

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

NEPR
Received:
Jun 9, 2022
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IN RE:

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

CASE NO. NEPR-MI-2021-0002

**SUBJECT: Motion Submitting FEMA Approval of
Project and Request for Confidential Treatment**

**MOTION SUBMITTING FEMA APPROVAL OF PROJECT AND
REQUEST FOR CONFIDENTIAL TREATMENT**

TO THE PUERTO RICO ENERGY BUREAU:

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

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 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 ("COR-3"), 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. This Energy Bureau thereafter

¹ Register No. 439372.

² Register No. 439373.

determined this directive applied to PREPA and LUMA. *See* Resolution and Order of August 20, 2021.

2. On August 30, 2021, LUMA filed a *Request for Clarification of a Portion of the Energy Bureau’s Resolution and Order entered on August 20, 2021, and Submission of Updated List of Projects and Twenty-Nine Scopes of Work*. Therein, LUMA submitted twenty-nine (29) Scope of Works (“SOWs”) for federally funded transmission and distribution projects (“T&D Project”) for its review and approval before submitting them to COR-3 and FEMA (“August 30th Submission”). Among the SOWs submitted to this Energy Bureau was the “FAASt [Distribution Feeders – Arecibo Short Term Group 2] (Distribution)”.

3. Then, on September 22, 2021, the Energy Bureau entered a Resolution and Order in which it determined that the majority of the twenty-nine (29) SOWs for T&D projects submitted by LUMA were necessary to improve the system’s reliability (“September 22nd Order”). Therefore, it approved most of the projects presented in the August 30th Submission, including the “FAASt [Distribution Feeders – Arecibo Short Term Group 2] (Distribution)” T&D Project SOW. Further, the Energy Bureau ordered LUMA to submit a copy of the approval by COR3 and/or FEMA of the approved projects and the costs obligated for each project within ten (10) days of receiving such approval.

4. In compliance with the September 22nd Order, LUMA hereby submits a copy of the approval by FEMA of the “FAASt [Distribution Feeders – Arecibo Short Term Group 2]

(Distribution)” T&D Project, received on June 2, 2022.³ See **Exhibit 1** to this Motion. The document state FEMA’s approval and includes the cost obligated for each project.

5. LUMA is submitting herein a redacted public version of **Exhibit 1** protecting confidential information associated with Critical Energy Infrastructure Information (“CEII”). The FEMA approval of the “FAASt [Distribution Feeders – Arecibo Short Term Group 2] (Distribution)” T&D Project is 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 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.

6. Under separate cover and expediently, within the next ten days, as allowed by Section A.2 of the Energy Bureau’s Policy on Management of Confidential Information, LUMA will submit a memorandum of law in support of this request to file the unredacted version of the FEMA approval of the “FAASt [Distribution Feeders – Arecibo Short Term Group 2] (Distribution)” T&D Project under seal of confidentiality.

WHEREFORE, LUMA respectfully requests that the Energy Bureau **take notice** of the aforementioned and **accept** the copy of the FEMA approval attached herein as Exhibit 1.

RESPECTFULLY SUBMITTED.

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

³ It is important to note that any FEMA approval for a T&D Project is known when FEMA makes the information available via its grant’s portal. The FEMA approval is made public to anyone with an account to access the grants portal.

In San Juan, Puerto Rico, this 9th day of June 2022.



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

/s/ Yahaira De la Rosa Algarín
Yahaira De la Rosa Algarín
RUA NÚM. 18,061
yahaira.delarosa@us.dlapiper.com

Exhibit 1

FEMA Approval

Department of Homeland Security Federal Emergency Management Agency

General Info

Project #	542762	PW#	10690	Project Type	Specialized
Project Category	F - Utilities	Applicant	PR Electric Power Authority (000-UA2QU-00)		
Project Title	FAASt [Distribution Feeders - Arecibo Short Term Group 2] (Distribution)			Event	4339DR-PR (4339DR)
Project Size	Large	Declaration Date	9/21/2017		
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 #918122; FAASt [Utuado Pueblo - 8101-03]

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

General Facility Information:

- **Facility Type:** Power generation, transmission, and distribution facilities
- **Facility:** Utuado Pueblo - 8101-03
- **Facility Description:** The feeder 8101-03 (4.16kV) consist of poles and structures (including their foundations), framing and insulators, load break switches (manual and automated), capacitor banks, voltage regulators, transformers (including lightning arresters and fuse cut-outs), conductors, guy wires, anchoring, grounding assemblies, underground cable, underground cable systems, fault interrupting equipment (fuses, reclosers, and sectionalizers), and any other associated components.
- **Approx. Year Built:** 1980
- **Start GPS Latitude/Longitude:** [REDACTED]
- **End GPS Latitude/Longitude:** [REDACTED]

General Damage Information:

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

Damage #918123; FAASt [Caguana - 8103-01]

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

General Facility Information:

- **Facility Type:** Power generation, transmission, and distribution facilities
- **Facility:** Caguana - 8103-01
- **Facility Description:** The feeder 8103-01 (4.16kV) consist of poles and structures (including their foundations), framing and insulators, load break switches (manual and automated), capacitor banks, voltage regulators, transformers (including lightning arresters and fuse cut-outs), conductors, guy wires, anchoring, grounding assemblies, underground cable, underground cable systems, fault interrupting

equipment (fuses, reclosers, and sectionalizers), and any other associated components.

- **Approx. Year Built:** 1980
- **Start GPS Latitude/Longitude:** [REDACTED]
- **End GPS Latitude/Longitude:** [REDACTED]

General Damage Information:

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

Damage #918124; FAASSt [Caguana - 8103-02]

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

General Facility Information:

- **Facility Type:** Power generation, transmission, and distribution facilities
- **Facility:** Caguana - 8103-02
- **Facility Description:** The feeder 8103-02 (4.16kV) consist of poles and structures (including their foundations), framing and insulators, load break switches (manual and automated), capacitor banks, voltage regulators, transformers (including lightning arresters and fuse cut-outs), conductors, guy wires, anchoring, grounding assemblies, underground cable, underground cable systems, fault interrupting equipment (fuses, reclosers, and sectionalizers), and any other associated components.
- **Approx. Year Built:** 1980
- **Start GPS Latitude/Longitude:** [REDACTED]
- **End GPS Latitude/Longitude:** [REDACTED]

General Damage Information:

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

Damage #918125; FAASSt [Yahuecas - 8203-02]

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

General Facility Information:

- **Facility Type:** Power generation, transmission, and distribution facilities
- **Facility:** Yahuecas - 8203-02
- **Facility Description:** The feeder 8203-02 (8.32kV) consists of poles and structures (including their foundations), framing and insulators, load break switches (manual and automated), capacitor banks, voltage regulators, transformers (including lightning arresters and fuse cut-outs), conductors, guy wires, anchoring, grounding assemblies, underground cable, underground cable systems, fault interrupting equipment (fuses, reclosers, and sectionalizers), and any other associated components.
- **Approx. Year Built:** 1980
- **Start GPS Latitude/Longitude:** [REDACTED]
- **End GPS Latitude/Longitude:** [REDACTED]

General Damage Information:

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

Damage #918126; FAASSt [Jayuya - 8301-03]

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

General Facility Information:

- **Facility Type:** Power generation, transmission, and distribution facilities

- **Facility:** Jayuya - 8301-03
- **Facility Description:** The feeder 8301-03 (4.16kV) consists of poles and structures (including their foundations), framing and insulators, load break switches (manual and automated), capacitor banks, voltage regulators, transformers (including lightning arresters and fuse cut-outs), conductors, guy wires, anchoring, grounding assemblies, underground cable, underground cable systems, fault interrupting equipment (fuses, reclosers, and sectionalizers), and any other associated components.
- **Approx. Year Built:** 1980
- **Start GPS Latitude/Longitude:** [REDACTED]
- **End GPS Latitude/Longitude:** [REDACTED]

General Damage Information:

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

Damage #918127; FAASt [Jayuya II - 8302-05]

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

General Facility Information:

- **Facility Type:** Power generation, transmission, and distribution facilities
- **Facility:** Jayuya II - 8302-05
- **Facility Description:** The feeder 8302-05 (4.16kV) consists of poles and structures (including their foundations), framing and insulators, load break switches (manual and automated), capacitor banks, voltage regulators, transformers (including lightning arresters and fuse cut-outs), conductors, guy wires, anchoring, grounding assemblies, underground cable, underground cable systems, fault interrupting equipment (fuses, reclosers, and sectionalizers), and any other associated components.
- **Approx. Year Built:** 1980
- **Start GPS Latitude/Longitude:** [REDACTED]
- **End GPS Latitude/Longitude:** [REDACTED]

General Damage Information:

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

Final Scope

918122 FAASt [Utuaado Pueblo - 8101-03]

No 428 PA work identified at this time for Utuaado Pueblo - Fedeer 8101-03.

DI# 918122 Work to be Completed (WTBC): \$0

Total Project Cost (All DI's): \$661,242 - \$50,794 (FAASt A&E 335168) = \$610,448

Feeders: 8103-01; 8103-02; & 8301-03	
Planning Permits & Applications	\$ 7,000
Environmental Management	\$ 10,000
Engineering - 10% (FAASt 335168)	\$ 50,794
Project Management -5 %	\$ 25,397
Distribution Line	\$ 507,938
Contingency - 10%	\$ 60,113
Total	\$ 661,242

For detailed cost estimate, please refer to document labeled: 542762-DR4339PR-Appendix H - Detail Cost Estimate - Arecibo Group 2 Rev1.pdf.

Project Notes:

1. Refer to detailed SOW provided in document: 542762-DR4339PR-Detailed SOW Arecibo Group 2 Rev1.pdf.
2. Architectural and Engineering (A&E) costs are deducted given previously obligated Global A&E Project for the subject FAASt PREPA work (see project: 335158 - FAASt A&E PREPA).

406 HMP Scope

Project number: 542762

Damage #918122; FAASt [Utua do Pueblo - 8101-03]

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

<p>Location: Utua do, Puerto Rico</p> <p>Start GPS Latitude/Longitude: [REDACTED] End GPS Latitude/Longitude: [REDACTED]</p>

Hazard Mitigation Narrative

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

➤ **Project #542762 (Version 0) [Distribution Critical Poles & Conductors Repair/Replacement].**

The Arecibo Short Term Group 2 consists of 6 interconnected and inter-functional distribution feeders (sites) establish the electrical distribution system as follows: Utua do Pueblo (8101-03), Caguana (8103-01 & 8103-02), Yahuecas (8203-02), Jayuya (8301-03), and Jayuya II (8302-05).

The Method of Repair (MOR) [**Version 0 (Distribution Critical Poles & Conductors Repair/Replacement)**] included the replacement of the damaged critical distribution poles (wood, concrete or galvanized), cross-arms, insulators, and all associated hardware needed for the new structure. According to the information provided by the Applicant, due to the high velocity hurricane winds, wind-blown debris, and prolonged heavy rain, were the main cause of the damages of the facilities.

In order to minimize the damages in a future event, the Applicant is proposing as a mitigation measure, increase the strength of the poles by increasing the wind tolerance to +160mph. Note: The FEMA Accelerated Award Strategy (FAASt) MOR included the PREPA distribution standards and specifications that were based on a 145mph sustained winds. However, the new PREPA Standard 2021 updates the design-criteria to a 160mph sustained winds resistant. The +160mph

wind tolerance mitigation measure, will protect and make the affected infrastructure more resistant, stronger, and resilient to similar hazards.

Hazard Mitigation Proposal (HMP) Scope of Work:

➤ Applicant stated that for Version 0, no 428 (PA) and/or 406 (HM) works have been identified at this time.

918123 FAASt [Caguana - 8103-01]

Introduction

The purpose of this document is to submit for approval the detailed Scope of Work ("SOW") to COR3 and FEMA for the Distribution Pole and Conductor Repair - Arecibo Group 2 Project under DR-4339-PR Public Assistance. The document provides a description of the project including scope, schedule, and cost estimates as well as Environmental & Historical Preservation ("EHP") requirements and proposed 406 hazard mitigation work. LUMA Energy is seeking approval from COR3 and FEMA for project funding to repair, restore, or replace the eligible facilities.

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

Facilities

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

Caguana - Feeder 8103-01

Name Feeder Number, GPS Start, GPS End, Phase Voltage Level (kV), and Construction Date, are provided in a table in Facilities section document labelled: *542762-DR4339PR-Detailed SOW Arecibo Group 2 Rev1.pdf, page 5/13.*

Proposed Scope of Work:

Feeder 8103-01 Scope:

A. Remove one 35ft wood pole and install one 50ft galvanized steel S8 pole in the same location. Cross arms, insulators and all associated hardware will also be replaced along with the new structure.

For detailed structure coordinates, please refers to document labeled: 542762-DR4339PR-Appendix G - Structure Coordinates - Arecibo Group 2 Rev1.pdf.

For location maps and pictures, please refers to the document labeled: 542762-DR4339PR-Appendix B - Maps and Pictures - Arecibo Group 2 Rev1.pdf.

Cost Estimate:

The estimated costs (Class 3 Accuracy +/-30%) to complete to complete the works related to the D# 918123 – Caguana/Feeder 8103-01 are captured in the table below. The cost estimate was developed utilizing preliminary Architectural and Engineering design information and may be subject to change. LUMA has allocated 10% of the project cost for the mitigation of potential known risks.

Feeder 8103-01	
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Planning Permits & Applications	\$ 244
Environmental Management	\$ 348
Engineering - 10% (FAASt 335168)	\$ 1,768
Project Management -5 %	\$ 884
Distribution Line	\$ 17,684
Contingency- 10%	\$ 2,093
Total	\$ 23,021

DI# 918123 Work to be Completed (WTBC): \$23,021 - \$1,768 (FAASt A&E 335168) = \$21,253

406 HMP Scope

Project number: 542762

Damage #918123; FAASt [Caguana - 8103-01]

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

Location: Utuado, Puerto Rico

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

Hazard Mitigation Narrative

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

➤ Project #542762 (Version 0) [Distribution Critical Poles & Conductors Repair/Replacement].

The Arecibo Short Term Group 2 consists of 6 interconnected and inter-functional distribution feeders (sites) establish the electrical distribution system as follows: Utuado Pueblo (8101-03), Caguana (8103-01 & 8103-02), Yahuecas (8203-02), Jayuya (8301-03), and Jayuya II (8302-05).

The Method of Repair (MOR) [Version 0 (Distribution Critical Poles & Conductors Repair/Replacement)] included the replacement of the damaged critical distribution poles (wood, concrete or galvanized), cross-arms, insulators, and all associated hardware needed for the new structure. According to the information provided by the Applicant, due to the high velocity hurricane winds, wind-blown debris, and prolonged heavy rain, were the main cause of the damages of the facilities.

In order to minimize the damages in a future event, the Applicant is proposing as a mitigation measure, increase the strength of the poles by increasing the wind tolerance to +160mph. Note: The FEMA Accelerated Award Strategy (FAASt) MOR included the PREPA distribution standards and specifications that were based on a 145mph sustained winds. However, the new PREPA Standard 2021 updates the design-criteria to a 160mph sustained winds resistant. The +160mph wind tolerance mitigation measure, will protect and make the affected infrastructure more resistant, stronger, and resilient to similar hazards.

Hazard Mitigation Proposal (HMP) Scope of Work:

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

Mitigation Measures (*Replacement*)

1. To avoid damage in a future event, the Applicant is proposing as a mitigation measure, increase the strength of the poles by increasing the wind tolerance of all materials to +160mph. The FAASt MOR included the PREPA distribution standards and specifications that were based on a 145mph sustained winds. However, the new PREPA Standard 2021 updates the design-criteria to a 160mph sustained winds resistant. The above mitigation measures will protect and make the affected infrastructure more resistant, stronger, and resilient to similar hazards. Refer to Appendix J: Section VI.D.1 of the PAPPG V3.1.

➤ [Distribution Critical Poles Replacement] 406 Mitigation Scope:

1. Feeder 8103-01 Scope: Replace one (1) 45' concrete H4 pole by 50' galvanized steel S8 pole.

Hazard Mitigation Proposal (HMP) Cost:

Total Net Hazard Mitigation Cost (Base Cost) =	\$4,609.00
+ HM (Applicant A&E, Management & General Conditions) =	<u>\$1,221.00</u>
Hazard Mitigation Total Cost =	\$5,830.00

HMP Cost-Effectiveness Calculations:

Eligible Cost of PA repair Scope of Work per DI: \$17,684.00

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

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

HMR = (\$4,609.00 / \$17,684.00) x 100 = **26.06%**

The cost of this Hazard Mitigation Proposal (HMP) is **26.06%** of the repair or restoration costs and is deemed cost effective per FEMA Public Assistance Program and Policy Guide (PAPPG) V3.1 April2018, Chapter 2, VII., Section C, ___ 15%Rule, _X_ 100% Rule, ___ BCA Rule. This Hazard Mitigation Proposal meets eligible repair and restoration cost effective requirements.

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

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

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

918124 FAASt [Caguana - 8103-02]

Introduction

The purpose of this document is to submit for approval the detailed Scope of Work ("SOW") to COR3 and FEMA for the Distribution Pole and Conductor Repair - Arecibo Group 2 Project under DR-4339-PR Public Assistance. The document provides a description of the project including scope, schedule, and cost estimates as well as Environmental & Historical Preservation ("EHP") requirements and proposed 406 hazard mitigation work. LUMA Energy is seeking approval from COR3 and FEMA for project funding to repair, restore, or replace the eligible facilities.

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

Facilities

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

Caguana - Feeder 8103-02

Name Feeder Number, GPS Start, GPS End, Phase Voltage Level (kV), and Construction Date, are provided in a table in Facilities section document labelled: *542762-DR4339PR-Detailed SOW Arecibo Group 2 Rev1.pdf, page 5/13.*

Proposed Scope of Work:

Feeder 8103-02 Scope:

- A. Remove fourteen 35ft wood poles and install fourteen 50ft galvanized steel S8 poles in the same location. Cross arms, insulators and all associated hardware will also be replaced along with the new structure.
- B. Remove two 40ft wood poles and install two 50ft galvanized steel S8 poles in the same location. Cross arms, insulators and all associated hardware will also be replaced along with the new structure.
- C. Remove one 30ft wood pole and install one 50ft galvanized steel S8 pole in the same location. Cross arms, insulators and all associated hardware will also be replaced along with the new structure.

For detailed structure coordinates, please refer to document labeled: 542762-DR4339PR-Appendix G - Structure Coordinates - Arecibo Group 2 Rev1.pdf.

For location maps and pictures, please refer to the document labeled: 542762-DR4339PR-Appendix B - Maps and Pictures - Arecibo Group 2 Rev1.pdf.

Cost Estimate:

The estimated costs (Class 3 Accuracy +/-30%) to complete the works related to the DI# 918124 – Caguana/Feeder 8103-02 are captured in the table below. The cost estimate was developed utilizing preliminary Architectural and Engineering design information and may be subject to change. LUMA has allocated 10% of the project cost for the mitigation of potential known risks.

Feeder 8103-02	
Planning Permits & Applications	\$ 4,182
Environmental Management	\$ 5,974
Engineering - 10% (FAASt 335168)	\$ 30,343
Project Management -5 %	\$ 15,171
Distribution Line	\$ 303,426
Contingency - 10%	\$ 35,910
Total	\$ 395,005

DI# 918124 Work to be Completed (WTBC): \$395,005 - \$30,343 (FAASt A&E 335168) = \$364,662

406 HMP Scope

Project number: 542762

Damage #918124; FAASt [Caguana - 8103-02]

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

Location: Utuado, Puerto Rico

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

Hazard Mitigation Narrative

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

➤ **Project #542762 (Version 0) [Distribution Critical Poles & Conductors Repair/Replacement].**

The Arecibo Short Term Group 2 consists of 6 interconnected and inter-functional distribution feeders (sites) establish the electrical distribution system as follows: Utuado Pueblo (8101-03), Caguana (8103-01 & 8103-02), Yahuecas (8203-02), Jayuya (8301-03), and Jayuya II (8302-05).

The Method of Repair (MOR) [**Version 0 (Distribution Critical Poles & Conductors Repair/Replacement)**] included the replacement of the damaged critical distribution poles (wood, concrete or galvanized), cross-arms, insulators, and all associated hardware needed for the new structure. According to the information provided by the Applicant, due to the high velocity hurricane winds, wind-blown debris, and prolonged heavy rain, were the main cause of the damages of the facilities.

In order to minimize the damages in a future event, the Applicant is proposing as a mitigation measure, increase the strength of the poles by increasing the wind tolerance to +160mph. Note: The FEMA Accelerated Award Strategy (FAASt) MOR included the PREPA distribution standards and specifications that were based on a 145mph sustained winds. However, the new PREPA Standard 2021 updates the design-criteria to a 160mph sustained winds resistant. The +160mph wind tolerance mitigation measure, will protect and make the affected infrastructure more resistant, stronger, and resilient to similar hazards.

Hazard Mitigation Proposal (HMP) Scope of Work:

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

Mitigation Measures (*Replacement*)

1. To avoid damage in a future event, the Applicant is proposing as a mitigation measure, increase the strength of the poles by increasing the wind tolerance of all materials to +160mph. The FAASt MOR included the PREPA distribution standards and specifications that were based on a 145mph sustained winds. However, the new PREPA Standard 2021 updates the design-criteria to a 160mph sustained winds resistant. The above mitigation measures will protect and make the affected infrastructure more resistant, stronger, and resilient to similar hazards. Refer to Appendix J: Section VI.D.1 of the PAPPG V3.1.

➤ [Distribution Critical Poles Replacement] 406 Mitigation Scope:

1. Feeder 8103-02 Scope: Replace seventeen (17) 45' concrete H4 poles by 50' galvanized steel S8 poles.

Hazard Mitigation Proposal (HMP) Cost:

Total Net Hazard Mitigation Cost (Base Cost) =	\$78,353.00
+ HM (Applicant A&E, Management & General Conditions) =	<u>\$20,764.00</u>
Hazard Mitigation Total Cost =	\$ 99,117.00

HMP Cost-Effectiveness Calculations:

Eligible Cost of PA repair Scope of Work per DI: \$303,426.00

Net Cost of 406 HMP per DI: \$78,353.00

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

HMR = (\$78,353.00 / \$303,426.00) x 100 = 25.82%

The cost of this Hazard Mitigation Proposal (HMP) is 25.82% of the repair or restoration costs and is deemed cost effective per FEMA Public Assistance Program and Policy Guide (PAPPG) V3.1 April2018, Chapter 2, VII., Section C, ___ 15%Rule, _X_ 100% Rule, ___ BCA Rule. This Hazard Mitigation Proposal meets eligible repair and restoration cost effective requirements.

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

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

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

918125 FAASt [Yahuecas - 8203-02]

No 428 PA work identified at this time for Yahuecas - Feeder 8203-02.

DI# 918125 Work to be Completed (WTBC): \$0

406 HMP Scope

Project number: 542762

Damage #918125; FAASt [Yahuecas - 8203-02]

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

Location: Adjuntas, Puerto Rico
Start GPS Latitude/Longitude: [REDACTED]; End GPS Latitude/Longitude: [REDACTED]

Hazard Mitigation Narrative

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

➤ **Project #542762 (Version 0) [Distribution Critical Poles & Conductors Repair/Replacement].**

The Arecibo Short Term Group 2 consists of 6 interconnected and inter-functional distribution feeders (sites) establish the electrical distribution system as follows: Utuado Pueblo (8101-03), Caguana (8103-01 & 8103-02), Yahuecas (8203-02), Jayuya (8301-03), and Jayuya II (8302-05).

The Method of Repair (MOR) [Version 0 (Distribution Critical Poles & Conductors Repair/Replacement)] included the replacement of the damaged

critical distribution poles (wood, concrete or galvanized), cross-arms, insulators, and all associated hardware needed for the new structure. According to the information provided by the Applicant, due to the high velocity hurricane winds, wind-blown debris, and prolonged heavy rain, were the main cause of the damages of the facilities.

In order to minimize the damages in a future event, the Applicant is proposing as a mitigation measure, increase the strength of the poles by increasing the wind tolerance to +160mph. Note: The FEMA Accelerated Award Strategy (FAAST) MOR included the PREPA distribution standards and specifications that were based on a 145mph sustained winds. However, the new PREPA Standard 2021 updates the design-criteria to a 160mph sustained winds resistant. The +160mph wind tolerance mitigation measure, will protect and make the affected infrastructure more resistant, stronger, and resilient to similar hazards.

Hazard Mitigation Proposal (HMP) Scope of Work:

➤ Applicant stated that for Version 0, no 428 (PA) and/or 406 (HM) works have been identified at this time.

918126 FAASt [Jayuya - 8301-03]

Introduction

The purpose of this document is to submit for approval the detailed Scope of Work ("SOW") to COR3 and FEMA for the Distribution Pole and Conductor Repair - Arecibo Group 2 Project under DR-4339-PR Public Assistance. The document provides a description of the project including scope, schedule, and cost estimates as well as Environmental & Historical Preservation ("EHP") requirements and proposed 406 hazard mitigation work. LUMA Energy is seeking approval from COR3 and FEMA for project funding to repair, restore, or replace the eligible facilities.

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

Facilities

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

Jayuya - Feeder 8301-03

Name Feeder Number, GPS Start, GPS End, Phase Voltage Level (kV), and Construction Date, are provided in a table in Facilities section document labelled: *542762-DR4339PR-Detailed SOW Arecibo Group 2 Rev1.pdf, page 5/13.*

Proposed Scope of Work:

Feeder 8301-03 Scope:

- A. Remove four 35ft wood poles and install four 50ft galvanized steel S8 poles in the same location. Cross arms, insulators and all associated hardware will also be replaced along with the new structure.
- B. Remove one 40ft wood pole and install one 50ft galvanized steel S8 pole in the same location. Cross arms, insulators and all associated hardware will also be replaced along with the new structure.
- C. Remove one 40ft wood pole and install one 45ft concrete H4 pole in the same location. Cross arms, insulators and all associated hardware will also be replaced along with the new structure.
- D. Remove two 45ft wood poles and install two 50ft galvanized steel S8 poles in the same location. Cross arms, insulators and all associated hardware will also be replaced along with the new structure.
- E. Remove two 55ft wood poles and install two 50ft galvanized steel S8 poles in the same location. Cross arms, insulators and all associated hardware will also be replaced along with the new structure.

For detailed structure coordinates, please refer to document labeled: 542762-DR4339PR-Appendix G - Structure Coordinates - Arecibo Group 2 Rev1.pdf.

For location maps and pictures, please refer to the document labeled: 542762-DR4339PR-Appendix B - Maps and Pictures - Arecibo Group 2 Rev1.pdf.

Cost Estimate:

The estimated costs (Class 3 Accuracy +/-30%) to complete the works related to the DI# 918126 – Jayuya/Feeder 8301-03 are captured in the table below. The cost estimate was developed utilizing preliminary Architectural and Engineering design information and may be subject to change. LUMA has allocated 10% of the project cost for the mitigation of potential known risks.

Feeder 8301-03	
Planning Permits & Applications	\$ 2,575
Environmental Management	\$ 3,678
Engineering - 10% (FAASt 335168)	\$ 18,683
Project Management -5 %	\$ 9,341
Distribution Line	\$ 186,828
Contingency- 10%	\$ 22,111
Total	\$ 243,216

DI# 918126 Work to be Completed (WTBC): \$243,216 - \$18,683 (FAASt A&E 335168) = \$224,533

406 HMP Scope

Project number: 542762

Damage #918126; FAASt [Jayuya - 8301-03]

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

Location: Jayuya, Puerto Rico

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

Hazard Mitigation Narrative

During the incident period from September 17, 2017, to November 15, 2017, the Commonwealth of Puerto Rico experienced hurricane-force winds, heavy rain,

flooding and power outage "loss of power" from Hurricane Maria. The incident caused damage to the electrical system, such as the power generation plants, transmission and distribution lines, substations, communication systems, buildings, among other damages to the infrastructures owned, operated, and maintained by the Puerto Rico Electric Power Authority (PREPA).

➤ **Project #542762 (Version 0) [Distribution Critical Poles & Conductors Repair/Replacement].**

The Arecibo Short Term Group 2 consists of 6 interconnected and inter-functional distribution feeders (sites) establish the electrical distribution system as follows: Utuado Pueblo (8101-03), Caguana (8103-01 & 8103-02), Yahuecas (8203-02), Jayuya (8301-03), and Jayuya II (8302-05).

The Method of Repair (MOR) [Version 0 (Distribution Critical Poles & Conductors Repair/Replacement)] included the replacement of the damaged critical distribution poles (wood, concrete or galvanized), cross-arms, insulators, and all associated hardware needed for the new structure. According to the information provided by the Applicant, due to the high velocity hurricane winds, wind-blown debris, and prolonged heavy rain, were the main cause of the damages of the facilities.

In order to minimize the damages in a future event, the Applicant is proposing as a mitigation measure, increase the strength of the poles by increasing the wind tolerance to +160mph. Note: The FEMA Accelerated Award Strategy (FAAST) MOR included the PREPA distribution standards and specifications that were based on a 145mph sustained winds. However, the new PREPA Standard 2021 updates the design-criteria to a 160mph sustained winds resistant. The +160mph wind tolerance mitigation measure, will protect and make the affected infrastructure more resistant, stronger, and resilient to similar hazards.

Hazard Mitigation Proposal (HMP) Scope of Work:

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

Mitigation Measures (*Replacement*)

1. To avoid damage in a future event, the Applicant is proposing as a mitigation measure, increase the strength of the poles by increasing the wind tolerance of all materials to +160mph. The FAASt MOR included the PREPA distribution standards and specifications that were based on a 145mph sustained winds. However, the new PREPA Standard 2021 updates the design-criteria to a 160mph sustained winds resistant. The above mitigation measures will protect and make the affected infrastructure more resistant, stronger, and resilient to similar hazards. Refer to Appendix J: Section VI.D.1 of the PAPPG V3.1.

➤ [Distribution Critical Poles Replacement] 406 Mitigation Scope:

1. **Feeder 8301-03 Scope:** Replace nine (9) 45' concrete H4 poles by 50' galvanized steel S8 poles.
2. **Note:** Applicant stated that after a final evaluation by the Engineering Division, the feeder 8301-03 point 3207 (45ft concrete H4 pole) does not have a feasible option for 406 Mitigation because the 50' S8 galvanized steel pole cannot be installed in that particular instance due to space constraints (retaining wall).

Hazard Mitigation Proposal (HMP) Cost:

Total Net Hazard Mitigation Cost (Base Cost) =	\$41,481.00
+ HM (Applicant A&E, Management & General Conditions) =	<u>\$10,992.00</u>
Hazard Mitigation Total Cost =	\$52,473.00

HMP Cost-Effectiveness Calculations:

Eligible Cost of PA repair Scope of Work per DI: \$167,745.00

Net Cost of 406 HMP per DI: \$41,481.00

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

HMR = (\$41,481.00/ \$167,745.00) x 100 = **24.73%**

The cost of this Hazard Mitigation Proposal (HMP) is **24.73%** of the repair or restoration costs and is deemed cost effective per FEMA Public Assistance Program and Policy Guide (PAPPG) V3.1 April2018, Chapter 2, VII., Section C, ___ 15%Rule, _X_ 100% Rule, ___ BCA Rule. This Hazard Mitigation Proposal meets eligible

repair and restoration cost effective requirements.

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

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

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

918127 **FAASt [Jayuya II - 8302-05]**

No 428 PA work identified at this time for Jayuya II - Feeder 8302-05

DI# 918127 Work to be Completed (WTBC): \$0

406 HMP Scope

Project number: 542762

Damage #918127; FAASt [Jayuya II - 8302-05]

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

Location: Jayuya, Puerto Rico

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

Hazard Mitigation Narrative

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

➤ **Project #542762 (Version 0) [Distribution Critical Poles & Conductors Repair/Replacement].**

The Arecibo Short Term Group 2 consists of 6 interconnected and inter-functional distribution feeders (sites) establish the electrical distribution system as follows: Utuado Pueblo (8101-03), Caguana (8103-01 & 8103-02), Yahuecas (8203-02), Jayuya (8301-03), and Jayuya II (8302-05).

The Method of Repair (MOR) [**Version 0 (Distribution Critical Poles & Conductors Repair/Replacement)**] included the replacement of the damaged critical distribution poles (wood, concrete or galvanized), cross-arms, insulators, and all associated hardware needed for the new structure. According to the information provided by the Applicant, due to the high velocity hurricane winds, wind-blown debris, and prolonged heavy rain, were the main cause of the damages of the facilities.

In order to minimize the damages in a future event, the Applicant is proposing as a mitigation measure, increase the strength of the poles by increasing the wind tolerance to +160mph. Note: The FEMA Accelerated Award Strategy (FAASt) MOR included the PREPA distribution standards and specifications that were based on a 145mph sustained winds. However, the new PREPA Standard 2021 updates the design-criteria to a 160mph sustained winds resistant. The +160mph wind tolerance mitigation measure, will protect and make the affected infrastructure more resistant, stronger, and resilient to similar hazards.

Hazard Mitigation Proposal (HMP) Scope of Work:

➤ Applicant stated that for Version 0, no 428 (PA) and/or 406 (HM) works have been identified at this time.

Cost

Code	Quantity	Unit	Total Cost	Section
9201 (PAAP Fixed Estimate (No Value - Tracking Purposes Only))	1.00	Lump Sum	\$0.00	Completed
3510 (3510 (3510 (Engineering And Design Services (FAASt Global A&E 335168)))	1.00	Lump Sum	(\$1,768.00)	Uncompleted
9201 (PAAP Fixed Estimate (No Value - Tracking Purposes Only))	1.00	Lump Sum	\$0.00	Completed
9001 (9001 (9001 (Contract (FAASt 136271)))	1.00	Lump Sum	\$23,021.00	Uncompleted
3510 (3510 (3510 (Engineering And Design Services (FAASt Global A&E 335168)))	1.00	Lump Sum	(\$30,343.00)	Uncompleted
9201 (PAAP Fixed Estimate (No Value - Tracking Purposes Only))	1.00	Lump Sum	\$0.00	Completed
9001 (9001 (9001 (Contract (FAASt 136271)))	1.00	Lump Sum	\$395,005.00	Uncompleted
9201 (PAAP Fixed Estimate (No Value - Tracking Purposes Only))	1.00	Lump Sum	\$0.00	Completed
3510 (3510 (3510 (Engineering And Design Services (FAASt Global A&E 335168)))	1.00	Lump Sum	(\$18,683.00)	Uncompleted
9201 (PAAP Fixed Estimate (No Value - Tracking Purposes Only))	1.00	Lump Sum	\$0.00	Completed
9001 (9001 (9001 (Contract (FAASt 136271)))	1.00	Lump Sum	\$243,216.00	Uncompleted
9201 (PAAP Fixed Estimate (No Value - Tracking Purposes Only))	1.00	Lump Sum	\$0.00	Completed

CRC Gross Cost	\$610,448.00
Total 406 HMP Cost	\$157,420.00
Total Insurance Reductions	\$0.00
<hr/>	
CRC Net Cost	\$767,868.00
Federal Share (90.00%)	\$691,081.20
Non-Federal Share (10.00%)	\$76,786.80

Award Information

Version Information

Version #	Eligibility Status	Current Location	Bundle Number	Project Amount	Cost Share	Federal Share Obligated	Date Obligated
0	Eligible	Awarded	PA-02-PR-4339-PW-10690(11829)	\$767,868.00	90 %	\$691,081.20	6/2/2022

Drawdown History

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

Subgrant Conditions

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

Insurance

Additional Information

5/23/2022

GENERAL INFORMATION

Event: DR4339-PR

Project: SP 542762

Category of Work: Cat F - Utilities

Applicant: PR Electric Power Authority

Event Type: Hurricane / Hurricane Maria

Cause of Loss: Wind / Wind Driven Rain

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

Total Public Assistance Amount: \$767,868.00 (Repairs Amount \$610,448.00 + Mitigation Amount \$157,420.00)

COMMERCIAL INSURANCE INFORMATION

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

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

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

Mapfre Praico Insurance Company (1398178000644)

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

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

Policy Limits: \$300,000,000.00

RCV or ACV: Replacement Cost Value

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

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

NUMBER OF DAMAGED LOCATIONS INCLUDED IN THIS PROJECT: (6)

Damaged Inventory (DI) #918122:

FAASt [Utua do Pueblo - 8101-03]

Location Description: Utua do Pueblo - 8101-03

GPS Coordinates: Start [REDACTED] End

Cause of Loss: Wind / Wind Driven Rain

SOV / Schedule #: Not insured

SOV / Schedule Amount: Not insured

Applicable Deductible Amount: N/A

Damage Inventory Amount: Repairs Amount \$0.00

-

Prior Obtain and Maintain Requirement:

No prior insurance requirements were found for this facility.

-

Reduction(s):

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

-

Obtain and Maintain Requirement:

No Obtain & Maintain Requirement is being mandated for the FAAST [Utado Pueblo - 8101-03] because the facility does not meet the definition of building, equipment, contents, or vehicle.

Damaged Inventory (DI) #918123:

FAAST [Caguana - 8103-01]

Location Description: Caguana - 8103-01

GPS Coordinates: Start [REDACTED] End

Cause of Loss: Wind / Wind Driven Rain

SOV / Schedule #: Not insured

SOV / Schedule Amount: Not insured

Applicable Deductible Amount: N/A

Damage Inventory Amount: \$27,083.00 (Repairs Amount \$21,253.00 + Mitigation Amount \$5,830.00)

-

Prior Obtain and Maintain Requirement:

No prior insurance requirements were found for this facility.

-

Reduction(s):

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

-

Obtain and Maintain Requirement:

No Obtain & Maintain Requirement is being mandated for the FAAST [Caguana - 8103-01] because the facility does not meet the definition of

building, equipment, contents, or vehicle.

Damaged Inventory (DI) #918124:

FAAST [Caguana - 8103-02]

Location Description: Caguana - 8103-02

GPS Coordinates: Start [REDACTED] End

Cause of Loss: Wind / Wind Driven Rain

SOV / Schedule #: Not insured

SOV / Schedule Amount: Not insured

Applicable Deductible Amount: N/A

Damage Inventory Amount: \$463,779.00 (Repairs Amount \$364,662.00 + Mitigation Amount \$99,117.00)

-

Prior Obtain and Maintain Requirement:

No prior insurance requirements were found for this facility.

-

Reduction(s):

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

-

Obtain and Maintain Requirement:

No Obtain & Maintain Requirement is being mandated for the FAAST [Caguana - 8103-02] because the facility does not meet the definition of building, equipment, contents, or vehicle.

Damaged Inventory (DI) #918125:

FAAST [Yahuecas - 8203-02]

Location Description: Yahuecas - 8203-02

GPS Coordinates: Start [REDACTED] End

Cause of Loss: Wind / Wind Driven Rain

SOV / Schedule #: Not insured

SOV / Schedule Amount: Not insured

Applicable Deductible Amount: N/A

Damage Inventory Amount: Repairs Amount \$0.00

-

Prior Obtain and Maintain Requirement:

No prior insurance requirements were found for this facility.

-
Reduction(s):

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

-
Obtain and Maintain Requirement:

No Obtain & Maintain Requirement is being mandated for the FAAST [Yahuecas - 8203-02] because the facility does not meet the definition of building, equipment, contents, or vehicle.

Damaged Inventory (DI) #918126:

FAAST [Jayuya - 8301-03]

Location Description: Jayuya - 8301-03

GPS Coordinates: Start [REDACTED] End

Cause of Loss: Wind / Wind Driven Rain

SOV / Schedule #: Not insured

SOV / Schedule Amount: Not insured

Applicable Deductible Amount: N/A

Damage Inventory Amount: \$277,006.00 (Repairs Amount \$224,533.00 + Mitigation Amount \$52,473.00)

-
Prior Obtain and Maintain Requirement:

No prior insurance requirements were found for this facility.

-
Reduction(s):

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

-
Obtain and Maintain Requirement:

No Obtain & Maintain Requirement is being mandated for the FAAST [Jayuya - 8301-03] because the facility does not meet the definition of building, equipment, contents, or vehicle.

Damaged Inventory (DI) #918127:

FAAST [Jayuya II - 8302-05]

Location Description: Jayuya II - 8302-05

GPS Coordinates: Start [REDACTED] End

Cause of Loss: Wind / Wind Driven Rain

SOV / Schedule #: Not insured

SOV / Schedule Amount: Not insured

Applicable Deductible Amount: N/A

Damage Inventory Amount: Repairs Amount \$0.00

-

Prior Obtain and Maintain Requirement:

No prior insurance requirements were found for this facility.

-

Reduction(s):

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

-

Obtain and Maintain Requirement:

No Obtain & Maintain Requirement is being mandated for the FAAST [Jayuya II - 8302-05] because the facility does not meet the definition of building, equipment, contents, or vehicle.

Insurance Proceeds Statement:

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

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

Standard Insurance Comments

FEMA Policy 206-086-1

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

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

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

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

O&M Requirements

There are no Obtain and Maintain Requirements on **FAAST**

[Distribution Feeders - Arecibo Short Term Group 2]
(Distribution).

406 Mitigation

There is no additional mitigation information on **FAASt**
[Distribution Feeders - Arecibo Short Term Group 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.
- Resource Conservation and Recovery Act, aka Solid Waste Disposal Act (RCRA) 1. The Applicant shall handle, manage, and dispose of all types of hazardous waste in accordance with requirements of local, state, and federal laws, regulations, and ordinances. In addition, the Applicant shall ensure that all debris is separated and disposed of in a manner consistent with the PR DNER guidelines at a permitted site or landfill. 2. 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. 3. Unusable equipment, debris, white goods, scrap metal any other material shall be disposed in approved manner and location. In the event significant items are discovered during the implementation or development of the project the Applicant shall handle, manage and dispose petroleum products, hazardous materials and toxic waste in accordance to the requi
- Endangered Species Act (ESA) - The Applicant must provide documentation at close-out that proves completion of required Conservation Measures.
- Endangered Species Act (ESA) - Conditions for the Puerto Rican Boa 1 Inform all personnel about the potential presence of the PR boa and the VI boa in areas where the proposed work will be conducted. Photographs of the PR and VI Boa are to be prominently displayed at the site. The recipient must ensure that project personnel is able to correctly identify a PR or VI boa. For information on PR boa, please visit: <https://ecos.fws.gov/ecp/species/6628>. 2. Prior to any construction activity, including removal of vegetation and earth movement, the boundaries of the project area must be delineated, buffer zones, and areas to be excluded and protected, should be clearly marked in the project plan and in the field to avoid further habitat degradation into forested areas. Once areas are clearly marked, and prior to any construction activity, including site preparation, project personnel able to correctly identify a PR or VI boa must survey the areas to be cleared to ensure that no boas are present within the work area. Vehicle and equipment operation must remain on designated access roads/paths and within rights-of way. 3. If a PR boa is found within any of the working or construction areas, activities should stop in the area where the boa was found. Do not capture the boa. If boas need to be moved out of harm's way, project personnel designated by the recipient shall immediately contact the Puerto Rico Department of Natural and Environmental Resources

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

- Endangered Species Act (ESA) - The below conservation measures apply to the following species: Puerto Rican parrot, Puerto Rican plain pigeon and the Puerto Rican broad-winged hawk. 8. During breeding seasons (see below), nest surveys shall be conducted if a project occurs in a species' range. Nest searches must be conducted by qualified personnel with the appropriate DNER permits prior to start of work. If nesting activity is detected, all construction activities or human disturbance must be avoided within a 200-meter buffer to the closest nest. This avoidance strategy must be kept until fledglings successfully leave the nest permanently. Outside the nesting season, if a nest is encountered, work shall not interfere with the species until they have left the site. If nesting activity is detected, all construction activities or human disturbance must be avoided within a 200-meter buffer to the closest nest. This avoidance strategy must be kept until juvenile birds fledge the nest and are permanently gone. Nesting season: Puerto Rican parrot (*Amazona vittata*): February to June; Puerto Rican plain pigeon (*Patagioenas inornata wetmorei* [*Columba inornata*]): April-September and Puerto Rican broad-winged hawk (*Buteo platypterus*): December-June For all nest sightings, the Applicant must record the time and date of the sighting and the specific location where it was found. Data should also include a photo of the nest and eggs, relocation site GPS coordinates, and the time and date of the relocation. All sightings and incidental lethal take reports should be sent to the USFWS Caribbean Ecological Services Field Office, Marelisa Rivera - Deputy Field Supervisor, 787-851-7297 extension 206, 787-510-5207, marelisa_rivera@fws.gov.

EHP Additional Info

There is no additional environmental historical preservation on **FAASt [Distribution Feeders - Arcibo Short Term Group 2] (Distribution)**.

Final Reviews

Final Review

Reviewed By MARTINEZ SANTIAGO, ISRAEL

Reviewed On 05/25/2022 4:06 PM AST

Review Comments

FEMA final review completed. Project ready for Recipient Review.

Recipient Review

Reviewed By Salgado, Gabriel

Reviewed On 05/26/2022 9:00 AM AST

Review Comments

Recipient review was completed. Project is ready for Applicant review.

Fixed Cost Offer

As a Public Assistance (PA) Subrecipient PR Electric Power Authority (000-UA2QU-00), in accordance with Section 428 of the Robert T. Stafford Disaster Relief and Emergency Assistance Act, the Applicant agrees to accept a permanent work subaward based on a Fixed Cost Offer in the amount of \$767,868.00 for subaward number 10690 under Disaster # 4339. The Applicant accepts responsibility for all costs above the Fixed Cost Offer.

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

Project Signatures

Signed By Nieves, Ezequiel

Signed On 05/27/2022