – Arroyo in the amount of $1,059,787.96.	$1,059,787.96
Wind	Equipment	An Obtain & Maintain Requirement is being required for Equipment, for the peril of Wind (all wind associated losses including "wind driven rain" for the FAASt [Offices, generation facilities, water dams, substations, and radio sites served by existing wide-area network infrastructure] – Atalaya in the amount of $1,059,787.96.	$1,059,787.96
Wind	Equipment	An Obtain & Maintain Requirement is being required for Equipment, for the peril of Wind (all wind associated losses including "wind driven rain" for the FAASt [Offices, generation facilities, water dams, substations, and radio sites served by existing wide-area network infrastructure] – Barrio Lapa in the amount of $1,059,787.96.	$1,059,787.96
Wind	Equipment	An Obtain & Maintain Requirement is being required for Equipment, for the peril of Wind (all wind associated losses including "wind driven rain" for the FAASt [Offices, generation facilities, water dams, substations, and radio sites served by existing wide-area network infrastructure] – Barrio Pina Gis in the amount of $1,197,938.07.	$1,197,938.07
Wind	Equipment	An Obtain & Maintain Requirement is being required for Equipment, for the peril of Wind (all wind associated losses including "wind driven rain" for the FAASt [Offices, generation facilities, water dams, substations, and radio sites served by existing wide-area network infrastructure] – Berwind TC in the amount of $2,164,915.45.	$2,164,915.45
Wind	Equipment	An Obtain & Maintain Requirement is being required for Equipment, for the peril of Wind (all wind associated losses including "wind driven rain" for the FAASt [Offices, generation facilities, water dams, substations, and radio sites served by existing wide-area network infrastructure] – Caguax Sect in the amount of $1,197,938.07.	$1,197,938.07
Wind	Equipment	An Obtain & Maintain Requirement is being required for Equipment, for the peril of Wind (all wind associated losses including "wind driven rain" for the FAASt [Offices, generation facilities, water dams, substations, and radio sites served by existing wide-area network infrastructure] – Canovanas TC in the amount of $2,164,915.45.	$2,164,915.45
Wind	Equipment	An Obtain & Maintain Requirement is being required for Equipment, for the peril of Wind (all wind associated losses including "wind driven rain" for the FAASt [Offices, generation facilities, water dams, substations, and radio sites served by existing wide-area network infrastructure] – Carolina in the amount of $1,059,787.96.	$1,059,787.96
Wind	Equipment	An Obtain & Maintain Requirement is being required for Equipment, for the peril of Wind (all wind associated losses including "wind driven rain" for the FAASt [Offices, generation facilities, water dams, substations, and radio sites served by existing wide-area network infrastructure] – Cayey Rural No. 2 in the amount of $1,197,938.07.	$1,197,938.07
Wind	Equipment	An Obtain & Maintain Requirement is being required for Equipment, for the peril of Wind (all wind associated losses including "wind driven rain" for the FAASt [Offices, generation facilities, water dams, substations, and radio sites served by existing wide-area network infrastructure] – Centro Medico Mayaguez in the amount of $1,059,787.96.	$1,059,787.96

Insured Peril	Item Type	Description	Required Coverage Amount
Wind	Equipment	An Obtain & Maintain Requirement is being required for Equipment, for the peril of Wind (all wind associated losses including "wind driven rain" for the FAASt [Offices, generation facilities, water dams, substations, and radio sites served by existing wide-area network infrastructure] – Centro Medico Mayaguez Provisional in the amount of $1,197,938.07.	$1,197,938.07
Wind	Equipment	An Obtain & Maintain Requirement is being required for Equipment, for the peril of Wind (all wind associated losses including "wind driven rain" for the FAASt [Offices, generation facilities, water dams, substations, and radio sites served by existing wide-area network infrastructure] – Centro Medico Sect in the amount of $1,059,787.96.	$1,059,787.96
Wind	Equipment	An Obtain & Maintain Requirement is being required for Equipment, for the peril of Wind (all wind associated losses including "wind driven rain" for the FAASt [Offices, generation facilities, water dams, substations, and radio sites served by existing wide-area network infrastructure] – Cerro Puntas in the amount of $1,197,938.07.	$1,197,938.07
Wind	Equipment	An Obtain & Maintain Requirement is being required for Equipment, for the peril of Wind (all wind associated losses including "wind driven rain" for the FAASt [Offices, generation facilities, water dams, substations, and radio sites served by existing wide-area network infrastructure] – Ciales in the amount of $1,197,938.07.	$1,197,938.07
Wind	Equipment	An Obtain & Maintain Requirement is being required for Equipment, for the peril of Wind (all wind associated losses including "wind driven rain" for the FAASt [Offices, generation facilities, water dams, substations, and radio sites served by existing wide-area network infrastructure] – Colegio Sect in the amount of $1,053,059.41.	$1,053,059.41
Wind	Equipment	An Obtain & Maintain Requirement is being required for Equipment, for the peril of Wind (all wind associated losses including "wind driven rain" for the FAASt [Offices, generation facilities, water dams, substations, and radio sites served by existing wide-area network infrastructure] – Combate in the amount of $1,053,059.41.	$1,053,059.41
Wind	Equipment	An Obtain & Maintain Requirement is being required for Equipment, for the peril of Wind (all wind associated losses including "wind driven rain" for the FAASt [Offices, generation facilities, water dams, substations, and radio sites served by existing wide-area network infrastructure] – Covadonga Sect in the amount of $1,197,938.07.	$1,197,938.07
Wind	Equipment	An Obtain & Maintain Requirement is being required for Equipment, for the peril of Wind (all wind associated losses including "wind driven rain" for the FAASt [Offices, generation facilities, water dams, substations, and radio sites served by existing wide-area network infrastructure] – Cuarto Hermanos Sect in the amount of $1,197,938.07.	$1,197,938.07
Wind	Equipment	An Obtain & Maintain Requirement is being required for Equipment, for the peril of Wind (all wind associated losses including "wind driven rain" for the FAASt [Offices, generation facilities, water dams, substations, and radio sites served by existing wide-area network infrastructure] – Daguao TC in the amount of $2,164,915.45.	$2,164,915.45
Wind	Equipment	An Obtain & Maintain Requirement is being required for Equipment, for the peril of Wind (all wind associated losses including "wind driven rain" for the FAASt [Offices, generation facilities, water dams, substations, and radio sites served by existing wide-area network infrastructure] – El Gato in the amount of $1,197,938.07.	$1,197,938.07
Wind	Equipment	An Obtain & Maintain Requirement is being required for Equipment, for the peril of Wind (all wind associated losses including "wind driven rain" for the FAASt [Offices, generation facilities, water dams, substations, and radio sites served by existing wide-area network infrastructure] – El Mani in the amount of $1,197,938.07.	$1,197,938.07
Wind	Equipment	An Obtain & Maintain Requirement is being required for Equipment, for the peril of Wind (all wind associated losses including "wind driven rain" for the FAASt [Offices, generation facilities, water dams, substations, and radio sites served by existing wide-area network infrastructure] – El Yunque in the amount of $1,197,938.07.	$1,197,938.07

Insured Peril	Item Type	Description	Required Coverage Amount
Wind	Equipment	An Obtain & Maintain Requirement is being required for Equipment, for the peril of Wind (all wind associated losses including "wind driven rain" for the FAASt [Offices, generation facilities, water dams, substations, and radio sites served by existing wide-area network infrastructure] – Fajardo TC in the amount of $2,164,915.45.	$2,164,915.45
Wind	Equipment	An Obtain & Maintain Requirement is being required for Equipment, for the peril of Wind (all wind associated losses including "wind driven rain" for the FAASt [Offices, generation facilities, water dams, substations, and radio sites served by existing wide-area network infrastructure] – Guanica TC in the amount of $1,197,938.07.	$1,197,938.07
Wind	Equipment	An Obtain & Maintain Requirement is being required for Equipment, for the peril of Wind (all wind associated losses including "wind driven rain" for the FAASt [Offices, generation facilities, water dams, substations, and radio sites served by existing wide-area network infrastructure] – Guaraguao Sect in the amount of $1,094,418.96.	$1,094,418.96
Wind	Equipment	An Obtain & Maintain Requirement is being required for Equipment, for the peril of Wind (all wind associated losses including "wind driven rain" for the FAASt [Offices, generation facilities, water dams, substations, and radio sites served by existing wide-area network infrastructure] – Guayama in the amount of $1,053,059.41.	$1,053,059.41
Wind	Equipment	An Obtain & Maintain Requirement is being required for Equipment, for the peril of Wind (all wind associated losses including "wind driven rain" for the FAASt [Offices, generation facilities, water dams, substations, and radio sites served by existing wide-area network infrastructure] – Hato Tejas TC in the amount of $1,094,418.96.	$1,094,418.96
Wind	Equipment	An Obtain & Maintain Requirement is being required for Equipment, for the peril of Wind (all wind associated losses including "wind driven rain" for the FAASt [Offices, generation facilities, water dams, substations, and radio sites served by existing wide-area network infrastructure] – Humacao TC in the amount of $2,164,915.45.	$2,164,915.45
Wind	Equipment	An Obtain & Maintain Requirement is being required for Equipment, for the peril of Wind (all wind associated losses including "wind driven rain" for the FAASt [Offices, generation facilities, water dams, substations, and radio sites served by existing wide-area network infrastructure] – Isabela Planta 1 in the amount of $1,094,418.96.	$1,094,418.96
Wind	Equipment	An Obtain & Maintain Requirement is being required for Equipment, for the peril of Wind (all wind associated losses including "wind driven rain" for the FAASt [Offices, generation facilities, water dams, substations, and radio sites served by existing wide-area network infrastructure] – Isabela Pueblo in the amount of $1,053,059.41.	$1,053,059.41
Wind	Equipment	An Obtain & Maintain Requirement is being required for Equipment, for the peril of Wind (all wind associated losses including "wind driven rain" for the FAASt [Offices, generation facilities, water dams, substations, and radio sites served by existing wide-area network infrastructure] – Isabela Grande Gis in the amount of $1,094,418.96.	$1,094,418.96
Wind	Equipment	An Obtain & Maintain Requirement is being required for Equipment, for the peril of Wind (all wind associated losses including "wind driven rain" for the FAASt [Offices, generation facilities, water dams, substations, and radio sites served by existing wide-area network infrastructure] – Isabela Grande Sect in the amount of $1,094,418.96.	$1,094,418.96
Wind	Equipment	An Obtain & Maintain Requirement is being required for Equipment, for the peril of Wind (all wind associated losses including "wind driven rain" for the FAASt [Offices, generation facilities, water dams, substations, and radio sites served by existing wide-area network infrastructure] – Juan Martin Sect in the amount of $1,094,418.96.	$1,094,418.96
Wind	Equipment	An Obtain & Maintain Requirement is being required for Equipment, for the peril of Wind (all wind associated losses including "wind driven rain" for the FAASt [Offices, generation facilities, water dams, substations, and radio sites served by existing wide-area network infrastructure] – La Santa in the amount of $1,094,418.96.	$1,094,418.96

Insured Peril	Item Type	Description	Required Coverage Amount
Wind	Equipment	An Obtain & Maintain Requirement is being required for Equipment, for the peril of Wind (all wind associated losses including "wind driven rain" for the FAASt [Offices, generation facilities, water dams, substations, and radio sites served by existing wide-area network infrastructure] – Las Lomas Sect in the amount of $1,094,418.96.	$1,094,418.96
Wind	Equipment	An Obtain & Maintain Requirement is being required for Equipment, for the peril of Wind (all wind associated losses including "wind driven rain" for the FAASt [Offices, generation facilities, water dams, substations, and radio sites served by existing wide-area network infrastructure] – Leon in the amount of $1,053,059.41.	$1,053,059.41
Wind	Equipment	An Obtain & Maintain Requirement is being required for Equipment, for the peril of Wind (all wind associated losses including "wind driven rain" for the FAASt [Offices, generation facilities, water dams, substations, and radio sites served by existing wide-area network infrastructure] – Manati TC in the amount of $1,805,447.45.	$1,805,447.45
Wind	Equipment	An Obtain & Maintain Requirement is being required for Equipment, for the peril of Wind (all wind associated losses including "wind driven rain" for the FAASt [Offices, generation facilities, water dams, substations, and radio sites served by existing wide-area network infrastructure] – Mayaguez TC in the amount of $1,805,447.45.	$1,805,447.45
Wind	Equipment	An Obtain & Maintain Requirement is being required for Equipment, for the peril of Wind (all wind associated losses including "wind driven rain" for the FAASt [Offices, generation facilities, water dams, substations, and radio sites served by existing wide-area network infrastructure] – Miramar Sect in the amount of $1,094,418.96.	$1,094,418.96
Wind	Equipment	An Obtain & Maintain Requirement is being required for Equipment, for the peril of Wind (all wind associated losses including "wind driven rain" for the FAASt [Offices, generation facilities, water dams, substations, and radio sites served by existing wide-area network infrastructure] – Monacillos TC in the amount of $1,805,447.45.	$1,805,447.45
Wind	Equipment	An Obtain & Maintain Requirement is being required for Equipment, for the peril of Wind (all wind associated losses including "wind driven rain" for the FAASt [Offices, generation facilities, water dams, substations, and radio sites served by existing wide-area network infrastructure] – Mora TC in the amount of $1,805,447.45.	$1,805,447.45
Wind	Equipment	An Obtain & Maintain Requirement is being required for Equipment, for the peril of Wind (all wind associated losses including "wind driven rain" for the FAASt [Offices, generation facilities, water dams, substations, and radio sites served by existing wide-area network infrastructure] – Pueblito de Rio in the amount of $1,094,418.96.	$1,094,418.96
Wind	Equipment	An Obtain & Maintain Requirement is being required for Equipment, for the peril of Wind (all wind associated losses including "wind driven rain" for the FAASt [Offices, generation facilities, water dams, substations, and radio sites served by existing wide-area network infrastructure] – Puerto Real in the amount of $1,741,992.29.	$1,741,992.29
Wind	Equipment	An Obtain & Maintain Requirement is being required for Equipment, for the peril of Wind (all wind associated losses including "wind driven rain" for the FAASt [Offices, generation facilities, water dams, substations, and radio sites served by existing wide-area network infrastructure] – Sabana Llana TC in the amount of $1,805,447.45.	$1,805,447.45
Wind	Equipment	An Obtain & Maintain Requirement is being required for Equipment, for the peril of Wind (all wind associated losses including "wind driven rain" for the FAASt [Offices, generation facilities, water dams, substations, and radio sites served by existing wide-area network infrastructure] – San German in the amount of $1,053,059.41.	$1,053,059.41
Wind	Equipment	An Obtain & Maintain Requirement is being required for Equipment, for the peril of Wind (all wind associated losses including "wind driven rain" for the FAASt [Offices, generation facilities, water dams, substations, and radio sites served by existing wide-area network infrastructure] – San German Sect in the amount of $1,741,992.29.	$1,741,992.29

Insured Peril	Item Type	Description	Required Coverage Amount
Wind	Equipment	An Obtain & Maintain Requirement is being required for Equipment, for the peril of Wind (all wind associated losses including "wind driven rain" for the FAASt [Offices, generation facilities, water dams, substations, and radio sites served by existing wide-area network infrastructure] – Santa Ana in the amount of $1,703,227.96.	$1,703,227.96
Wind	Equipment	An Obtain & Maintain Requirement is being required for Equipment, for the peril of Wind (all wind associated losses including "wind driven rain" for the FAASt [Offices, generation facilities, water dams, substations, and radio sites served by existing wide-area network infrastructure] – SANTA ANA in the amount of $1,703,227.96.	$1,703,227.96
Wind	Equipment	An Obtain & Maintain Requirement is being required for Equipment, for the peril of Wind (all wind associated losses including "wind driven rain" for the FAASt [Offices, generation facilities, water dams, substations, and radio sites served by existing wide-area network infrastructure] – Santa Isabel TC in the amount of $1,805,447.45.	$1,805,447.45
Wind	Equipment	An Obtain & Maintain Requirement is being required for Equipment, for the peril of Wind (all wind associated losses including "wind driven rain" for the FAASt [Offices, generation facilities, water dams, substations, and radio sites served by existing wide-area network infrastructure] – Santurce Luchetti in the amount of $1,741,992.29.	$1,741,992.29
Wind	Equipment	An Obtain & Maintain Requirement is being required for Equipment, for the peril of Wind (all wind associated losses including "wind driven rain" for the FAASt [Offices, generation facilities, water dams, substations, and radio sites served by existing wide-area network infrastructure] – Viaducto TC in the amount of $1,805,447.45.	$1,805,447.45
Wind	Equipment	An Obtain & Maintain Requirement is being required for Equipment, for the peril of Wind (all wind associated losses including "wind driven rain" for the FAASt [Offices, generation facilities, water dams, substations, and radio sites served by existing wide-area network infrastructure] – Yabucoa Pueblo in the amount of $1,805,447.45.	$1,805,447.45
Wind	Equipment	An Obtain & Maintain Requirement is being required for Equipment, for the peril of Wind (all wind associated losses including "wind driven rain" for the FAASt [Offices, generation facilities, water dams, substations, and radio sites served by existing wide-area network infrastructure] – Yabucoa TC in the amount of $1,703,227.96.	$1,703,227.96
Wind	Equipment	An Obtain & Maintain Requirement is being required for Equipment, for the peril of Wind (all wind associated losses including "wind driven rain" for the FAASt [Offices, generation facilities, water dams, substations, and radio sites served by existing wide-area network infrastructure] – Yauco 2 in the amount of $1,703,227.69.	$1,703,227.69
Wind	Equipment	An Obtain & Maintain Requirement is being required for Equipment, for the peril of Wind (all wind associated losses including "wind driven rain" for the FAASt [Offices, generation facilities, water dams, substations, and radio sites served by existing wide-area network infrastructure] - Aguas Buenas TC in the amount of $1,064,360.00.	$1,064,360.00
Wind	Equipment	An Obtain & Maintain Requirement is being required for Equipment, for the peril of Wind (all wind associated losses including "wind driven rain" for the FAASt [Offices, generation facilities, water dams, substations, and radio sites served by existing wide-area network infrastructure] – Sabana Llana TC in the amount of $1,037,204.85.	$1,037,204.85
Wind	Equipment	An Obtain & Maintain Requirement is being required for Equipment, for the peril of Wind (all wind associated losses including "wind driven rain" for the FAASt [Offices, generation facilities, water dams, substations, and radio sites served by existing wide-area network infrastructure] - Monacillos in the amount of $2,750,078.17.	$2,750,078.17
Wind	Equipment	An Obtain & Maintain Requirement is being required for Equipment, for the peril of Wind (all wind associated losses including "wind driven rain" for the FAASt [Offices, generation facilities, water dams, substations, and radio sites served by existing wide-area network infrastructure] – Monacillos NMS in the amount of $638,653.86.	$638,653.86

406 Mitigation

There is no additional mitigation information on **FAASt [Transport Network Group 1] (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 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.
- If there are any further changes to the SOW, including any increase in the extent of ground disturbance, the applicant must notify FEMA beforehand, prior to engaging in further activities not within the current SOW.

EHP Additional Info

There is no additional environmental historical preservation on **FAASt [Transport Network Group 1] (Telecommunication)**.

Final Reviews

Final Review

Reviewed By LEFRANC-GARCIA, CARLOS L. **Reviewed On** 06/20/2025 4:13 PM PDT

Review Comments

Reviewed, found eligible and reasonable - CLG 06.20.25

Recipient Review

Reviewed By Mulero, Noel **Reviewed On** 09/02/2025 9:36 PM PDT

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 $5,490,296.88 for subaward number 11859 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		$84,287,009.00	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	9/17/2025	$4,941,267.20	90%	Accepted	4339DRPRP00118591

Department of Homeland Security
Federal Emergency Management Agency

v0

General Info

Project #	682645 **P/W #** 107779	**Project Type**	Specialized
Project Category	F - Utilities	**Applicant**	PR Electric Power Authority (000-UA2QU-00)
Project Title	FAASt [Maunabo TC] (Substation)	**Event**	4339DR-PR (4339DR)
Project Size	Large	**Declaration Date**	9/20/2017
Activity Completion Date	9/20/2027	**Incident Start Date**	9/17/2017
Process Step	Obligated	**Incident End Date**	11/15/2017

Damage Description and Dimensions

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

Damage #1242539; FAASt [Maunabo TC]

General Facility Information:

- **Facility Type:** Power generation, transmission, and distribution facilities
- **Facility:** Maunabo TC
- **Facility Description:** The Maunabo TC switchyard consists of facilities that operate at nominal voltages of 115 kV and 38 kV. It includes: ? Four (4) 38 kV circuit breakers o One (1) oil circuit breaker (OCB) o Three (3) gas circuit breakers (GCBs) ? One (1) 115 kV oil circuit breaker (OCB) ? One (1) 115/38 kV, 30 MVA transformer
- **Approx. Year Built:** 1971
- **GPS Latitude/Longitude:** [redacted]

Final Scope

1242539 **FAASt [Maunabo TC]**

1. 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 #682645 under DR-4339-PR Public Assistance. The document provides a detailed description of the project, scope of PA construction activities to be completed, common EHP review

information, proposed hazard mitigation measures, and project cost estimates. LUMA is seeking approval from COR3 and FEMA for PA funding for the scope described in this document.

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

2. Project Description

The site of the Maunabo TC facility is located at State Road PR-750, in the vicinity of kilometer 0.4, about 0.3 miles from the intersection with State Road PR-3, in Talante Ward, in the municipality of Maunabo, Puerto Rico. The proposed project consists of the installation of a rectangular shaped transmission transformer with a total weight of 81,400 Kg (about 179,000 pounds), within the premises of the switch yard. To place the new transformer, the demolition of three (3) old transformers pedestals and four (4) other minor bases will take place. The project includes not only the demolition of existing foundations, construction of a new foundation, and placement of the transformer, but also the construction of a secondary oil containment dike with two (2) feet high walls. The project area will be approximately 28' X 43'. Topography at the project site is relatively leveled and higher in elevation than the access road.

LUMA's proposal is to install the new transformer will achieve two objectives. First, the placement of the new transformer will provide stabilization of the electrical grid while the Maunabo TC is rebuilt. This action will prevent system overload and prevent outrages at substations while permanent work is being performed. Also, the installation of this transformer will provide assistance and stabilization to transmission and distribution feeders interconnected and related to the function of the substation by preventing overloads and outages. Second, this transformer will be seamlessly integrated into the rebuilt Maunabo TC once completed.

In alignment with the scope of work, a comprehensive Bill of Materials ("BOM") has been prepared, along with a Class 5 cost estimate, which covers the permanent work, non-permanent work, and the required Architect & Engineering ("A&E") services. These documents have been developed following LUMA's established Work Breakdown Structure ("WBS") to ensure transparency, accuracy, and alignment with project objectives.

3. Facility

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

Name	Year of Construction	GPS Location	Voltage (kV)	Division / Region / District
Maunabo TC	March 1958	[redacted]	115/38	West / Ponce / Guayama

4. Project Scope of Work

The scope of work consists of the following:

- Demolish and remove seven (7) foundations (dimensions thereof are 2'W x 2'L x 5'D) and dispose of equipment in compliance with environmental regulations. Refer to line 14 of the LPCE.

- Perform grading (area of 4'W x 7'L) to ensure proper site elevation for new foundations, drainage, and roadways. Ensure the ground is level and compacted to specifications, considering soil study findings. Refer to line 14 of the LPCE.

- Install drainage systems (ground disturbance thereof is part of the grading work mentioned above (area of 4'W x 7'L) to ensure proper water flow away from critical equipment and foundations. Refer to line 14 of the LPCE.

- Excavate and pour concrete foundations for the transformer, the two breakers and the secondary oil containment dike. The ground disturbance for the transformer foundation work is 30'Lx 30'Wx3'D. The ground disturbance for the breaker 115kV foundation work is 10'Lx10'Wx1'D. The ground disturbance for the breaker 38kV foundation work is 8'Lx8'Wx1'D. Refer to lines

124, 125, and 126 of the LPCE. The equipment to be used is Skid Steer, Excavators, Dump trucks, Manlifts, Bucket Trucks, Line Trucks, Auger Trucks, 45-ton Crane, Zoom Boom, Air compressor, Truck Digger, Water truck, and Concrete Vibrator.

- Install electrical 63 cubic linear feet of conduits and initiate grounding systems. Refer to lines 50, 51, 106 and 107 of the LPCE.
- Dispose debris in a dumpster inside the substation at [redacted]. Refer to line 129 of the LPCE.
- Perform backfill for conduit installation, grounding, and cable tray systems. Refer to lines 94 to 121 of the LPCE.
- Begin above-grade work using existing structural steel, mount new equipment (refer to lines 23 to 72 of the LPCE), and install enclosure.
- Install and commission one (1) new 115kV breaker, one (1) new 38kV gas circuit breakers (GCBs) Capacity 2000amp, one (1) new 112 MVA transformer (115/38kV), existing bus systems, and transformer connections. Refer to lines 81, 82, and 92 of the LPCE.
- Conduct comprehensive inspections of all completed work of structural, electrical, and civil elements. Address any issues identified during inspection before proceeding with final testing. Refer to lines 3 and 5 of the Non-Permanent Work part of the LPCE.
- Perform functional testing of transformers, breakers, and control systems. Verify protection schemes, automation systems, and SCADA functionality. Coordinate with LUMA teams for final review and commissioning approval. Refer to lines 132 to 140 of the LPCE.
- Energize the substation after confirming all systems are operational and tested. Monitor initial load conditions and performance of the new infrastructure.
- Restore the area to its original condition by removing temporary fencing, barriers, and equipment, and perform a final inspection to ensure that the site is fully cleaned, with all materials properly disposed of or recycled. Refer to lines 18 and 19 of the LPCE.

5. Project Cost Estimate

COST ESTIMATE			
Cost Element	**428**	**406**	**PROJECT TOTAL**
PLANNING	$ 972,034.76	$ -	$ 972,034.76
Permitting and Assessments	$ 66,623.72	$ -	$ 66,623.72
Environmental Documentation & Management	$ 282,940.95	$ -	$ 282,940.95
Engineering Services & Design	$ 622,470.09	$ -	$ 622,470.09
MANAGEMENT	$ 633,086.92	$ -	$ 633,086.92
Project Management	$ 178,167.05	$ -	$ 178,167.05
Construction Management	$ 237,556.07	$ -	$ 237,556.07
Contracting, Procurement & Contract Administration	$ 98,585.77	$ -	$ 98,585.77

Projects Controls (Scheduling, Estimating, Support, Cost Control, Risk, Document Control & Reporting)	$ 118,778.03	$ -	$ 118,778.03
Maunabo TC Phase 1 Transformer Replacement for Stabilization Program Class 5 Estimate	$ 12,321,233.55	$ -	$ 12,321,233.55
Maunabo TC Phase 1 Transformer Replacement for Stabilization Program Class 5 Estimate, material, labor and equipment	$ 10,304,983.51	$ -	$ 10,304,983.51
Start Up/Commissioning	$ 154,574.75	$ -	$ 154,574.75
Construction Trespass	$ 51,524.91	$ -	$ 51,524.91
Transportation Expenses	$ 51,524.91	$ -	$ 51,524.91
Security (Field 24 hr)	$ 62,366.89	$ -	$ 62,366.89
Insurance	$ 208,160.66	$ -	$ 208,160.66
Contingency	$ 1,131,763.81	$ -	$ 1,131,763.81
Escalation	$ 356,334.11	$ -	$ 356,334.11
GENERAL CONDITIONS	$ 695,103.38	$ -	$ 695,103.38
Sales Tax	$ 179,854.21	$ -	$ 179,854.21
Municipal Construction Tax	$ 515,249.17	$ -	$ 515,249.17
COST TOTALS	**$ 14,621,458.61**	$ -	**$ 14,621,458.61**
DEDUCTIONS	**TOTAL INSURANCE PROCEEDS RECEIVED**		$ -
	DE-OBLIGATION TO FAASt IF APPLICABLE		$ -
FAASt ALLOCATIONS	FAAST PROJECT #682645 - 428		$ 8,292,124.95
	FAAST PROJECT #682645 - 406 HM		$ -
	FAAST PROJECT #682645 TOTAL:		**$ 8,292,124.95**
	FAASt A&E # 335168 - 428		$ 1,605,121.68

	FAASt A&E # 335168 - 406 HM	$ -
	FAASt A&E # 335168 TOTAL	**$ 1,605,121.68**
	FAASt E&M #673691 - 428	$ 4,724,211.98
	FAASt E&M #673691 - 406 HM	$ -
	FAASt E&M #673691 TOTAL	**$ 4,724,211.98**

6. Attachments

Item	Document Description or Filename
A	Appendix A – 682645 – DR-4339PR Consent Federal Funding – FEMA COR3
B	Appendix B – 682645- DR- 4339PR LPCE – Maunabo TC Phase 1 Transformer Replacement for Stabilization Program Class 5 4-21-2025
C	Appendix C – 682645 – DR-4339PR Standard for Substation
D	Appendix D – 682645 –DR- 4339PR Maunabo TC Substation Overview
E	Appendix E – 682645 – DR-4339PR-Geotechnical Report
F	Appendix F – 682645 – DR-4339PR- Specification 4802.001 - 46kV, 123kV and 245kV Power Circuit Breakers
G	Appendix G – 682645- DR-4339PR Specification 4802.008 115-38kV Power Transformer

Work to be Completed (WTBC): $14,621,458.61

A&E Deduction (Global A&E FAASt 335168): $-1,605,121.68

E&M Deduction (Global E&M FAASt 673691): $-4,724,211.98

Project Total: $8,292,124.95

Project Cost Estimate Notes:

1. Refer to detailed SOW provided in document labeled: “682645 - DR4339PR - Detail Scope of Work - MaunaboTC (Breaker and Transformer Replacement Phase 1) (4.24.2025) signed.pdf”.

2. Refer to detailed Cost Estimate provided in document labeled: “682645 - DR4339PR - Detail Scope of Work - MaunaboTC (Breaker and Transformer Replacement Phase 1) (4.24.2025) signed.pdf”

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. 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 materials will be reduced from this project (not labor). All costs associated with Planning, Management, General Conditions, and Contingencies will remain in this project.2.

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

6. For reference documents Appendix A thru G.

406 HMP Scope

406 Hazard Mitigation measures were not requested by the subrecipient for this project in Version 0. However, the mitigation opportunities will be applied in a future version (V1) of the Permanent Work Project. The project is ready for Insurance completion.

Cost

Code	Quantity	Unit	Total Cost	Section
9001	1	Lump Sum	$14,621,458.61	Uncompleted
3510	1	Lump Sum	($1,605,121.68)	Uncompleted
9001	1	Lump Sum	($4,724,211.98)	Uncompleted
9201	1	Lump Sum	$0.00	Completed

CRC Gross Cost	$8,292,124.95
Total 406 HMP Cost	$0.00
Total Insurance Reductions	$0.00
CRC Net Cost	$8,292,124.95
Federal Share (90.00%)	$7,462,912.46
Non-Federal Share (10.00%)	$829,212.49

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

4/28/2025

GENERAL INFORMATION

Event: DR4339-PR

Project: SP 682645

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: Yes

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

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

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

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

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

Damaged Inventory (DI) #1242539:

FAASt [Maunabo TC]

Location Description: Maunabo TC

GPS Coordinates: [redacted]

Cause of Loss: Wind / Wind Driven Rain

SOV / Schedule #: Transmission Centers”

SOV / Schedule Amount: $335,000,000.00

Applicable Deductible Amount: $25,000,000.00

Prior Obtain and Maintain Requirement:

No prior insurance requirements were found for this facility.

Reduction(s):

No insurance reduction will be applied to this project. 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 for Equipment, for the peril of Wind (all wind associated losses including "wind driven rain") for the FAASt [Maunabo TC] in the amount of $7,309,761.72 (CRC Gross Cost $8,292,124.95 – Uninsurable items $982,363.23). Please see “SP682645 – Cost Estimate – Insurance” 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.

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

O&M Requirements

Insured Peril	Item Type	Description	Required Coverage Amount
Wind	Equipment	An Obtain & Maintain Requirement is being required for Equipment, for the peril of Wind (all wind associated losses including "wind driven rain") for the FAASt [Maunabo TC] in the amount of $7,309,761.72.	$7,309,761.72

406 Mitigation

There is no additional mitigation information on **FAASt [Maunabo TC] (Substation)**.

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 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, hazardousmaterials, and toxic waste in accordance with the requirements of the local and federal agencies. Noncompliance with these requirementsmay jeopardize receipt of federal funds.
- 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 CONSTRUCTION MANAGEMENT PLAN [682645] FAASt [Maunabo TC] (Substation) 2 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.
- If there are any further changes to the SOW, including any increase in the extent of ground disturbance, the applicant must notify FEMA beforehand, prior to engaging in further activities not within the current SOW.
- All borrow or fill material must come from pre-existing stockpiles, material reclaimed from maintained roadside ditches (provided the designed width or depth of the ditch is not increased) or commercially procured material from a source existing prior to the event. For any FEMA-funded project requiring the use of a non-commercial source or a commercial source that was not permitted to operate prior to the event (e.g., a new pit, agricultural fields, road ROWs, etc.) in whole or in part, regardless of cost, the Applicant must notify FEMA and the Recipient prior to extracting material. FEMA must review the source for compliance with all applicable federal environmental planning and historic preservation laws and executive orders prior to a Sub-recipient or their contractor beginning to borrow extraction. Consultation and regulatory permitting may be required. Non-compliance with this requirement may jeopardize receipt of federal funding. Documentation of borrow sources utilized is required at close-out and must include fill type (private, commercial, etc.), name, fill site GPS coordinates (not of the company/governmental office), address, and type of material.
- 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.

EHP Additional Info

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

Final Reviews

Final Review

Reviewed By LEFRANC-GARCIA, CARLOS L. **Reviewed On** 05/22/2025 6:14 PM PDT

Review Comments

Project has been reviewed, found eligible and reasonable - CLG 05.21.25

Recipient Review

Reviewed By Mulero, Noel **Reviewed On** 06/02/2025 1:59 AM PDT

Review Comments

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

Project Signatures

Reviewed By Unsigned **Reviewed On** Unsigned

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 $8,292,124.95 for subaward number 107779 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	9/17/2025	$7,462,912.46	90%	Accepted	4339DRPRP01077791

Department of Homeland Security
Federal Emergency Management Agency

v0

General Info

Project #	735474 **P/W #** 107918	**Project Type**	Specialized
Project Category	F - Utilities	**Applicant**	PR Electric Power Authority (000-UA2QU-00)
Project Title	FAASt [Pole and Conductor Repair - Caguas Group 3 Phase 2] (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 #661604; FAASt [Distribution Pole and Conductor Repair - Caguas Group 3 - Phase 2]

General Facility Information:

- **Facility Type:** Power generation, transmission, and distribution facilities
- **Facility:** FAASt [Distribution Pole and Conductor Repair - Caguas Group 3 - Phase 2](SUB.2801-02, SUB.2801-03, SUB.2803-02, SUB.3201-04, SUB.3205-07, SUB.3301-01, SUB.3301-01, SUB.3301-02)
- **Facility Description:** The facilities listed below are part of the feeder systems in the Caguas Region. These interconnected and inter functional distribution feeders (sites) establish the electrical distribution system. The feeders all originate from a substation (start) and serve customers along a route to various locations (end). The coordinates represented by GPS end is the end of the mainline backbone of each feeder. These feeders are a subset of projects identified in the Distribution Feeders – Caguas Short Term projects in the PREPA 10-Year Infrastructure Plan.
- **Approx. Year Built:** 1980
- **Start GPS Latitude/Longitude:** [redacted]
- **End GPS Latitude/Longitude:** [redacted]

Final Scope

661604 **FAASt [Distribution Pole and Conductor Repair - Caguas Group 3 - Phase 2]**

INTRODUCTION

This document is to submit for COR3 and FEMA approval the Detailed Scope of Work (SOW) for project 735474 Distribution Pole and Conductor Repair - Caguas Group 3 - Phase 2 Project under DR- 4339-PR Public Assistance. The document provides a detailed project description, including scope, schedule, cost estimates, and Environmental and Historic Preservation (EHP) requirements; LUMA Energy is seeking approval from COR3 and FEMA for project funding to repair, restore, or replace the eligible facilities.

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

FACILITIES

Facilities Description

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

Facilities List

The table below describes seven distribution feeders being replaced as part of the project. The table identifies the GPS location of the line segments, the voltage level, and an indication of the extent of work by identifying the number of poles to be replaced.

Name	Feeder Number	# Of Poles to Replace	GPS Start	GPS End	Phase	Voltage Level (kV)	Constructed Date
LAS PIEDRAS, SUB. 2801	2801-02	84	[redacted]		1 Phase	8.32	More than 20 years
LAS PIEDRAS, SUB. 2801	2801-03	30			1 Phase	8.32	More than 20 years
PUEBLITO DEL RIO, SUB. 2803	2803-02	91			1 Phase	8.32	More than 20 years
JUNCOS, SUB. 3201	3201-04	101			1 Phase	4.16	More than 20 years
JUNCOS, SUB. 3205	3205-07	174			1 Phase	13.2	More than 20 years
SAN LORENZO, SUB. 3301	3301-01	83			1 Phase	8.32	More than 20 years
SAN LORENZO 2, SUB. 3302	3302-02	43			1 Phase	8.32	More than 20 years

PROJECT SCOPE OF WORK

The project's scope is the replacement of poles and the repair of conductors for specific feeders in Caguas region to be performed under the "Proposed 428 Public Assistance Scope of Work". Each work type specific to said scope of works for this group are included below.

The proposed restoration includes the replacement of eligible disaster damage up to required codes and standards and the request to

upgrade undamaged infrastructure to fully effectuate the restoration of disaster-damaged components and restore the system's function to an approved industry standard. The Scope of Work consists of the removal and replacement of the following infrastructure to restore this facility to codes and standards.

Proposed 428 Public Assistance Scope of Work

Feeder 2801-02 Scope:

Remove	Quantity	Install	Quantity
35' WOOD	47	45FT S5.7 GALV STEEL	47
40' WOOD	24	45FT S5.7 GALV STEEL	24
40' CONCRETE	5	45FT S5.7 GALV STEEL	5
45' WOOD	3	45FT S5.7 GALV STEEL	3
35' WOOD	3	50FT S8 GALV STEEL	3
40' WOOD	1	50FT S8 GALV STEEL	1
55' WOOD	1	50FT S8 GALV STEEL	1

Feeder 2801-03 Scope:

-

Remove	Quantity	Install	Quantity
35' WOOD	15	45FT S5.7 GALV STEEL	15
35' CONCRETE	1	45FT S5.7 GALV STEEL	1
40' WOOD	10	45FT S5.7 GALV STEEL	10
45'WOOD	3	45FT S5.7 GALV STEEL	3
45' CONCRETE	1	45FT S5.7 GALV STEEL	1

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Feeder 2803-02 Scope:

-

Remove	Quantity	Install	Quantity

35' WOOD	49	45FT S5.7 GALV STEEL	49
40' WOOD	25	45FT S5.7 GALV STEEL	25
40' CONCRETE	5	45FT S5.7 GALV STEEL	5
40' GALVANIZED	1	45FT S5.7 GALV STEEL	1
45' WOOD	6	45FT S5.7 GALV STEEL	6
35' WOOD	1	50FT S8 GALV STEEL	1
40' WOOD	4	50FT S8 GALV STEEL	4

Feeder 3201-04 Scope:

-

Remove	Quantity	Install	Quantity
30' WOOD	1	45FT S5.7 GALV STEEL	1
35' WOOD	52	45FT S5.7 GALV STEEL	52
40' WOOD	31	45FT S5.7 GALV STEEL	31
40' CONCRETE	11	45FT S5.7 GALV STEEL	11
35' WOOD	3	50FT S8 GALV STEEL	3
40' WOOD	1	50FT S8 GALV STEEL	1
40' CONCRETE	2	50FT S8 GALV STEEL	2

Feeder 3205-07 Scope:

-

Remove	Quantity	Install	Quantity
30' WOOD	1	45FT S5.7 GALV STEEL	1
35' WOOD	117	45FT S5.7 GALV STEEL	117
40' WOOD	34	45FT S5.7 GALV STEEL	34
45' WOOD	5	45FT S5.7 GALV STEEL	5

50' WOOD	1	45FT S5.7 GALV STEEL	1
35' WOOD	6	50FT S8 GALV STEEL	6
40' WOOD	9	50FT S8 GALV STEEL	9
45 WOOD	1	50FT S8 GALV STEEL	1

Feeder 3301-01 Scope:

-

Remove	Quantity	Install	Quantity
35' WOOD	57	45FT S5.7 GALV STEEL	57
40' WOOD	22	45FT S5.7 GALV STEEL	22
40' GALVANIZED	1	45FT S5.7 GALV STEEL	1
45' WOOD	1	45FT S5.7 GALV STEEL	1
55' CONCRETE	1	45FT S5.7 GALV STEEL	1
40' WOOD	1	50FT S8 GALV STEEL	1

Feeder 3302-02 Scope:

Remove	Quantity	Install	Quantity
35' WOOD	10	45FT S5.7 GALV STEEL	10
40' WOOD	30	45FT S5.7 GALV STEEL	30
45' WOOD	2	45FT S5.7 GALV STEEL	2
40' WOOD	1	50FT S8 GALV STEEL	1

Scope Notes

The work includes the following actions:

-

A. Pole Replacement

1. Remove existing poles, including hardware, and install new poles, including hardware, in the exact location. If the replacement cannot be installed in the precise location, the pole will be installed within 3 feet.

2. All pole installations are to replace existing pole locations; no new locations are included in this scope of work. For the depths of the poles to be installed, refer to APPENDIX C—Project Considerations, column C (Soil area and depth impact).

3. The existing foundation will be removed and replaced with a new concrete foundation base as per Distribution Construction Standards (Concrete Base Standard). The maximum auger width to be used is 42" and the maximum depth to be drilled is 15ft. Refer to APPENDIX C – Project Considerations column I (Concrete Foundation) for specific locations where this work applies.

4. New guy wire/ anchors are to be installed within 3 feet of the existing anchor in compliance with the_LUMA Overhead Electrical Distribution System Manual.The maximum distance an anchor will be installed for a 50-foot pole is 25 feet from the base of the pole, within the right-of-way.

5. Vegetation clearance will be performed solely to the extent that it allows crews to conduct work and will be limited to 10 feet radius surrounding the surface of the pole but not to exceed the width of the right-of-way for the exclusive purpose of gaining access to the pole to conduct repairs. The costs related to Vegetation clearance procedures are in project [727694] FAASt [Region 4 -Caguas Group C] (Vegetation). The vegetation removal process will be managed according to federal and state regulations.

6. All work for this program will be performed within the current electrical right-of-way.

B. Material Disposal:

1. PCBs, oil from the transformer and breakers, sealants, and other chemical wastes typical of a construction site are considered hazardous waste and will be disposed of by the contractor in approved facilities per applicable federal, state, and local regulations. Refer to the Waste Management Plan in the applicant profile.

2. Debris to be removed includes *Waste Management Plan* in the applicant profile.

3. Transformers will be contained and returned to LUMA in compliance with applicable federal, state, and local regulations. Removing the transformer will require testing the existing oil for PCB levels. Per environmental regulations, the oil will be drained and delivered to the authorized waste disposal site. Refer to the *Waste Management Plan*.

1. Access Roads:

1. Poles are close to the roads and are site accessible with existing access points at the established locations. **The construction of access roads is not required for this scope of work.** Refer to APPENDIX C—Project Considerations in column G, "Site Accessible."

1. Staging Area:

1. All materials are stored and dispatched from the Caguas Regional Warehouse (18.256683, -66.029936). Refer to Warehouse locations. No additional or temporary staging areas are required.

1. Fill, Gravel, Sand, etc.

1. Fill, gravel, and sand materials will be obtained from an approved supplier as referenced in the LUMA Vendor

Directory List in the applicant profile. LUMA will retain and make available for review the documentation provided by material suppliers.

4. List of Equipment to be used:

1. 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.

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

G. Specific List of Permits Required:

1. DTOP Endorsements & Municipality Notifications.

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

C. Proposed 406 Hazard Mitigation Grant Program Scope of Work

406 Hazard Mitigation Proposal
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.

PROJECT 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 and may be subject to change. LUMA has allocated 10% of the project cost to mitigate known risks. For more details, refer to APPENDIX B – Detailed Cost Estimate.

Project Cost Estimate Notes:

COST ESTIMATE			
Cost Element	**428**	**406**	**PROJECT TOTAL**
PLANNING	**$ 1,420,828.67**	**$ -**	**$ 1,420,828.67**
MANAGEMENT	**$ 541,268.06**	**$ -**	**$ 541,268.06**
Caguas Group 3 Phase 2	**$ 16,785,005.42**	**$ -**	**$ 16,785,005.42**
material, labor and equipment	$ 12,987,247.00	$ -	$ 12,987,247.00
Lodging & Per Diem & Travel	$ 2,047,977.00		$ 2,047,977.00
Contingency	$ 1,298,724.70	$ -	$ 1,298,724.70
Escalation	$ 451,056.72	$ -	$ 451,056.72

COST TOTALS	**$ 18,747,102.15**	**$ -**	**$ 18,747,102.15**
DEDUCTIONS	**TOTAL INSURANCE PROCEEDS RECEIVED**		
FAASt ALLOCATIONS	**FAAST PROJECT #735474 TOTAL:**		**$ 14,075,641.42**
FAASt A&E # 335168 TOTAL	**$ 1,962,096.73**	**$ -**	**$ 1,962,096.73**
FAASt E&M #673691 TOTAL	**$ 2,709,364.00**	**$ -**	**$ 2,709,364.00**

Work To Be completed: $18,747,102.15

A&E Deduction (Global A&E FAASt# 335168): $1,962,096.73

E&M Deduction (FAASt# 673691): $2,709,364.00

Project Total Cost (FAASt Project# 805521): $14,075,641.42

Project Notes:

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

2. For additional information of detailed SOW please refer to document labeled: 735474-DR4339PR-Detailed SOW Caguas Group 3 - Phase 2 Rev0 428-1.pdf

3. For detailed Cost Estimate please refer to document labeled: Detailed Cost Estimate - Caguas Group 3 - Phase 2 Rev0 428(2).xlsx

4. A&E cost included in this project will be reduced from this project and obligated under the FAASt Project #335168, A&E, as show in in the table above. The A&E project was obligated to track and account for cost associated with individual FAASt projects.

5. Equipment and material costs included in this project will be reduced from this project and obligated under FAASt Project #673691, Equipment and Materials, as shown in the table above. Only the base cost of equipment and/or material will be reduced from this project (not labor). All costs associated with Planning, Management, General Conditions, and Contingencies will remain in this project.

APPENDIX A - Structure Coordinates

APPENDIX B - Detail Cost Estimate

APPENDIX C - Project Considerations

406 HMP Scope

406 Hazard Mitigation measures were not requested by the subrecipient for this project in Version 0. However, the mitigation opportunities will be applied in a future version (V1) of the Permanent Work Project. The project is ready for Insurance completion.

Cost

Code	Quantity	Unit	Total Cost	Section
9001	1	Lump Sum	($2,709,364.00)	Uncompleted
9001	1	Lump Sum	$18,747,102.15	Uncompleted
3510	1	Lump Sum	($1,962,096.73)	Uncompleted
9201	1	Lump Sum	$0.00	Completed

CRC Gross Cost	$14,075,641.42
Total 406 HMP Cost	$0.00
Total Insurance Reductions	$0.00
CRC Net Cost	$14,075,641.42
Federal Share (90.00%)	$12,668,077.28
Non-Federal Share (10.00%)	$1,407,564.14

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

4/29/2025

GENERAL INFORMATION

Event: DR4339-PR

Project: SP 735474

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) #661604:

FAASt [Distribution Pole and Conductor Repair - Caguas Group 3 - Phase 2]

Location: FAASt [Distribution Pole and Conductor Repair - Caguas Group 3 - Phase 2](SUB.2801-02, SUB.2801-03, SUB.2803-02, SUB.3201-04, SUB.3205-07, SUB.3301-01, SUB.3301-01, SUB.3301-02)

GPS Coordinates: Start [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 [Distribution Pole and Conductor Repair - Caguas Group 3 - Phase 2] 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.

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

O&M Requirements

There are no Obtain and Maintain Requirements on **FAASt [Pole and Conductor Repair -Caguas Group 3 Phase 2] (Distribution)** .

406 Mitigation

There is no additional mitigation information on **FAASt [Pole and Conductor Repair -Caguas Group 3 Phase 2] (Distribution)** .

Environmental Historical Preservation

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

EHP Conditions

- Any change to the approved scope of work will require re-evaluation for compliance with NEPA and other Laws and Executive Orders.
- This review does not address all federal, state and local requirements. Acceptance of federal funding requires recipient to comply with all federal, state and local laws. Failure to obtain all appropriate federal, state and local environmental permits and clearances may jeopardize funding.
- If ground disturbing activities occur during construction, applicant will monitor ground disturbance and if any potential archaeological resources are discovered, will immediately cease construction in that area and notify the State and FEMA.
- All borrow or fill material must come from pre-existing stockpiles, material reclaimed from maintained roadside ditches (provided the designed width or depth of the ditch is not increased), or commercially procured material from a source existing prior to the event. For any FEMA&#65533;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&#65533;recipient or their contractor beginning to borrow extraction. Consultation and regulatory permitting may be required. Non-compliance with this requirement may jeopardize receipt of federal funding. Documentation of borrow sources utilized is required at close-out and must include fill type (private, commercial, etc.), name, fill site GPS coordinates (not of the company/governmental office), address, and type of mater.
- 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&#65533;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). The below conservation measures apply to the following species: Puerto Rican Parrot (Amazona vittata) for Feeders 2803-02 and 3205-07; Puerto Rican Plain Pigeon (Patagioenas Inornata Wetmorei) for Feeders 3201-04, 3205-07, 3301-01, and 3302-02; Puerto Rican Broad-Winged Hawk (Buteo platypterus brunnescens) for Feeders 2803-02, 3205-07 and 3301-01; Puerto Rican Sharp-Shinned Hawk (Accipiter Striatus Venator) Feeder 3301-01. 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

parrot: February-June. Puerto Rican plain pigeon: April-September. Puerto Rican broad-winged hawk: December-June. Puerto Rican sharp-shinned 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 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. Vegetative debris management alternatives can be left on site, landfill disposal, or recycled. For vegetative debris left on site, the Applicant shall apply best management practices to ensure debris will not cause encroachment in the floodplain, interference with the natural water flows; sedimentation or erosion or nearby wetlands; alteration to water quality, danger to endangered or threatened species and/or its habitats or community safety. Applicant shall ensure disposal of vegetative waste is in accordance with requirements of local, state, and federal laws, regulations, and ordinances. The contractor/applicant will be responsible for the proper management and disposition in authorized landfills or recycle facilities. Disposal or recycle evidence should by keep on Applicant file, because it can be requested at close-out. Any change or adjustment in waste management alternatives shall be submitted for EHP review.
- Executive Order 11988 Floodplains Conditions for Feeders 2803-02, 3205-07 and 3301-01: 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 Applicants permanent files.
- Executive Order 11990 - Wetlands Conditions for Feeders (2803-02 and 3205-07) 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 feeders (2801-02; 2801-03; 2803-02; 3201-04; 3205-07; 3301-01; and 3302-02). 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 Services 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

- 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.
- If there are any further changes to the SOW, including any increase in the extent of ground disturbance, the applicant must notify FEMA beforehand, prior to engaging in further activities not within the current SOW.

EHP Additional Info

There is no additional environmental historical preservation on **FAASt [Pole and Conductor Repair -Caguas Group 3 Phase 2] (Distribution)** .

Final Reviews

Final Review

Reviewed By LEFRANC-GARCIA, CARLOS L. **Reviewed On** 05/22/2025 8:21 PM PDT

Review Comments

Project reviewed, found eligible and reasonable. - CLG 05.22.2025

Recipient Review

Reviewed By Mulero, Noel **Reviewed On** 06/02/2025 1:52 AM PDT

Review Comments

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

Project Signatures

Reviewed By Unsigned

Reviewed On Unsigned

Fixed Cost Offer

As a Public Assistance (PA) Subrecipient PR Electric Power Authority (000-UA2QU-00), in accordance with Section 428 of the Robert T. Stafford Disaster Relief and Emergency Assistance Act, the Applicant agrees to accept a permanent work subaward based on a Fixed Cost Offer in the amount of $14,075,641.42 for subaward number 107918 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	9/17/2025	$12,668,077.28	90%	Accepted	4339DRPRP01079181

Department of Homeland Security
Federal Emergency Management Agency

v0

General Info

Project #	757689 **P/W #** 108034	**Project Type**	Specialized
Project Category	F - Utilities	**Applicant**	PR Electric Power Authority (000-UA2QU-00)
Project Title	FAASt [Automation Program Group 24] (TL/ 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 #1399041; FAASt [Automation Program Group 24: Caguas Feeders: 3405-02, 3501-01, 3501-03] (Distribution)

General Facility Information:

- **Facility Type:** Power generation, transmission, and distribution facilities
- **Facility:** Automation Program Group 24
- **Facility Description:** Caguas Feeders: 3405-02, 3501-01, 3501-03
- **Approx. Year Built:** 1980
- **Start GPS Latitude/Longitude:** [redacted]
- **End GPS Latitude/Longitude:** [redacted]

Final Scope

1399041

FAASt [Automation Program Group 24: Caguas Feeders: 3405-02, 3501-01, 3501-03] (Distribution)

Introduction

This document is to submit for approval a Detailed Scope of Work ("SOW") to COR3 and FEMA forthe 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 detailed SOW according to the Transmission and Distribution Operations & Maintenance Agreement between Puerto Rico Electric Power Authority ("PREPA"), the Puerto RicoPublic-Private Partnerships Authority ("P3A"), and LUMA Energy, and following the Consent to Federal Funding Letter issued by PREPA and P3A, which collectively provides the necessary consent for LUMA Energy, as agent of PREPA, to undertake work in connection with any Federal Funding requests related to the Transmission and Distribution System submitted to FEMA.

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 each 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 757689 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 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 loss of service and potential damage in the event of future hurricanes. This project is necessary for the EMS to maintain the continuity of the distribution power grid on Feeders 3405- 02, 3501-01, and 3501-03.

Key components of this project are (1) pole replacement, (2) the three-phase reclosers, 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 Reclosers: 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 we are installing seven total 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 feeder and distribution lines branching from the feeder. Single-phase reclosers will also be used on feeders with three-phases if fault currents are low at the location. In this project we are installing a total of 34 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. cFCI operate independent of the feeder reclosers. cFCI 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 in building a predictive failure model.

Data sent to the EMS aides the grid operator in making decisions on operations, management and restoration. The cFCI can be programmed to send automatic notification/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 damage in future disasters.

This project's scope does not contain fiber optics or communication capability that is included in other projects. This project is distinguishable from projects that include fiber optics as these feeders are using cellular technology for communications with the operations center. LUMA has developed this scope for reclosers and their associated hardware only. The lack of fiber optics as a method of transmitting information in this scope of work 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.

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 feeder at issue in this project. To avoid duplication of work across projects, LUMA reviewed the FIDsidentified for work across distribution programs. The analysis did not identify any poles on this feeder, where LUMA is installing Distribution Automation ("DA") devices, that require disaster-related replacement. Accordingly, LUMA has not initiated any rebuild projects for this feeder under the Distribution Rebuild Program (also referred to as the "D-Line Program").LUMA also confirmed thatnone of the poles on this feeder, 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. Because the poles in the DA program are not identified for replacement in either the D-Line or D- Pole Programs and the only cause for their replacement is the proper execution of mitigation

measures, the pole replacement is included in the 406 Hazard Mitigation scope of work of this project. This allocation is consistent with the illustrated scenarios provided in the DA Program position paper and LUMA's Resilience Plan. 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.

Facilities List

Name	Feeder Number	GPS Start	GPS End
Caguas	3405-02	[redacted]	
Caguas	3501-01		
Caguas	3501-03		

Note: Please refer to ***Appendix C — Project Considerations*** *for a list of all GPS locations that this project will impact*.

Below is a breakdown of the scope of work for the "Proposed 428 Public Assistance Scope of Work" proposed for feeders of this

group.

4.1

POLE FID	Coordinates Lat, Long	Existing (Remove)	428 Replacement	Scope of work
6225594	[redacted]	(CP-C1) (K-1)	(CP-C6-XARM) (REC-2-1VER 6.) (K-7-4) (K-5)	• Use existing galvanized steel pole 50'. • Install (1) Three-Phase recloser 3405-02A. • Install and Commission Three-Phase radio communication kit for three-phase recloser. • Install (1) kva transformer
				(4.80/8.32 kv - 120/240 v) for load side. • Use existing secondary conductor for Source s
NEW POLE	[redacted]	(K-6	(50'-S8.5 GALVANIZED STEEL POLE) (S-6) (REC-2-2 VER 3.) (K-6)	• Install new 50' S8.5 12- Sided galvanized steel new location midspan. • Transfer secondary framing from Wood pole to pole installed. • Install (1) Three-Phase recloser 3405-02B. • Install and Commission Three- Phase communication kit for three-phase recloser • Use existing Secondary conductor for load side. • Install (1) 1 kva transformer (4.80/8.32 Kv - 120 for source side.
6225197		35' WOOD POLE) (CP-C1) (STL-10) (K-7-4) (E-2-1)	(45'-S5.7 12-SIDED GALVANIZED STEEL POLE) (CP-C6-XARM) (REC-3-C) (STL-10) (K-7-4)	• Remove and dispose 35' wood pole. • Replace pole with 45; S5.7 12-Sided galvanized s pole. • Install (3) single-phase Recloser • Remove, dispose and replace streetlight. • Remove and dispose stub pole.
6225174		(ASSY-1509 (QTY=3)	(LABOR & REPAIR)	• Remove and dispose (3) fuses.
6225199		(ASSY-1509 (QTY=3)	(LABOR & REPAIR)	• Remove and dispose (3) fuses.
N/A		(NONE)	(LABOR & cFCI) (QTY=3)	• Install (3) Communicating Fault Current Indicator in segment fid: 15920052
N/A		(NONE)	(LABOR & cFCI) (QTY=3)	• Install (3) Communicating Fault Current Indicator in segment fid: 15894044.

Feeder 3501-01

POLE FID	Coordinates Lat, Long	Existing (Remove)	428 Replacement	Scope of work
New Pole	[redacted]	(NONE)	(50'-S8.5 12-SIDED GALVANIZED STEEL POLE) (CP-C6- XARM) (REC-2-1 VERS6) (K-6) (E-1-2-3 (QTY=1) (F- 1-3 (QTY=1))	• Install a new 50' S8.5 12-Sided galvanized st on midspan. • Install (1) Three-Phase recloser **3501-01A.** • Install and Commission Three- Phase radio communication kit for three-phase recloser • Use secondary conductor from adjacent pole 10650427 to feed recloser a on load side. • Install (1) 1kva transformer (4.80/8.32 kv - 120/240 v) for source side.
				• Install (1) anchor. • Install (1) down guy.
7636018		(45'-C3 WOOD POLE) (CP-C6-XARM) (K-5) (STL-10) (E-1-2-(QTY=1)) (F-1-3 (QTY=1))	(50' S8.5 12-SIDED GALVANIZED STEEL POLE) (CP-C3- XARM) (REC-2-1-VER.6) (K-5) (STL-10) (E-1-2-3(QTY=3)) (F-4-2 (QTY=1)) (F-1-3 (QTY=1))	• Remove and dispose 45' C3 wood pole. • Replace pole with 50' S8.5 12- Sided galvanized steel pole. • Install (1) Three-Phase recloser **3501-01B** on a radial configuration. • Install and Commission Three- Phase radio communication kit for three-phase recloser • Install (1) 1kva transformer (4.80/8.32kv - 120/24 source side. • Remove, dispose and replace (1) anchor and (1) downguy. Install addtionals (2) down guys and (1) anchor. • Remove, dispose, and replace streetlights.
NEW POLE		(NONE)	(70'-S8 12-SIDED GALVANIZED STEEL POLE) (38KV SC VERTICAL SUSPENSION ASSY. ANGLE 0-10) (OPS- REC-2-1-1) (AH-GS-88.5)	• Install a new 70' S8 12-sided galvanized steel pol midspan. • Install (1) Three-Phase Recloser **3501-01C.** • Install and Commission Three- Phase radio communication kit for three-phase recloser • Install 1kva transformer (4.80/8.32 kv - 120/240 v source side. • Install (1) Anchor and (1) down guy.
7637226		(ASSY 1509 (QTY=3)	(LABOR & REPAIR)	• Remove and dispose (3) Fuses.

10070962	[redacted]	(ASSY 1509 (QTY=3)	(LABOR & REPAIR)	• Remove and dispose (3) Fuses.
7638447		(ASSY 1509 (QTY=3)	(LABOR & REPAIR)	• Remove and dispose (3) Fuses.
10070589		(ASSY 1509 (QTY=3)	(LABOR & REPAIR)	• Remove and dispose (3) Fuses.
7638363		(ASSY 1509 (QTY=3)	(LABOR & REPAIR)	• Remove and dispose (3) fuses. • Replace with (3) solid blade cutout.
7635056		(ASSY 1509 (QTY=3)	(LABOR & REPAIR)	• Remove and dispose (3) Fuses.
7636028		(ASSY 1509 (QTY=3)	(LABOR & REPAIR)	• Remove and dispose (3) Fuses.
1001762143		(ASSY 1509 (QTY=3)	(LABOR & REPAIR)	• Remove and dispose (3) Fuses.
10072183		(ASSY 1509 (QTY=3)	(LABOR & REPAIR)	• Remove and dispose (3) Fuses.

10650385	[redacted]	(ASSY 1509 (QTY=3)	(LABOR & REPAIR)	• Remove and dispose (3) Fuses.
10650434		(45'-S3 GALVANIZED STEEL POLE) (CP-C7) (K- 7 A) (STL-10) (ASSY 1509QTY=3))	(50'-S8.5 12-SIDED GALVANIZED STEEL POLE) (CP-C6- XARM) (CP-C5-XARM) (REC-3-C) (K-7 A) (STL-10) (E-1-2-3 (QTY=2)) (F-1-3 (QTY=2))	• Remove and dispose 45' S3 galvanized steel pole • Replace pole with 50' S8.5 12- Sided galvanized steel pole. • Remove and dispose (3) fuses • Install (3) Cutout Mounted Single- Phase Recloser • Remove, dispose and replace streetlight. • Install (2) anchors and (2) down guys. • Remove, dispose and replace framings.
7636020		(45'-CLASS 3 WOOD POLE) (CP-C5-XARM) (CP-C2) (STL-10)	(50'-S8.5 12-SIDED GALVANIZED STEEL POLE) (CP-C6- XARM) (CP-C5-XARM) (REC-3-C) (E-1-2-3(QTY=1)) (F-1-3 (QTY=1)) (STL-10)	• Remove and dispose 45' Class 3 Wood pole. • Replace pole with 50' S8.5 12- Sided galvaniz steel pole. • Remove, dispose and replace framings. • Remove and dispose (3) fuses. • Install (3) Cutout Mounted Single- Phase recloser. • Install (1) anchor and (1) down guy. • Remove, dispose and replace streetlight. • Communication lines should remain in wood pole.

7637703	[redacted]	(40'-CLASS 4 WOOD POLE) (CP-C6-XARM) (CP-C5-XARM)	(50'S8.5 12-SIDED GALVANIZED STEEL POLE) (CP-C6- XARM) (CP-C5-XARM) (REC-3-C) (E-1-2-3(QTY=1)) (F-1-3 (QTY=1))	• Remove and dispose 40' Class 4 wood pole. • Replace pole with 50' S8.5 12- Sided galvaniz steel pole. • Remove, dispose and replace framings. • Install (3) Cutout Mounted Single- Phase. • Install (1) anchor and (1) down guy.
10650761		(ASSY 1509QTY=3)) (STL-10) (K-7-B)	(REC-3-C) (K-7-B) (STL-10) (290FT 3/0ACSR PRIMARY)	• Use existing steel pole 50'-s8.5. Remove • Remove and dispose (3) Fuses. • Install (3) Cutout Mounted Single- Phase Recloser • Remove, dispose and replace streetlight. • Install 290ft 3/0acsr primary conductor
10650746		(40'-H4 CONCRETE POLE) (CP-C1) (K-7-A) (STL-10)	(45'-S5.7 12-SIDED GALVANIZED STEEL POLE) (CP-C1) (K-7-A) (STL-10)	• Remove and dispose 40' H4 Concrete Pole. • Replace with 45' S5.7 12-Sided galvanized steel p • Remove, dispose and replace framings. • Remove, dispose, and replace Streetlight.
10650729		(40'-H3 CONCRETE POLE) (CP-C6-XARM) (ASSY 1509 (QTY=3)) (K- 5)	(45'-S5.7 12-SIDED GALVANIZED STEEL POLE) (REC-3-C) (CP-C6-XARM) (K-5)	• Remove and dispose 40' H3 concrete pole. • Replace pole with 45' S5.7 12- Sided galvanized steel pole. • Remove, dispose and replace framings.

	[redacted]	(K-7-2 B)	(E-1- 2-3 (QTY=1)) (F-1-3(QTY=1)) (K-7-2 B)	• Remove and dispose (3) fuses. • Install (3) Cutout Mounted Single- Phase recloser. • Use existing (1) anchor and existing (1) down guy.
7638451		(40'-S3 GALVANIZED STEEL POLE) (CP-C2)	(45'-S5.7 12-SIDED GALVANIZED STEEL POLE) (REC-3-C) (CP-C6-XARM) (E-1-2-3(QTY=1)) (F-1-3 (QTY=1))	• Remove and dispose 40' S3 galvanized pole. • Replace with 45' S5.7 12-Sided galvanized st pole. • Remove, dispose and replace framings. • Install (3) Cutout Mounted Single- Phase recloser • Install (1) anchor and (1) down guy.
NEW POLE		(NONE)	(45'-S5.7 12-SIDED GALVANIZED STEEL POLE) (REC-3-C) (CP-C6-XARM) (K-6)	• Install a new 45' S5.7 12-Sided galvanized steel p midspan • Install (3) Cutout Mounted single- phase recloser. • Replace open wire conductor to 1/0 source side load side

10070681	[redacted]	(35' CLASS 4 WOOD POLE) (CP-C3-XARM) (CP-C5-XARM) (K-7-B) (STL-10) (E-1-2-3(QTY=1)) (F-1-3 (QTY=1))	(50'-S8.5 12-SIDED GALVANIZED STEEL POLE) (REC-3-C) (CP-C3-XARM) (CP-C5-XARM) (K-7-B) (STL-10) (E-1-2-3 (QTY=1)) (F-1-3(QTY=1))	• Remove and dispose 35' Class 4 wood pole. • Replace with 50' S8.5 12-Sided galvanize steel pole. • Install (3) Cutout Mounted Single Phase recloser. • Remove, dispose and replace streetlight. • Remove, dispose and replace (1) anchor and(1) guy.
10070989		(ASSY 1509 (QTY=3))	(LABOR & REPAIR)	• Remove and dispose (3) Fuses.
10071125		(ASSY 1509 (QTY=3))	(LABOR & REPAIR)	• Remove and dispose (3) Fuses.
7638460		(ASSY 1509 (QTY=1))	(LABOR & REPAIR)	• Remove and dispose (1) Fuses.
10650422		(ASSY 1509 (QTY=3))	(LABOR & REPAIR)	• Remove and dispose (3) Fuses.
N/A		(NONE)	(LABOR, cFCI) (QTY=3)	• Install (3) Communicating Fault Current Indicator on Segment 14544804.
N/A		(NONE)	(LABOR, cFCI) (QTY=3)	• Install (3) Communicating Fault current indicator on Segment 8456952.
7639086		(ASSY 1509 (QTY=3))	(ABS-3-XARM) (E1-2-3 (QTY=1)) (F-1-3 (QTY=1))	• Use existing galvanized steel Pole 50'-s8.5. • Remove and dispose (3) fuses with • Install (3) horizontal air-break Switch. • Install (1) anchor and (1) Down guy.

Feeder 3501-03

POLE FID	Coordinates Lat, Long	Existing (Remove)	428 Replacement	Scope of work

6834387	[redacted]	(40'-C4 WOOD POLE) (CP-B3) (S-3) (E-2-1 (QTY=1)) (E-1-2-3 (QTY=2)) (F-4-2 (QTY=1))	(50'-S8.5 12-SIDED GALVANIZED STEEL POLE) (40'-S5.7 12-SIDED GALVANIZED STEEL POLE) (REC-2-2 Ver.3) (S-6) (K-5) (E-2-1(QTY=1)) (E-1-2-3 (QTY=2)) (F-4-2(QTY=1))	• Remove and dispose 40' C4 wood pole. • Replace pole with 50' S8.5 12- Sided galvan Steel pole. • Remove, dispose and replace primary Frami • Install (1) Three-Phase Recloser Recloser 3 03A. • Install and Commission Three- Phase radio communication kit for three-phase recloser • Install (1) 1kva (4.80/8.32 kv - 120/240 V) fc source side. • Install Secondary framing. • Install 1/0 tpx Secd for load side (190ft). • Remove and dispose. Replace this stub pole 40' S5.7 12- Sided galvanized Steel pole. • Remove, dispose and replace (1) anchor. • Remove, dispose and replace (3) Down guy
NEW POLE		NONE	(50'-S8.5 12-SIDED GALVANIZED STEEL POLE) (REC-2-2 Ver. 4) (S-6) (E-1-2-3 (QTY=2)) (F-4-2 (QTY=1)) (K-6)	• Install new 50' S8.5 12-Sided galvanized ste pole in new location mid span. • Install primary framing. • Install (1) Three-Phase Recloser 3501-03B i Configuration. • Install and Commission Three- Phase radio communication kit for three-phase recloser • Install (1) 1 kva Transformer (4.80/8.32-120/240v) for Source side. • Install secondary Framing. • Install secondary open Wire configuration 1/0 tpx secd (140ft). • Install (1) anchor and (2) Down guys.
6837608		(ASSY-1509 (QTY=3)	(LABOR & REPAIR)	• Remove and dispose (3) Fuses.
6835055		(ASSY-1509 (QTY=3)	(LABOR & REPAIR)	• Remove and dispose (3) Fuses.
7340258		(ASSY-1509 (QTY=3)	(LABOR & REPAIR)	• Remove and dispose (3) Fuses.
6837183		(35'-C4 WOOD POLE) (CP-C12- XARM) (E-1-2-3(QTY-1))	(45'-S5.7 12-SIDED GALVANIZED STEEL POLE) (CP-C12-XARM)	• Remove and dispose 36' C4 wood pole. • Replace pole with 45' S5.7 12- Sided Galvar steel pole.

		(F-1-3(QTY-1))		• Remove, dispose and replace Primary framin • Install solid blade Cutout (fid: 14538193). • Remove and dispose (3) fuses. • Remove and dispose (1) Anchor and (1) dov

6835051	[redacted]	45'-C3 WOOD POLE) (CP-C7-XARM) (S-6) (STL-10) (K-7 A) (K-5) (E-1-2-3(QTY-2)) (F-1-3(QTY-2))	(50'-S8.5 12-SIDED GALVANIZED STEEL POLE) (REC-3-B) (S-6) (CP-B5 XARM) (STL-10) (K-7 A) (K-5) (E-1-2-3(QTY-1)) (F-1-3(QTY-1))	• Remove and dispose 45' C3 wood pole • Replace with 50' S8.5 12-Sided galvanized s Pole. • Remove, dispose and replace framings. • Install (3) Cutout Mounted Single- Phase Rec • Remove and dispose (2) fuses. • Remove and dispose (2) Anchor. Replace or one. • Remove and dispose (2) Downguy. Replace only one. • Remove, dispose and replace streetlight.
6834513		(40'-C3 WOOD POLE) (CP-B6 XARM) (E-1-2-3(QTY-2)) (F-1-3(QTY-2))	(45'-S5.7 12-SIDED GALVANIZED STEEL POLE) (REC-3-B) (CP-B6 XARM) (E-1-2-3(QTY-1)) (F-1-3(QTY-1))	• Remove and dispose 40' C3 wood pole. • Replace 45' S5.7 12-Sided galvanized steel Pole. • Remove, dispose and replace framings. • Install (2) Cutout Mounted Single- Phase recl pole • Fid: 6834513. • Remove and dispose (2) anchor. And (2) downguy. Replace (1) anchor and (1) downguy
6837617		(40'-C3 WOOD POLE) (CP-C6 XARM) (CP-C5 XARM) (E-1-2-3(QTY-1)) (F-1-3(QTY-1))	(45'-S5.7 12-SIDED GALVANIZED STEEL POLE) (REC-3-C) (CP-C6 XARM)	• Remove and dispose 40' C3 wood • Replace with 45' S5.7 12-Sided galvanized ste Pole. • Remove, dispose and replace framings. • Install (3) Cutout Mounted Single- Phase Reclos • Remove and dispose (1) anchor. And (1) dow • Remove and dispose tap-off that is not In servi
6834559		(ASSY-1509 (QTY=1)	(LABOR & REPAIR)	• Remove and dispose (1) Fuse.
6834934		(ASSY-1509 (QTY=1)	(LABOR & REPAIR)	• Remove and dispose (1) Fuse.
6837612		(ASSY-1509 (QTY=3)	(LABOR & REPAIR)	• Remove and dispose (3) Fuses.
N/A		NONE	(LABOR, cFCI) (QTY=3)	• Install (3) Communicating Fault Current Indicato Segment 14544808.
N/A		NONE	(LABOR, cFCI) (QTY=3)	• Install (3) Communicating Fault Current indicato Segment 14538193.

For more detailed information about the scope of work please refer to the ***APPENDIX B - LUMA Project Cost Estimate***.

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 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 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
3501-01	727694 FAASt Region 4 -Caguas Group C] (Vegetation)
3405-02 3501-03	727692 FAASt Region 4 -Caguas Group A] High Density (Vegetation)

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 in compliance with applicable federal and local regulations.

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 is the Caguas Regional Warehouse, whose address is # 1 Street, Jose Mercado Corner, Caguas, 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*.

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")

c. LUMA will provide proof of all permits.

Proposed 406 Hazard Mitigation Scope of Work

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.

Project Cost Estimate

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 may be subject to change. LUMA has allocated 10% of the project cost to mitigate potential known risks. For more details, refer to LUMA LPCE **Refer to APPEND IX *B- LUMA Project Cost Estimate.***

COST ESTIMATE			
Cost Element	**428**	**406**	**PROJECT TOTAL**
PLANNING	**$185,494.10**	**$-**	**$185,494.10**
MANAGEMENT	**$113,805.22**	**$-**	**$113,805.22**
Distribution Automation Group 24	**$2,223,519.81**	**$-**	**$2,223,519.81**
GENERAL CONDITIONS	**$114,130.59**	**$-**	**$114,130.59**
COST TOTALS	**$2,636,949.72**	**$-**	**$2,636,949.72**
DEDUCTIONS	**TOTAL INSURANCE PROCEEDS RECEIVED**		**$-**
	DE-OBLIGATION TO FAASt IF APPLICABLE		**$-**
FAASt ALLOCATIONS	FAAST PROJECT # 757689- 428		**$1,774,822.40**
	FAAST PROJECT 757689- 406HM		**$-**
	FAAST PROJECT # 757689 TOTAL		**$1,774,822.40**
	FAASt A&E # 335168 - 428		**$299,299.32**
	FAASt A&E # 335168 - 406 HM		**$-**
	FAASt A&E # 335168 TOTAL		**$299,299.32**
	FAASt E&M #673691 - 428		**$562,828.00**
	FAASt E&M #673691 - 406 HM		**$-**
	FAASt E&M #673691 TOTAL		**$562,828.00**

Work To Be Completed (WTBC): $2,636,949.72

A&E Deduction (Global A&E FAASt 335168): $299,299.32

Equipment & Material Deduction (Global FAASt 673691): $562,828.00

Project Total Cost: $1,774,822.40

Project Notes:

1. Refer to detailed SOW provided in document “757689- DR4339-PR- DSOW- Group 24 - Rev. 2.pdf”

2. Refer to detailed cost estimate summary provided in document “757689-DR4339PR-APPENDIX B- LUMA Project Cost Estimate. Rev. 2 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 24 Automation Program FAASt 757689.

6. For attachments, refer to:

   a. 757689-DR4339PR-APPENDIX A - Initial Scope of Work

   b. 757689-DR4339PR-APPENDIX B - LUMA Project Cost Estimate

   c. 757689-DR4339PR-APPENDIX C - Project Considerations

   d. 757689-DR4339PR-APPENDIX D - LUMA Active Projects

406 HMP Scope

406 Hazard Mitigation measures were not requested by the sub-applicant for this project in Version 0. However, there may be mitigation opportunities that will apply to Version 1 of the Permanent Work Project. The project is ready for Insurance completion.

Cost

Code	Quantity	Unit	Total Cost	Section
9001	1	Lump Sum	$2,636,949.72	Uncompleted
3510	1	Lump Sum	($299,299.32)	Uncompleted
9001	1	Lump Sum	($562,828.00)	Uncompleted
9201	1	Lump Sum	$0.00	Completed

CRC Gross Cost	$1,774,822.40
Total 406 HMP Cost	$0.00
Total Insurance Reductions	$0.00
CRC Net Cost	$1,774,822.40
Federal Share (90.00%)	$1,597,340.16
Non-Federal Share (10.00%)	$177,482.24

Subgrant Conditions

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

Insurance

Additional Information

6/4/2025

Does the Applicant have a Commercial Policy: Yes.

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

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

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

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

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

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

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

O&M Requirements

There are no Obtain and Maintain Requirements on **FAASt [Automation Program Group 24] (TL/ Distribution)**.

406 Mitigation

There is no additional mitigation information on **FAASt [Automation Program Group 24] (TL/ Distribution)**.

Environmental Historical Preservation

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

EHP Conditions

- Any change to the approved scope of work will require re-evaluation for compliance with NEPA and other Laws and Executive Orders.
- This review does not address all federal, state and local requirements. Acceptance of federal funding requires recipient to comply with all federal, state and local laws. Failure to obtain all appropriate federal, state and local environmental permits and clearances may jeopardize funding.
- If ground disturbing activities occur during construction, applicant will monitor ground disturbance and if any potential archaeological resources are discovered, will immediately cease construction in that area and notify the State and FEMA.
- The Subrecipient and/or Subrecipient's contractor must follow the Low Impact Debris Removal Stipulations (LIDRS) outlined in Appendix E of the Project-Specific Programmatic Agreement Among FEMA, the SHPO, ACHP, COR3, and PREPA (PSPA), executed on August 2, 2022.
- Pursuant to Stipulation III.B of the PSPA, if, in the course of implementing this Individual Undertaking(s), previously unidentified structures, sites, buildings, objects, districts, or archaeological deposits, that may be eligible for listing in the National Register, or human remains are uncovered, or if it appears that an Individual Undertaking has affected or will affect a previously identified historic property in an unanticipated manner, the contractor must notify Subrecipient who will immediately notify the Recipient. Work must stop in the vicinity of the discovery and measures must be taken to protect the discovery and avoid additional harm.
- Additional staging areas and/or work pads within work site area haven't been identified yet. The Subrecipient and/or private operator must provide the information of any additional staging areas or work pads for EHP evaluation as soon as available specially if any construction activity will be necessary to prepare the site(s). Information for staging areas and/or work pads confined to previously disturbed or hardened surfaces can be provided at close-out.
- If there are any further changes to the SOW, including any increase in the extent of ground disturbance, the applicant must notify FEMA beforehand, prior to engaging in further activities not within the current SOW.
- Endangered Species Act (ESA). The below conservation measures apply to the following species: Puerto Rican Plain Pigeon (Patagioenas Inornata Wetmorei) for Feeder 3405-02. 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. 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 Jose 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 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 Feeders 3501-01 and 3501-03: 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 Applicants permanent files.
- Executive Order 11990 - Wetlands Conditions for Feeder 3501-03: 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 feeders (3405-02; 3501-01; and 3501-03). 1. Inform all project personnel about the potential presence of the Puerto Rican (PR) boa and Virgin Islands (VI) boa in areas where the proposed work will be conducted and provide training on PR and VI boa identification. A pre-construction meeting will be conducted to inform all project personnel about the need to avoid harming these species. All personnel will be advised that there are civil and criminal penalties for harming, harassing, or killing species protected under the Endangered Species Act of 1973. An educational poster or sign with photo or illustration of these species will be displayed at the project site. 2. Prior to any construction activity, including removal of vegetation and earth movement, the boundaries of the project area and any area to be excluded and protected will be clearly marked in the project plan and in the field to avoid further habitat degradation outside of the footprint of the project. 3. Once areas are clearly marked, and right before the use of heavy machinery and any construction activity (including removal of vegetation and earth movement), biologist or designated project personnel with experience on these species will survey the areas to be cleared to verify the presence of any PR or VI boa within the Action Area. If a PR or VI boa is found during the search, it should be captured and managed as per #6 below. Once the removal of vegetation begins, the biologist or designated personnel must remain at the work site and be ready to capture any boa that might be in harms way as the result of the habitat disturbance (see #6). 4. For VI boas, once the Action Area has been searched, vegetation will be cut about one meter above ground prior to the use of heavy machinery for land clearing. Cutting vegetation by hand will allow VI boas present on site to move away on their own to adjacent available habitat. If there is no suitable habitat adjacent to the project site, any VI boa found will be relocated accordingly (see #6).
- 5. For all boa sightings (dead or alive), record the time and date of the sighting and the specific location where it was found. Data will also include a photo of the animal (dead or alive), relocation site GPS coordinates, time and date of the relocation, and comments on how the animal was detected and its behavior. 6. If any PR or VI boa (dead or alive) is found within the Action Area and on harms way, the action will stop, and information will be recorded (see #5). All attempts will be made to immediately safely capture and relocate the animal within suitable habitat (forested) at least 1km from the Action Area and away from construction areas. PR boa relocation sites will be pre-determined before the project starts and sites shared with the Service for revision and concurrence. Relocation of PR boas will be conducted by trained, designated personnel ensuring the animal is not harmed or injured during the capture and relocation process. 7. Measures will be taken to avoid and minimize PR boa and VI boa casualties by heavy machinery or motor vehicles being left in the Action Area. - Any heavy machinery left on site (staging areas) or near potential PR or VI boa habitat will be thoroughly inspected each morning before work starts to ensure that no boas have sheltered within engine compartments or other areas of the heavy machinery. If a PR boa or VI boa is found within vehicles or heavy machinery, boas will be safely captured accordingly. If not possible, the animal will be left alone until it leaves the vehicle or machine by itself. - The PR boa and VI boa may seek shelter within debris piles. Measures should be taken to avoid and minimize boa casualties associated with sheltering in new debris piles as a result of project

activities. New debris piles should be placed in areas as far as possible from forested areas. Prior to moving, disposing, or shredding, debris piles should be carefully inspected for the presence of PR boas and VI boas. If debris piles will be left on site, we recommend they be placed in an undisturbed area. - In the event a PR boa and VI boa is found dead within the project area, the Federal Agency and the Recipient must contact the Service to appropriately dispose the animal. - If a PR boa or a VI boa is accidentally injured or killed during capture and relocation activities during the Action, the Federal Agency and the Recipient shall terminate the authorized activities and contact the Service within 24 hours to 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 Services Point of Contact (POC) is Jose Cruz-Burgos, Endangered Species Coordinator, and can be contacted at: . Mobile: 305-304-1386 . Office phone: 786-244-0081 . Office Direct Line: 939-320-3120

EHP Additional Info

There is no additional environmental historical preservation on **FAASt [Automation Program Group 24] (TL/ Distribution)**.

Final Reviews

Final Review

Reviewed By LEFRANC-GARCIA, CARLOS L. **Reviewed On** 06/09/2025 4:21 PM PDT

Review Comments

Project has been reviewed, found eligible and reasonable. -CLG 06.09.25

Recipient Review

Reviewed By Mulero, Noel **Reviewed On** 07/03/2025 3:30 PM PDT

Review Comments

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

Project Signatures

Reviewed By Unsigned **Reviewed On** Unsigned

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 $1,774,822.40 for subaward number 108034 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	9/17/2025	$1,597,340.16	90%	Accepted	4339DRPRP01080341

Department of Homeland Security
Federal Emergency Management Agency

v0

General Info

Project #	757696 **P/W #** 108037	**Project Type**	Specialized
Project Category	F - Utilities	**Applicant**	PR Electric Power Authority (000-UA2QU-00)
Project Title	FAASt [Automation Program Group 31] (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 #1399052; FAASt [Automation Program Group 31: Bayamon Feeders: 1803-03, 1806-03] (Distribution)

General Facility Information:

- **Facility Type:** Power generation, transmission, and distribution facilities
- **Facility:** Automation Program Group 31
- **Facility Description:** Bayamon Feeders: 1803-03, 1806-01, 1806-02, 1806-03
- **Approx. Year Built:** 1980
- **Start GPS Latitude/Longitude:** [redacted]
- **End GPS Latitude/Longitude:** [redacted]

Final Scope

1399052

FAASt [Automation Program Group 31: Bayamon Feeders: 1803-03, 1806-03] (Distribution)

Introduction

This document is to submit for approval a Detailed Scope of Work ("DSOW") to COR3 and FEMA for the Transmission and Distributio 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 detailed SOW according to the Transmission and Distribution Operations & Maintenance Agreement between Puerto Ricc Electric Power Authority ("PREPA"), the Puerto Rico Public-Private Partnerships Authority ("P3A"), and LUMA Energy, and following the Conser to Federal Funding Letter issued by PREPA and P3A, which collectively provides the necessary consent for LUMA Energy, as agent of PREPA to undertake work in connection with any Federal Funding requests related to the Transmission and Distribution System submitted to FEMA.

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 each 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 757696 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 links, 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 loss of service and potential damages for upcoming occurrences. This project is necessary for the EMS to maintain the continuity of the distribution power grid on Feeders 1803-03 and 1806-03.

Key components of this project are (1) pole replacement, (2) the three-phase reclosers, 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 to 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. Therefore, Luma is to 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 Reclosers: 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. It enables remote control and status visualization of the reclosers. 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 damages in future disasters. In this project we are installing six three-phase reclosers.

Single-Phase Reclosers: 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 the distribution feeder and distribution lines branching from the feeder. It is a protection device that is used on a single-phase or a two-phase distribution feeder. Single-phase reclosers are used on feeders with three-phases if fault currents are low at the location. A single-phase recloser is a single device with one switch that can open to interrupt fault currents and automatically reclose to restore power. In this project we are installing five single-phase reclosers.

(3) Communicating Fault Current Indicators

Communicating fault current indicators (cFCI) installed at strategic locations improve the outage management, restoration, and recovery process, specifically by decreasing the time required to detect and locate faults. The cFCI operates independently of the feeder reclosers. cFCI helps identify permanent and incipient faults in the distribution system and collects voltage and current data which can be used to detect system imbalance, prevent future issues due to harmonics, and help in building predictive failure models.

Data sent to the EMS aides 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 which saves. Installation of the three-phase reclosers and the communicating fault current indicators (communications ready) is critical for the Energy Management System ("EMS") to effectively 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 is distinguishable from projects that include fiber optics as these feeders are using cellular technology for communications with the operations center. LUMA has developed this scope for reclosers and their associated hardware only. The lack of fiber optics as a method of transmitting information in this scope of work 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.

FACILITIES

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 each feeder. 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 this feeder, where LUMA is installing Distribution Automation (" DA ") devices, that require disaster-related replacement. Accordingly, LUMA has not initiated any rebuild projects for this feeder under the Distribution Rebuild Program (also referred to as the" D-Line Program"). LUMA also confirmed that none of the poles on this feeder, 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. Because the poles in the DA program are not identified for replacement in either the D-Line or D-Pole Programs and the only cause for their replacement is the proper execution of mitigation measures, the pole replacement is included in the 406 Hazard Mitigation scope of work of this project. This allocation is consistent with the illustrated scenarios provided in the DA Program position paper and LUMA's Resilience Plan. 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 ***APPENDIX D – LUMA Active Projects*** which shows no duplication of scope elements.

Facilities List

Name	Feeder Number	GPS Start	GPS End
Bayamon	1803-03	[redacted]	
Bayamon	1806-03		

Note: Please refer to **APPENDIX *C*— *Project Considerations* for a list of all GPS locations that this project will impact**.

PROJECT SCOPE OF WORK

Below is a list of the "Proposed 428 Public Assistance Scope of Work" proposed for feeders of this group.

Proposed 428 Public Assistance Scope of Work

Feeder 1803-03

POLE FID	Coordinates Lat, Long	Existing (Remove)	428 Replacement	Scope of work
7153771	[redacted]	(40'-S3 GALVANIZED STEEL POLE) (AC-C6) (K-1) (ASSY 1509 (QTY=3)) (STL-10)	(50'-S8 GALVANIZED STEEL POLE) (CP-C6-XARM) (K-6) (REC-2-1 VERS 6) (STL-10)	• Remove and dispose 40' Galvanized steel pole. • Replace with 50' S8 12-Sided galvanized steel pole. • Install (1) three-phase recloser 1803- 03A. • Install and commission the radio communication kit for the Three-Phase Recloser. • Install (1) 1 kva transformer (2.40/4.16 kva -120/240v) source side. • Remove, dispose, and replace primary framings. • Remove and dispose 336 Al. spacer conductors 700 ft. Replace with 1/0 al conductors 700 ft. • Remove, dispose, and replace streetlight. • Remove and dispose (3) fuses.
NEW POLE		N/A	(50'-S8 GALVANIZED STEEL POLE) (S-6) (K-6) (REC-2-2 VER 3)	• Install new 50' S8 12-Sided Galvanized Steel pole in new location mid span*. • Install (1) three-phase Recloser 1803-03B. • Install and commission the radio communication kit for the Three-Phase Recloser. • Install secondary conductor 1/0 al tpx - 130 ft. for load side and source side.
7153770		(40' CLASS 5 WOOD POLE) (CP-C5-XARM) (CP-C6-XARM) (K-1) (E-1-2-3(QTY=1)) (F-1-3(QTY=1))	(50' S8 GALVANIZED STEEL POLE) (CP-C5 XARM) (CP-C6-XARM) (K-6) (E-1-2-3(QTY=1)) (F-1-3(QTY=1))	• Remove and dispose 40' class 5 wood pole. • Replace pole with 50' S8 12-Sided galvanized steel pole due to recloser 1803-03A installation. • Remove, dispose, and replace the primary framings. • Replace, dispose, and replace (1) down guy and Replace (1) anchor

POLE FID	Coordinates Lat, Long	Existing (Remove)	428 Replacement	Scope of work
7153775	[redacted]	(40' CLASS 5 WOOD POLE) (AC-C6 XARM) (T-2) (25kVA, 2.40/4.16 kV120/240V) (K-7 A) (STL-10)	(50'-S8 GALVANIZED STEEL POLE) (CP-C6-XARM) (T-2) (25kVA, 2.40/4.16 kV120/240V) (K-7-A) (STL-10)	• Remove and dispose 40' Class 5 Wood pole. • Replace pole with 50' S8 12-Sided galvanized steel. • Replace transformer for Stainlees Steel 25kva (2.40/4.16 kv120/240v) • Remove, dispose and Replace streetlight. • Remove, dispose, and replace primary framings. • Remove, dispose, and Replace 25kva (2.40/4.16 kv120/240v)
7153768		(35' CLASS 4 WOOD POLE) (AC-C6 XARM) (K-6) (URD-3) (STL-10)	(45' S5.7 GALVANIZED STEEL POLE) (CP-C6 XARM) (K-6) (K-5) (STL-10)	• Remove and dispose 35' Class 4 wood pole. • Replace pole with 45' S5.7 12-Sided galvanized steel pole. • Remove, dispose, and replace primary framings. • Remove, dispose, and replace streetlights.
7153498		(40' CLASS 5 WOOD POLE) (S-5) (S-1) (T-2) (K-7-B) (E-1-2-3) (F-1-3) (STL-10)	(50'-S8 GALVANIZED STEEL POLE) (S-5) (S-6) (T-2) (K-7 B) (K-5) (STL-10)	• Remove, dispose, and replace 40' Class 5 wood pole. • Replace with 50' S8 12-sided galvanized Steel pole. • Remove, dispose, and replace streetlight. • Transfer 37.5kva (2.40/4.16 kv-120/240v) to new pole. • Re-Use downguy. • Remove and dispose (1) down guy and (1) Anchor.

Feeder 1806-03

POLE FID	Coordinates Lat, Long	Existing (Remove)	428 Replacement	Scope of work
7153496	[redacted]	(40' CLASS 2 WOOD POLE) (S-1) (K-7 A) (STL-10) (T-1) (37.5KVA, (2.40/4.16KV-120/240 V)	(45' S5.7 GALVANIZED STEEL POLE) (S-1) (K-7-B) (STL-10)	• Remove and dispose 40' Class 2 wood pole. • Replace pole with 45' S5.7 12-sided galvanized steel pole. • Remove, dispose, and replace primary framings. • Remove, dispose, and replace streetlight. • Labor:37.5kva (2.40/4.16kv-120/240 v) transformer and install in FID 7153498.
7153580		(35' CLASS 4 WOOD POLE) (K-7 B) (E-1-2-3) (F-1-3) (STL-10)	(40' S5.7 GALVANIZED STEEL POLE) (K-7-B) (E-1-2-3) (F-1-3) (STL-10)	• Remove and dispose 35' Class 4 wood pole. • Replace pole with 40' S5.7 12-Sided galvanized steel pole • Remove dispose and replace primary framings. • Replace, dispose, and replace streetlight. • Replace, remove, dispose, and replace (1) down guy and (1) anchor.
14053394		(FUSES REMOVAL (QTY=3))	(LABOR & REPAIR)	• Remove and dispose (3) Fuses.
7153762		(FUSES REMOVAL (QTY=3))	(LABOR & REPAIR)	• Remove and dispose (3) Fuses.
N/A		NONE	(LABOR, cFCI) (QTY=3)	• Install (3) Communicating Fault Current Indicator.

POLE FID	Coordinates Lat, Long	Existing (Remove)	428 Replacement	Scope of work

11543149	[redacted]	(55FT C2 WOOD POLE) (38KV SINGLE CIRCUIT DELTA SUSPENSION ASSY. ANGLE 0-2) (CP-C1) (K-6) (STL-10)	(70FT S8 STEEL POLE) (CONCRETE POLE BASE) (38KV SINGLE CIRCUIT DELTA SUSPENSION ASSY. ANGLE 0-2) (REC-2-1) (K-6) (STL-10) (E-1-2-3, QTY=3) (F-1-3) (F-4-2) (XFRM, 7.62/13.2KV, 120/240V, SS, 1KVA CONTROL TRANSFORMER	• Remove and dispose 55' C2 wood pole • Replace pole with 70' S8 12-Sided galvanized steel pole. • Install (1) Three-phase recloser (1806-03B). • Install and commission the radio communication kit f the three-phase recloser. • Install (3) down guys and expansion anchors. • Install concrete base. • Install (1) Transformer 7.62/13.2kv, 120/240v, stain steel, 1KV control transformer in to feed the reclose load side • Remove, dispose, and replace feeders' insulators. • Remove, dispose, and replace primary framing. • Remove, dispose, and replace secondary conduct insulator. • Remove, dispose, and replace existing streetlight.

7149675	[redacted]	(40FT C2 WOOD POLE) (CP-C6-XARM)	(50FT S8 STEEL POLE) (40FT S5.7 STEEL POLE) (REC-2-1) (E-2-1) (E-1-2-3) (F-1-3) (420FT TRIPLEX #2 SECONDARY CONDUCTOR) (XFRM, 13.2/7.62KV, 120/240, SS, 1KVA CONTROL TRANSFORMER) (K-5) (K-6)	• Remove and dispose 40' C2 Wood pole. • Replace pole with 50' S8 12-Sided galvanized steel • Remove, dispose, and replace primary framing. • Install (1) Three-phase recloser (1806-03C). • Install and commission the Radio communication kit the Three-phase recloser. • Install stub pole (40ft s5.7 steel pole, for span guy. • Install secondary conductor insulators. • Install anchor for stub pole. • Install secondary span from pole with fid 7149696 (18.438453, -66.153826) for 420 feet in conductor # triplex, secondary conductor identified in the adjacer pole to feed the recloser load side. • Install (1) Xfrm, 7.62/13.2kv, 120/240, ss, 1kva con transformer on 3phase recloser to feed the recloser source side.

Not digitalized **Segment FID 17399026**	[redacted]	(65FT H6 CONCRETE POLE) (38KV SINGLE CIRCUIT DELTA SUSPENSION ASSY. ANGLE 0-2) (CP-C2) (E-2-1	(70FT S8 STEEL POLE) (38KV SINGLE CIRCUIT DELTA SUSPENSION ASSY. ANGLE 0-2) (REC-2-1) (K-5) (E-1-2-3, QTY=2) (F1-3, QTY=2) (XFRM, 7.62/13.2KV, 120/240V, SS 1KVA CONTROL TRANSFORMER, QTY=2) (E-1-2-3, FOR FID 7149394) (F-1-3, FOR FID 7149394	• Remove and dispose 65' H6 Concrete pole. • Replace pole with a 70' S8 12-Sided Galvanized St Pole. • Replace feeders' insulators. • Install (1) Three-phase recloser (1806-03D). • Install and commission radio communication kit for Three-Phase Recloser. • Install anchors. • Install (2) transformer, 7.62/13.2kv, 120/240, Stainl Steel 1 KVA control transformer to feed the source load side. • Remove, dispose, and replace primary framing • Remove, dispose, and replace the secondary conductor insulator. • Remove, dispose, and replace downguys.
7149464		(40FT S3 STEEL POLE) (K-6) (STL-10) (T-12)	(50FT S8 STEEL POLE) (REC-2) (K-6) (STL-10) (LABOR) (375FT SECONDARY CONDUCTOR)	• Remove and dispose 40' S3 Steel Pole. • Replace pole with a 50' S8 12-Sided galvanized ste pole. • Replace feeder crossarms and insulators. • Install (1) three-phase recloser (1806-03E). • Install and commission the communication radio kit f the three-phase recloser. • Install secondary span of triplex #2 from pole with 7149453 for 375 feet identified to feed the recloser source side • Remove, dispose, and replace feeder crossarms a insulators. • Remove, dispose, and replace • secondary conductor insulator. • Remove, dispose and replace existing streetlight. • Labor to close jumper wires and normalize feeder. • Remove and dispose out of service capacitor bank

11543153	[redacted]	(60FT C2 WOOD POLE) (38KV SINGLE CIRCUIT VERTICAL DEADEN ASSY. ANGLE 0-10) (CP-C6-XARM) (CP-C5XARM) (K-6) (STL-10)	(70FT S8 STEEL POLE) (CONCRETE POLE BASE) (38KV SINGLE CIRCUIT VERTICAL DEADEN ASSY. ANGLE 0-10) (CP-C6-XARM) (CP-C7) (K-6) (STL-10) (E-1-2-3) (F-1-3)	• Remove and dispose 60' C2 wood pole. • Replace pole with a 70' S8 12-Sided galvanized ste pole. • Install fuse cutouts for feeder tap. • Install down guy and expansion anchor. • Install concrete base. • Remove, dispose, and replace feeders crossarms insulators. • Remove, dispose, and replace framings. • Remove, dispose, and replace secondary conduct insulator. • Remove, dispose, and replace existing streetlight.
11544249		(40FT C3 WOOD POLE) (K-6) (STL-10, QTY=2) (E-1-2-3) (F-1-3)	(70FT S8 STEEL POLE) (38KV SINGLE CIRCUIT DELTA SUSPENSION ASSY. ANGLE 0-2) (CP-C1) (CP-B5-XARM) (REC-3-B) (K-6) (STL-10) (E-1-2-3) (F-1-3)	• Remove and dispose 40' C3 wood pole. • Replace pole with 70' S8 12-sided galvanize steel intercept feeder. • Install (2) Single-Phase Recloser. Remove and dispose fuse cut outs. • Remove, dispose, and replace secondary conduct Insulator. • Remove, dispose, and Replace Streetlight. • Remove, dispose, and replace down guy and anch
7149631		(45FT C2 WOOD POLE) (CP-C6-XARM) (CP-C7) (CP-A5) (E-1-2-3,QTY=2) (F-1-3, QTY=2)	(50FT S8 STEEL POLE) (CP-C6-XARM) (CPA5) (REC-3-C) (K-6) (E-1-2-3) (F-1-3)	• Remove and dispose 45' C2 wood pole. • Replace pole with 50' S8 12-sided galvanized steel pole. • Remove and dispose fuse • Cutouts. • Install (3) Single-Phase Reclosers. • Remove and dispose fuse Cutouts. • Remove, dispose, and replace secondary Conduct • Secondary span Will be installed in this pole Where recloser 1806-03D will Be installed to feed the new Recloser.
7150681		(CP-A14)	LABOR FOR CLOSE JUMPERS	• Remove and dispose fuses. • Labor to Close jumper wires.
11280103		NONE	(LABOR, cFCI) (QTY=3)	• Install (3) Communicating Fault Current Indicator

11543540	[redacted]	NONE	(LABOR, cFCI) (QTY=3)	• Install (3) Communicating Fault Current Indicators.

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. Refer to APPENDIX C – Project Considerations, column C (soil area and depth impact) for the depths of the poles to be installed.

c. 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.

d. 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
1803-03	727691 FAASt [Region 1 -San Juan Group C] (Vegetation)
1806-03	727558 FAASt [Region 3 -Bayamon Group C] (Vegetation)

e. 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.

f. All work for this program will be performed within the current electrical right-of-way.

2) Debris will be separated and taken to an approved 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 is the Toa Baja District Warehouse, whose address is 165 street, 30.5 KM, Palo Seco Ward, Toa Baja, 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 includes *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*.

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")

c. LUMA will provide proof of all permits.

Proposed 406 Hazard Mitigation Scope of Work

406 Hazard Mitigation Proposal
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.

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 potential known risks. For more details refer to **APPENDIX B- LUMA Project Cost Estimate.**

COST ESTIMATE			
Cost Element	**428**	**406**	**PROJECT TOTAL**
PLANNING	**$121,483.46**	**$-**	**$121,483.46**
MANAGEMENT	**$73,692.20**	**$-**	**$73,692.20**
Distribution Automation Group 31	**$1,440,436.49**	**$-**	**$1,440,436.49**
GENERAL CONDITIONS	**$74,565.12**	**$-**	**$74,565.12**
COST TOTALS	**$1,710,177.27**	**$-**	**$1,710,177.27**
DEDUCTIONS	**TOTAL INSURANCE PROCEEDS RECEIVED**		**$-**
	DE-OBLIGATION TO FAASt IF APPLICABLE		**$-**
FAASt ALLOCATIONS	FAAST 757696- 428		**$1,145,457.61**
	FAAST 757696- 406 HM		**$-**

	FAAST PROJECT 757697 TOTALS	**$1,145,457.61**
	FAASt A&E # 335168 - 428	**$195,175.66**
	FAASt A&E # 335168 - 406 HM	**$-**
	FAASt A&E # 335168 TOTAL	**$195,175.66**
	FAASt E&M #673691 - 428	**$369,544.00**
	FAASt E&M #673691 - 406 HM	**$-**
	FAASt E&M #673691 TOTAL	**$369,544.00**

Work To Be completed: $1,710,177.27

A&E Deduction (Global A&E FAASt# 335168): $195,175.66

E&M Deduction (FAASt# 673691): $369,544.00

Project Total Cost (FAASt Project# 757696): $1,145,457.61

Project Notes:

1. Refer to detailed SOW provided in document labeled: "*757696-DR4339PR- DSOW Group 31 Revision 003-.pdf*."
2. Refer to detailed Cost Estimate provided in document labeled: "757696-DR4339PR-APPENDIX B - LUMA Project Cost Estimate- Revision 003.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 cost 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. 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 Automation Group 31 FAASt 757696.
5. This project is part of Donor FAASt 136271 – MEPA078 Puerto Rico Electrical Power Authority (PREPA) Island Wide FAASt Project 136271.

For reference documents Appendix A thru D, see files labeled:

ATTACHMENTS

757696-DR4339PR-APPENDIX A - Initial Scope of Work.pdf

757696-DR4339PR-APPENDIX B - LUMA Project Cost Estimate- Revision 003.xlsx

757696-DR4339PR-APPENDIX C - Project Considerations.xlsx

757696-DR4339PR-APPENDIX D - LUMA's Active Project.xlsx

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	$1,710,177.27	Uncompleted
3510	1	Lump Sum	($195,175.66)	Uncompleted
9001	1	Lump Sum	($369,544.00)	Uncompleted
9201	1	Lump Sum	$0.00	Completed

CRC Gross Cost	$1,145,457.61
Total 406 HMP Cost	$0.00
Total Insurance Reductions	$0.00
CRC Net Cost	$1,145,457.61
Federal Share (90.00%)	$1,030,911.85
Non-Federal Share (10.00%)	$114,545.76

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 Recipient must submit its certification of the subrecipient's completion of this project, the final claim for payment, and supporting documentation within 180 days from the date that the applicant completes the scope of work, or the project deadline, whichever occurs first. FEMA reimburses Large Projects (those with costs above the large project threshold) based on the actual eligible final project costs. Therefore, during the final project reconciliation (closeout), the project may be amended to reflect the reconciliation of actual eligible costs.
- The Subrecipient provided the estimate for this PW. FEMA validated the estimate and found it to be reasonable for the work to be performed.

Insurance

Additional Information

5/27/2025

Does the Applicant have a Commercial Policy: Yes.

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

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

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

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

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

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

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

O&M Requirements

There are no Obtain and Maintain Requirements on **FAASt [Automation Program Group 31] (Distribution)**.

406 Mitigation

There is no additional mitigation information on **FAASt [Automation Program Group 31] (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.

EHP Additional Info

There is no additional environmental historical preservation on **FAASt [Automation Program Group 31] (Distribution)**.

Final Reviews

Final Review

Reviewed By Diaz Rodriguez, Sheila M. **Reviewed On** 07/01/2025 5:04 PM PDT

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** 07/15/2025 7:50 PM PDT

Review Comments

This project is full 428, after being obligated, the allocation for the corresponding 406 mitigation funds must be developed. 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 $1,145,457.61 for subaward number 108037 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	9/17/2025	$1,030,911.85	90%	Accepted	4339DRPRP01080371

Department of Homeland Security
Federal Emergency Management Agency

v0

General Info

Project #	757700 **P/W #** 108041	**Project Type**	Specialized
Project Category	F - Utilities	**Applicant**	PR Electric Power Authority (000-UA2QU-00)
Project Title	FAASt [Automation Program Group 35] (TL / 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 #1399062; FAASt [Automation Program Group 35: Bayamon Feeders: 1909-07, 1909-08, 1909-09] (Distribution)

General Facility Information:

- **Facility Type:** Power generation, transmission, and distribution facilities
- **Facility:** Automation Program Group 35
- **Facility Description:** Bayamon Feeders: 1909-07, 1909-08, 1909-09
- **Approx. Year Built:** 1980
- **Start GPS Latitude/Longitude:** [redacted]
- **End GPS Latitude/Longitude:** [redacted]

Final Scope

1399062

FAASt [Automation Program Group 35: Bayamon Feeders: 1909-07, 1909-08, 1909-09] (Distribution)

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.

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 757700 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 in the event of future hurricanes. This project is necessary for the EMS to maintain the continuity of the distribution power grid on Feeders 1909- 07, 1909-08, and 1909-09.

Key components of this project are (1) pole replacement, (2) the three-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.

(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 include 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.

Facilities	

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.

Facilities List

Name	Feeder Number	GPS Start	GPS End
Bayamon	1909-07	[redacted]	
Caguas	1909-08		
Bayamon	1909-09		

Note: Please refer to **APPENDIX C** - ***Project Considerations*** for a list of all GPS locations that this project will impact.

Project Scope of Work

Feeder 1909-07

POLE FID	Coordinates Lat, Long	Existing (Remove)	428 Replacement	Scope of work
13058039	[redacted]	(35'-C4-WOOD POLE) (AC-C1)	(45'-S5.7 GALVANIZED STEEL POLE) (CP-C1) (K-6)	• Adjacent Pole: Remove and dispose 35' C4 Wood Pole, • Replace with 45' S5.7 12-Sided Galvanized Steel Pole due to Three-Phase Recloser Installation • Remove, dispose, and replace primary framing.
13057935		(FUSE REMOVAL (QTY=3))	N/A	• Remove and dispose (3) fuses.
13058025		(FUSE REMOVAL (QTY=3))	N/A	• Remove and dispose (3) Fuses.

POLE FID	Coordinates Lat, Long	Existing (Remove)	428 Replacement	Scope of work
NEW POLE	[redacted]	NONE	(50'-S8 GALVANIZED STEEL POLE) (CP-C6- XARM) (REC-2) (K-5) (E-1-2-3) (F-1-3)	• Install new 50' S8 12-Sided Galvanized steel pole. • Install (1) Three-Phase recloser 1909-07A in radial configuration. • Install and commission the radio communication kit for the three-phase recloser. • Replace primary Cond 1/0-360ft. • Install secondary Cond 1/0 AL TPX-60ft for source ide to feed recloser. • Install (1) Anchor and (1) Down Guy.
Segment FID **1001115057**		NONE	cFCI= 3 LABOR	• Install (3) Communicating Fault Current Indicators.

Feeder 1909-08

POLE FID	Coordinates Lat, Long	Existing (Remove)	428 Replacement	Scope of work
1001780114	[redacted]	(50'-S8 GALVANIZED STEEL POLE) (CP-C1) (CP-C8) (STL-10) (K-6)	(60'-S8 GALVANIZED STEEL POLE) (REC-2-1-1) (OPS-CP-C8) (STL-10) (K-6) (E-1-2-3) (QTY=2) (F-4-2(QTY=1))	• Remove and dispose 50'-S8 concrete pole • Replace with 60' S 12-Sided galvanized st pole. • Install (1) three-phase recloser **1909-08A** radial configuration. • Install and commission radio communicatio for the three-phase recloser. • Install (1) 1kva transformer (7.62/13.2kv-120/240v) for source. • Install (2) downguys. • Install (1) anchor. • Remove, dispose, and replace framings. • Remove, dispose, and Replace streetlight.
12258899		(50'-H6 CONCRETE) (CP-C1)	(50'-S8 GALVANIZED STEEL POLE) (CP-C6-XARM) (REC-2-1 Ver. 6) (E-1-2-3(QTY=1)) (F-1-3(QTY=1))	• Remove and dispose 50'-H6 concrete pole. • Replace with 50' S8 12-sided galvanized st pole. • Install (1) three-phase recloser **1909-08B** o radial configuration. • Install and commission radio communication the three-phase recloser. • Install (1) 1kva transformer (7.62/13.20 kv-120/240v) for source side. • Install (1) Down guy. • Install (1) anchor. • Remove, dispose, and replace framings.

POLE FID	Coordinates Lat, Long	Existing (Remove)	428 Replacement	Scope of work
NEW POLE	[redacted]	NONE	(50'-S8 GALVANIZED STEEL POLE) (CP-C6XARM) (REC-2-1 Ver.6) (K-1) (E-1-2-3(QTY=1)) (F-1-3 (QTY=1)	• Install new galvanized steel pole 50' S8 12- Galvanized steel pole in location mid span*. • Install (1) three-phase recloser **1909-08C** c radial configuration. • Install and commission radio communication three-phase recloser. • Install (1) down guy and (1) anchor. • Install (1) 1 kva transformer (7.62/13.20 kv 120/240 v) for source side.
12259536		(45'-H6 CONCRETE POLE) (CP-C6-XARM) (E-1-2-3(QTY=1)) (F-1-3(QTY=1)) (STL-10) (K-7-B)	(50'-S8.5 GALVANIZED STEEL POLE) (CP-C6-XARM) (REC-2-1 Ver. 6) (STL-10) (K-7-B) (E-1-2-3(QTY=2)) (F-1-3(QTY=2))	• Remove and dispose 45'-H6 concrete pole. • Replace with 50' S8.5 12-Sided galvanized pole. • Install (1) three-phase recloser **1909-08D** o configuration. • Install and commission the radio communica for the three-phase recloser. • Install (1) 1kva transformer (7.62/13.2kv- 120/240v) for source side to feed recloser. • Install (1) new additional anchors. • Install (1) new additional Downguy. • Remove, dispose, and Replace primary and secondary framing. • Remove, dispose, and Replace streetlight. • Remove, dispose, and replace (1) downguy • Remove, dispose and replace, (1) anchor.
Segment FID **1001282162**		NONE	cFCI= 3 LABOR	• Install (3) Communicating Fault Current Indic
Segment FID **19541395**		NONE	cFCI= 3 LABOR	• Install (3) Communicating Fault Current Indic

Feeder 1909-09

POLE FID	Coordinates Lat, Long	Existing (Remove)	428 Replacement	Scope of work
NEW POLE	[redacted]	NONE	(50'-S8 GALVANIZED STEEL POLE) (CP-C6-XARM) (REC-2-1 VER.6) (E-1-2-3 (QTY=2)) (F-4-2(QTY=1))	• Install a new galvanized 50' S8 12-sided galvanized steel pole in new location mid sp • Install (1) three-phase recloser **1909-09A** • Install and commission of radio communica kit for the Three-Phase Recloser. • Install (2) 1 kva transformer (7.62/13.20 k 120/240 v) for source side and load side. • Install (2) down guys. • Install (1) Anchor.

POLE FID	Coordinates Lat, Long	Existing (Remove)	428 Replacement	Scope of work
15701350	[redacted]	(35'-H3 CONCRETE POLE) (CP-C1) (K-6 (QTY=1) (STL-10)	(50'-S8 GALVANIZED STEEL POLE) (CP-C6-XARM) (REC-2-1 VER.6) (K-6 (QTY=1)) (STL-10) (E-1-2-3(QTY=2)) (F-4-2(QTY=1))	• Remove and dispose 35' H3 Concrete pole • Replace with 50' S8 12-sided galvanized s • Install (1) three-phase recloser **1909-09B**. • Install and commission radio communicatio for the three-phase recloser. • Install (2) kva transformer (7.62/13.20 kv - 120/240v) for load and source side. • Install (2) down guys. • Install (1) Anchor. • Remove, dispose and replace framings. • Remove dispose and Replace streetlight.
NEW POLE		NONE	(60'-S10 GALVANIZED STEEL POLE) (CP-C6-XARM) (REC-2-1 VER. 6) (S-6) (E-1-2-3(QTY=2)) (K-5) (F-4-2 (QTY=1))	• Install a new 60' S10 12-Sided galvanized s pole in new location mid span*. • Install (1) Three-Phase recloser **1909-09C**. • Install and commission radio communication the three-phase recloser. • Install (1) 1 kva transformer (7.62/13.20 kv 120/240 v) for source side. • Install secondary cond 1/0 al tpx -100ft to f recloser from load side. • Install (1) anchor. • Install (2) Downguy.
15701352		(35'-H3 CONCRETE POLE) (CP-C6-XARM) (K-6 (QTY=1) (STL-10)	(50'-S8 GALVANIZED STEEL POLE) (CP-C6-XARM) (K-6 (QTY=1)) (STL-10) (E-1-2-3 (QTY=2)) (F-1-3 (QTY=2))	• Adjacent Pole: • Remove and dispose 35' H3 concrete pole • Replace with 50' S8 12-Sided galvanized s • Install (2) anchor. • Install (2) downguys • Remove, dispose, and replace framings. • Remove, dispose, and Replace streetlight.
15655696		(45'-H4 CONCRETE POLE) (CP-C1) (S-1) (K-5)	(50'-S8 GALVANIZED STEEL POLE) (CP-C6-XARM) (S-6) (K-6) (E-1-2-3(QTY=2)) (F-4-2QTY=2)	• Adjacent Pole: • Remove and dispose 45' H4 Concrete pole • Replace with 50' S8 12-Sided galvanized s • Install (2) downguy. • Install (1) Anchor. • Remove, dispose and replace framings.
15655730		(45'-H4 CONCRETE POLE) (CP-C6-XARM) (S-6) (T-2) (STL-10) (K-4)	(50'-S8 GALVANIZED STEEL POLE) (CP-C6-XARM) (S-5) (CP-B5-XARM) (T-2) (STL-10) (K-4(QTY=1))	• Adjacent Pole: • Remove and dispose 45' H4 concrete pole • Replace pole with 50' S8 12-Sided galvani steel pole. • Replace transformer for a 25Kva (7.62/13. 120/240V Stainless Steel) • Remove, dispose and replace framings. • Remove, dispose, and Replace streetlight. • Remove, dispose, and Replace 25 kva Transformer (7.62/13.2 kv -120/240 v)

POLE FID	Coordinates Lat, Long	Existing (Remove)	428 Replacement	Scope of work
7580562	[redacted]	(REMOVE FUSES (QTY=3))	(LABOR AND REPAIR)	• Remove and dispose (3) Fuses.
15706163		(REMOVE FUSES (QTY=3))	(LABOR AND REPAIR)	• Remove and dispose (3) Fuses.
15706169		(REMOVE FUSES (QTY=3))	(LABOR AND REPAIR)	• Remove and dispose (3) Fuses.
1000135621		(REMOVE FUSES (QTY=3))	(LABOR AND REPAIR)	• Remove and dispose (3) Fuses.
Segment FID 1000127106		NONE	(LABOR, cFCI) (QTY=3)	• Install (3) Communicating Fault Current Indi
Segment FID 1000135608		NONE	(LABOR, cFCI) (QTY=3)	• Install (3) Communicating Fault Current Indi
NEW POLE		NONE	(45'-S5.7 GALVANIZED STEEL POLE) (CP-C6- XARM) (ASSY 1505-C) (E-1-2-3 (QTY=1)) (F-1-3 (QTY=1))	• Install a new 45' 12-sided galvanized steel a new mid span. • Install Fuse Cutout Blade. • Install (1) Anchor and (1) downguy.

4.2 Proposed 406 Hazard Mitigation Scope of Work

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
1909-07 **1909-08**	740406 FAASt [Region 1-San Juan Group B] (Vegetation)
1909-09	723883 FAASt [Region 1 -San Juan Group A] (Vegetation)

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 LUMA's Regional Warehouse. The warehouse assigned to this project is the Sabana Liana Regional Warehouse, whose address is #654 De Diego Street, Rio Piedras, PR. The coordinates are [redacted] Refer to the 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)

PROJECT COST ESTIMATE

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	**$162,161.76**	**$-**	**$162,161.76**
MANAGEMENT	**$83,198.10**	**$-**	**$83,198.10**
Distribution Automation Group 35	**$1,658,954.19**	**$-**	**$1,658,954.19**
GENERAL CONDITIONS	**$84,122.11**	**$-**	**$84,122.11**
COST TOTALS	**$1,988,436.16**	**$-**	**$1,988,436.16**
DEDUCTIONS	**TOTAL INSURANCE PROCEEDS RECEIVED**		**$-**
	DE-OBLIGATION TO FAASt IF APPLICABLE		**$-**
FAASt ALLOCATIONS	FAAST PROJECT # 757700 428		**$1,318,515.66**
	FAAST PROJECT #757700- 406 HM		**$-**
	FAAST PROJECT # 757700 TOTAL:		**$1,318,515.66**
	FAASt A&E # 335168 - 428		**$245,359.86**
	FAASt A&E # 335168 - 406 HM		**$-**
	FAASt A&E # 335168 TOTAL		**$245,359.86**

	FAASt E&M #673691 - 428	**$424,560.64**
	FAASt E&M #673691 - 406 HM	**$-**
	FAASt E&M #673691 TOTAL	**$424,560.64**

Work To Be completed: $$1,988,436.16

A&E Deduction (Global A&E FAASt# 335168): $245,359.86

E&M Deduction (FAASt# 673691): $424,560.64

Project Total Cost (FAASt Project# 805521): $1,318,515.66

Project Notes:

1. Refer to detailed SOW provided in document "*757700-DR4339PR- DSOW Group 35. Rev. 1.pdf*.
2. Refer to detailed cost estimate summary provided in document "757700-DR4339PR-Cost Estimate-Group 35. Rev. 1.xlsx".
3. This project is part of a FAAST project, please reference project 136271.
4. The A&E cost included in this project will be reduced and obligated under 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.
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 35 Automation FAASt 757700.
6. For reference documents Appendix A thru D, see files labeled:
    a. *757700-DR4339PR-APPENDIX A - Initial Scope of Work .pdf*
    b. *757700-DR4339PR-APPENDIX B - LUMA Project Cost Estimate.xlsx*
    c. *757700-DR4339PR-APPENDIX C - Project Considerations.pdf*
    d. *757700-DR4339PR-APPENDIX D - LUMA's Active Project.pdf*

406 HMP Scope

406 Hazard Mitigation measures were not requested by the sub-applicant for this project in Version 0. However, there may be mitigation opportunities that will apply to Version 1 of the Permanent Work Project. The project is ready for Insurance completion.

Cost

Code	Quantity	Unit	Total Cost	Section
9001	1	Lump Sum	$1,988,436.16	Uncompleted
3510	1	Lump Sum	($245,359.86)	Uncompleted
9001	1	Lump Sum	($424,560.64)	Uncompleted
9201	1	Lump Sum	$0.00	Completed

CRC Gross Cost	$1,318,515.66
Total 406 HMP Cost	$0.00
Total Insurance Reductions	$0.00
CRC Net Cost	$1,318,515.66
Federal Share (90.00%)	$1,186,664.10
Non-Federal Share (10.00%)	$131,851.56

Subgrant Conditions

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

Insurance

Additional Information

6/4/2025

Does the Applicant have a Commercial Policy: Yes.

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

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

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

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

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

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

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

O&M Requirements

There are no Obtain and Maintain Requirements on **FAASt [Automation Program Group 35] (TL / Distribution)**.

406 Mitigation

There is no additional mitigation information on **FAASt [Automation Program Group 35] (TL / Distribution)**.

Environmental Historical Preservation

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

EHP Conditions

- Any change to the approved scope of work will require re-evaluation for compliance with NEPA and other Laws and Executive Orders.
- This review does not address all federal, state and local requirements. Acceptance of federal funding requires recipient to comply with all federal, state and local laws. Failure to obtain all appropriate federal, state and local environmental permits and clearances may jeopardize funding.
- If ground disturbing activities occur during construction, applicant will monitor ground disturbance and if any potential archaeological resources are discovered, will immediately cease construction in that area and notify the State and FEMA.
- The Applicant shall handle, manage, and dispose of all types of hazardous waste in accordance with requirements of local, state, and federal laws, regulations, and ordinances. In addition, the Applicant shall ensure that all debris is separated and disposed of in a manner consistent with the PR DNER guidelines at a permitted site or landfill. The contractor/applicant will be responsible for the proper disposition of construction debris in authorized landfills providing the name, location, coordinates and permits of the facility to the corresponding authorities. Unusable equipment, debris, white goods, scrap metal any other material shall be disposed in approved manner and location. In the event significant items are discovered during the implementation or development of the project the Applicant shall handle, manage and dispose petroleum products, hazardous materials and toxic waste in accordance with the requirements of the local and federal agencies. Noncompliance with these requirements may jeopardize receipt of federal funds. If transformers: The applicant is responsible to ensure damaged transformers are handled, managed, and disposed of in accordance with all federal and state laws and requirements. Downed electrical equipment may contain toxic and hazardous materials, such as polychlorinated biphenyls (PCBs), and may spill these materials if a rupture occurs. Applicant is responsible for screening transformers that do or may contain PCBs and the area where any related spill occurred. The applicant is then

responsible to handle, manage, dispose of, or recycle damaged equipment and contaminated soil as appropriate. Where possible, temporary measures should be implemented to prevent, treat, or contain further releases or mitigate the migration of PCBs into the environment. If damaged equipment or material storage containers must be stored temporarily, containers should be placed on hardened surface areas, such as a concrete or an asphalt for no more than 90 days. Excavated contaminated material should be disposed of in accordance with federal and state laws and requirements.

- 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 CONSTRUCTION MANAGEMENT PLAN [757700] FAASt [Automation Program Group 35] (TL / Distribution) 2 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.
- If there are any further changes to the SOW, including any increase in the extent of ground disturbance, the applicant must notify FEMA beforehand, prior to engaging in further activities not within the current SOW.

EHP Additional Info

There is no additional environmental historical preservation on **FAASt [Automation Program Group 35] (TL / Distribution)**.

Final Reviews

Final Review

Reviewed By Diaz Rodriguez, Sheila M. **Reviewed On** 07/03/2025 12:37 PM PDT

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** 07/15/2025 7:54 PM PDT

Review Comments

This project is full 428, after being obligated, the allocation for the corresponding 406 mitigation funds must be developed. 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 $1,318,515.66 for subaward number 108041 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	9/17/2025	$1,186,664.10	90%	Accepted	4339DRPRP01080411

Department of Homeland Security
Federal Emergency Management Agency

v0

General Info

Project #	797148 **P/W #** 108074	**Project Type**	Specialized
Project Category	F - Utilities	**Applicant**	PR Electric Power Authority (000-UA2QU-00)
Project Title	FAASt [Feeder Rebuild # 8101-03] (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 #1414783; FAASt [Distribution Feeder Rebuild # 8101-03]

General Facility Information:

- **Facility Type:** Power generation, transmission, and distribution facilities
- **Facility:** Distribution Feeder Rebuild # 8101-03
- **Facility Description:** The facility included: poles and structures (including their foundations), framing and insulators, load break switches (manual and automated), capacitor banks, voltage regulators, transformers (including lightning arresters and fuse cut-outs), conductors, guy wires, anchoring, grounding assemblies, underground cable, underground cable systems, and fault interrupting equipment (fuses, reclosers, and sectionalizers).
- **Approx. Year Built:** 1980
- **GPS Latitude/Longitude:** [redacted]

Final Scope

1414783 **FAASt [Distribution Feeder Rebuild # 8101-03]**

INTRODUCTION

This document contains the Detailed Scope of Work (DSOW) for the project 797148 Distribution Feeder Rebuild #8101-03 Project. The document provides a detailed description of the project, including scope, schedule, cost estimates and project considerations. LUMA Energy is seeking approval from COR3 and FEMA for project funding to repair, restore, or replace the eligible facilities under DR-4339-PR Public Assistance.

LUMA submits this Detailed Scope of Work (DSOW) pursuant to the Transmission and Distribution Operations & Maintenance Agreement between the Puerto Rico Electric Power Authority ("PREPA"), the Puerto Rico Public-Private Partnerships Authority ("P3A"), and LUMA Energy, and in accordance with the Consent to Federal Funding Letter issued by PREPA and P3A and provided herein as LUMA Vendor Directory List included on the Applicant Event Profile in Grants Portal, which collectively provides the necessary consent for LUMA Energy, as agent of PREPA, to execute federally-funded projects and seek reimbursement from FEMA as it relates to the Transmission and Distribution (“T&D”) System.

FACILITIES

Facilities Description

Feeder 8101-03 serves suburban and rural areas of the municipality of Utuado. Feeder 8101-03 is approximately2.98 miles of three-phase overhead distribution conductor. During the design process, LUMA decided that a 2.11-mile segment of the Feeder, that is hung from support structures for the 38kV line TL2400 (i.e., underbuilt), would be removed from this project and be repaired as part of the TL2400 restoration project (FAASt. No. 547251). Therefore, this project is a 0.87-mile project split into two segments, and the segment that is convergent with TL 2400 is outside the scope of this project.

The First Segment is the western point of the project (see table below with GPS Start coordinates [redacted]) (please refer to ***Appendix C- Design*** and ***Appendix B- Structural Pole Analysis*** for a list of all GPS locations to be impacted by this project) and travels east following road PR-111 for approximately 0.08 miles. At that point the project is bisected by the segment of the feeder that is convergent with TL 2400 (see table below with GPS End coordinates [redacted]). The second segment of the project resumes with the installation of a new conductor from a pole installed in FAASt No. 547251 (see table below with GS Start coordinates [redacted]) to a pole within this project and continues east following road PR-111 for 0.79 miles until it ends where it converges with TL-2400 (see table below with GPS End coordinates [redacted]).

GPS Coordinates for the start and end points of the electrical feeder backbone (BB) project are noted in the table below.This existing distribution line consists of two segments extending for approximately 0.87 miles.

Line Segment	Line Number	GPS Start	GPS End	Concrete	Wood	Steel	Voltage (k
First segment	8101-03	[redacted]		3	0	0	4.16
Second segment	8101-03			19	0	1	4.16

The table below lists the pole that is excluded from this project because it was installed through the Fiona Emergency repairs with a pending Fiona Permanent Work project to bring to codes and standards:

Pole FID	Disaster Related	Latitude	Longitude	Scope of Work Under Fior
16429130	DR-4671-PR	[redacted]		Replace pole with 50 S8, insulators, fi arm and arrestors, Down Guys and anchors, streetlight and reuse transfor 25kVA

For the details on the work to be performed on this FID 16429130 under this project, please refer to section 4.1.

PROJECT SCOPE OF WORK

This section contains the proposed SOW for the project, including work to repair PREPA's disaster- damaged facilities for which LUMA will request funding under PREPA's § 428 fixed cost subaward (this workand funding is referred to herein as § 428 work or § 428 funding). For specific details of the proposed

reconstruction of the feeder, please refer to ***Appendix C – Design*** and ***Appendix D – Voltage Improvement and Additional Protection Devices***.

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

Proposed 428 Public Assistance Scope of Work

This project includes the removal and replacement of twenty-two (22) existing poles, the installation of six new poles and additional work on three existing poles. One of the poles to remain is FID 16429130, which is referenced in the second table of Section 3.1 above that includes work already performed, and part F of section 4.1 below that includes to be performed under this scope of work. Part F of section 4.1 below also includes work to be performed under this scope of work on FIDs 12247539 and 20950106, which are the other two poles to remain. Two of the poles to be replaced are part of the voltage improvements and additional protection devices work order. The tables below summarize the structure count of the work in this project backbone for the distribution feeder, grouped into the following categories:

A. **Poles**

Pole Description	Remove and Replace	New Installation
Steel galvanized, 12-sided, tapered shaft, 50' S8.5	**18**	6
Steel galvanized, 12-sided, tapered shaft, 60' S10	**4**	**0**
Sub-Total	**22**	**6**
Total	**28**	

B. Concrete Bases

Concrete Base Description	Diameter (in.)	Length (ft.)	Amount	Volume (CY)
Precast Concrete Base for 50-S8.5, 55-S8.5, 60-S8.5, and 65-S8.5	40	14.5	6	20.1

C. Stainless Steel Transformers

Interconnection Voltage 13.2kV/Power Transformer Single Configuration		
37.5 kVA	**50 kVA**	**75kVA**
8	4	1

D. Guy Wire/ Anchors

Guy Wire and Anchor Distribution		
Description	**Unit**	**Quantity**
Guy Wires 1/2" & Anchors	**ea.**	38

E. Conductor

Type of Conductor	Unit	Quantity
556 ACSR Conductor	**C.L.F.**	71.78

ACSR-GA15kV #556-0108	**C.L.F.**	146.25
3/0 AWG	**C.L.F.**	7.39
1/0 TPX	**C.L.F.**	43.29

F. Poles to remain

Pole FID	Description
16429130	Remove existing conductor and replace with new 556 ACSR conductor and replace transformer with 37.5kVA
12247539	Remove Existing conductor and replace with new 3/0 ACSR conductor
20950106	Remove Existing conductor and replace with new 3/0 ACSR conductor

Distribution Line Replacement:

A. Install six (6) additional poles to comply with structure loading cases along the feeder backbone. The pole quantities are described in part A of section 4.1, above.
B. Remove existing transformers and replace them with new stainless-steel units with their respective capacity. The transformer quantities are described in part C of section 4.1, above.
C. Remove eight (8) 25kVA transformers, four (4) 37.5kVA transformers, four (4) 50kVA transformers, and two (2) 100 kVA existing transformers (a total of eighteen (18)) and replace them with new 37.5kVA, 50kVA and 75kVA transformers. The transformers are sized to comply with the current consensus-based Codes and Standards, the OH Electrical Distribution System Manual 4301.001Version 4. The transformer quantities are described in part C of section 4.1, above. For the locations of the existing transformers that will be removed, refer to **Appendix B – Structural Pole Analysis in Removal Pole Schedule Tap.**
D. Remove existing conductors and replace with new conductors per the LUMA specification. The conductor quantities are described in part E of section 4.1, above.
E. Remove existing poles and replace with new poles with streetlighting, including six (6) new luminaires.

F. Install two new Capacitor banks in two different laterals of the feeder. Please refer to **Appendix D**

- Voltage Improvement and Additional Protection Devices

G. Remove and replace all distribution equipment, including disconnect switches, fuse cutouts, surge arresters, pole insulators, suspension insulators, cross arms, service drops, secondary lines, tap conductors (first span), in compliance with LUMA Overhead Electrical Distribution System manual included on the applicant Event Profile in Grants portal.
H. Remove and dispose of the existing distribution lines facilities with their related components.
I. All the work to be completed will be in the current utility easement.

J. The replacement of individual structures and components will follow the design methodology per the Project Design Criteria and will conform to LUMA codes and standards applicable to the infrastructure.
K. Within the area of the backbone feeder there will be repair work to improve voltage and add protection devices as part of the scope of work. Please refer to **Appendix D - Voltage Improvement and Additional Protection Devices**.

Pole Replacement:

A. Remove existing poles and hardware and replace with new poles and hardware within 10 feet of the same location.

B. Depths of the poles to be erected are provided in **Appendix C – Design**.

C. Install new concrete foundation bases in compliance with Distribution Construction Standards (Concrete Base standard) included in the Applicant Event Profile in Grants Portal. The maximum auger width used is 48". The concrete foundation base quantities are described in part B of section 4.1, above.
D. Install new guys and anchors in compliance with LUMA Overhead Electrical Distribution System included in the Applicant Event Profile in Grants Portal. The new guys and anchor quantities are described in part D of section 4.1, above.

4.2 Scope Notes

1) Miscellaneous Civil Earthworks:

i) Prior to construction activities, erosion control blankets as temporary **erosion control and protection measures** to mitigate erosion or environmental risks will be installed.

2) Water Quality

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

3) List of Equipment to be used

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

iii) All the above equipment will adhere to Tier 4 EPA Emission Standards where applicable.

4) Fill, Gravel, Sand, etc.:

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

5) Staging Area:

The main staging area will be in Utuado Substation ([redacted]). Additional temporarystaging areas are located at ([redacted] and ([redacted]). Refer to ***Appendix E – Staging Area*** for locations with detailed information.

6) Material Disposal:

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

7) Transformer:

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

8) Ground disturbance:

At this stage of design, details on location of ground disturbance and dimensions thereof are not available. This will be reported to FEMA immediately it is established by design.

9) Vegetation Management:

i) Vegetation clearance will be performed solely to extent that it allows crews to conduct work and will be limited to 10ft radius surroundings the surface of the pole, but to exceed the width of the right-of way for the exclusive purpose of gaining access to the pole to conduct repairs. The costs related to Vegetation clearance procedures are in project 727540 FAASt Region Arecibo Municipality Utuado Group C High Density (Vegetation). The vegetation removal process will be managed according to federal and state regulations.

10) Access Roads

No access roads are needed. Poles can be accessed from PR-111 and municipal roads.

4.1 Proposed 406 Hazard Mitigation Grant Program Scope of Work

406 Hazard Mitigation Proposal
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.

TYPE OF PROJECT

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 (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 project designation is considered initial and is based on currently available information. The type of project designation may be revised based on the results of the completed preliminary A&E work.

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.

PROJECT SCHEDULE

Milestone	Target Date
FEMA Obligation of Funds	December 2025
Start Procurement of Long-Lead Items	January 2024
Start Environmental	December 2025
Start Permitting	December 2025
Start Detailed Design Engineering	November 2023
Start Project Construction	April 2026
In-Service-Date	**August 2026**

Note: This schedule is subject to change based on various factors including outage and crew availability.

PROJECT COST ESTIMATE (PCE)

The estimated costs (compliant with Class 3 Accuracy +/-30%) to complete the project are captured in the table(s) below. The cost estimate was developed utilizing preliminary Architectural and Engineering design information and may be subject to change. LUMA has allocated 10% of the project cost to mitigate potential known risks. For more details refer to ***APPENDIX F – LUMA LPCE.***

Cost Element	428	406	PROJECT TOTAL
PLANNING	**$ 642,113.55**	**$ -**	**$ 642,113.55**
(A&E) Permitting and Assessments	$ 20,237.55	$ -	$ 20,237.55
(A&E) Environmental Documentation & Management	$ 252,100.00	$ -	$ 252,100.00
(A&E) Engineering Services & Design	$ 369,776.00	$ -	$ 369,776.00
MANAGEMENT	**$ 135,733.69**	**$ -**	**$ 135,733.69**
(A&E) Project Management	$ 38,198.98	$ -	$ 38,198.98
(A&E) Construction Management	$ 50,931.97	$ -	$ 50,931.97
(A&E) Contracting, Procurement & Contract Administration	$ 21,136.76	$ -	$ 21,136.76
(A&E) Projects Controls (Scheduling, Estimating, Support, Cost Control, Risk, Document Control & Reporting)	$ 25,465.98	$ -	$ 25,465.98
Arecibo Short Term Group 2	**$ 2,486,050.40**	**$ -**	**$ 2,486,050.40**
Arecibo Short Term Group 2 Feeder 8101-03, Project ID: 10134, FEMA Project Name: Arecibo Short Term Group 2 Feeder 8101-03 Rev-2, FAAST#: 797148, material, labor and equipment.	$ 2,044,197.11	$ -	$ 2,044,197.11
Start Up/Commissioning	$ 30,662.95	$ -	$ 30,662.95
Construction Trespass	$ 10,220.98	$ -	$ 10,220.98
Transportation Expenses	$ 10,220.98	$ -	$ 10,220.98

Security (Field 24 hr)	$ 18,397.77	$ -	$ 18,397.77
Insurance	$ 41,292.78	$ -	$ 41,292.78
Construction Contingency	$ 254,659.87	$ -	$ 254,659.87
Escalation	$ 76,397.96	$ -	$ 76,397.96
GENERAL CONDITIONS	**$ 119,268.59**	**$ -**	**$ 119,268.59**
Sales Tax	$ 17,058.74	$ -	$ 17,058.74
Municipal Construction Tax	$ 102,209.85	$ -	$ 102,209.85
COST TOTALS	**$ 3,383,166.23**	**$ -**	**$ 3,383,166.23**
DEDUCTIONS	**TOTAL INSURANCE PROCEEDS RECEIVED**		**$ -**
	DE-OBLIGATION TO FAASt IF APPLICABLE		**$ -**
FAASt ALLOCATIONS	FAAST PROJECT # 797148 - 428		**$ 2,359,895.63**
	FAAST PROJECT # 797148 - 406 HM		**$ -**
	FAAST PROJECT # 797148 TOTAL:		**$ 2,359,895.63**
	FAASt A&E # 335168 - 428		**$ 777,847.24**
	FAASt A&E # 335168 - 406 HM		**$ -**
	FAASt A&E # 335168 TOTAL		**$ 777,847.24**

	FAASt E&M #673691 - 428	**$ 245,423.36**
	FAASt E&M #673691 - 406 HM	**$ -**
	FAASt E&M #673691 TOTAL	**$ 245,423.36**

Project Cost Estimate Notes

Work To Be completed: $3,383,166.23

A&E Deduction (Global A&E FAASt# 335168): $777,847.24

E&M Deduction (FAASt# 673691): $245,423.36

Project Total Cost (FAASt Project# 136271): $2,359,895.63

Project Notes:

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

2. For additional information of detailed SOW please refer to document labeled:797148-DR4339PR-Feeder 8101-03 -DETAILED SCOPE OF WORK FULL 428 - REV3.pdf

3. For detailed Cost Estimate please refer to document labeled: 797148-DR4339PR-[Feeder Rebuild # 8101-03]-APPENDIX F- LUMA LPCE-Rev. 2.xlsx

4. A&E cost included in this project will be reduced from this project and obligated under the FAASt Project #335168, A&E, as show in in the table above. The A&E project was obligated to track and account for cost associated with individual FAASt projects.

5. Equipment and material costs included in this project will be reduced from this project and obligated under FAASt Project #673691, Equipment and Materials, as shown in the table above. Only the base cost of equipment and/or material will be reduced from this project (not labor). All costs associated with Planning, Management, General Conditions, and Contingencies will remain in this project.

ATTACHMENTS

APPENDIX A – Location Map

APPENDIX B – Structural Pole Analysis

APPENDIX C – Design

APPENDIX D – Voltage Improvement and Additional Protection Devices

APPENDIX E – Staging Area

APPENDIX F – LUMA LPCE

APPENDIX G – Proposed Design KMZ

APPENDIX H – Project Considerations

406 HMP Scope

406 Hazard Mitigation measures were not requested by the subrecipient for this project in Version 0. However, the mitigation opportunities will be applied in a future version (V1) of the Permanent Work Project. The project is ready for Insurance completion.

Cost

Code	Quantity	Unit	Total Cost	Section
3510	1	Lump Sum	($777,847.24)	Uncompleted
9001	1	Lump Sum	$3,383,166.23	Uncompleted
9001	1	Lump Sum	($245,423.36)	Uncompleted
9201	1	Lump Sum	$0.00	Completed

CRC Gross Cost	$2,359,895.63
Total 406 HMP Cost	$0.00
Total Insurance Reductions	$0.00
CRC Net Cost	$2,359,895.63
Federal Share (90.00%)	$2,123,906.07
Non-Federal Share (10.00%)	$235,989.56

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 [Feeder Rebuild # 8101-03] (Distribution)**.

406 Mitigation

There is no additional mitigation information on **FAASt [Feeder Rebuild # 8101-03] (Distribution)**.

Environmental Historical Preservation

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

EHP Conditions

- Any change to the approved scope of work will require re-evaluation for compliance with NEPA and other Laws and Executive Orders.
- This review does not address all federal, state and local requirements. Acceptance of federal funding requires recipient to comply with all federal, state and local laws. Failure to obtain all appropriate federal, state and local environmental permits and clearances may jeopardize funding.
- If ground disturbing activities occur during construction, applicant will monitor ground disturbance and if any potential archaeological resources are discovered, will immediately cease construction in that area and notify the State and FEMA.
- All borrow or fill material must come from pre-existing stockpiles, material reclaimed from maintained roadside ditches (provided the designed width or depth of the ditch is not increased), or commercially procured material from a source existing prior to the event. For any FEMA funded project requiring the use of a non-commercial source or a commercial source that was not permitted to operate prior to the event (e.g., a new pit, agricultural fields, road ROWs, etc.) in whole or in part, regardless of cost, the Applicant must notify FEMA and the Recipient prior to extracting material. FEMA must review the source for compliance with all applicable federal environmental planning and historic preservation laws and executive orders prior to a Subrecipient or their contractor beginning to borrow extraction. Consultation and regulatory permitting may be required. Non-compliance with this requirement may jeopardize receipt of federal funding. Documentation of borrow sources utilized is required at close-out and must include fill type (private, commercial, etc.), name, fill site GPS coordinates (not of the company/governmental office), address, and type of mater. See further conditions in the attached Construction Management Plan (CMP).

- 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 Jose Cruz Burgos, Endangered Species Coordinator, and can be contacted at: -Mobile: 305-304-1386 -Office phone: 786-244-0081 -Office Direct Line: 939-320-3120 -Email: Caribbean_es@fws.gov or jose_cruz-burgos@fws.gov
- Puerto Rican harlequin butterfly 34. 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: o Clearly mark the host plant with flagging tape. o Establish a 10-meter (32-foot) buffer zone around the bush for its protection. o 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. o 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. i) For questions regarding the Puerto Rican harlequin butterfly, the Point of Contacts are: o 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 o Carlos Pacheco, Fish and Wildlife Biologist -Mobile: 786-847-5951 -Office Direct Line: 939-320-3113 -Email: carlos_pacheco@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.

- 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.
- Puerto Rican Boa 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.
- Puerto Rican parrot and Puerto Rican broad-winged hawk 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 Jose 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 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.
- If there are any further changes to the SOW, including any increase in the extent of ground disturbance, the applicant must notify FEMA beforehand, prior to engaging in further activities not within the current SOW.

EHP Additional Info

There is no additional environmental historical preservation on **FAASt [Feeder Rebuild # 8101-03] (Distribution)**.

Final Reviews

Final Review

Reviewed By LEFRANC-GARCIA, CARLOS L. **Reviewed On** 08/07/2025 7:06 PM PDT

Review Comments

Project reviewed, found eligible and reasonable in 06.18.2025. Project was sent back by error. No changes to the SOW or Cost. This project will administratively move forward to the LPN queue.

Recipient Review

Reviewed By LEFRANC-GARCIA, CARLOS L. **Reviewed On** 08/07/2025 7:06 PM PDT

Review Comments

Project reviewed, found eligible and reasonable in 06.18.2025. Project was sent back by error. No changes to the SOW or Cost. This project will administratively move forward to the LPN queue.

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 $2,359,895.63 for subaward number 108074 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	9/17/2025	$2,123,906.07	90%	Accepted	4339DRPRP01080741

Department of Homeland Security
Federal Emergency Management Agency

v0

General Info

Project #	798275 **P/W #** 108075	**Project Type**	Specialized
Project Category	F - Utilities	**Applicant**	PR Electric Power Authority (000-UA2QU-00)
Project Title	FAASt [Feeder Rebuild # 1620-02] (Distribution)	**Event**	4339DR-PR (4339DR)
Project Size	Large	**Declaration Date**	9/20/2017
Activity Completion Date	9/20/2027	**Incident Start Date**	9/17/2017
		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 #1484187; FAASt [Distribution Feeder Rebuild # 1620-02]

General Facility Information:

- **Facility Type:** Power generation, transmission, and distribution facilities
- **Facility:** Distribution Feeder Rebuild # 1620-02
- **Facility Description:** The facility included: poles and structures (including their foundations), framing and insulators, load break switches (manual and automated), capacitor banks, voltage regulators, transformers (including lightning arresters and fuse cut-outs), conductors, guy wires, anchoring, grounding assemblies, underground cable, underground cable systems, and fault interrupting equipment (fuses, reclosers, and sectionalizers).
- **Approx. Year Built:** 1980
- **GPS Latitude/Longitude:** [redacted]

Final Scope

1484187 **FAASt [Distribution Feeder Rebuild # 1620-02]**

1.0 OVERVIEW:

For teh Overview section see file: 798275-DR4339PR-Distribution Feeder Rebuild 1620-02 Detail Scope Of Work. Rev. 2.pdf"

2.0 INTRODUCTION:

This document contains the Detailed Scope of Work (SOW) for project 798275 Distribution Feeder Rebuild # 1620-02. The document provides a detailed description of the project, including scope, schedule, cost estimates, and project considerations. LUMA Energy is seeking approval from COR3 and FEMA for project funding to repair, restore, or replace the eligible facilities under DR-4339-PR Public Assistance.

LUMA submits this Detailed SOW pursuant to the Transmission and Distribution Operations & Maintenance Agreement

between the Puerto Rico Electric Power Authority ("PREPA"), the Puerto Rico Public-Private Partnerships Authority ("P3A") and LUMA Energy, and in accordance with the Consent to Federal Funding Letter issued by PREPA and P3A included on the Applicant Event Profile in Grants Portal, 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 (T&D) system submitted to FEMA execute federally-funded projects and seek reimbursement from FEMA as it relates to the transmission and distribution (T&D) system.

3.0 FACILITIES:

3.1 Facilities Description

Feeder 1620-02 is located in San Juan, Puerto Rico.It has 1.76 circuit miles of 3-phase overhead distribution lines, which start at Parque Escorial substation ([redacted]. The feeder is subdivided into the following categories: central line, three-phase laterals, and one- or two-phase laterals. GPS Coordinates for the start and end point of the electrical feeder backbone (BB) project are noted within the table in section 3.2, below. The proposed work to rebuild this feeder is a subset of the scope of work included in the San Juan Region Feeders Project in the PREPA 10-Year Infrastructure Plan. For more details, please refer to **Appendix A – Pole Schedule**.

3.2 Facilities List

The electrical feeder 1620-02 serves 3,718 customers along a route to various locations.

Feeder Number	Feeder Name	Customers Counts	GPS Start	GPS End	Phase	Voltage Level (kV)	Date of Construc
1620-02	Parque Escorial	3718	[redacted]		3Phase	13.2KV	More than 2 years

Note: Please refer to **Appendix B - Feeder Location Map**.

LUMA will install 95 new poles along the feeder backbone. All new poles will be located within the easement and are listed in **Appendix A – Pole Schedule**, which includes the pole FID, coordinates, type of pole to be installed, type of pole and hardware to be removed, and whether it has a concrete foundation.

Pole FIDs 13519708 and 13520903

Pole FIDs 13519708 and 13520903 were removed and replaced as part of D-Pole FAASt Project 673844. This DSOW does not include scope or costs associated with that previously funded repair and replacement work. For details on the additional work on these FIDs, please refer to section 4.1.

Pole FID	Program	FASSt	Latitude	Longitude	D-Pole Scope of Work in FAAS 673844
13519708	D-Pole and Conductor Repair	673844	[redacted]		Replace pole with 50 S8, Cross arms, insulators associated hardware.
13520903	D-Pole and Conductor Repair	673844	[redacted]		eplace pole with 50 S8, Cross arms, nsulators and all associated hardware.

For detailed information, please refer to **Appendix A – Pole Schedule**.

4.0 PROJECT SCOPE OF WORK:

This section contains the proposed SOW for the project, including work to repair PREPA's disaster- damaged facilities for which LUMA will request funding under PREPA's § 428 fixed cost subaward (this work and funding is referred to herein as § 428 work or § 428 funding) and proposed hazard mitigation measures for which LUMA will request funding not yet included in the subaward, if any (this work and funding is referred to herein as § 406 hazard mitigation work). For specific details of the proposed reconstruction of the feeder please refer to **Appendix A – Pole Schedule** and **Appendix F - Proposed Design.**

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

4.1 Proposed § 428 Public Assistance Scope of Work

This project includes the removal and replacement of eighty-two (82) existing poles, the installation of thirteen (13) new poles and perform work in two (2) existing poles to comply with code and standards. The tables below summarize the structure count of the work in this project backbone for the distribution feeder, grouped into the following categories:

Poles to be removed and replaced

Description	Quantity (Ea.)
Electrical utility pole, steel galvanized, 12-sided, tapered shaft, 50' S-8.5	29
Electrical utility pole, steel galvanized, 12-sided, tapered shaft, 50' S-10	18
Electrical utility pole, steel galvanized, 12-sided, tapered shaft, 55' S-8.5	3
Electrical utility pole, steel galvanized, 12-sided, tapered shaft, 55' S-10	4
Electrical utility pole, steel galvanized, 12-sided, tapered shaft, 60' S-8.5	1
Electrical utility pole, steel galvanized, 12-sided, tapered shaft, 60' S-10	5
Electrical utility pole, steel galvanized, 12-sided, tapered shaft, 60' S-13	21
Electrical utility pole, steel galvanized, 12-sided, tapered shaft, 73' S-35	1
Total	82

New poles to be installed

Description	Quantity (Ea.)
Electrical utility pole, steel galvanized, 12-sided, tapered shaft, 50' S-8.5	5
Electrical utility pole, steel galvanized, 12-sided, tapered shaft, 50' S-10	3
Electrical utility pole, steel galvanized, 12-sided, tapered shaft, 55' S-8.5	1
Electrical utility pole, steel galvanized, 12-sided, tapered shaft, 55' S-10	1
Electrical utility pole, steel galvanized, 12-sided, tapered shaft, 60' S-8.5	1
Electrical utility pole, steel galvanized, 12-sided, tapered shaft, 60' S-13	2
Total	**13**

Pole FIDs 13519708 and 13520903

As mentioned above, Pole FIDs 13519708 and 13520903 were removed and replaced as part of D-Pole FAASProject 673844. This DSOW does not include scope or costs associated with that previously funded repair and replacement work. The scope of work included in this Project 798275 for these two poles is limited to the following which is not duplicated in FAASt Project 673844.

FID	Description
13519708	Remove conductor and replace with new 556 ACSR conductor
13520903	Install five (5) new guys wires and three (3) new anchors on the existing pole and remove conductor and replace with new 556 ACSR conductor

Concrete Bases

Concrete Base Description	Diameter (in.)	Length (ft.)	Amount of Precast Foundation	Volume (C
Precast Concrete Base for 50-S8.5, 55-S8.5, 60-S8.5, and 65-S8.5	40	14.5	7	23.45
Precast Concrete Base for 50-S10, 55-S10, 60'-S10, 60-S13, and 65-S10	48	16	21	128.31
Total			**28**	**151.76**

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

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

Steel Galvanized Transformers

Steel Galvanized Transformers	Quantity (Ea.)
37.5 KVA	1
50 KVA	23
75 KVA	2
Total	**26**

Guys Wires / Anchoring

Description	Quantity (Ea.)
Guy Wires 1/2"	119
Expansion Anchor	65

Conductor

Description	Quantity (C.L.F)
New Construction > Conductor > 556 ACSR Conductor	409.65
New Construction > Conductor > 394.5 AAAC Spacer	7.67
New Construction > Conductor > 3/0 Conductor	46.04

Distribution Line Replacement:

- Install thirteen (13) additional poles to comply with structure loading cases along the feeder backbone. The pole quantities are summarized in section 4.1, above.
- Remove twenty-six (26) existing transformers and replace them with one (1) new 37.5KVA, twenty-three (23) 50KVA and two (2) 75KVA transformers. The transformer quantities are summarized in section 4.1, above. The transformers are sized to comply current codes and standards (C&S) - 4301.001 Overhead Electrical Distribution System Manual V04 for replacement and design.

- Remove 455.69 C.L.F of existing conductors and replace them with 409.65 C.L.F. of 556 ACSR,

  7.67 C.L.F. of 394.5 AAAC Spacer, and 46.04 C.L.F of 3/0 ACSR conductors per the LUMA specification. The conductor quantities to be installed are summarized in section 4.1, above.

- Remove twenty-three (23) halogen lighting on 3 phase primary poles and replace them with a new LED luminaire. Transfer existing LED lighting to new poles. For additional information, please refer to **Appendix A – Pole Schedule.** The luminaries included in this DSOW to be replaced have been verified with the following Streetlight Projects to avoid any duplication of benefits:
  - Carolina Municipality:
    - P678789- Part 1- Zone 05
  - San Juan Municipality:
    - P666894- Part 1- Zone 41 & 42
    - P737712-Part 3- Zone 59
- Remove and replace all distribution equipment including disconnect switches (16), fuse cutout (85), surge arrester (262), crossarms (162), pole insulators (566), suspension insulators (356). Transfer the service drop and the secondary lines. Replace the conductors in compliance with LUMA Overhead Electrical Distribution System Manual included on the Applicant Event Profile in Grants Portal.

- Ground disturbance will occur during the project lifecycle. For additional information, please refer to **Appendix C – Project Considerations.**
- Remove and dispose of the existing distribution line facilities with their related components.

- All the work to be completed will be in the current utility and public easement. Poles with easement encroachments are included as part of the engineering design.

Pole Replacement:

- Remove existing poles and hardware and replace with new poles and hardware within 10 feet of the same location.
- Depths of the poles to be erected are provided in **Appendix C – Project Considerations**.
- Install twenty-eight (28) new concrete foundation bases in compliance with LUMA Overhead Electrical Distribution System Manual included on the Applicant Event Profile in Grants Portal. The maximum auger width used is 48". The concrete foundation types and quantities are summarized in section 4.1, above.
- Install one hundred nineteen (119) new guys and sixty-five (65) expansion anchors in compliance with LUMA Overhead Electrical Distribution System Manual included on the Applicant Event Profile in Grants Portal. The guy and anchors quantities are summarized in section 4.1, above.
- All work will be performed within the electrical easement.

4.2 Detail Description for Planned Field Work Scope Notes

A. Material Disposal:

- Chemical wastes will be handled and disposed of these materials in authorized facilities in accordance with applicable local regulations.
- The types of debris that will be removed from the project are luminaires, pole arms, photocells, wiring, transformers, concrete, metal scrap, steel, wood, domestic and construction waste. The debris will be separated and taken to an authorized waste disposal facility in compliance with applicable local regulations.

B. Transformer:

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

C. Staging Area:

- The proposed **staging area** will be located at BO Sabana Llana 284 A Calle 6, San Juan PR 00926. Coordinates [redacted]. Refer to **Appendix D – Staging Area**.

D. Fill, Gravel, Sand, etc.:

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

E. 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, Filtering Machine and Flatbed platform.

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

F. Vegetation:

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

G. Access Roads:

Poles are close to the roads and are site-accessible with existing access points at the established locations. The construction of access roads is not required for this scope of work. Refer to **APPENDIX C – Project Considerations** in column H, "Site Accessible."

H. Ground disturbance:

Location and depth of poles and concrete bases to be installed are provided in **Appendix C – Project Considerations**.

8.0 PROJECT COST ESTIMATE (PCE)

The estimated costs (compliant with Class 3 Accuracy +/-30%) to complete the project are captured in the table(s) below. The cost estimate was developed utilizing preliminary Architectural and Engineering design information and may be subject to change. LUMA has allocated 10% of the project cost to mitigate potential known risks. For more details, refer to **Appendix E - LUMA Project Cost Estimate**.

COST ESTIMATE			
Cost Element	**428**	**406**	**PROJECT TOTAL**
PLANNING	**$ 590,946.16**	**$ -**	**$ 590,946.16**
(A&E) Permitting and Assessments	$ 58,699.54	$ -	$ 58,699.54
(A&E) Environmental Documentation & Management	$ 166,327.07	$ -	$ 166,327.07
(A&E) Engineering Services & Design	$ 365,919.55	$ -	$ 365,919.55

MANAGEMENT	**$ 363,474.52**	**$ -**	**$ 363,474.52**
(A&E) Project Management	$ 102,291.14	$ -	$ 102,291.14
(A&E) Construction Management	$ 136,388.19	$ -	$ 136,388.19
(A&E) Contracting, Procurement & Contract Administration	$ 56,601.10	$ -	$ 56,601.10
(A&E) Projects Controls (Scheduling, Estimating, Support, Cost Control, Risk, Document Control & Reporting)	$ 68,194.09	$ -	$ 68,194.09
San Juan Short Term Group 3,	**$ 7,120,503.11**	**$ -**	**$ 7,120,503.11**
San Juan Short Term Group 3, Feeder 1620-02, Project ID: 10143, FEMA Project Name: San Juan Short Term Group 3, Feeder 1620-02, FAAST#: 798275, material, labor and equipment.	$ 5,929,247.36	$ -	$ 5,929,247.36
Start Up/Commissioning	$ 88,938.71	$ -	$ 88,938.71
Construction Trespass	$ 29,646.23	$ -	$ 29,646.23
Transportation Expenses	$ 29,646.23	$ -	$ 29,646.23
Security (Field 24 hr)	$ 53,363.22	$ -	$ 53,363.22
Insurance	$ 119,770.79	$ -	$ 119,770.79
Construction Contingency	$ 665,308.28	$ -	$ 665,308.28
Escalation	$ 204,582.29	$ -	$ 204,582.29
GENERAL CONDITIONS	**$ 343,770.72**	**$ -**	**$ 343,770.72**

Sales Tax	$ 47,308.36	$ -	$ 47,308.36
Municipal Construction Tax	$ 296,462.36	$ -	$ 296,462.36
COST TOTALS	**$ 8,418,694.51**	**$ -**	**$ 8,418,694.51**
DEDUCTIONS	**TOTAL INSURANCE PROCEEDS RECEIVED**		**$ -**
	DE-OBLIGATION TO FAASt IF APPLICABLE		**$ -**
FAASt ALLOCATIONS	FAAST PROJECT # 798275 - 428		**$ 6,711,420.90**
	FAAST PROJECT # 798275 - 406 HM		**$ -**
	FAAST PROJECT # 798275 TOTAL:		**$ 6,711,420.90**
	FAASt A&E # 335168 - 428		**$ 954,420.68**
	FAASt A&E # 335168 - 406 HM		**$ -**
	FAASt A&E # 335168 TOTAL		**$ 954,420.68**
	FAASt E&M #673691 - 428		**$ 752,852.93**
	FAASt E&M #673691 - 406 HM		**$ -**
	FAASt E&M #673691 TOTAL		**$ 752,852.93**

DI# 1484187 Work to be Completed (WTBC): **$8,418,694.51**

A&E Deduction (428- FAASt A&E Project # 335168):	**-$954,420.68**
Equipment & Material Deduction (428- FAASt E&M Project # 673691):	**-$752,852.93**
Project Total Cost:	**$6,711,420.90**

Project Notes

1. Refer to detailed SOW provided in document “For this section see file: "798275-DR4339PR-Distribution Feeder Rebuild 1620-02 Detail Scope Of Work. Rev. 2.pdf”

2. Refer to detailed cost estimate provided in document “798275-DR4339PR-Distribution Feeder Rebuild 1620-02-Appendix E - LUMA Project Cost Estimate Rev. 2.xlsx”.

3. This project is part of a FAAST project, please reference project 136271.

4. A&E costs included in this project will be reduced and obligated under the FAASt Project #335168 [A&E PREPA]. 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 deducted from this FAASt Project and obligated under FAASt Project #673691, Equipment and Materials. Only the base cost of equipment and/or material will be deducted (not labor). All costs associated with Planning, Management, General Conditions, and Contingencies will remain in this project, FAASt #798275.

6. For attachments refer to:

   a. Appendix A – Pole Schedule

   b. Appendix B – Feeder Location Map

   c. Appendix C – Project Considerations

   d. Appendix D – Staging Area

   e. Appendix E – LUMA Project Cost Estimate

   f. Appendix F – Proposed Design

   g. Appendix G – Proposed Design KMZ

406 HMP Scope

406 Hazard Mitigation measures were not requested by the subrecipient for this project in Version 0. However, the mitigation opportunities will be applied in a future version (V1) of the Permanent Work Project. The project is ready for Insurance completion.

Cost

Code	Quantity	Unit	Total Cost	Section
9001	1	Lump Sum	$8,418,694.51	Uncompleted
3510	1	Lump Sum	($954,420.68)	Uncompleted
9001	1	Lump Sum	($752,852.93)	Uncompleted
9201	1	Lump Sum	$0.00	Completed

CRC Gross Cost	$6,711,420.90
Total 406 HMP Cost	$0.00
Total Insurance Reductions	$0.00
CRC Net Cost	$6,711,420.90
Federal Share (90.00%)	$6,040,278.81
Non-Federal Share (10.00%)	$671,142.09

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

4/30/2025

GENERAL INFORMATION

Event: DR4339-PR

Project: SP 798275

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) #1484187:

FAASt [Distribution Feeder Rebuild # 1620-02]

Location: Distribution Feeder Rebuild # 1620-02

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 [Distribution Feeder Rebuild # 1620-02] because the facility does not meet the definition of building, equipment, contents, or vehicle.

Insurance Proceeds Statement:

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

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

Standard Insurance Comments

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

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

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

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

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

…

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.

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

O&M Requirements

There are no Obtain and Maintain Requirements on **FAASt [Feeder Rebuild # 1620-02] (Distribution)**.

406 Mitigation

There is no additional mitigation information on **FAASt [Feeder Rebuild # 1620-02] (Distribution)**.

Environmental Historical Preservation

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

EHP Conditions

- Any change to the approved scope of work will require re-evaluation for compliance with NEPA and other Laws and Executive Orders.
- This review does not address all federal, state and local requirements. Acceptance of federal funding requires recipient to comply with all federal, state and local laws. Failure to obtain all appropriate federal, state and local environmental permits and clearances may jeopardize funding.
- If ground disturbing activities occur during construction, applicant will monitor ground disturbance and if any potential archaeological resources are discovered, will immediately cease construction in that area and notify the State and FEMA.
- NHPA (1): All borrow or fill material must come from pre-existing stockpiles, material reclaimed from maintained roadside ditches (provided the designed width or depth of the ditch is not increased) or commercially procured material from a source existing prior to the event. For any FEMA-funded project requiring the use of a non-commercial source or a commercial source that was not permitted to operate prior to the event (e.g. a new pit, agricultural fields, road ROWs, etc.) in whole or in part, regardless of cost, the Applicant must notify FEMA and the Recipient prior to extracting material. FEMA must review the source for compliance with all applicable federal environmental planning and historic preservation laws and executive orders prior to a subrecipient or their contractor commencing borrow extraction. Consultation and regulatory permitting may be required. Non-compliance with his requirement may jeopardize receipt of federal funding. Documentation of borrow sources utilized is required at closeout. See the attached Construction Management Plan (CMP).
- 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.
- If there are any further changes to the SOW, including any increase in the extent of ground disturbance, the applicant must notify FEMA beforehand, prior to engaging in further activities not within the current SOW.
- - 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 to the requirements of the local and federal agencies. Noncompliance with these requirements may jeopardize receipt of federal funds.
- 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.
- 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.

EHP Additional Info

There is no additional environmental historical preservation on **FAASt [Feeder Rebuild # 1620-02] (Distribution)**.

Final Reviews

Final Review

Reviewed By DIAZ-PABON, PEDRO J. **Reviewed On** 06/04/2025 11:15 AM PDT

Review Comments

To the best of my knowledge, this project is ready to continue the review process and comply with all policies & regulations. Project will move forward.

Recipient Review

Reviewed By Mulero, Noel **Reviewed On** 06/11/2025 10:27 PM PDT

Review Comments

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

Project Signatures

Reviewed By Unsigned **Reviewed On** Unsigned

Fixed Cost Offer

As a Public Assistance (PA) Subrecipient PR Electric Power Authority (000-UA2QU-00), in accordance with Section 428 of the Robert T. Stafford Disaster Relief and Emergency Assistance Act, the Applicant agrees to accept a permanent work subaward based on a Fixed Cost Offer in the amount of $6,711,420.90 for subaward number 108075 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	9/17/2025	$6,040,278.81	90%	Accepted	4339DRPRP01080751

Department of Homeland Security
Federal Emergency Management Agency

v0

General Info

Project #	800286 **P/W #** 108077	**Project Type**	Specialized
Project Category	F - Utilities	**Applicant**	PR Electric Power Authority (000-UA2QU-00)
Project Title	FAASt [Automation Program Group 36] (TL / 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 #1490780; FAASt [Automation Program Group36] (Distribution)

General Facility Information:

- **Facility Type:** Power generation, transmission, and distribution facilities
- **Facility:** Automation Program Group36
- **Facility Description:** Transmission and Distribution Automation Program Installation of Intelligent Reclosers, Single Phase Reclosers and Fault Current Indicators Group 36: 2005-10, 2501-01, 2501-02, 2501-03.
- **Approx. Year Built:** 1970
- **Start GPS Latitude/Longitude:** [redacted]
- **End GPS Latitude/Longitude:** [redacted]

Final Scope

1490780 **FAASt [Automation Program Group36] (Distribution)**

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 detailed SOW 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.

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 800286 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 loss of service and potential damage in the event of future hurricanes. This project is necessary for the EMS to maintain the continuity of the distribution power grid on Feeders 1102- 03, 1106-05, 1204-03, 1301-02, and 2005-10.

Key components of this project are: (1) pole replacement, (2) the three-phase 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 nine 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 13 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, that can be used to detect system imbalance, prevent future issues due to harmonics and help in building 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 notification/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 only. 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.

FACILITIES

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.

Facilities List

Name	Feeder Number	GPS Start	GPS End

San Juan	1102-03	[redacted]
San Juan	1106-05	
San Juan	1204-03	
San Juan	1301-02	
San Juan	2005-10	

Note: Please refer to ***APPENDIX C*** - ***Project Considerations*** for a list of all GPS locations that this project will impact.

PROJECT SCOPE OF WORK

Below is the "Proposed 428 Public Assistance Scope of Work" for feeders of this group.

Proposed 428 Public Assistance Scope of Work

Feeder- 1102-03

POLE FID	Coordinates Lat, Long	Existing (Remove)	428 Replacement	Scope of work

15198307	[redacted]	(45 FT C2 WOOD POLE) (OPS-CP-C6-XARM) (ABS-3-XARM) (K-7-4) (STL-10)	(50 FT S8 STEEL POLE) (OPS-CP-C6-XARM) (K-7-4) (REC-2-1) (STL-10)	• Remove and dispose 45' C2 wood pole. • Replace with a 50' S8 12-Sided galvanized steel pole. • Install (1) Three-Phase recloser 1102-03A in a loop restoration circuit. Use Existing secondary to feed three-phase recloser from source side. • Install and commission the radio communication kit for three-phase recloser • Install 1 kva transformer (2.4/7.62kv – 120v) to feed three Phase recloser from load side. • Remove, dispose and replace primary Framing and secondary framing. • Remove, dispose and replace streetlight. • Remove and dispose air-break switch.	**Feeder- 1106-05**
15197609		**(S-1)**	**(S-6) (REC-3-C)**	**• Existing Pole: Remove, dispose and replace primary framing. • Install (3) Single-Phase recloser 200A.**	
15197623		(ASSY-1509 (QTY=3))	(LABOR, CLOSE JUMPERS (QTY=3))	• Remove and dispose (3) Fuses • Labor to close Jumpers	
15197359		NONE	(LABOR, cFCI (QTY=3))	• Install (3) Communicating Fault Current Indicators.	
15197882		NONE	(LABOR, cFCI (QTY=3))	• Install (3) Communicating Fault Current Indicators.	
POLE FID	**Coordinates Lat, Long**	**Existing (Remove)**	**428 Replacement**	**Scope of work**	
NEW POLE	[redacted]	NONE	60 FT S8 STEEL POLE) (S-6) (CP-C6-XARM) (REC-2-1)	• Install new galvanized steel pole 60' S10 12-Sided Galvanized steel pole in new location mid span*. • Install Primary Framings. • Install (1) Three-Phase Recloser 1106-05A • Install and commission radio communication kit for three-phase recloser. • Install 1 kva Transformer (7.62/13.20 kv -120/240v) for source side	

POLE FID	Coordinates Lat, Long	Existing (Remove)	428 Replacement	Scope of work
15196880	[redacted]	(CP-C7) (ASSY-1509 (QTY=3))(QTY=3)	LABOR TO CLOSE JUMPERS (QTY=3)	• Remove and dispose (3) fuses. • Labor to close jumpers.
15196868		(35 FT C4 WOOD POLE) (S-1)	(45 FT S5.7 STEEL POLE) (S-6) (E-1-2-3) (F-1-3) (REC-3-C)	• Remove and dispose 35' wood pole. • Replace with a 45' S5.7 12-sided galvanized steel pole. • Remove, dispose and replace primary framing, • Install downguy. • Insall Anchor • Install (3) Single-Phase Reclosers 200A.
15196866		(ASSY-1509 (QTY=3)) (CP-C7)	(LABOR, CLOSE JUMPERS (QTY=3))	• Remove and dispose (3) • Labor to close jumpers.
1000828279		(45 FT H6 CONCRETE POLE) (OPS-CP-C4-XARM) (STL-10) (K-5) (ASSY-1509 (QTY=3))	(50 FT S8 STEEL POLE) (OPS-CP-C4-XARM) (STL-10) (K-5) (E-1-2-3) (F-1-3) (REC-3-C)	• Remove and dispose 45' concre pole. • Replace with a 50' S8 12-sided galvanized steel pole. • Remove, dispose, and replace primary and secondary framing. • Remove, dispose and Replace streetlight. • Remove and dispose (3) fuses. • Install downguy and acnhior. • Remove and dispose (3) fuses. • Install (3) Single-Phase Recloser.
15196831		NONE	(LABOR, cFCI (QTY=3))	• Install (3) Communicating Fault Current Indicator.

Feeder- 1204-03

15202072	(45'-C2 WOOD POLE) (CP-C6 XARM) (S-6) (K-4) (E-1-2-3 (QTY=1)) (F-1-3 (QTY=1))	(60'-S8.5 GALVANIZED STEEL POLE) (CP-C6 XARM) (S-6) (REC-2-1 Ver. 6) (K-4) (E-1-2-3 (QTY=4)) (F-1-3 (QTY=2)) (F-4-2 (QTY=1)	• Remove and dispose 45' C2 Wood pole. • Replace pole with a 60' S8 12-Sided Galvanized steel pole. • Install (1) Three-Phase Recloser 1204-03A • Install and commission radio communication kit for three-phase recloser. • Install (2) 1 kva Transformer (7.62/13.20 kv -120/240v) for source side and load side. • Remove, dispose and replace anchor and dow guy (1) fuses. • Install (2) additional anchors. • Install (3) additional dow nguys. • Remove, dispose and replace framings.	**Feeder- 1301-02**
NEW POLE	NONE	(50'-S8.5 GALVANIZED STEEL POLE) (CP-C6 XARM) (REC-2-1 Ver. 6)	• Install new galvanized steel pole 50' S8.5 12-Sided galvanized steel pole in new location mid span*. • Install (1) Three-Phase Recloser 1204-03B. • Install and commission Radio Communication Kit for the Three-phase Recloser. • Install (2) 1kva (7.62/13.20 kv -120/240 v) for source and Load side.	
NEW POLE	NONE	60'-S10 GALVANIZED STEEL POLE) (40'-S5.7 GALVANIZED STEEL POLE) (CP-C6 XARM) (S-6) (REC-2-1 Ver. 6) (E-2-1(QTY=1)) (E-1-2-3 (QTY=1)) (F-1-3 (QTY=1))	• Install a new 60'-S10 12-Sided Galvanized steel pole. • Install (1) Three-Phase Recloser 1204-03C. • Install and commission the Radio Communication kit for the Three-Phase Recloser. • Install (2) 1kva (7.62/13.20 kv - 120/240 v) for source and load side. • Install 40' S5.7 galvanized steel stub Pole.	
15202071	**(ABS-3-XARM (QTY=3))**	**(LABOR & REPAIR)**	**• Remove and dispose (3) air-brake switch.**	
15201719	(ASSY-1509 (QTY=3))	(LABOR, (QTY=3))	• Remove and dispose (3) fuses.	

15201729	[redacted]	(45'-H4 CONCRETE POLE) (CP-C1) (CP-A5) (ASSY 1509 (QTY=1)) (REMOVE EXISTING PRIMARY RISER)	(50'-S8.5 GALVANIZED STEEL POLE) (CP-C6 XARM) (CP-A5) (REC-3-A	• Remove and dispose 45' H4 Concrete pole. • Replace with a 50' S8.5 12-Sided galvanized Steel pole. • Install (1) CutOut Mounted Single-Phase Recloser. • Remove, dispose, and replace framings. • Remove and dispose (1) fuse • Remove Out of service primary Riser.
15201997		(45'-H4 CONCRETE POLE) (CP-C1)	(45'-S5.7 GALVANIZED STEEL POLE) (CP-C6 XARM) (REC-3-C)	• Remove and dispose 45'H4 concrete pole. • Replace with 45' S5.7 12-Sided galvanized Steel pole. • Install (3) Cutout Mounted Single-Phase recloser. • Remove, dispose, and replacer framings
Segment FID 13665918		NONE	(LABOR, cFCI) (QTY=3)	• Install (3) Communicating Fault Current Indicators.
Segment FID 31220910		NONE	(LABOR, cFCI) (QTY=3)	• Install (3) Communicating Fault Current Indicators.

Feeder 2005-10

POLE FID	Coordinates Lat, Long	Existing (Remove)	428 Replacement	Scope of work
NEW POLE	[redacted]	NONE	(50 FT S8 STEEL POLE) (CP-C6-XARM) (K-5) (REC-2-1)	• Install a new 50' S8 12-Sided Galvanized steel pole as a midspan. • Install primary Framing. • Install (1) three-phase recloser 1301-02A in loop restoration circuit. Use existing secondary to feed Three-phase recloser from load side. • Install 1 kva stainless steel transformer (2.40/7.62kv-120v) to feed three phase recloser from Source side. • Install and commission radio communication kit for three-phase recloser.

13524705	18.410668 -66.022650	(CP-C6-XARM)	(K-5)	• Remove and dispose primary framing. • Install secondary framing. • Install 1/0 tpx (qty=25 ft). • Install 1/0 acsr primary • Conductor (qty=75 ft) and compression splices (qty=3).
22053341	[redacted]	(40 FT C3 WOOD POLE) (CP-C6-XARM) S-6) (ABS-3-XARM)	(60 FT S8 STEEL POLE) (CP-C6-XARM) (S-6) (REC-2-2)	• Remove and dispose 40' C4 Wood pole. • Replace with a 60' S8 12-Sided Galvanized Steel pole. • Install (1) three-phase recloser 1301-02B in loop restoration Circuit. • Install and commission Radio Communication Kit for the three-phase recloser. • Install (2) 1 kva transformers (2.40/7.62kv-120v) to Feed three phase recloser from source Side and load side. • Remove and dispose air-break switch. • Remove, dispose and replace primary framings.
13525293		NONE	(LABOR, cFCI) (QTY=3)	• Install (3) Communicating Fault Current Indicators.
1001602057		NONE	(LABOR, cFCI) (QTY=3)	• Install (3) Communicating Fault Current Indicators.

POLE FID	Coordinates	Existing (Remove)	428 Replacement	Scope of work
NEW POLE	[redacted]	NONE	60'-S10 GALVANIZED STEEL POLE) (REC-2-1 VER. 6) (K-1) (CP-C6-XARM) (S-1)	• Install new galvanized steel pole 60' S10 12-Sided Galvanized steel pole in new location mid span*. • Install (1) Three-Phase Recloser 2005-10A • Install and commission radio communication kit for three-phase recloser. • Install (2) 1 kva Transformer (7.62/13.20 kv -120/240v) for source side and load side.

Proposed 406 Hazard Mitigation Scope of Work

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.

POLE FID	Coordinates Lat, Long	Existing (Remove)	428 Replacement	Scope of work
10044885	[redacted]	(40'-H4 CONCRETE POLE) (CP-C1) (E-1-2-3 (QTY=)) (F-1-3 (QTY=1))	(50'-S8 GALVANIZED STEEL POLE) (REC-2-1 VER. 6) (E-1-2-3 (QTY=1)) (F-1-3 (QTY=1)) (CP-C6-XARM)	• Remove and dispose 40' H4 Concrete pole. • Replace pole with a 50' S8 12-sided galvanized steel pole. • Install (1) three-Phase recloser 2005-10B. • Install and commission radio communication kit for the three-phase recloser. • Install (2) 1 kva transformer • (7.62/13.20 kv-120/240v) for source side and load side. • Remove, dispose, and replace framings. • Remove, dispose and replace (1) anchor and (1) downguy).
12372255		(45'-H4 CONCRETE POLE) (S-1) (CP-C8) (STL-10)	(60'-S10 GALVANIZED STEEL POLE) (CP-C1) (S-1) (STL-10) (E-1-2-3 (QTY=2)) (F-4-2 (QTY=1)) (K-1)	• Adjacent Pole: • Remove, dispose, and replace framings. • Remove, dispose, and replace streetlights. • Remove, dispose, and replace 45' H4 Concrete pole. • Replace pole with 60' S10 12-Sided galvanized steel pole. • Install (1) anchor. • Install (2) DownGuy •
12372254		(45'-H4 CONCRETE POLE) (S-6) (STL-10) (CP-C8) (K-5)	(60'-S10 GALVANIZED STEEL POLE) (CP-C1) (S-6) (STL-10) (K-5)	• Adjacent Pole: • Remove and dispose 45 H4 Concrete pole. • Replace pole with 60 S10 12-sided galvanized steel pole • Remove, dispose, and replace framings • Remove, dispose and replace streetlights. • Labor to Transfer air brake switch to new pole.
Segment FID 18371210		NONE	(LABOR, cFCI) (QTY=3)	• Install (3) Communicating Fault Current Indicators.
Segment FID 1000125552		NONE	(LABOR, cFCI) (QTY=3)	• Install (3) Communicating Fault Current Indicators.
Feeder				Project Title

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. The 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:

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 Sabana

??1102-03 **1106-05** **1204-03**	723883 FAASt [Region 1 -San Juan Group A] (Vegetation)
1301-02 **2005-10**	727691 FAASt [Region 1 -San Juan Group C] (Vegetation)

Llana Regional Warehouse, whose address is #654 de Diego Street Final, Rio Piedras, San Juan, 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")

PROJECT COST ESTIMATE

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	**$188,639.71**	**$-**	**$188,639.71**
MANAGEMENT	**$111,725.24**	**$-**	**$111,725.24**
Distribution Automation Group 36	**$2,188,388.53**	**$-**	**$2,188,388.53**
GENERAL CONDITIONS	**$112,714.44**	$-	**$112,714.44**
COST TOTALS	**$2,601,467.92**	**$-**	**$2,601,467.92**
DEDUCTIONS	**TOTAL INSURANCE PROCEEDS RECEIVED**		**$-**
	DE-OBLIGATION TO FAASt IF APPLICABLE		**$-**
FAASt ALLOCATIONS	FAAST PROJECT # 800286		**$1,703,712.89**
	FAAST PROJECT # 800286 - 406 HM		**$-**
	FAAST PROJECT # 800286 TOTAL:		**$1,703,712.89**
	FAASt A&E # 335168 - 428		**$300,364.95**

	FAASt A&E # 335168 - 406 HM	**$-**
	FAASt A&E # 335168 TOTAL	**$300,364.95**
	FAASt E&M #673691 - 428	**$597,390.08**
	FAASt E&M #673691 - 406 HM	**$-**
	FAASt E&M #673691 TOTAL	**$597,390.08**

Project Cost Summary, 428 Version 0:

Work to be Completed (WTBC): $ 2,601,467.86

A&E Deduction (Global A&E FAASt 335168): -$300,364.95

E&M Deduction (Global E&M FAASt 673691): -$597,390.08

Project Total: $1,703,712.83

Project Cost Estimate Notes:

1. Refer to detailed SOW provided in document labeled: "800286-DR4339PR- DSOW Group 36. Rev. 1. pdf."
2. Refer to detailed Cost Estimate provided in document labeled: "800286-DR4339PR-Cost Estimate Group 36. Rev. 1.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. 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 36 Automation FAASt 800286.
5. This project is part of Donor FAASt 136271 – MEPA078 Puerto Rico Electrical Power Authority (PREPA) Island Wide FAASt Project 136271.

6. ATTACHMENTS:

800286-DR4339PR-APPENDIX A - Initial Scope of Work 800286-DR4339PR-APPENDIX B - LUMA Project Cost Estimate 800286-DR4339PR-APPENDIX C - Project Considerations 800286-DR4339PR-APPENDIX D - LUMA's Active Project

406 HMP Scope

406 Hazard Mitigation measures were not requested by the sub-applicant for this project in Version 0. However, there may be mitigation opportunities that will apply to Version 1 of the Permanent Work Project. The project is ready for Insurance completion.

Cost

Code	Quantity	Unit	Total Cost	Section
9001	1	Lump Sum	$2,601,467.86	Uncompleted
3510	1	Lump Sum	($300,364.95)	Uncompleted
9001	1	Lump Sum	($597,390.08)	Uncompleted
9201	1	Lump Sum	$0.00	Completed

CRC Gross Cost	$1,703,712.83
Total 406 HMP Cost	$0.00
Total Insurance Reductions	$0.00
CRC Net Cost	$1,703,712.83
Federal Share (90.00%)	$1,533,341.55
Non-Federal Share (10.00%)	$170,371.28

Subgrant Conditions

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

Insurance

Additional Information

5/12/2025

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 36] (TL / Distribution)**.

406 Mitigation

There is no additional mitigation information on **FAASt [Automation Program Group 36] (TL / Distribution)**.

Environmental Historical Preservation

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

EHP Conditions

- Any change to the approved scope of work will require re-evaluation for compliance with NEPA and other Laws and Executive Orders.
- This review does not address all federal, state and local requirements. Acceptance of federal funding requires recipient to comply with all federal, state and local laws. Failure to obtain all appropriate federal, state and local environmental permits and clearances may jeopardize funding.
- If ground disturbing activities occur during construction, applicant will monitor ground disturbance and if any potential archaeological resources are discovered, will immediately cease construction in that area and notify the State and FEMA.
- All borrow or fill material must come from pre-existing stockpiles, material reclaimed from maintained roadside ditches (provided the designed width or depth of the ditch is not increased), or commercially procured material from a source existing prior to the event. For any FEMA-funded project requiring the use of a non-commercial source or a commercial source that was not permitted to operate prior to the event (e.g. a new pit, agricultural fields, road ROWs, etc.) in 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 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 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.
- The Applicant shall handle, manage, and dispose of all types of hazardous waste in accordance with requirements of local, state, and federal laws, regulations, and ordinances. In addition, the Applicant shall ensure that all debris is separated and disposed of in a manner consistent with the PR DNER guidelines at a permitted site or landfill. The contractor/applicant will be responsible for the proper disposition of construction debris in authorized landfills providing the name, location, coordinates and permits of the facility to the corresponding authorities. Unusable equipment, debris, white goods, scrap metal any other material shall be disposed in approved manner and location. In the event significant items are discovered during the implementation or development of the project the Applicant shall handle, manage and dispose petroleum products, hazardous materials and toxic waste in accordance with the requirements of the local and federal agencies. Noncompliance with these requirements may jeopardize receipt of federal funds. If transformers: The applicant is responsible to ensure damaged transformers are handled, managed, and disposed of in accordance with all federal and state laws and requirements. Downed electrical equipment may contain toxic and hazardous materials, such as polychlorinated biphenyls (PCBs), and may spill these materials if a rupture occurs. Applicant is responsible for screening transformers that do or may contain PCBs and the area where any related spill occurred. The applicant is then responsible to handle, manage, dispose of, or recycle damaged equipment and contaminated soil as appropriate. Where possible, temporary measures should be implemented to prevent, treat, or contain further releases or mitigate the migration of PCBs into the environment. If damaged equipment or material storage containers must be stored temporarily, containers should be placed on hardened surface areas, such as a concrete or an asphalt for no more than 90 days. Excavated contaminated material should be disposed of in accordance with federal and state laws and requirements.
- Executive Order 11988 Floodplain Conditions for Feeders 1102-03, 1106-05 and 1204-03: 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 Feeder 1301-02: 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.

EHP Additional Info

There is no additional environmental historical preservation on **FAASt [Automation Program Group 36] (TL / Distribution)**.

Final Reviews

Final Review

Reviewed By Diaz Rodriguez, Sheila M. **Reviewed On** 07/01/2025 5:09 PM PDT

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** 07/15/2025 7:59 PM PDT

Review Comments

This project is full 428, after being obligated, the allocation for the corresponding 406 mitigation funds must be developed. 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 $1,703,712.83 for subaward number 108077 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	9/17/2025	$1,533,341.55	90%	Accepted	4339DRPRP01080771

General Info

Project #	800361 **P/W #** 108078	**Project Type**	Specialized
Project Category	F - Utilities	**Applicant**	PR Electric Power Authority (000-UA2QU-00)
Project Title	FAASt [Automation Program Group 37] (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 #1490781; FAASt [Automation Program Group 37] (Distribution)

General Facility Information:

- **Facility Type:** Power generation, transmission, and distribution facilities
- **Facility:** Automation Program Group 37
- **Facility Description:** Transmission and Distribution Automation Program Installation of Intelligent Reclosers, Single Phase Reclosers and Fault Current Indicators Group 37: Caguas Region Feeder 2701-02 Caguas Region Feeder 3406-01 Caguas Region Feeder 3602-03 Caguas Region Feeder 3701-02
- **Approx. Year Built:** 1970
- **Start GPS Latitude/Longitude:** [redacted]
- **End GPS Latitude/Longitude:** [redacted]

Final Scope

1490781 **FAASt [Automation Program Group 37] (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 detailed SOW 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 each 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 800361 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 loss of service and potential damage in the event of future hurricanes. This project is necessary for the EMS to maintain the continuity of the distribution power grid on Feeders 2701- 02, 3406-01, 3602-03, and 3701-02.

Key components of this project are: (1) pole replacement, (2) the three-phase and single-phase reclosers, and (3) the installation of 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 four 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 feeder and distribution lines branching from the feeder. Single-phase reclosers will also be used on feeders with three-phases if fault currents are low at the location. In this project LUMA will install a total of six 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. cFCI operate independent of the feeder reclosers. cFCIs

help identify permanent and incipient faults in the distribution system and collect voltage and current data, that can be used to detect system imbalance, prevent future issues due to harmonics and help in building 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 notification/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 is will use cellular technology for communications with the operations center. LUMA is using cellular communications service only for reclosers and their associated hardware only. 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.

3.1 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
Caguas	2701-02	[redacted]	
Caguas	3406-01		
Caguas	3602-03		
Caguas	3701-02		

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 "Proposed 428 Public Assistance Scope of Work" for feeders of this group.

4.1 Proposed 428 Public Assistance Scope of Work

Feeder 2701-02

POLE FID	Coordinates Lat, Long	Existing (Remove)	428 Replacement	Scope of work
5421009	[redacted]	(ASSY-1509)	(E-1-2-3) (F-1-3)	• Adjacent Pole: • Remove and dispose fuse cutout. • Install (3) Fuse cutout blades switch. • Install Surge arresters. • Install Downguy
11039169		(45 FT C2 WOOD POLE) (CP-C6-XARM) (E-1-2-3) (F-1-3)	(50 FT S8.5 STEEL POLE) (CP-C6-XARM)	• Adjacent Pole: • Adjacent Pole: Remove and dispose 45' class 2 wood Pole. • Replace pole for a 50' S8.5 12- Sided Galvanized steel pole. • Install Three-Phase Horizontal Fuse Blade. • Remove, dispose and Replace Crossarm and primary Framing. • Remove and dispose fuse • Cutout. • Install Surge Arresters. • Remove and dispose anchor • And downguy
5420894	[redacted]	(45 FT C2 WOOD POLE) (CP-C12-XARM) (K-7) (STL-10)	(50 FT S8.5 STEEL POLE) (REC-2) (K-7) (STL-10)	• Remove and dispose 45' class 2 wood Pole. • Replace pole with for a 50' S8.5 12-Sided Galvanized steel pole. • Install (1) three-phase recloser 2701-02A radial feeder. • Install and Commission radio communication kit for three-phase recloser. • Remove, dispose and replace Primary and secondary

				Framings.
				• Remove, dispose and Replace
				Streetlight.
				• Use 25kva tx bank (4.80/8.32kv
				120v) on source side
10517058	[redacted]	(ASSY-1509)	NONE	• Remove and dispose fuse cutout. • Replace with (3) Fuse cutout blades switch
11039409		(35 FT C4	(50 FT S8.5 STEEL	• Remove and dispose and 35' CLASS 4 WOO
		WOOD	POLE)	POLE Replace pole with a 50' S8.5 12-Sided Galvar
		POLE)	(REC-2-1)	steel pole. • Install (1) three-phase recloser 2701-02B ra
		(CP-C1)		• Feeder. • Install and commission radio communication three- phase recloser. • Install (1) 1kva transformer (4.80/8.32KV-12 for the source side. • Remove, dispose, and Replace Primary fram
10170621		N/A	(LABOR,cFCI(QTY=3))	• Install (3) Communicating Fault Current Indica
11039728		(35 FT C4	(50 FT S8.5 STEEL	• Remove and dispose 45' class 2 wood Pole.
		WOOD POLE)	POLE)	with a 50' 8.5 S8 12-Sided Galvanized Steel Pole.
		(CP-C1)	(ABS-3-XARM)	• Remove, dispose, and replace primary framin • Install Air Break Switch.
			(LABOR,cFCI(QTY=3))	• Install (3) Communicating Fault Current Indicat

Feeder 3406-01

POLE FID	Coordinates Lat, Long	Existing (Remove)	428 Replacement	Scope of work
NEW POLE	[redacted]	NONE	(50' S8.5 STEEL POLE) (REC-2-2) (E-1-2-3) (F-1-3)	• Install a new 50' S8.5 12-Sided galvanized stee pole. • Install spacer and primary framings. • Install (1) three-phase recloser 3406-01A loop feeder. • Install and commissioning of the Radio Commun Kit for the Three-Phase Recloser. • Install (2) 1Kva (4.80/8.32Kv- 120V) transform • Install AAAC spacer span. • Install (1) anchor and (1) downguy.

NEW POLE	[redacted]	NONE	(50' S8.5 STEEL POLE) (CP-C6-XARM) (REC-3-C)	• Install a new 50' S8.5 12-Sided galvanized stee pole. • Install primary and secondary framings. • Install (3) Single-phase recloser radial feeder. •?
1000746928		(SOLID BLADE QTY=3)	(REMOVE FUSES QTY =3)	• Remove and dispose (3) Fuses. Replace with (Fuse Cutout Solid blades.
1001368329		N/A	(LABOR,cFCI(QTY=3))	• Install (3) Communicating Fault Current Indicato

Feeder 3602-03

POLE FID	Coordinate s Lat, Long	Existing (Remove)	428 Replacement	Scope of work
1001191193	[redacted]	(45'-H4 CONCRETE POLE) (CP-C1) (E-1-2-3(QTY=2) (F-1-3 (QTY=2))	(50' S8.5 GALVANIZED STEEL POLE) (CP-C6-XARM) (REC-2-1 VER 7)	• Remove and dispose 45' H4 Concrete pole. • Replace with 50' S8.5 12-Sided galvanized s pole. • Install (1) three-phase Recloser 3602-03A c configuration. • Install and commission radio communication for three- phase recloser. • Install (2) 1kva Transformer (8.32/4.80) for source side and load side to feed recloser. • Remove, dispose and Replace Primary framin • Remove and dispose (2) Downguys and (2) anchors.
11004187		(45' WOOD POLE)	(50'-S8.5 GALVANIZED STEEL POLE)	• Remove and dispose 45' wood pole.

POLE FID	Coordinate s Lat, Long	Existing (Remove)	428 Replacement	Scope of work
	[redacted]	(CP-C3-VERT) (CP-A5) (STL-10) (E-1-2-3 (QTY=1)) (F-1-3 (QTY=1)) (K-7-4)	(CP-C3-VERT) (CP-A5) (REC-3-A) (STL-10) (E-1-2-3 (QTY=2)) (F-4-2 (QTY=1)) (K-7-4)	• Replace with a 50' S8.5 12-sided galvanized pole. • Remove, dispose and replace primary and secondary framing. • Remove, dispose and replace Streetlight. • Remove, dispose (2) downguy. Replace onl one. • Remove, dispose and replace (1) anchor. • Install (1) Cutout Monted Single- Phase Recl
10599697		(45'-S5.7 GALVANIZED STEEL POLE) (CP- A4) (REC-3-A) (E-1-2-3 (QTY=1)) (F-1-3 (QTY=1))	(45'-S3 GALVANIZED STEEL POLE) (CP-A4) (E-1-2-3 (QTY=2)) (F-1-3 (QTY=2))	• Remove and dispose 45' S5 steel pole. • Replace 45' S5.7 12-sided galvanized steel pole. • Install (1) cutout mounted single- phase rec • Install new additional (1) downguy and (1) anchor. • Remove, dispose and replace primary framir • Remove, dispose and replace (1) anchor an downGuy.

1001715052	[redacted]	(50'-H4 CONCRETE POLE) (CP-C4) (CP-A5) (K-4) (E-1-2-3 (QTY=2)) (F-4-2 (QTY=2))	(50'-S8.5 GALVANIZED STEEL POLE) (CP-C4) (CP-A5) (REC-3-A) (K-4) (E-1-2-3 (QTY=4)) (F-4-2 (QTY=2))	• Remove and dispose 50' H4 concrete pole. pole with 50' S8.5 12-sided galvanized steel • Install (1) CutOut Mounted single-phase recloser. • Install new addition (2) down guys • Remove, dispose, and replace primary and secondary Framing. • Remove, dispose and Replace (2) anchors. • Remove, dispose and replace (2) down Guy
1001714773		(ASSY-1509 (QTY=1))	(LABOR TO CLOSE JUMPERS(QTY=1))	• Remove and dispose (1) fuse. • Labor to close Jumpers.
10599702		(ASSY-1509 (QTY=1))	(LABOR TO CLOSE JUMPERS(QTY=1))	• Remove and dispose (1) fuse. • Labor to close Jumpers.
10593268		(ASSY-1509 (QTY=1))	(LABOR TO CLOSE JUMPERS(QTY=1))	• Remove and replace (1) fuse. • Labor to close Jumpers.
10593257		(ASSY-1509 (QTY=1))	(LABOR TO CLOSE JUMPERS(QTY=1))	• Remove and dispose (1) fuse. • Labor to close Jumpers.
Segment FID 14524508		N/A	(LABOR, cFCI(QTY=3))	• Install (3) Communicating Fault Current Indic
Segment FID 1001714763		N/A	(LABOR, cFCI(QTY=3))	• Install (3) Communicating Fault Current Indic

Feeder 3701-02

POLE FID	Coordinates Lat, Long	Existing (Remove)	428 Replacement	Scope of work
NEW POLE	[redacted]	NONE	(50'-S8.5 GALVANIZED STEEL POLE) (CP-C6-XARM) (REC-2-VER. 6) (K- 5(QTY=2))	• Install new 50' S8.5 12-sided galvanized steel po in new location mid span*. • Install (1) Three-Phase Recloser 3701-02A. Instal commission radio communication kit for three- phas recloser. • Install primary Framing. • Install secondary cond 1/0 al Tpx - 70ft source s 90ft load side To feed recloser
7514577		(CP-C1) (40-CLASS3-WOOD) (STL-10) (E-1-2-3(QTY:2)) (F1-3(QTY=1))	(50'-S8.5 GALVANIZED STEEL POLE) (STL-10) (CP-C6-XARM) (REC-2-1-VER. 6) (K-6) (E-1-2-(QTY=3)) (F1-3(QTY=1)) (F-4-2(QTY=1))	• Remove and dispose 40' wood pole. • Replace with a 50'S8.5 12-Sided galvanized steel p • Remove, dispose and replace primary framing. • Remove, dispose, and replace (2) anchors and do guys. • Labor to Use existing secondary Conductor for loa side. • Remove, dispose, and replace streetlight. • Install (1) Three-Phase Recloser 3701-02B.

7514579	[redacted]	(40' CLASS 3 WOOD POLE) (CP-C6- XARM) (T-1) (K-6) (K-5) (E-1-2-3(QTY=2)) (F-4-2(QTY=1))	(50'-S8.5 GALVANIZED STEEL POLE) (CP-C6-XARM) (T-1) (K-6) (K-5) (E-1-2-3(QTY=2)) (F-4-2(QTY=1))	• Adjacent Pole: • Remove, dispose and replace primary framing. • Remove, dispose and replace 50kva (4.80/8.32 kv 120/240 v). • Remove, dispose and replace (2) anchor and (1) d guy.
7514588		(40' CLASS 3 WOOD POLE) (CP-C6-XARM) (K-5) (K-6) (CP-A5) (E-1-2-3(QTY=2)) (F-4-2(QTY=1))	(45'-S5.7 GALVANIZED STEEL POLE) (CP-C6-XARM) (K-5) (K-6) (CP-A5) (E-1-2-3(QTY=2)) (F-4-2(QTY=1))	• Adjacent Pole: • Remove, dispose and replace primary framings. • Remove, dispose and repl (2) downguys and (1) anch
7515080		(ASSY1509)	(LABOR & REPAIR)	• Remove and dispose (3) Fuses. • Labor to close jumpers.
3041816		(ASSY1509)	(LABOR & REPAIR)	• Remove and dispose (1) Fuse. • Labor to close jumpers.
7514589		(ASSY1509)	(LABOR & REPAIR)	• Remove and dispose Fuses. • Labor to close jumpers.
7517032		(ASSY1509)	(LABOR & REPAIR)	• Remove and dispose Fuses. • Labor to close jumpers.
7514328		(ASSY1509)	(LABOR & REPAIR)	• Remove and dispose Fuses. • Labor to close jumpers.

POLE FID	Coordinates Lat, Long	Existing (Remove)	428 Replacement	Scope of work
7514661	[redacted]	(ASSY1509)	(LABOR & REPAIR)	• Remove and dispose Fuses. • Labor to close jumpers.
7514322		(ASSY1509)	(LABOR & REPAIR)	• Remove and dispose Fuses. • Labor to close jumpers.
7518213		(35'-C4 WOOD POLE) (CP-A6) (K-6) (K-5) (STL-10) (ASSY-1509 (QTY=1))	(45'-S5.7 GALVANIZED STEEL POLE) (CP-A6) (REC-3-A) (K-6) (K-5) (STL-10) (E-1-2-3 (QTY=1)) (F-1-3 (QTY=1))	• Remove and dispose 35' C4 Wood pole. Replace p with a 45' S5.7 12-Sided galvanized steel pole. • Install (1) Mounted single-phase recloser. • Install (1) down guy. • Install (1) ancho • Transfer primary and secondary framing. • Remove and dispose (1) fuse. • Remove, dispose, and Replace streetlight.

7517312	[redacted]	(45'-S3 STEEL POLE) (CP-A6) (K-7-A) (T-1)	(50'-S8.5 GALVANIZED STEEL POLE) (CP-A6) (REC-3-A) (K-7-A)	• Remove and dispose 45' steel pole. • Replace with a 50' S8.5 12-soded galvanized steel • Install (1) cutout mounted single- phase recloser. • Remove, dispose and replace primary and second framing. • Labor to remove and dispose Transformer.
7515194		(50'-C2 WOOD POLE) (CP-C6-XARM) (CP-C5-XARM) (K-6) (E-1-2-3 (QTY=1)) (F-1-3 (QTY=1)) (ASSY-1509 (QTY=3))	(50'-S8.5 GALVANIZED STEEL POLE) (CP-C7) (REC-3-C) (K-6)	• Remove and dispose 50' C2 wood pole. Replace w 50' S8.5 12-sided galvanized steel pole. • Install (3) Cutout mounted single - phase recloser. • Remove and dispose (3) Fuses. • Remove and dispose (1) downguy and (1) anchor
7515195		(40'-C3 WOOD POLE) (CP-C6-XARM) (K-7-B) (K-5) (STL-10) (E-1-2-3 (QTY=1)) (F-1-3 (QTY=1)) (E-2-1)	(50'-S8.5 GALVANIZED STEEL POLE) (CP-C6-XARM) (K-7-B) (K-5) (STL-10) (T-1)	• Adjacent Pole: • Remove and dispose 40' C3 Wood Pole. Replace p with a 50'-S8.5 12-sided galvanized steel pole. • Remove, dispose, and replace primary and second framing. • Remove dispose and replace streetlight. • Remove and dispose stub pole. • Labor to transfer 37.5 KVA (4.80/8.32-120/240V) new pole. • Remove and dispose (1) downguy and (1) Anchor
7515189		(35'-C4 WOOD POLE) (CP-C1)	(50'-S8.5 GALVANIZED STEEL POLE) (CP-C1)	• Adjacent Pole: • Remove and dispose 35' C4 wood pole. Replace p with a

POLE FID	Coordinates Lat, Long	Existing (Remove)	428 Replacement	Scope of work
	[redacted]			50' S8.5 12-sided galvanized steel pole • Remove, dispose and replace framings.
3126238		(45'-C3 WOOD POLE) (CP-A6) (K-4) (E-1-2-3 (QTY=1)) (F-1-3 (QTY=1))	(45'-S5.7 GALVANIZED STEEL POLE) (CP-A6) (REC-3-A) (K-4) (E-1-2-3 (QTY=1)) (F-1-3 (QTY=1))	• Remove, dispose, and replace 45' C3 wood pole. Replace pole with 45'-S5.7 12-Sided galvanized ste pole. • Install (1) cutout mounted single- phase recloser. • Remove, dispose and replace primary and second framing. • Remove, dispose and replace (1) anchor and (1) guy.
NEW POLE		NONE	(45'-S5.7 GALVANIZED STEEL POLE) (CP-C6 XARM) (REC-3-C) (K-1)	• Install new 45'-S5.7 12-sided galvanized steel pole in new location mid span*. • Install primary and secondary framing. • Install (3) cutout mounted single- phase reclosers
10325939		ASSY-1509 (3)	CLOSE JUMPERS	• Remove and dispose (3) Fuses. • Close Jumpers
7519119		ASSY-1509 (2)	CLOSE JUMPERS	• Remove and dispose (2) Fuses. • Close Jumpers

7517419	[redacted]	ASSY-1509 (1)	CLOSE JUMPERS	• Remove and dispose (1) Fuse. • Close Jumpers
7520015		ASSY-1509 (1)	CLOSE JUMPERS	• Remove and dispose (1) Fuse. • Close Jumpers
SEGMENT FID 7512260		N/A	(LABOR, cFCI(QTY=3))	• Install (3) Communicating Fault Current Indicators.
SEGMENT FID 8199518		N/A	(LABOR, cFCI(QTY=3))	• Install (3) Communicating Fault Current Indicators.
7517049		ASSY-1509 (3)	SOLID BLADE CUTOUT (3)	• Remove and dispose (3) fuses. • Replace with (3) Fuse Cutout Solide Blades.

4.2 Proposed 406 Hazard Mitigation Scope of Work

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
3406-01	727692 FAASt [Region 4 -Caguas Group A] High
3701-02	Density (Vegetation)
2701-02	727694 FAASt [Region 4 -Caguas Group C]
3602-03	(Vegetation)

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. Refer to document Warehouse Locations. The warehouse assigned to this project is this projects are:

Warehouse	Address	Latitude	Longitu
Humacao District Warehouse	#3 Street 82.3KM Humacao, PR	18.137507	-65.827
Caguas Regional Warehouse	#1 Street, Jose Mercado Corner, Caguas, PR	18.2393592	-66.037

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 t h e Department of Transportation and Public Works Agency - ("DTOP")

6.0 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 2.1, Consensus-Based Codes, Specifications, and Standards for Public Assistance.

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

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	**$201,141.85**	**$-**	**$201,141.85**
MANAGEMENT	**$96,846.24**	**$-**	**$96,846.24**
LPCE Distribution Automation Group 37	**$1,972,208.53**	**$-**	**$1,972,208.53**
GENERAL CONDITIONS	**$97,654.60**	**$-**	**$97,654.60**
COST TOTALS	**$2,367,851.22**	**$-**	**$2,367,851.22**
DEDUCTIONS		**TOTAL INSURANCE PROCEEDS RECEIVED**	**$-**
		DE-OBLIGATION TO FAASt IF APPLICABLE	**$-**

FAASt ALLOCATIONS	FAAST PROJECT # 800361 - 428	**$1,596,192.73**
	FAAST PROJECT #800361 - 406 HM	**$-**
	FAAST PROJECT # 800361 TOTAL:	**$1,596,192.73**
	FAASt A&E # 335168 - 428	**$297,988.09**
	FAASt A&E # 335168 - 406 HM	**$-**
	FAASt A&E # 335168 TOTAL	**$297,988.09**
	FAASt E&M #673691 - 428	**$473,670.40**
	FAASt E&M #673691 - 406 HM	**$-**
	FAASt E&M #673691 TOTAL	**$473,670.40**

DI# 1490781 Work to be Completed (WTBC): **$2,367,851.22**

A&E Deduction (428- FAASt A&E Project # 335168): **-$297,988.09**

Equipment & Material Deduction (428- FAASt E&M Project # 673691): **-$473,670.40**

Project Total Cost: **$1,596,192.73**

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 37 Automation FAASt 800361.

9.0 ATTCHMENTS

800361-DR4339PR-APPENDIX A - Initial Scope of Work 800361-DR4339PR-APPENDIX B - LUMA Project Cost Estimate 800361-DR4339PR-APPENDIX C - Project Considerations 800361-DR4339PR-APPENDIX D - LUMA’s Active Project

406 HMP Scope

406 Hazard Mitigation measures were not requested by the sub-applicant for this project in Version 0. However, there may be mitigation opportunities that will apply to Version 1 of the Permanent Work Project. The project is ready for Insurance completion.

Cost

Code	Quantity	Unit	Total Cost	Section
9001	1	Lump Sum	$2,367,851.22	Uncompleted
3510	1	Lump Sum	($297,988.09)	Uncompleted
9001	1	Lump Sum	($473,670.40)	Uncompleted
9201	1	Lump Sum	$0.00	Completed

CRC Gross Cost	$1,596,192.73
Total 406 HMP Cost	$0.00
Total Insurance Reductions	$0.00
CRC Net Cost	$1,596,192.73
Federal Share (90.00%)	$1,436,573.46
Non-Federal Share (10.00%)	$159,619.27

Subgrant Conditions

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

Insurance

Additional Information

5/12/2025

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 37] (Distribution)**.

406 Mitigation

There is no additional mitigation information on **FAASt [Automation Program Group 37] (Distribution)**.

Environmental Historical Preservation

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

EHP Conditions

- Any change to the approved scope of work will require re-evaluation for compliance with NEPA and other Laws and Executive Orders.
- This review does not address all federal, state and local requirements. Acceptance of federal funding requires recipient to comply with all federal, state and local laws. Failure to obtain all appropriate federal, state and local environmental permits and clearances may jeopardize funding.
- If ground disturbing activities occur during construction, applicant will monitor ground disturbance and if any potential archaeological resources are discovered, will immediately cease construction in that area and notify the State and FEMA.
- The Subrecipient and/or Subrecipient's contractor must follow the Low Impact Debris Removal Stipulations (LIDRS) outlined in Appendix E of the Project-Specific Programmatic Agreement Among FEMA, the SHPO, ACHP, COR3, and PREPA (PSPA), executed on August 2, 2022.
- Pursuant to Stipulation III.B of the PSPA, if, in the course of implementing this Individual Undertaking(s), previously unidentified structures, sites, buildings, objects, districts, or archaeological deposits, that may be eligible for listing in the National Register, or human remains are uncovered, or if it appears that an Individual Undertaking has affected or will affect a previously identified historic property in an unanticipated manner, the contractor must notify Subrecipient who will immediately notify the Recipient. Work must stop in the vicinity of the discovery and measures must be taken to protect the discovery and avoid additional harm.
- Additional staging areas and/or work pads within work site area haven't been identified yet. The Subrecipient and/or private operator must provide the information of any additional staging areas or work pads for EHP evaluation as soon as available specially if any construction activity will be necessary to prepare the site(s). Information for staging areas and/or work pads confined to previously disturbed or hardened surfaces can be provided at close-out.
- All borrow or fill material must come from pre-existing stockpiles, material reclaimed from maintained roadside ditches (provided the designed width or depth of the ditch is not increased), or commercially procured material from a source existing prior to the event. For any FEMA-funded project requiring the use of a non-commercial source or a commercial source that was not permitted to operate prior to the event (e.g. a new pit, agricultural fields, road ROWs, etc.) in Recipient prior to extracting material. FEMA must review the source for compliance with all applicable federal environmental planning and historic preservation laws and execute orders prior to a subrecipient or their contractor commencing borrow extraction. Consultation and regulatory permitting may be required. Non-compliance with this requirement may jeopardize receipt of federal funding. Documentation of borrow sources utilized is required at closeout.
- Executive Order 11988 - Floodplain Conditions for Feeders 2701-02, 3406-01 and 3701-02: 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 Applicants permanent files.

- Executive Order 11990 - Wetlands Conditions for Feeder 2701-02: 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.
- 5. For all boa sightings (dead or alive), record the time and date of the sighting and the specific location where it was found. Data will also include a photo of the animal (dead or alive), relocation site GPS coordinates, time and date of the relocation, and comments on how the animal was detected and its behavior. 6. If any PR or VI boa (dead or alive) is found within the Action Area and on harms way, the action will stop, and information will be recorded (see #5). All attempts will be made to immediately safely capture and relocate the animal within suitable habitat (forested) at least 1km from the Action Area and away from construction areas. PR boa relocation sites will be pre-determined before the project starts and sites shared with the Service for revision and concurrence. Relocation of PR boas will be conducted by trained, designated personnel ensuring the animal is not harmed or injured during the capture and relocation process. 7. Measures will be taken to avoid and minimize PR boa and VI boa casualties by heavy machinery or motor vehicles being left in the Action Area. - Any heavy machinery left on site (staging areas) or near potential PR or VI boa habitat will be thoroughly inspected each morning before work starts to ensure that no boas have sheltered within engine compartments or other areas of the heavy machinery. If a PR boa or VI boa is found within vehicles or heavy machinery, boas will be safely captured accordingly. If not possible, the animal will be left alone until it leaves the vehicle or machine by itself. - The PR boa and VI boa may seek shelter within debris piles. Measures should be taken to avoid and minimize boa casualties associated with sheltering in new debris piles as a result of project activities. New debris piles should be placed in areas as far as possible from forested areas. Prior to moving, disposing, or shredding, debris piles should be carefully inspected for the presence of PR boas and VI boas. If debris piles will be left on site, we recommend they be placed in an undisturbed area. - In the event a PR boa and VI boa is found dead within the project area, the Federal Agency and the Recipient must contact the Service to appropriately dispose the animal. - If a PR boa or a VI boa is accidentally injured or killed during capture and relocation activities during the Action, the Federal Agency and the Recipient shall terminate the authorized activities and contact the Service within 24 hours to 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 Services 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: Puerto Rican Parrot (Amazona vittata) for Feeder 2701-02; Puerto Rican Plain Pigeon (Patagioenas Inornata Wetmorei) for Feeders 3406-01 and 3602-03; Puerto Rican Broad-Winged Hawk (Buteo platypterus brunnescens) for Feeder 2701-02. 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 parrot: February-June. - Puerto Rican plain pigeon: April-September. - 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 Jose 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 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.
- Endangered Species Act (ESA) Conditions for the Puerto Rican Boa (Chilabothrus inornatus) for feeders (2701-02; 3406-01; 3602-03; and 3701-02). 1. Inform all project personnel about the potential presence of the Puerto Rican (PR) boa and Virgin Islands (VI) boa in areas where the proposed work will be conducted and provide training on PR and VI boa identification. A pre-construction meeting will be conducted to inform all project personnel about the need to avoid harming these species. All personnel will be advised that there are civil and criminal penalties for harming, harassing, or killing species protected under the Endangered Species Act of 1973. An educational

poster or sign with photo or illustration of these species will be displayed at the project site. 2. Prior to any construction activity, including removal of vegetation and earth movement, the boundaries of the project area and any area to be excluded and protected will be clearly marked in the project plan and in the field to avoid further habitat degradation outside of the footprint of the project. 3. Once areas are clearly marked, and right before the use of heavy machinery and any construction activity (including removal of vegetation and earth movement), biologist or designated project personnel with experience on these species will survey the areas to be cleared to verify the presence of any PR or VI boa within the Action Area. If a PR or VI boa is found during the search, it should be captured and managed as per #6 below. Once the removal of vegetation begins, the biologist or designated personnel must remain at the work site and be ready to capture any boa that might be in harms way as the result of the habitat disturbance (see #6). 4. For VI boas, once the Action Area has been searched, vegetation will be cut about one meter above ground prior to the use of heavy machinery for land clearing. Cutting vegetation by hand will allow VI boas present on site to move away on their own to adjacent available habitat. If there is no suitable habitat adjacent to the project site, any VI boa found will be relocated accordingly (see #6).

EHP Additional Info

There is no additional environmental historical preservation on **FAASt [Automation Program Group 37] (Distribution)**.

Final Reviews

Final Review

Reviewed By Diaz Rodriguez, Sheila M. **Reviewed On** 07/01/2025 1:17 PM PDT

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** 07/11/2025 2:18 PM PDT

Review Comments

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

Project Signatures

Reviewed By Unsigned **Reviewed On** Unsigned

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 $1,596,192.73 for subaward number 108078 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	9/17/2025	$1,436,573.46	90%	Accepted	4339DRPRP01080781

Department of Homeland Security
Federal Emergency Management Agency

v0

General Info

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

Damage Description and Dimensions

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

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

General Facility Information:

- **Facility Type:** Power generation, transmission, and distribution facilities
- **Facility:** Distribution Feeder Rebuild # 1529-15
- **Facility Description:** The facility included: poles and structures (including their foundations), framing and insulators, load break switches (manual and automated), capacitor banks, voltage regulators, transformers (including lightning arresters and fuse cut-outs), conductors, guy wires, anchoring, grounding assemblies, underground cable, underground cable systems, and fault interrupting equipment (fuses, reclosers, and sectionalizers).
- **Approx. Year Built:** 1980
- **Start GPS Latitude/Longitude:** [redacted]
- **End GPS Latitude/Longitude:** [redacted]

Final Scope

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

Introduction:

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

LUMA submits this (DSOW) pursuant to the Transmission and DistributionOperations & Maintenance Agreement between the Puerto Rico Electric Power Authority ("PREPA"), the Puerto Rico Public- Private Partnerships Authority

("P3A"), and LUMA Energy, and in accordance with the Consent to Federal Funding Letter issued by PREPA and P3A and provided herein as LUMA Vendor Directory Listincluded on the Applicant Event Profile in Grants Portal, which collectively provides the necessary consent for LUMA Energy, as agent of PREPA, to execute federally-funded projects and seek reimbursement from FEMA as it relates to the Transmission and Distribution ("T&D") System.

Facilities Description

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

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

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

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

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

Facility List

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

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

Pole FID	Program	Latitude	Longitude
1002118839	DA	[redacted]	

Project Scope of Work:

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

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

Proposed 428 Public Assistance Scope of Work

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

A. **Poles**

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

B. **Concrete Bases**

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

C. Stainless Steel Transformers

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

D. Guys & Anchors

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

E. Conductor

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

Distribution Line Replacement:

A. Install eleven (11) additional poles to comply with structure loading cases along the feeder backbone. The pole quantities are described in part A of section 4.1, above.
B. Remove existing transformers and replace them with new stainless-steel units with their respective capacity. The transformer quantities are described in part C of section 4.1, above.
C. Remove existing transformers and replace them with three (3) new 37.5KVA and one (1) new 75KVA transformers. The transformers are sized to comply with the current consensus-based Codes and Standards, the LUMA Overhead Electrical Distribution System Manual 4301.001 version 4, available in Grants Portal - Applicant Event Profiles.
D. Remove existing conductors and replace with new conductors per the LUMA specification. The conductor quantities are described in part E of section 4.1, above.

E. Remove existing poles and replace with new poles with streetlighting, including a new luminaire.

F. Remove and replace all distribution equipment, including disconnect switches, fuse cutouts, surge arresters, pole insulators, suspension insulators, cross arms, service drops, secondary lines, tap conductors (first span), in compliance with LUMA Overhead Electrical Distribution System Manual 4301.001 version 4, available in Grants Portal - Applicant Event Profiles.
G. Remove and dispose of the existing distribution lines facilities with their related components (poles, conductors, insulators, and hardware).

H. All the work to be completed will be in the current utility easement.

I. The replacement of individual structures and components will follow the design methodology per the Project Design Criteria and will conform to LUMA codes and standards applicable to the infrastructure.
J. Remove and install three fuses at pole FID# 12253897, coordinates [redacted] Please refer to **Appendix C - Voltage Improvement and Additional Protection Devices.**

Pole Replacement:

A. Remove existing poles and hardware and replace with new poles and hardware within 10 feet of the same location.

B. Depths of the poles to be erected are provided in **Appendix B – Design**.

C. Install new concrete foundation bases in compliance with Distribution Construction Standards (Concrete Base Standard), available in Grants Portal - Applicant Event Profiles. The maximum auger width to be used is 48".
D. Install new guys and anchors to new poles and existing poles in compliance with LUMA Overhead Electrical Distribution System Manual, version 4, available in Grants Portal - Applicant Event Profiles.

Scope Notes

1) Miscellaneous Civil Earthworks:
   i) Install erosion control blankets as temporary **erosion control and protection measures** to mitigate erosion or environmental risks will be installed.

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

3) List of Equipment to be used

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

   iii) All the above equipment will adhere to Tier 4 EPA Emission Standards where applicable.

4) Fill, Gravel, Sand, etc.:

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

5) Staging Area:

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

   ([redacted] and ([redacted]). Refer to ***Appendix D – Staging Area*** for locations with detailed information.

6) Material Disposal:

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

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

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

9) Vegetation Management:

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

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

Project Cost Estimate (PCE):

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

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

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

Work To Be Completed: $ 3,038,024.53

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

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

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

Project Notes:

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

2. For additional information of detailed SOW please refer to document labeled:801172-DR4339PR- - FEEDER 1529-15 DETAILED SCOPE OF WORK FULL 428 REV.3.pdf.

3. For detailed Cost Estimate please refer to document labeled: 801172-DR4339PR-FEEDER 1529-15-APPENDIX F - LUMA LPCE-Rev.2.xlsx.

4. A&E cost included in this project will be reduced from this project and obligated under the FAASt Project #335168, A&E, as show in in the table above. The A&E project was obligated to track and account for cost associated with individual FAASt projects.

5. Equipment and material costs included in this project will be reduced from this project and obligated under FAASt Project#673691, Equipment and Materials, as shown in the table above. Only the base cost of equipment and/or material will be reduced from this project (not labor). All costs associated with Planning, Management, General Conditions, and Contingencies will remain in this project.

6. For reference documents Appendix A through H, see the file labelled:

APPENDIX A – Structural Pole Analysis
APPENDIX B – Design
APPENDIX C – Voltage Improvements and Additional Protection Devices
APPENDIX D – Staging Area
APPENDIX E –Vegetation Management
APPENDIX F – LUMA LPCE

APPENDIX G – Proposed Design KMZ
APPENDIX H – Project Considerations

406 HMP Scope

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

Cost

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

CRC Gross Cost	$2,285,961.13
Total 406 HMP Cost	$0.00
Total Insurance Reductions	$0.00
CRC Net Cost	$2,285,961.13
Federal Share (90.00%)	$2,057,365.02
Non-Federal Share (10.00%)	$228,596.11

Subgrant Conditions

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

Insurance

Additional Information

4/29/2025

GENERAL INFORMATION

Event: DR4339-PR

Project: SP 801172

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) #1492050:

FAASt [Distribution Feeder Rebuild # 1529-15]

Location: Distribution Feeder Rebuild # 1529-15

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 [Distribution Feeder Rebuild # 1529-15] 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.

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

O&M Requirements

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

406 Mitigation

There is no additional mitigation information on **FAASt [Feeder Rebuild # 1529-15] (Distribution)**.

Environmental Historical Preservation

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

EHP Conditions

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

EHP Additional Info

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

Final Reviews

Final Review

Reviewed By LEFRANC-GARCIA, CARLOS L. **Reviewed On** 06/18/2025 12:51 PM PDT

Review Comments

Reviewed, found eligible and reasonable - CLG 06.18.25

Recipient Review

Reviewed By Mulero, Noel **Reviewed On** 07/03/2025 3:44 PM PDT

Review Comments

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

Project Signatures

Reviewed By Unsigned **Reviewed On** Unsigned

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 $2,285,961.13 for subaward number 108083 under Disaster # 4339. The Applicant accepts responsibility for all costs above the Fixed Cost Offer.

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

Award Information

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	9/17/2025	$2,057,365.02	90%	Accepted	4339DRPRP01080831

Department of Homeland Security
Federal Emergency Management Agency

v0

General Info

Project #	825843 **P/W #** 108134	**Project Type**	Specialized
Project Category	F - Utilities	**Applicant**	PR Electric Power Authority (000-UA2QU-00)
Project Title	FAASt [Guanica TC] (Substation)	**Event**	4339DR-PR (4339DR)
Project Size	Large	**Declaration Date**	9/20/2017
Activity Completion Date	9/20/2027	**Incident Start Date**	9/17/2017
Process Step	Obligated	**Incident End Date**	11/15/2017

Damage Description and Dimensions

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

Damage #1548110; [FAASt] Guanica Transformer Replacement

General Facility Information:

- **Facility Type:** Power generation, transmission, and distribution facilities
- **Facility:** Guanica TC
- **Facility Description:** This facility is a transmission center 115/13.20 kV with a capacity of 12.00/22.40 MVA.
- **Approx. Year Built:** 1970
- **GPS Latitude/Longitude:** [redacted]

Final Scope

1548110 **[FAASt] Guanica Transformer Replacement**

Introduction

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

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 page 4.

This document contains the detailed SOW for FEMA PA project Guánica Transformer Replacement under DR-4339-PR Public Assistance. The document provides a detailed description of the project, the scope of PA construction activities to be completed, common EHP review information, and project cost estimates. LUMA is seeking approval from COR3 and FEMA for PA funding for the scope described in this document.

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

Project Description

The purpose of this project is to replace the out-of-service transformer at Guánica, in order to support the electrical stabilization of the substation. This action will prevent system overloads and substation outages. Also, the installation of this transformer will aid and stabilize the transmission and distribution feeders interconnected and related to the function of the substation.

Facility

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

Substation	Voltage (kV)	GPS Location	Construction Year
Guánica TC	115 / 38	[redacted]	1970

Scope Of Work

A. 115/38 kV Transformer:

1. Remove one (1) existing 115/38 kV power transformer. Perform the work associated with removal: decommission, remove accessories, drain and test oil for PCB[LC1] levels.

2. Install a new 115/38 kV, 112 MVA power transformer. The new transformer is being procured through PW10710 for Equipment and Materials.

3. Build a new foundation for the 115/38 kV, 112 MVA power transformer to make it adequate for the new transformer loads and dimensions[IC2] . This transformer platform will have oil containment. 14ft X 24ft X 4ft

4. Provide transportation and unloading services for the substation's new transformer.

5. Provide transportation and unloading services to the old transformer for disposal.

B. Conduits and Control Cables

1. Remove all existing control cables from the 115/38 kV power transformer to the control house.

2. Within the existing footprint, excavate a trench and install eight (8), 2-inch, Sch. 80 PVC conduits, for the new power. The trench will be 24" wide 36" deep. The distance is under design.

3. Install all the new cables from the control house to the new 115/38 kV power transformer.

C. High-Side of the Transformer

Replace the existing 556.5 aluminum-conductor steel reinforced cable (ACSR) for high-side connection between the existing 115kV gas circuit breaker (G.C.B 0070) and the new transformer with a single 1192.5 ACSR.

D. Low-Side of the Transformer

1. Replace the existing 556.5 ACSR for the low-side of the transformer with a parallel conductor 1192.5 ACSR.

E. Protection, Automation, and control

1. Re-use the existing transformer differential protection SEL-387E.

2. Re-use the existing reverse power protection SEL-311C.

3. Re-use the existing breaker failure protection SEL-351.

4. Connect to the RTU (Microsoft) through DNP3 Protocol all Alarms, Metering, and Control of the power transformer, high side breaker (0070) and low side breaker (0030).

5. If the new transformer does not have a transformer monitoring device (such as a SEL-2414 or SEL-2411), a SEL-2411 must be installed in the protection panel to gather all transformer non-electrical alarms and trips, with the load tap change (LTC) control.

F. Testing and Commissioning:

1. Perform all the testing and commissioning associated for the new equipment installation.

G. Demolition:

1. Demolition for the existing foundation will be necessary to build a new, bigger foundation for the transformer that we are replacing. 46ft X 13ft X 3ft[. This work is within the footprint of the substation.

H. Access roads:

1. Improve the substation's existing entrance access road. [IC12] [DM13] This work will be performed outside the substation footprint[SB14] [DM15] .[IC16] See figure 1 for location.

I. Vegetation Clearing

1. Vegetation clearing adjacent to access road so access road can be repaired and restored.

2. The vegetation impact will be 661.36 sqt mts.

406 HAZARD MITIGATION OPPORTUNITY

1. Not applicable in this version of the project.

Project Cost Estimate

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. For a more detailed cost estimate refer to **Appendix E - Guánica TC LPCE**.

COST ESTIMATE			
Cost Element	428	406	PROJECT TOTAL
PLANNING	$ 511,038.09	$ -	$ 511,038.09
Permitting and Assessments	$ 50,752.41	$ -	$ 50,752.41
Environmental Documentation & Management	$ 131,467.60	$ -	$ 131,467.60
Engineering Services & Design	$ 328,818.08	$ -	$ 328,818.08

MANAGEMENT	$ 315,943.04	$ -	$ 315,943.04
Project Management	$ 88,914.55	$ -	$ 88,914.55
Construction Management	$ 118,552.74	$ -	$ 118,552.74
Contracting, Procurement & Contract Administration	$ 49,199.38	$ -	$ 49,199.38
Projects Controls (Scheduling, Estimating, Support, Cost Control, Risk, Document Control & Reporting)	$ 59,276.37	$ -	$ 59,276.37
Guanica TC Estabilization	$ 6,180,043.78	$ -	$ 6,180,043.78
Guanica TC Estabilization, material, labor and equipment.	$ 5,126,506.95	$ -	$ 5,126,506.95
Start Up/Commissioning	$ 76,897.60	$ -	$ 76,897.60
Construction Trespass	$ 25,632.53	$ -	$ 25,632.53
Transportation Expenses	$ 25,632.53	$ -	$ 25,632.53
Security (Field 24 hr)	$ 46,138.56	$ -	$ 46,138.56
Insurance	$ 103,555.44	$ -	$ 103,555.44
Contingency	$ 597,851.06	$ -	$ 597,851.06
Escalation	$ 177,829.11	$ -	$ 177,829.11
GENERAL CONDITIONS	$ 341,053.70	$ -	$ 341,053.70
Sales Tax	$ 135,993.43	$ -	$ 135,993.43
Municipal Construction Tax	$ 205,060.27	$ -	$ 205,060.27
COST TOTALS	$ 7,348,078.61	$ -	$ 7,348,078.61
DEDUCTIONS	TOTAL INSURANCE PROCEEDS RECEIVED		$ -
	DE-OBLIGATION TO FAASt IF APPLICABLE		$ -

FAASt ALLOCATIONS	FAAST PROJECT # - 428	$ 2,320,373.96
	FAAST PROJECT # - 406 HM	$ -
	FAAST PROJECT # TOTAL:	$ 2,320,373.96
	FAASt A&E # 335168 - 428	$ 826,981.13
	FAASt A&E # 335168 - 406 HM	$ -
	FAASt A&E # 335168 TOTAL	$ 826,981.13
	FAASt E&M #673691 - 428	$ 4,200,723.52
	FAASt E&M #673691 - 406 HM	$ -
	FAASt E&M #673691 TOTAL	$ 4,200,723.52

Project Cost Summary, 428 Version 0:

Work to be Completed (WTBC): $ 7,348,078.61

A&E Deduction (Global A&E FAASt 335168): -$826,981.13

E&M Deduction (Global E&M FAASt 673691): -$4,200,723.52

Project Total: $2,320,373.96

Project Cost Estimate Notes:

1. Refer to detailed SOW provided in document labeled: "DR43339PR-FEMA DSOW Guanica TC signed 4.8.2025 (002).pdf

2. Refer to detailed Cost Estimate provided in document labeled: "FEMA LPCE Guanica TC Estabilization 4-3-2025.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. 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 materials will be reduced from this project (not labor). All costs associated with Planning, Management, General Conditions, and Contingencies will remain in this project.2.

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

6. For reference documents Appendix A thru G.

Attachments

Appendix A: Guánica TC Foundation drawings

Appendix B: Guánica TC Road improvements drawings

Appendix C: Guánica TC Site Maps

Appendix D: Guánica TC Warehouse at Palo Seco

Appendix E: Guánica TC LPCE

Appendix F: Guánica TC Photos

Appendix G: Guánica Access Road KMZ

406 HMP Scope

406 Hazard Mitigation measures were not requested by the subrecipient for this project in Version 0. However, the mitigation opportunities will be applied in a future version (V1) of the Permanent Work Project. The project is ready for Insurance completion

Cost

Code	Quantity	Unit	Total Cost	Section
9001	1	Lump Sum	$7,348,078.61	Uncompleted
3510	1	Lump Sum	($826,981.13)	Uncompleted
9001	1	Lump Sum	($4,200,723.52)	Uncompleted
9201	1	Lump Sum	$0.00	Completed

CRC Gross Cost	$2,320,373.96
Total 406 HMP Cost	$0.00
Total Insurance Reductions	$0.00
CRC Net Cost	$2,320,373.96
Federal Share (90.00%)	$2,088,336.57
Non-Federal Share (10.00%)	$232,037.39

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

4/21/2025

GENERAL INFORMATION

Event: DR4339-PR

Project: SP 825843

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: Yes

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

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

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

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

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

Damaged Inventory (DI) #1548110:

[FAASt] Guanica Transformer Replacement

Location Description: Guanica TC

GPS Coordinates: [redacted]

Cause of Loss: Wind / Wind Driven Rain

SOV / Schedule #: Transmission Centers”

SOV / Schedule Amount: $335,000,000.00

Applicable Deductible Amount: $25,000,000.00

Prior Obtain and Maintain Requirement:

No prior insurance requirements were found for this facility.

Reduction(s):

No insurance reduction will be applied to this project. 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 for Equipment, for the peril of Wind (all wind associated losses including "wind driven rain") for the [FAASt] Guanica Transformer Replacement in the amount of $1,756,860.29 (CRC Gross Cost $2,320,373.96 – Uninsurable items $563,513.67). Please see “SP825843 – Cost Estimate – Insurance” 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.

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

O&M Requirements

Insured Peril	Item Type	Description	Required Coverage Amount
Wind	Equipment	An Obtain & Maintain Requirement is being required for Equipment, for the peril of Wind (all wind associated losses including "wind driven rain") for the [FAASt] Guanica Transformer Replacement in the amount of $1,756,860.29.	$1,756,860.29

406 Mitigation

There is no additional mitigation information on **FAASt [Guanica TC] (Substation)**.

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.

- All borrow or fill material must come from pre-existing stockpiles, material reclaimed from maintained roadside ditches (provided the designed width or depth of the ditch is not increased) or commercially procured material from a source existing prior to the event. For any FEMA-funded project requiring the use of a non-commercial source or a commercial source that was not permitted to operate prior to the event (e.g., a new pit, agricultural fields, road ROWs, etc.) in whole or in part, regardless of cost, the Applicant must notify FEMA and the Recipient prior to extracting material. FEMA must review the source for compliance with all applicable federal environmental planning and historic preservation laws and executive orders prior to a Sub-recipient or their contractor beginning to borrow extraction. Consultation and regulatory permitting may be required. Non-compliance with this requirement may jeopardize receipt of federal funding. Documentation of borrow sources utilized is required at close-out and must include fill type (private, commercial, etc.), name, fill site GPS coordinates (not of the company/governmental office), address, and type of material.
- 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.
- If there are any further changes to the SOW, including any increase in the extent of ground disturbance, the applicant must notify FEMA beforehand, prior to engaging in further activities not within the current SOW.
- CERCLA 1: The Applicant is responsible initiate communications with all Local, State or Federal Agency responsible with CERCLA compliance; In the same way the Applicant will be responsible to establish any plan and/or agreement necessary to ensure compliance and manage and perform the project in accordance with them. All communications (emails, letters, plans, agreements, documents, phone calls, etc.) pertaining to these activities and compliance must be maintained in the Applicant's permanent files. These communications may be required as a condition at close-out.
- 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. 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. 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.
- ESA 1: The Applicant must provide documentation at close-out that proves completion of required Conservation Measures.
- ESA 2: Conditions for Puerto Rican boa (PR boa; Chilabothrus inornatus) 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.

- ESA 3: 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 Services Point of Contact (POC) is Jose Cruz-Burgos, Endangered Species Coordinator, and can be contacted at: Mobile: 305-304-1386 Office phone: 786-244-0081 Office Direct Line: 939-320-3120 Email: Caribbean_es@fws.gov or jose_cruz-burgos@fws.gov
- ESA 4: Conditions for the Puerto Rican nightjar: 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 plain pigeon: April-September. - Puerto Rican broad-winged hawk: December-June. - Puerto Rican sharp-shinned hawk: December-June. - Puerto Rican nightjar: February-August. - Elfin-woods warbler: March-June. - Yellow-shouldered blackbird: February-November. 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 Jose 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
- ESA 5: Conditions for Mitracarpus polycladus 30. Before initiating any work within the range of listed plant species and in areas with suitable habitat, applicants must conduct plant surveys. In the event that listed species are discovered at the project site, the Service must be notified. The Applicant must develop conservation measures to minimize or avoid impacts on those species and share those measures with the Service for evaluation and approval. If no listed plants are found during surveys, no further action is required. However, if a listed plant species is found while the project is being conducted, project personnel shall stop work, and the Service should be contacted for further technical assistance. Service's point of contacts: - Jose Cruz-Burgos, Endangered Species Program Coordinator, Mobile: 305-304-1386, Office: 786-244-0081, jose_cruz-burgos@fws.gov. - Omar Monsegur, Fish and Wildlife Biologist, Mobile: (305) 304-0292, omar_monsegur@fws.gov.
- ESA 6: Conditions for Puerto Rican Crested Toad (Peltophryne lemur; PRCT) 32. Outside breeding events, the PRCT is

difficult to detect. The species seems to be more active at night, from 7:30 pm to 1:00 am, and have been observed using small holes and crevices to access underground chambers as daytime retreats. The Service has developed the following conservation measures with the purpose of assisting others to avoid or minimize adverse effects to the PRCT and its habitat. a. Inform all project personnel about the potential presence of the PRCT in areas where the proposed work will be conducted. A pre-construction meeting must be conducted to inform all project personnel about the need to avoid harming the species as well as penalties for harassing or harming PRCTs. 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 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 must be clearly marked in the project plan and in the field in order to avoid further habitat degradation into forested and conservation areas. c. Strict measures must be established to minimize toad casualties by motor vehicles or other equipment in areas where the species is known to occur. Once the access routes are determined, maintain the traffic (human and vehicle) within designated access to minimize affecting toads and habitat. Personnel shall pay attention in those access routes particularly at night, and after heavy rains to avoid mortality of toads. d. Before earth movement, vegetation clearing, or debris removal activities commence each workday, biologist or personnel with experience identifying and searching for toads shall survey the work area to ensure that no toads are present or can be affected by the work activities for that day. If a crested toad is observed any time within the operational area of the project, cease or delay activities in this area until the toads move out of the area on their own. Activities at other work sites, where no toads have been found after surveying, may continue. e. We recommend the use of sound recorders and monitoring of ponds, if present, within or near the project area to detect toad activities and breeding events, particularly during the rainy season. f. Avoid impacts to drainages and avoid interrupting water flow and potential movement pathways for toads. g. If a PRCT is in an imminent risk of being affected by the project, contact PRDNER Rangers and the Service. h. For all PRCT sightings (dead or alive), record the time and date of the sighting and the specific location and send the information to the caribbean_es@fws.gov. i. For questions regarding the Puerto Rican Crested toad the Point of Contacts are: Jose Cruz-Burgos, Endangered Species Program 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 Direct Line: 939-320-3113 Email: carlos_pacheco@fws.gov

EHP Additional Info

There is no additional environmental historical preservation on **FAASt [Guanica TC] (Substation)**.

Final Reviews

Final Review

Reviewed By LEFRANC-GARCIA, CARLOS L. **Reviewed On** 09/12/2025 6:42 PM PDT

Review Comments

Reviewed, found eligible and reasonable - CLG 09/12

Recipient Review

Reviewed By Mulero, Noel **Reviewed On** 09/16/2025 6:43 PM PDT

Review Comments

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

Project Signatures

Reviewed By Unsigned

Reviewed On Unsigned

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 $2,320,373.96 for subaward number 108134 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	9/22/2025	$2,088,336.57	90%	Accepted	4339DRPRP01081341

Department of Homeland Security
Federal Emergency Management Agency

v0

General Info

Project #	956342 **P/W #** 108153	**Project Type**	Specialized
Project Category	F - Utilities	**Applicant**	PR Electric Power Authority (000-UA2QU-00)
Project Title	FAASt [Arecibo Region 2 Line 36400 (115Kv) – Ponce TC to Dos Bocas HP] (Vegetation)	**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 #1716299; Arecibo Region 2 Transmission Line 36400 – Ponce TC to Dos Bocas HP

General Facility Information:

- **Facility Type:** Power generation, transmission, and distribution facilities
- **Facility:** Transmission Line 36400 – Ponce TC to Dos Bocas HP
- **Facility Description:** Transmission line 36400 is a single circuit line with a total length of 36.78 miles.
- **Approx. Year Built:** 1980
- **Start GPS Latitude/Longitude:** [redacted]
- **End GPS Latitude/Longitude:** [redacted]

Final Scope

1716299 **Arecibo Region 2 Transmission Line 36400 – Ponce TC to Dos Bocas HP**

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 SOP states that the SOW may include § 406 hazard mitigation proposals ("HMPs"). This project version does not include 406 hazard mitigation proposals. 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 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 # 956342 under DR-4339-PR Public Assistance. The document

provides a detailed description of the project, the scope of PA construction activities to be completed, common EHP review information and project cost estimates. The Subrecipient seeks approval from COR3 and FEMA for PA funding for the scope described herein.

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

Transmission Line 36400 Vegetation Clearance

This is a LUMA priority single transmission line vegetation clearing project for an entire ruralsegment of the 115kV Line 36400 in Arecibo Region 2 that starts at Ponce TC and ends at DosBocas HP. The DSOW captures the scope of work and cost estimate for Vegetation Clearing intended to mitigate the threat that the existing vegetation along this segment of Line 36400, if left untended to, poses a threat to Puerto Rico's electric grid reliability.

In this DSOW for vegetation clearing of 11.484 miles at TL 36400 Ponce TC to Dos Bocas HP. FEMA has recognized that a one-time, island-wide vegetation clearance and removal operation may be considered an eligible § 406 HMP. As instructed by FEMA Public Assistance leadership, LUMA is submitting the full scope of vegetation clearance for Line 36400 Ponce TC to Dos Bocas HP as a § 428 cost in this DSOW. Following obligation, FEMA PA leadership agreed that LUMA will submit an amendment to move the costs related to LUMA's Vegetation Clearing Program.

Facilities

Facilities List – Building and Substations

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

Facilities List – Other facilities

Transmission line segment of TL 36400 is a rural-single circuit line. Vegetation clearance will be performed in the identifed segments of the following transmission line:

Table 1: Transmission Line and the segments in which vegetation clearing is to occur.

Line Segment	Line Number	GPS Start	GPS End	Total Mileage submitted	Total Mileage Validates by FEMA
Ponce TC to Dos Bocas HP	36400	[redacted]		36.78	11.484

Project Area Map with Boundaries of Construction

Please see Appendix D – TL36400.kmz/Shapefile

Scope of Work

The type of project proposed:

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 Work to be Performed

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 E** 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 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

Vegetation outside or along the boundary of the easement has the potential to interfere with the operation of power transmission lines 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.

Disposal

Excess woody debris will be removed from the easement. See Vegetative Removal in section 11.0, below.

Scope of Work Limitations

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.

The 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 Number 7282 may 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, 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 measured from the highest part of the vegetation within the easement to the lowest conductor of the power line be maintained.

The Regulation 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-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, 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 overhead power lines, Regulation 7282 recommends the following minimum widths for easements:

Recommended Easement Width for Overhead Transmission & Sub-transmission Lines (Feet)				
Construction type	Area	Voltage		
		38	115	230
Single Circuit	Urban	25'	30'	40'
	Rural	50'	100'	100'
Double Circuit, Same Structure	Urban	25'	40'	60'
	Rural	50'	100'	100'
Double Circuit, Different Structures	Rural	50'	100'	100'

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, "[v]egetation 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 to the following distances measured from the outermost conductor's edge:

Voltage Class	Horizontal Clearance
230 kV	25' or edge of easement, whichever is less
115 kV	20' or edge of easement, whichever is less
38 kV	15' or edge of easement, whichever is less

This scope of work includes repair related vegetation removal included in the sub-FAASt recovery project below. No duplicate costs for repair-related vegetation clearance will be captured in the sub-FAASt recovery project.

Table 2: FAASt Recovery Projects on the Same Line Identified in this Sub-FAASt Project.

FAASt Recovery Project #	Project Name	GPS Start	GPS End	Miles

168483	FAAST - 115kV Line 36400 - Dos Bocas HP to Ponce TC (Transmission)	[redacted]	[redacted]	36.90
Total Mileage				36.90

Codes & Standards

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

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

b. Industry standards per FEMA Recovery Policy FP-104-009-5, Version 2.1, Implementing Section 20601 of the 2018 Bipartisan Budget Act through the Public Assistance Program.

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

d. Subrecipient's authorized representative '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 Version2.1 (Dec. 20, 2019).

All work will be conducted in compliance with applicable industry standards and best practices, including:

a. LUMA Vegetation Management Plan (2024) which incorporates the following:

i. Reglamento de Servidumbres para la Autoridad de Energía Eléctrica 7282 (2007) (Regulation 7282).

ii. NESC – National Electrical Safety Code, Rule 218 (2017), adopted by PREPA through Rule 7014.

iii. PREPA Technical Communication 12-2 (Technical Press Releases and Circulars 2012).

iv. ANSI A300 Tree, Shrub, and other Woody Plant Management- Standard Practices:

1) Part 1 Pruning (2017).

2) Part 7 Integrated Vegetation Management (2018).

3) Part 9 Tree Risk Assessment (2017).

Project Cost Estimate

This project scope and cost details the proposal to clear 11.484 miles of vegetation on TL 36400 at an agreed to and validated cost of $367,454.17 per mile as detailed in the scope of work and represented in the cost estimate. For more details on this cost estimate, refer to **Appendix C.1 – DR4339PR-FEMA Cost Estimate**.

Project	Line	Line length (miles)	Vegetation Line Length (miles)	10% Adm. Buffer Acceptance (Miles)	% of Vegetation	FEMA cost	FEMA Final Cost	3% Basic Construction Services (A&E)	Total Project Cost without A&E

956342	36400	36.78	10.44	11.484	31.22%	$367,454.17	$4,219,843.69	$126,595.31	$4,093,248.38

Work to be completed: $4,219,843.69

A&E Deduction (Global A&E FAASt 335168): - $126,595.31

Project Total Cost: $4,093,248.38

Project Notes:

1. Refer to detailed SOW provided in document labeled: “956342-DR4339PR-Vegetation – Ponce TC to Dos Bocas HP. FEMA .pdf”

2. Refer to detailed Cost Estimate provided in document labeled: “Appendix C.1 - DR4339PR-FEMA Cost Estimate.pdf”

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

4. For clarification of cost estimate adjustment, please refer to email correspondence: “956356 - DR4339PR - PREPA FAASt projects (115kV) Email Correspondance”

5. A&E costs included in this project will be reduced from this project and obligated under the FAASt Project #335168, A&E, as shown in the table above. The A&E project was obligated to track and account for costs associated with individual FAASt projects.

6. Attachments:
    a. Appendices A and B - Lists of Protected Flora Species and Incompatible Flora Species
    b. Appendix C.1 - DR4339PR-FEMA Cost Estimate
    c. Appendix D - KMZ/Shapefile – Mapping
    d. Appendix E - ANSI A300
    e. Appendix F - Example TL 39000 Density Photographs

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	($126,595.31)	Uncompleted
9001	1	Lump Sum	$4,219,843.69	Uncompleted

CRC Gross Cost	$4,093,248.38
Total 406 HMP Cost	$0.00
Total Insurance Reductions	$0.00
CRC Net Cost	$4,093,248.38
Federal Share (90.00%)	$3,683,923.55
Non-Federal Share (10.00%)	$409,324.83

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.
- 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

8/11/2025

Does the Applicant have a Commercial Policy: Yes.

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

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

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

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

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

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

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

O&M Requirements

There are no Obtain and Maintain Requirements on **FAASt [Arecibo Region 2 Line 36400 (115Kv) – Ponce TC to Dos Bocas HP] (Vegetation)**.

406 Mitigation

There is no additional mitigation information on **FAASt [Arecibo Region 2 Line 36400 (115Kv) – Ponce TC to Dos Bocas HP] (Vegetation)**.

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 [Arecibo Region 2 Line 36400 (115Kv) – Ponce TC to Dos Bocas HP] (Vegetation)**.

Final Reviews

Final Review

Reviewed By LEFRANC-GARCIA, CARLOS L. **Reviewed On** 09/12/2025 2:30 PM PDT

Review Comments

Reviewed, found eligible and reasonable - CLG 09.12

Recipient Review

Reviewed By Mulero, Noel **Reviewed On** 09/15/2025 2:13 PM PDT

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

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	9/17/2025	$3,683,923.55	90%	Accepted	4339DRPRP01081531

Department of Homeland Security
Federal Emergency Management Agency

v0

General Info

Project #	956349 **P/W #** 108157	**Project Type**	Specialized
Project Category	F - Utilities	**Applicant**	PR Electric Power Authority (000-UA2QU-00)
Project Title	FAASt [San Juan Region 1 Line 36800 (115kV) – Canovanas TC to Palmer TC] (Vegetation)	**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 #1716303; San Juan Region 1 Transmission Line 36800 – Canovanas TC to Palmer TC

General Facility Information:

- **Facility Type:** Power generation, transmission, and distribution facilities
- **Facility:** Transmission Line 36800 – Canovanas TC to Palmer TC
- **Facility Description:** Transmission line 36800 is a single circuit line with a total of 11.13 miles.
- **Approx. Year Built:** 1980
- **Start GPS Latitude/Longitude:** [redacted]
- **End GPS Latitude/Longitude:** [redacted]

Final Scope

1716303 San Juan Region 1 Transmission Line 36800 – Canovanas TC to Palmer 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 SOP states that the SOW may include § 406 hazard mitigation proposals ("HMPs"). This project version does not include 406 hazard mitigation proposals. 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 # 956349 under DR-4339-PR Public Assistance. The document provides a detailed description of the project, the scope of PA construction activities to be completed, common EHP review information and project cost estimates. The Subrecipient seeks approval from COR3 and FEMA for PA funding for the scope described herein.

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

Transmission Line 36800 Vegetation Clearance

This is a LUMA priority single transmission line vegetation clearing project for an entire rural segment of the 115kV Line 36800 in San Juan Region 1 that starts at Canovanas TC and ends at Palmer TC. The DSOW captures the scope of work and cost estimate for Vegetation Clearing intended to mitigate the threat that the existing vegetation along this segment of Line 36800, if left untended to, poses a threat to Puerto Rico's electric grid reliability.

In this DSOW for vegetation clearing of 3.828 miles along TL 36800 Canovanas TC to Palmer TC. FEMA has recognized that a one-time, island-wide vegetation clearance and removal operation may be considered an eligible § 406 HMP. As instructed by FEMA Public Assistance leadership, LUMA is submitting the full scope of vegetation clearance for Line 36800 Canovanas TC to Palmer TC as a § 428 cost in this DSOW. Following obligation, FEMA PA leadership agreed that LUMA will submit an amendment to move the costs related to LUMA's Vegetation Clearing Program.

FACILITIES

1.1 FACILITIES LIST – BUILDINGS AND SUBSTATIONS

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

•N/A

1.2 FACILITIES LIST – OTHER FACILITIES

Transmission line segment of TL 36800 is a rural-single circuit line. Vegetation clearance will be performed in the identified segments of the following transmission line:

Table 1: Transmission Line and the segments in which vegetation clearing is to occur.

Line Segment	Line Number	GPS Start	GPSEnd	Total Mileage submitted	Total Mileage Validated by FEMA
Canovanas TC to Palmer TC	3680	[redacted]	[redacted]	11.13	3.828

PROJECT AREA MAP WITH BOUNDARIES OF CONSTRUCTION

1.0Please see Appendix D – TL36800 .kmz/Shapefile.

§ 428 SCOPE OF WORK

The type of project proposed:

?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 ___.

1.3 DESCRIPTION OF PROPOSED WORK TO BE PERFORMED 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 E 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 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 within 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

Vegetation outside or along the boundary of the easement has the potential to interfere with the operation of power transmission lines 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.

Disposal

Excess woody debris will be removed from the easement. See Vegetative Removal in section 11.0, below.

Scope of Work Limitations

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.

The 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 Number 7282 may 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, 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 measured from the highest part of the vegetation within the easement to the lowest conductor of the power line be maintained.

The Regulation 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-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, or operate. PREPA's Regulation 7282 (Feb. 24,2007) describes the minimum requirements that easements must meet for PREP infrastructure, and the rights afforded to PREPA by easement.

For overhead power lines, Regulation 7282 recommends the following minimum widths for easements:

Recommended Easement Width for Overhead Transmission & Sub-transmission Lines (feet)				
Construction Type	**Area**	**Voltage**		
		38	**115**	**230**
Single Circuit	Urban	25'	30'	40'
	Rural	50'	100'	100'
Double Circuit, Same Structure	Urban	25'	40'	60'
	Rural	50'	100'	100'
Double Circuit, Different Structures	Rural	50'	100'	100'

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, "[v]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 to the following distances measured from the outermost conductor's edge:

Voltage Class	Horizontal Clearance
230 kV	25' or edge of easement, whichever is less
115 kV	20' or edge of easement, whichever is less
38 kV	15' or edge of easement, whichever is less

This scope of work includes repair related vegetation removal included in the sub-FAASt recovery project below. No duplicate costs for repair-related vegetation clearance will be captured in the sub-FAASt recovery project.

Table 2: FAASt Recovery Projects on the Same Line Identified in this Sub-FAASt Project.

FAASt Recovery Project #	**Project Name**	**GPS Start**	**GPS End**	**Miles**

180326	Canovanas TC to Sabana Llana TC	[redacted]		8
180326	Canovanas TC to Palmer TC			23
180326	Palmer TC to Fajardo TC			
Total Mileage				31

1.4 CODES & STANDARDS

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

a. Consensus-based codes, per FEMA's Public Assistance Alternative Procedures (Section428) Guide for Permanent Work FEMA-4339-DR-PR (Feb. 2020).

b. 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.

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

d. Subrecipient's authorized representative '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 Version2.1 (Dec. 20, 2019).

All work will be conducted in compliance with applicable industry standards and best practices, including:

a. LUMA Vegetation Management Plan (2024) which incorporates the following:

i. Reglamento de Servidumbres para la Autoridad de Energía Eléctrica 7282 (2007) (Regulation 7282).

ii. NESC – National Electrical Safety Code, Rule 218 (2017), adopted by PREPAthrough Rule 7014.

iii. PREPA Technical Communication 12-2 (Technical Press Releases and Circulars2012).

iv. ANSI A300 Tree, Shrub, and other Woody Plant Management- Standard Practices:

1)Part 1 Pruning (2017).

2)Part 7 Integrated Vegetation Management (2018).

3)Part 9 Tree Risk Assessment (2017).

PROJECT COST ESTIMATE (PCE)

This project scope and cost details the proposal to clear 3.828 miles of vegetation on TL 36800 at an agreed to and validated cost of $367,454.17 per mile as detailed in the scope of work and represented in the cost estimate (does not include pre/post inspection costs). For more details on this cost estimate, refer to **Appendix C.1 – DR4339PR-FEMA Cost Estimate.**

	Line	Line length (Miles)	Vegetation Line length (Miles)	10%Adm. Buffer Acceptan ce (Miles)	% of Vegetation	FEMA Cost	FEMA Final Cost	3% Basic Construction Services (A&E)	Total Project Cost without A&E
	36800	11.13	3.48	3.828	34.39%	$367,454.17	$1,406,614.56	$42,198.44	$1,364,416.12

Work to be completed: $1,406,614.56

A&E Deduction (Global A&E FAASt 335168): - $42,198.44

Project Total Cost: $1,364,416.12

Project Notes:

1. Refer to detailed SOW provided in document labeled: " 956349-DR4339PR-Vegetation Clearance for FAASt 956349_ San Juan Region 1 Transmission Line 36800 – Canovanas TC to Palmer TC.FEMA.pdf"

2. Refer to detailed Cost Estimate provided in document labeled: " LPCE - VEG - 115kv TLINE 36800 Canovanas TC to Palmer TC - 8.1.25.xlsx"

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

4. For clarification of cost estimate adjustment, please refer to email correspondence: "956353 - DR4339PR - PREPA FAASt projects (115kV) Email Correspondance"

5. A&E costs included in this project will be reduced from this project and obligated under the FAASt Project #335168, A&E, as shown in the table above. The A&E project was obligated to track and account for costs associated with individual FAASt projects.

6. Attachments:

   a. Appendices A and B - Lists of Protected Flora Species and Incompatible Flora Species

   b. Appendix C.1 - DR4339PR-FEMA Cost Estimate

   c. Appendix D - KMZ/Shapefile – Mapping

   d. Appendix E - ANSI A300

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	$1,406,614.56	Uncompleted
3510	1	Lump Sum	($42,198.44)	Uncompleted

CRC Gross Cost	$1,364,416.12
Total 406 HMP Cost	$0.00
Total Insurance Reductions	$0.00
CRC Net Cost	$1,364,416.12
Federal Share (90.00%)	$1,227,974.51
Non-Federal Share (10.00%)	$136,441.61

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

Does the Applicant have a Commercial Policy: Yes.

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

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

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

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

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

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

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

O&M Requirements

There are no Obtain and Maintain Requirements on **FAASt [San Juan Region 1 Line 36800 (115kV) – Canovanas TC to Palmer TC] (Vegetation)**.

406 Mitigation

There is no additional mitigation information on **FAASt [San Juan Region 1 Line 36800 (115kV) – Canovanas TC to Palmer TC] (Vegetation)**.

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.
- 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. 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 [San Juan Region 1 Line 36800 (115kV) – Canovanas TC to Palmer TC] (Vegetation)**.

Final Reviews

Final Review

Reviewed By LEFRANC-GARCIA, CARLOS L. **Reviewed On** 09/12/2025 2:39 PM PDT

Review Comments

Reviewed, found eligible and reasonable - CLG 09.12

Recipient Review

Reviewed By Mulero, Noel **Reviewed On** 09/12/2025 7:01 PM PDT

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

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	9/17/2025	$1,227,974.51	90%	Accepted	4339DRPRP01081571

Department of Homeland Security
Federal Emergency Management Agency

v0

General Info

Project #	956353 **P/W #** 108158	**Project Type**	Specialized
Project Category	F - Utilities	**Applicant**	PR Electric Power Authority (000-UA2QU-00)
Project Title	FAASt [Arecibo Region 2 Line 36100 (115kV) – Dos Bocas HP to Barrio Pina] (Vegetation)	**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 #1716302; Arecibo Region 2 Transmission Line 36100 – Dos Bocas HP to Barrio Pina

General Facility Information:

- **Facility Type:** Power generation, transmission, and distribution facilities
- **Facility:** Transmission Line 36100 – Dos Bocas HP to Barrio Pina
- **Facility Description:** Transmission line 36100 is a single circuit line with a total length of 30.97 miles.
- **Approx. Year Built:** 1980
- **Start GPS Latitude/Longitude:** [redacted]
- **End GPS Latitude/Longitude:** [redacted]

Final Scope

1716302 **Arecibo Region 2 Transmission Line 36100 – Dos Bocas HP to Barrio Pina**

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 SOP states that the SOW may include § 406 hazard mitigation proposals ("HMPs"). This project version does not include 406 hazard mitigation proposals. 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 # 956353 under DR-4339-PR Public Assistance. The document provides a detailed description of the project, the scope of PA construction activities to be completed, common EHP review information and project cost estimates. The Subrecipient seeks approval from COR3 and FEMA for PA funding for the scope described herein.

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

Transmission Line 36100 Vegetation Clearance

This is a LUMA priority single transmission line vegetation clearing project for an entire segment of the 115kV Line 36100 in Arecibo Region 2 that starts at Dos Bocas HP and ends at Barrio Pina. The DSOW captures the scope of work and cost estimate for Vegetation Clearing intended to mitigate the threat that the existing vegetation along this segment of Line 36100, if left untended to, poses a threat to Puerto Rico's electric grid reliability.

In this DSOW for vegetation clearing of 10.538 miles at TL 36100 Dos Bocas HP to Barrio Pina. FEMA has recognized that a one-time, island-wide vegetation clearance and removal operation may be considered an eligible § 406 HMP. As instructed by FEMA Public Assistance leadership, LUMA is submitting the full scope of vegetation clearance for Line 36100 Dos Bocas HP to Barrio Pina as a § 428 cost in this DSOW. Following obligation, FEMA PA leadership agreed that LUMA will submit an amendment to move the costs related to LUMA's Vegetation Clearing Program.

Facilities

Facilities List – Building and Substations

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

Facilities List – Other facilities

Transmission line segment of TL 36100 is a rural-single circuit line. Vegetation clearance will be performed in the identified segments of the following transmission line:

Table 1: Transmission Line and the segments in which vegetation clearing is to occur.

Line Segment	Line Number	GPS Start	GPS End	Total Mileage submitted	Total Mileage Validates by FEMA
Dos Bocas HP to Barrios Pina	36100	[redacted]		30.97	10.538

Project Area Map with Boundaries of Construction

Please see Appendix D – TL36100.kmz/Shapefile

Scope of Work

The type of project proposed:

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 Work to be Performed

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 E 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 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

- Vegetation outside or along the boundary of the easement has the potential to interfere with the operation of power transmission lines 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.

Disposal

Excess woody debris will be removed from the easement. See Vegetative Removal in section 11.0, below.

Scope of Work Limitations

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.

The 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 Number 7282 may 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, 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 measured from the highest part of the vegetation within the easement to the lowest conductor of the power line be maintained.

The Regulation 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-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, 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 overhead power lines, Regulation 7282 recommends the following minimum widths for easements:

Recommended Easement Width for Overhead Transmission & Sub-transmission Lines (Feet)				
Construction type	Area	Voltage		
		38	115	230
Single Circuit	Urban	25'	30'	40'
	Rural	50'	100'	100'
Double Circuit, Same Structure	Urban	25'	40'	60'
	Rural	50'	100'	100'
Double Circuit, Different Structures	Rural	50'	100'	100'

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, "[v]egetation 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 to the following distances measured from the outermost conductor's edge:

Voltage Class	Horizontal Clearance
230 kV	25' or edge of easement, whichever is less
115 kV	20' or edge of easement, whichever is less
38 kV	15' or edge of easement, whichever is less

This scope of work includes repair related vegetation removal included in the sub-FAASt recovery project below. No duplicate costs for repair-related vegetation clearance will be captured in the sub-FAASt recovery project.

Table 2: FAASt Recovery Projects on the Same Line Identified in this Sub-FAASt Project.

FAASt Recovery Project #	Project Name	GPS Start	GPS End	Miles
167446	TL 36100 Bayamón to Monacillos	[redacted]		7.43
Pending	TL 36100 Dos Bocas to Ciales			14.39
Pending	TL 36100 Cana to Bayamon			6.59
Total Mileage				28.41

Codes & Standards

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

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

b. 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.

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

d. Subrecipient's authorized representative '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 (Dec. 20, 2019).

All work will be conducted in compliance with applicable industry standards and best practices, including:

a. LUMA Vegetation Management Plan (2024) which incorporates the following:

i. Reglamento de Servidumbres para la Autoridad de Energía Eléctrica 7282 (2007) (Regulation 7282).

ii. NESC – National Electrical Safety Code, Rule 218 (2017), adopted by PREPA through Rule 7014.

iii. PREPA Technical Communication 12-2 (Technical Press Releases and Circulars 2012).

iv. ANSI A300 Tree, Shrub, and other Woody Plant Management- Standard Practices:

1) Part 1 Pruning (2017).

2) Part 7 Integrated Vegetation Management (2018).

3) Part 9 Tree Risk Assessment (2017).

Project Cost Estimate

This project scope and cost details the proposal to clear 10.538 miles of vegetation on TL 36100 at an agreed to and validated cost of $367,454.17 per mile as detailed in the scope of work and represented in the cost estimate. For more details on this cost estimate, refer to Appendix C.1 – DR4339PR-FEMA Cost Estimate.

Project	Line	Line length (miles)	Vegetation Line Length (miles)	10% Adm. Buffer Acceptance (Miles)	% of Vegetation	FEMA cost	FEMA final Cost	3% Basic Construction Services (A&E)	Total Project Cost without A&E
956353	36100	30.97	9.58	10.538	34.03%	$367,454.17	$3,872,232.04	$116,166.96	$3,756,065.08

Work to be completed: $3,872,232.04

A&E Deduction (Global A&E FAASt 335168): - $116,166.96

Project Total Cost: $3,756,065.08

Project Notes:

1. Refer to detailed SOW provided in document labeled: "*956353-DR4339PR-Vegetation Clearance for FAASt 956353_ Arecibo Region 2 Transmission Line 36100 – Dos Bocas to Barrio Pina.FEMA.pdf*"

2. Refer to detailed Cost Estimate provided in document labeled: "*Appendix C.1 – DR4339PR-FEMA Cost Estimate.pdf*"

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

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5. A&E costs included in this project will be reduced from this project and obligated under the FAASt Project #335168, A&E, as shown in the table above. The A&E project was obligated to track and account for costs associated with individual FAASt projects.

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   a. Appendices A and B - Lists of Protected Flora Species and Incompatible Flora Species

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   d. Appendix E - ANSI A300

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	$3,872,232.04	Uncompleted
3510	1	Lump Sum	($116,166.96)	Uncompleted

CRC Gross Cost	$3,756,065.08
Total 406 HMP Cost	$0.00
Total Insurance Reductions	$0.00
CRC Net Cost	$3,756,065.08
Federal Share (90.00%)	$3,380,458.58
Non-Federal Share (10.00%)	$375,606.50

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

8/11/2025

Does the Applicant have a Commercial Policy: Yes.

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

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

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

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

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

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

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

O&M Requirements

There are no Obtain and Maintain Requirements on **FAASt [Arecibo Region 2 Line 36100 (115kV) – Dos Bocas HP to Barrio Pina] (Vegetation)**.

406 Mitigation

There is no additional mitigation information on **FAASt [Arecibo Region 2 Line 36100 (115kV) – Dos Bocas HP to Barrio Pina] (Vegetation)**.

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.
- 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. 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 [Arecibo Region 2 Line 36100 (115kV) – Dos Bocas HP to Barrio Pina] (Vegetation)**.

Final Reviews

Final Review

Reviewed By LEFRANC-GARCIA, CARLOS L. **Reviewed On** 09/12/2025 2:40 PM PDT

Review Comments

Reviewed, found eligible and reasonable - CLG 09.12

Recipient Review

Reviewed By Mulero, Noel **Reviewed On** 09/15/2025 2:32 PM PDT

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

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	9/17/2025	$3,380,458.58	90%	Accepted	4339DRPRP01081581

Department of Homeland Security
Federal Emergency Management Agency

v0

General Info

Project #	956356 **P/W #** 108159	**Project Type**	Specialized
Project Category	F - Utilities	**Applicant**	PR Electric Power Authority (000-UA2QU-00)
Project Title	FAASt [Ponce Region 6 Line 39000 (115kV) – Aguas Buenas Substation to Hacienda San Jose] (Vegetation)	**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 #1716306; Ponce Region 6 Transmission Line 39000 – Aguas Buenas Substation to Hacienda San Jose

General Facility Information:

- **Facility Type:** Power generation, transmission, and distribution facilities
- **Facility:** Transmission Line 39000 – Aguas Buenas Substation to Hacienda San Jose
- **Facility Description:** Transmission line 39000 is a single circuit line with a total length of 2.81 miles.
- **Approx. Year Built:** 1980
- **Start GPS Latitude/Longitude:** [redacted]
- **End GPS Latitude/Longitude:** [redacted]

Final Scope

1716306

Ponce Region 6 Transmission Line 39000 – Aguas Buenas Substation to Hacienda San Jose

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 SOP states that the SOW may include § 406 hazard mitigation proposals ("HMPs"). This project version does not include 406 hazard mitigation proposals. 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 # 956356 under DR-4339-PR Public Assistance. The document provides a detailed description of the project, the scope of PA construction activities to be completed, common EHP review information and project cost estimates. The Subrecipient seeks approval from COR3 and FEMA for PA funding for the scope described herein.

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

Transmission Line 39000 Vegetation Clearance

This is a LUMA priority single transmission line vegetation clearing project for an entire segment of the 115kV Line 39000 in Ponce Region 6 that starts at Aguas Buenas Substation and ends at Hacienda San Jose. The DSOW captures the scope of work and cost estimate for Vegetation Clearing intended to mitigate the threat that the existing vegetation along Line 39000, if left untended to, poses a threat to Puerto Rico’s electric grid reliability.

LUMA utilized a vegetation removal contractor, Wright Tree, to assess the conditions of .831 miles of the subject TL 39000 segment. This represents 29.6% of the line segment length. The purpose of this assessment is to generate a project specific scope of work and cost with a high level of accuracy. This estimate is unique to the actual conditions assessed by the contractor and the resulting cost estimate for TL 39000 Aguas Buenas Substation to Hacienda San Jose. LUMA will provide line specific assessments for scope and cost estimates applicable to other priority 115kV lines vegetation clearing projects.

The project scope and cost details the proposal to clear 0.913 miles of vegetation on TL 39000 at an agreed to and validated cost of $367,454.17 per mile as detailed in the scope of work and represented in the cost estimate.

FEMA has recognized that a one-time, island-wide vegetation clearance and removal operation may be considered an eligible § 406 HMP. As instructed by FEMA Public Assistance leadership, LUMA is submitting the full scope of vegetation clearance for Line 39000 Aguas Buenas Substation to Hacienda San Jose as a § 428 cost in this DSOW. Following obligation, FEMA PA leadership agreed that LUMA will submit an amendment to move the costs related to LUMA’s Vegetation Clearing Program.

FACILITIES

1.1 FACILITIES LIST – BUILDINGS AND SUBSTATIONS

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

• N/A

1.2 FACILITIES LIST – OTHER FACILITIES

Transmission line 39000 is a single circuit line. Vegetation clearance will be performed in the identified segments of the following transmission line:

Table 1: Transmission Line and the segments in which vegetation clearing is to occur.

Line Segment	Line Number	GPS Start	GPS End	Total Mileage submitted	Total Mileage Validated by FEMA
Aguas Buenas Substation to Hacienda San Jose	39000	[redacted]		2.82	0.913

PROJECT AREA MAP WITH BOUNDARIES OF CONSTRUCTION

1.0 Please see Appendix D – TL39000 .kmz/Shapefile.

§ 428 SCOPE OF WORK

The type of project proposed:

[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 ___.

1.3 DESCRIPTION OF PROPOSED WORK TO BE PERFORMED

Vegetation Clearing Assessments

Vegetation removal contractor Wright Tree performed the initial verification to determine the scope of work for the necessary vegetation mitigation measures at each facility or asset and the appropriate clearing method, such as including tree felling, vegetation remediation, vegetative debris disposal via chipping, mulching, hauling, and recycling.

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 E** 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 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

Vegetation outside or along the boundary of the easement has the potential to interfere with the operation of power transmission lines 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 thatis 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.

Disposal

Excess woody debris will be removed from the easement. See Vegetative Removal in section 11.0, below.

Scope of Work Limitations

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.

The 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 Number 7282 may 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, 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 measured from the highest part of the vegetation within the easement to the lowest conductor of the power line be maintained.

The Regulation 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-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, 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 overhead power lines, Regulation 7282 recommends the following minimum widths for easements:

Recommended Easement Width for Overhead Transmission & Sub-transmission Lines (feet)				
Construction Type	**Area**	**Voltage**		
		38	**115**	**230**
Single Circuit	Urban	25'	30'	40'
	Rural	50'	100'	100'
Double Circuit, Same Structure	Urban	25'	40'	60'
	Rural	50'	100'	100'
Double Circuit, Different Structures	Rural	50'	100'	100'

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, "[v]egetation 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 to the following distances measured from the outermost conductor's edge:

Voltage Class	Horizontal Clearance
230 kV	25' or edge of easement, whichever is less
115 kV	20' or edge of easement, whichever is less
38 kV	15' or edge of easement, whichever is less

This scope of work includes repair related vegetation removal included in the sub-FAASt recovery project below. No duplicate costs for repair-related vegetation clearance will be captured in the sub-FAASt recovery project.

Table 2: FAASt Recovery Projects on the Same Line Identi?ed in this Sub-FAASt Project.

FAASt Recovery Project #	Project Name	GPS Start	GPS End	Miles
177191	Line 39000 - Aguas Buenas TC to Caguas TC	[redacted]		5.75
Total Mileage				5.75

1.4 CODES & STANDARDS

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

a. Consensus-based codes, per FEMA's Public Assistance Alternative Procedures (Section428)Guide for Permanent Work FEMA-4339-DR-PR (Feb. 2020).
b. 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.
c. FEMA Recovery Interim Policy FP-104-009-11 Version 2.1, Consensus-Based Codes, Specifications, and Standards for Public Assistance.
d. Subrecipient's authorized representative '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 Version2.1 (Dec. 20, 2019).

All work will be conducted in compliance with applicable industry standards and best practices, including:

a . LUMA Vegetation Management Plan (2024) which incorporates the following:
  i. Reglamento de Servidumbres para la Autoridad de Energía Eléctrica 7282 (2007)(Regulation 7282).
  ii. NESC – National Electrical Safety Code, Rule 218 (2017), adopted by PREPA through Rule 7014.

iii. PREPA Technical Communication 12-2 (Technical Press Releases and Circulars 2012).
iv. ANSI A300 Tree, Shrub, and other Woody Plant Management- Standard Practices:
1)Part 1 Pruning (2017).
2)Part 7 Integrated Vegetation Management (2018).
3)Part 9 Tree Risk Assessment (2017).

PROJECT COST ESTIMATE (PCE)

The project scope and cost details the proposal to clear 0.913 miles of vegetation on TL 39000 at an agreed to and validated cost of $367,454.17 per mile as detailed in the scope of work and represented in the cost estimate.

For more details on this cost estimate, refer to **Appendix C.1 – DR-4339PR-FEMA Cost Estimate.**

roject	Line	Line length (Miles)	Vegetation Line length (Miles)	10% Adm. Buffer Acceptance (Miles)	% of Vegetation	FEMA Cost	FEMA Final Cost	3% Basic Construction Services (A&E)	Total Project Cost without A&E
56356	39000	2.82	0.83	0.913	32.38%	$367,454.17	$335,485.66	$10,064.57	$325,421.09

Work to be completed: $335,485.66

A&E Deduction (Global A&E FAASt 335168): - $10,064.57

Project Total Cost: $325,421.09

Project Notes:

1. Refer to detailed SOW provided in document labeled: “956356-DR4339PR-Vegetation Clearance for FAASt 956356_ Ponce Region 6 Transmission Line 39000 – Aguas Buenas Substation to Hacienda San Jose.FEMA.pdf”

2. Refer to detailed Cost Estimate provided in document labeled: “Appendix C.1 - DR4339PR-FEMA Cost Estimate.pdf”

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

4. For clarification of cost estimate adjustment, please refer to email correspondence: “956356 - DR4339PR - PREPA FAASt projects (115kV) Email Correspondance”

5. A&E costs included in this project will be reduced from this project and obligated under the FAASt Project #335168, A&E, as shown in

the table above. The A&E project was obligated to track and account for costs associated with individual FAASt projects.

6. Attachments:
   a. Appendices A and B - Lists of Protected Flora Species and Incompatible Flora Species
   b. Appendix C.1 - DR4339PR-FEMA Cost Estimate
   c. Appendix D - KMZ/Shapefile – Mapping
   d. Appendix E - ANSI A300
   e. Appendix F - Example TL 39000 Density Photographs

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	$335,485.66	Uncompleted
3510	1	Lump Sum	($10,064.57)	Uncompleted

CRC Gross Cost	$325,421.09
Total 406 HMP Cost	$0.00
Total Insurance Reductions	$0.00
CRC Net Cost	$325,421.09
Federal Share (90.00%)	$292,878.99
Non-Federal Share (10.00%)	$32,542.10

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

8/11/2025

Does the Applicant have a Commercial Policy: Yes.

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

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

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

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

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

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

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

O&M Requirements

There are no Obtain and Maintain Requirements on **FAASt [Ponce Region 6 Line 39000 (115kV) – Aguas Buenas Substation to Hacienda San Jose] (Vegetation)**.

406 Mitigation

There is no additional mitigation information on **FAASt [Ponce Region 6 Line 39000 (115kV) – Aguas Buenas Substation to Hacienda San Jose] (Vegetation)**.

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.
- 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. 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 [Ponce Region 6 Line 39000 (115kV) – Aguas Buenas Substation to Hacienda San Jose] (Vegetation)**.

Final Reviews

Final Review

Reviewed By LEFRANC-GARCIA, CARLOS L. **Reviewed On** 09/12/2025 2:25 PM PDT

Review Comments

Reviewed, found eligible and reasonable- CLG 09.12

Recipient Review

Reviewed By Mulero, Noel **Reviewed On** 09/15/2025 1:33 PM PDT

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

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	9/17/2025	$292,878.99	90%	Accepted	4339DRPRP01081591

Department of Homeland Security
Federal Emergency Management Agency

v0

General Info

Project #	956593 **P/W #** 108161	**Project Type**	Specialized
Project Category	F - Utilities	**Applicant**	PR Electric Power Authority (000-UA2QU-00)
Project Title	FAASt [Factor Sect 8014 Transformer Replacement] (Substation)	**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 #1720450; FAASt [Factor Sect 8014 Transformer Replacement]

General Facility Information:

- **Facility Type:** Power generation, transmission, and distribution facilities
- **Facility:** Factor Sect 8014 Transformer Replacement
- **Facility Description:** Factor Sectionalizer has two 38/13.2kV transformers, but one is out of service. The purpose of this project is to stabilize the distribution and transmission grids around the Factor Sectionalizer by replacing the out-of-service transformer. This action will aid and stabilize the transmission and distribution feeders by preventing consequential load loss as a result of a forced outage of transformers at adjacent substations caused by future storms similar to Hurricane Maria. If, during a storm, the adjacent stations or distribution lines are damaged and experience a forced outage, the new transformer can absorb the load of the adjacent 13 kV feeders, thus providing critical backup to those substations.
- **Approx. Year Built:** 1984
- **Location Description:** See coordinates.
- **GPS Latitude/Longitude:** [redacted]

Final Scope

1720450 **FAASt [Factor Sect 8014 Transformer Replacement]**

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 Factor Sect 8014 Transformer Replacement under DR-4339-PR Public Assistance. The document provides a detailed description of the project, the scope of PA construction activities to be completed, common EHP review information, and project cost estimates. LUMA is seeking approval from COR3 and FEMA for PA funding for the scope described in this document.
LUMA submits this Detailed SOW pursuant to the Transmission and Distribution Operations and Maintenance Agreement between the Puerto Rico Electric Power Authority ("PREPA"), the Puerto Rico Public-Private Partnerships Authority ("P3A"), and LUMA, and in accordance with the Consent to Federal Funding Letter issued by PREPA and P3A, which collectively provides the necessary consent for LUMA, as agent of PREPA, to undertake work in connection with any Federal Funding requests related to the T&D System submitted to FEMA. References to "Subrecipient" herein refer to PREPA pursuant to this agreement and consent for LUMA to act as its agent with respect to federal funds.

Project Description

Factor Sectionalizer has two 38/13.2kV transformers, but one is out of service. The purpose of this project is to stabilize the distribution and transmission grids around the Factor Sectionalizer by replacing the out-of-service transformer. This action will aid and stabilize the transmission and distribution feeders by preventing consequential load loss as a result of a forced outage of transformers at adjacent substations caused by future storms similar to Hurricane Maria. If, during a storm, the adjacent stations or distribution lines are damaged and experience a forced outage, the new transformer can absorb the load of the adjacent 13 kV feeders, thus providing critical backup to those substations.

Facilities

Factor Sectionalizer is a 14,993 sq ft substation located in Arecibo municipality. It has a two 38-kV/13.2 kV transformers, one of which is out of service and needs to be replaced. The following table describes the name, year of construction, and GPS coordinates of each building or substation included in this project:

Substation	Voltage (kV)	GPS Location	Construction Year
Factor Sect 8014	38/13.2	[redacted]	1984

Scope of Work to be Performed

A. 38 kV Transformer:

1. Remove one (1) existing 38/13.2 kV 22.4 MVA power transformer (13' X 8'). Work associated with the removal includes: decommission, remove accessories, drain, and test oil for PCB levels. Refer to line 27 of the LPCE.

2. Install a new 38/13.2 kV 22.4 MVA power transformer. Refer to line 49 of the LPCE. The new transformer is being procured through PW10710 for Equipment and Materials.

3. Expand the existing foundation of 13' X 8' for the 38/13.2 kV 22.4 MVA power transformer to make it adequate for the new transformer loads and dimensions. This transformer platform will have oil containment with dimensions of 21.5' long X 15' wide. Refer to lines 32 to 43 of the LPCE.

4. Provide transportation and unloading services for the new transformer to the facility and the old transformer to be disposed. Refer to line 50 of the LPCE.

B. Conduits and Control Cables from 38 kV Transformers to Control House

1. Remove all the existing control cables from the 38 kV power transformer to the control house.

2. Within the existing footprint, excavate a trench and install eight (8), 2-inch, Sch. 80 PVC conduits (per LUMA's Substation Design Criteria Document (DCD) Document No.: 4801.001), for the new power. The trench will be 24" wide X 36" deep X 10' long. Refer to line 64 of the LPCE.

3. Install all the new cables from the control house to the new 38 kV power transformer, 250' of 10 AWG, 4/C.

C. High Side of the Transformer

1. Remove and replace the existing 1-inch copper busbar for the high-side connection between the existing 38kV gas circuit breaker (0050) and the new transformer with a new 1-inch copper busbar. Refer to lines 29 and 30 of the LPCE.

D. Low Side of the Transformer

1. Remove and replace the existing 2-inch copper busbar for the low side connection between the existing metal clad and the transformer with a new 2-inch copper busbar. Refer to lines 29 and 30 of the LPCE.

E. Conduits and Control Cables from 38/13.2 kV Transformer and Gas Circuit Breaker to Control House

1. Reuse all the existing control cables from the 38/13.2 kV power transformer to the old control house.

F. Protection, Automation, and Control

1. Re-use the existing transformer differential protection SEL-387E.

G. Testing and Commissioning:

1. Perform all the testing and commissioning associated with the new equipment installation.

H. Ground Rods and Ground Plate

The table below describes the location and dimensions of the ground rods and ground plates. Ground rods and ground plates will comply with LUMA's Substation Ground Grid Design Standard Document No.: 4801.003.

Grounding Equipment	Quantity	Dimensions	Coordinates
Factor Sect 8014	To be Determined	¾" diameter x 10ft (depth)	To Be Determined
Ground Plates	To be Determined	96" x 72" Depth to be determined	To Be Determined

a. Trenches for Buried Conduit

Trenches will be dug for conduit that will be used for control cables from the new transformer and gas circuit breakers to the control room. Refer to lines 63 to 69 of the LPCE. Table below describes the start and end points of the trench and its dimensions. Table 9 below describes the quantity location and dimensions of the precast hand holes.

Project Cost Estimate

COST ESTIMATE			
Cost Element	428	406	PROJECT TOTAL
PLANNING	$296,664.48	$ -	$296,664.48
Permitting and Assessments	$2,899.24	$ -	$2,899.24
Environmental Documentation & Management	$26,330.53	$ -	$26,330.53

Engineering Services & Design	$267,434.71	$ -	$267,434.71
MANAGEMENT	$118,196.63	$ -	$118,196.63
Project Management	$31,300.77	$ -	$31,300.77
Construction Management	$31,300.77	$ -	$31,300.77
Contracting, Procurement & Contract Administration	$6,707.30	$ -	$6,707.30
Projects Controls (Scheduling, Estimating, Support, Cost Control, Risk, Document Control & Reporting)	$48,887.79	$ -	$48,887.79
Factor Sect. 68014	$5,208,443.53	$ -	$5,208,443.53
Factor Sect. 68014, material, labor and equipment	$4,390,304.22	$ -	$4,390,304.22
Start Up/Commissioning	$65,854.56	$ -	$65,854.56
Construction Trespass	$21,951.52	$ -	$21,951.52
Transportation Expenses	$5,959.61	$ -	$5,959.61
Security (Field 24 hr)	$2,781.15	$ -	$2,781.15
Insurance	$88,684.14	$ -	$88,684.14
Contingency	$486,244.94	$ -	$486,244.94
Escalation	$146,663.39	$ -	$146,663.39
GENERAL CONDITIONS	$284,014.97	$ -	$284,014.97
Sales Tax	$64,499.76	$ -	$64,499.76
Municipal Construction Tax	$219,515.21	$ -	$219,515.21
COST TOTALS	$5,907,319.61	$ -	$5,907,319.61
DEDUCTIONS	TOTAL INSURANCE PROCEEDS RECEIVED		$ -

	DE-OBLIGATION TO FAASt IF APPLICABLE	$ -
FAASt ALLOCATIONS	~~FAAST PROJECT # - 428~~	~~$3,751,193.63~~
	FAAST PROJECT # - 406 HM	$ -
	FAAST PROJECT # TOTAL:	$3,751,193.63
	FAASt A&E # 335168 - 428	$414,861.11
	FAASt A&E # 335168 - 406 HM	$ -
	FAASt A&E # 335168 TOTAL	$414,861.11
	FAASt E&M #673691 - 428	$1,741,264.87
	FAASt E&M #673691 - 406 HM	$ -
	FAASt E&M #673691 TOTAL	$1,741,264.87

Project 956593 Cost Summary, 428 PAAP:

Work To Be Completed (WTBC): $5,907,319.61

A&E Deduction (Global A&E FAASt 335168): - $414,861.11

E&M Deduction (Global E&M FAASt 673691): -$1,741,264.87

Project Total Cost: $3,751,193.63

Project Notes

1. 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 costs associated with individual FAASt projects.

2. 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.

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

4. For details on the updated SOW and CE, refer to filenames:

- DR4339PR - Detail Scope of Work for Factor Sectionalizer signed (6.19.2025) (003).pdf
- Appendix D - LPCE FActor transformer instalation(5-30-2025).xlsx
- 956593 - DR - 4339PR - Appendix A-D - Factor Sect 8014 Transformer Replacement.zip

Attachments

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

- Appendix A – Factor Sect 8014 Warehouse at Palo Seco

- Appendix B – Substation Ground Grid Design Standard
- Appendix C – Substation Design Criteria
- Appendix D – Factor Sect 8014 LPCE

406 HMP Scope

406 Hazard Mitigation measures were not requested by the subrecipient for this project in Version 0. However, the mitigation opportunities will be applied in a future version (V1) of the Permanent Work Project. The project is ready for Insurance completion

Cost

Code	Quantity	Unit	Total Cost	Section
9001	1	Lump Sum	$5,907,319.61	Uncompleted
3510	1	Lump Sum	($414,861.11)	Uncompleted
9008	1	Lump Sum	($1,741,264.87)	Uncompleted
9201	1	Lump Sum	$0.00	Completed

CRC Gross Cost	$3,751,193.63
Total 406 HMP Cost	$0.00
Total Insurance Reductions	$0.00
CRC Net Cost	$3,751,193.63
Federal Share (90.00%)	$3,376,074.27
Non-Federal Share (10.00%)	$375,119.36

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

7/8/2025

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) #1720450:

FAASt [Factor Sect 8014 Transformer Replacement]

Location: Factor Sect 8014

GPS Coordinates: [redacted]

Cause of Loss: Wind / Wind Driven Rain

Damage Inventory Amount: $3,751,193.63 (CRC Gross Cost)

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:

An Obtain & Maintain Requirement is being required for Equipment, for the peril of Wind (all wind associated losses including "wind driven rain") for FAASt [Factor Sect 8014 Transformer Replacement in the amount of $3,751,193.63 (Insurable Repair Amount).

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
Wind	Equipment	An Obtain & Maintain Requirement is being required for Equipment, for the peril of Wind (all wind associated losses including "wind driven rain") for FAASt [Factor Sect 8014 Transformer Replacement in the amount of $3,751,193.63.	$3,751,193.63

406 Mitigation

There is no additional mitigation information on **FAASt [Factor Sect 8014 Transformer Replacement] (Substation)**.

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&#65533;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. 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 2 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.

EHP Additional Info

There is no additional environmental historical preservation on **FAASt [Factor Sect 8014 Transformer Replacement] (Substation)**.

Final Reviews

Final Review

Reviewed By LEFRANC-GARCIA, CARLOS L. **Reviewed On** 09/12/2025 6:18 PM PDT

Review Comments

Reviewed, found eligible and reasonable - CLG 09.12

Recipient Review

Reviewed By Mulero, Noel **Reviewed On** 09/16/2025 9:51 PM PDT

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 $3,751,193.63 for subaward number 108161 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	9/22/2025	$3,376,074.27	90%	Accepted	4339DRPRP01081611

Department of Homeland Security
Federal Emergency Management Agency

v0

General Info

Project #	957578 **P/W #** 108163	**Project Type**	Specialized
Project Category	F - Utilities	**Applicant**	PR Electric Power Authority (000-UA2QU-00)
Project Title	FAASt [Costa Sur TC Underground Cable Failure Replacement on Transformer Lead Bank #2] (Substation)	**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 #1723279; Costa Sur TC Underground Cable Failure Replacement on Transformer Lead Bank #2

General Facility Information:

- **Facility Type:** Power generation, transmission, and distribution facilities
- **Facility:** Costa Sur TC Underground Cable Failure Replacement on Transformer Lead Bank #2
- **Facility Description:** This project describes work, under the System Improvement Plan, required to stabilize the electric grid while permanent work is performed under substation, transmission line, and distribution feeder rebuild projects.
- **Year Built:** 1973
- **Location Description:** See Coordinates.
- **GPS Latitude/Longitude:** [redacted]

Final Scope

1723279

Costa Sur TC Underground Cable Failure Replacement on Transformer Lead Bank #2

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 Costa Sur TC Underground Cable Failure Replacement on Transformer Lead Bank #2 under DR-4339-PR Public Assistance. The document provides a detailed description of the project, scope of PA construction activities to be completed, common EHP review information, proposed hazard mitigation measures, and project cost estimates. LUMA is seeking approval from COR3 and FEMA for PA funding for the scope described in this document.

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

Project Description

This project describes work, under the System Improvement Plan, required to stabilize the electric grid while permanent work is performed under substation, transmission line, and distribution feeder rebuild projects. The repair of underground cables is a key element in the installation of the 230/115 kV transformer that will prevent system overload and outages while permanent work is being performed at the Costa Sur Transmission Center (TC) substation and connected transmission lines and distribution feeders.

This project aims to repair the existing failed termination at the 230kV yard for bank #2 transformer lead located at Costa Sur TC in Guayanilla, Puerto Rico. The project scope includes the removal of the existing dielectric fluid, the removal of approximately 150 feet of the existing pipe type cable, the removal of one existing (1) termination, and the replacement with a new high-pressure cable and new termination.

The cable replacement's purpose is to energize the Lead Transformer Bank #2 included in the scope of work, which will assist in stabilizing the electrical grid during performance of the work in Project #682834 EPC—Costa Sur TC—Phase II & III (Substation) Version 1.

Facility Description

The Costa Sur TC is a generation plant and transmission center that is vital to Puerto Rico's power supply chain. Costa Sur TC comprises 2.15 acres for the 230kV switchyard located at 18.00302500, -66.75501944 and 2.14 acres for the 115kV and 39kV switchyard located at 18.00170556, -66.75344444, and has components operating at nominal voltages of 230kV, 115kV and 38kV. The Costa Sur TC is currently in service, but one of the two transformers in item #3 in the list below is out of service and is to be replaced with the transformer included in the scope of work of Project #682834 EPC – Costa Sur TC Phase II & III Version 1 and will be energized with the underground cable in this project. The components of the Transmission Center include:

1. Fifteen (15) 230 kV circuit breakers:
    a. Eleven (11) oil circuit breakers (OCBs)
    b. Four (4) gas circuit breakers (GCBs)
2. Two (2) generation units connected to the 230 kV buses
3. Two (2) 230/115 kV, 328/436/544 MVA autotransformers
4. Twenty-four (24) 115 kV circuit breakers:
    a. Nineteen (19) oil circuit breakers (OCBs)
    b. Five (5) gas circuit breakers (GCBs)
5. Two (2) 115/38 kV, 60/80/100/112 MVA power transformers
6. Twenty-two (22) 38 kV oil circuit breakers (OCBs)

Facility

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

Substation	Voltage (kV)	GPS Location	Construction Year
Costa Sur TC	230 / 115 / 38	[redacted]	1973

Scope Of Work

In version 0 of this project, LUMA is requesting FEMA's approval to repair the existing underground pipe type cable, replace damage termination and cable testing between the 230kV and 115kV switchyards to energize Transformer Lead Bank #2, which will stabilize the electrical grid during the Costa Sur TC Rebuild full permanent construction.

A. Demolition

1. Perform selective site demolition from steel structure to expose the existing underground trifurcating spreader (a splice that splits the cable into three). Refer to line 18 of the LPCE.

    A. Ground disturbance will occur to expose the trifurcator area for pipe preparation and for cable replacement. The disturbance will be 150 feet long x 30 feet wide x 8.5 feet deep for trifurcator activities, pipe preparation and cable pulling and splicing. It is planned to use hydroexcavation equipment to prepare the area

2. Remove and dispose of dielectric fluid. Refer to line 19 of the LPCE.

    B. Dielectric fluid is to be tested for PCB and classified as special waste or hazardous waste, depending on the PCB concentration in the sample.

    C. Certified third party will transport and dispose of dielectric fluid (oil) at an authorized facility.

3. Remove the cable from pipe/conduit (i.e., trifurcating spreader). Refer to line 20 of the LPCE.

4. Remove and dispose of the failed section of underground cable and the existing termination at the 230kV yard. Refer to lines 21 and 22 of the LPCE.

    A. Certified third party will transport and dispose of the waste at an authorized facility.

B. Underground Cable Installation

1. Test, clean, and treat existing pipe conduit for new cable installation. Refer to line 23 and 24 of the LPCE.
    1. If the pipe fails the test, a new underground pipe must be installed for the new cable installation. A version of the project will be submitted to describe the scope of work for the new underground pipe installation.
    2. Work to be performed prior to construction: install a silt fence, or straw bale, as temporary erosion control and protection measures to mitigate erosion or environmental risks. The slit fence and straw bales will be placed inside the existing perimeter fence to the extent and location described in Figure 1.
2. Install the new phase of high-pressure cable into the clean and treated pipe. Refer to lines 25, 26 and 27 of the LPCE.
    1. This task shall be performed by a highly skilled/qualified High-Pressure Fluid Filled (HPFF) or pipe-type cable splicers.
3. Modify existing termination stand to support new termination. Refer to line 27 of the LPCE.
4. Install new cable, splice/joint and termination. Refer to lines 26 and 27 of the LPCE.
5. Weld joint casing and trifurcator. Backfill the hole and grade the surrounding area. The disturbance will be 150 feet long x 30 feet wide x 8.5 feet deep for trifurcator activities Refer to lines 26 and 27 of the LPCE.
6. Fill pipe with dielectric fluid. Refer to lines 26 and 28 of the LPCE.

C. Testing and Energization

1. Test the cable integrity of each phase of the new cable using a High-Voltage DC High-Potential test. Refer to line 29 of the LPCE.
2. Place repaired underground cable in service.

No vegetation removal will be performed.

Hazard Mitigation Opportunity

None identified for this version.

Project Cost Estimate

COST ESTIMATE			
Cost Element	**428**	**406**	**PROJECT TOTAL**
PLANNING	**$87,851.39**	**$-**	**$87,851.39**
MANAGEMENT	**$54,004.86**	**$-**	**$54,004.86**
Costa Sur 230kV Cable Failure Repairs on Transformer Lead Bank#2, material, labor, and equipment	**$1,058,737.34**	**$-**	**$1,058,737.34**
GENERAL CONDITIONS	**$50,252.17**	**$-**	**$50,252.17**
COST TOTALS	**$1,250,845.76**	**$-**	**$1,250,845.76**
DEDUCTIONS	**TOTAL INSURANCE PROCEEDS RECEIVED**		**$-**
	DE-OBLIGATION TO FAASt FCE #136271		**$-**
FAASt ALLOCATIONS	FAAST PROJECT # XXXXXX - 428		$1,108,988.92
	FAAST PROJECT # XXXXXX - 406 HM		$-
	FAAST PROJECT #XXXXXX TOTAL:		**$1,108,989.51**
	FAASt A&E # 335168 - 428		$141,856.25
	FAASt A&E # 335168 - 406 HM		$-
	FAASt A&E # 335168 TOTAL		**$141,856.25**
	FAASt E&M #673691 - 428		$-
	FAASt E&M #673691 - 406 HM		$-

	FAASt E&M #673691 TOTAL	**$-**

Cost estimate section:

Project Cost Summary, 428 Version 0:

Work to be Completed (WTBC): $1,250,845.76

A&E Deduction (Global A&E FAASt 335168): $-141,856.25

Project Total: $1,108,989.51

Project Cost Estimate Notes:

1. SOW has been modified and the Applicant will upload a revised version. For more information please see document labeled: “SP-957578-DR4339PR-SOW email confirmation”
2. Refer to detailed Cost Estimate provided in document labeled: “Appendix A - LPCE - Costa Sur 230 kV Cable Failure Repairs on Transformer Lead Bank #2 - 02-21-2025 (rev 6-19-25) (updated).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 136271.
5. For Attachments refer to:
    - Appendix A - LPCE - Costa Sur 230 kV Cable Failure Repairs on Transformer Lead Bank #2 - 02-21-2025 (rev 6-19-25).
    - Appendix B - Aerial SOW overview Costa Sur UG Cable

406 HMP Scope

There is no feasible Hazard Mitigation opportunity identified nor requested by subapplicant for this Project. Project is Ready for Insurance Completion.

Cost

Code	Quantity	Unit	Total Cost	Section
9001	1	Lump Sum	$1,250,845.76	Uncompleted
3510	1	Lump Sum	($141,856.25)	Uncompleted

CRC Gross Cost	$1,108,989.51
Total 406 HMP Cost	$0.00
Total Insurance Reductions	$0.00
CRC Net Cost	$1,108,989.51
Federal Share (90.00%)	$998,090.56
Non-Federal Share (10.00%)	$110,898.95

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

7/16/2025

Does the Applicant have a Commercial Policy: Yes.

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

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

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

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

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

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

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

O&M Requirements

There are no Obtain and Maintain Requirements on **FAASt [Costa Sur TC Underground Cable Failure Replacement on Transformer Lead Bank #2] (Substation)**.

406 Mitigation

There is no additional mitigation information on **FAASt [Costa Sur TC Underground Cable Failure Replacement on Transformer Lead Bank #2] (Substation)**.

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 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. 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. 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.
- 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 Applicants permanent files.
- As per 44CFR Section 9.11 d (9) In the replacement of building contents, materials and equipment, the Applicant shall, as appropriate, provide flood proofing and/or elevation of the building and/or elimination of such future losses by relocation of those building contents, materials, and equipment outside or above the floodplain as established by 9.7(c).

EHP Additional Info

There is no additional environmental historical preservation on **FAASt [Costa Sur TC Underground Cable Failure Replacement on Transformer Lead Bank #2] (Substation)**.

Final Reviews

Final Review

Reviewed By LEFRANC-GARCIA, CARLOS L. **Reviewed On** 09/03/2025 3:08 PM PDT

Review Comments

Reviewed, found eligible and reasonable.

Recipient Review

Reviewed By Mulero, Noel **Reviewed On** 09/05/2025 3:08 PM PDT

Review Comments

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

Project Signatures

Reviewed By Unsigned **Reviewed On** Unsigned

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	9/17/2025	$998,090.56	90%	Accepted	4339DRPRP01081631