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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 FEMA Approval of Four Projects**

MOTION SUBMITTING FEMA APPROVAL OF FOUR PROJECTS

TO THE PUERTO RICO ENERGY BUREAU:

COME NOW LUMA Energy, LLC[1], and **LUMA Energy ServCo, LLC**[2], (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. Meanwhile, on April 14, 2021, PREPA filed a *Motion in Compliance with the Resolution and Order Entered on March 26, 2021*, which included a list of projects under the categories of transmission, distribution, and substations. PREPA submitted the list of projects to the Energy Bureau at least thirty (30) calendar days before their submittal to COR-3 and/or FEMA, aligning with the March 26th Order. The list of projects submitted by PREPA included the FAASt Manati TC - BRKS 230 kV (Substation) federally funded Transmission and Distribution Project ("T&D Project").

3. On April 22, 2021, the Energy Bureau issued a Resolution and Order ("April 22nd Order"). It determined that additional information was required to thoroughly evaluate the projects submitted by PREPA and evaluate its compliance with the March 26th Order. The Energy Bureau ordered PREPA to provide detailed information: (i) on or before April 28, 2021, for each project already submitted to COR-3 and/or FEMA; and (ii) on or before May 21, 2021, for each project in that will be submitted to COR-3 and/or FEMA under the different project categories. It also ordered PREPA to include a list of all the substations to be relocated to mitigate possible future flooding damages.

4. In compliance with the April 22nd Order, on April 28, 2021, PREPA filed a *Motion in Compliance with the Resolution and Order entered on April 22, 2021*. PREPA submitted the Scopes of Work ("SOW") provided to COR-3 and FEMA in compliance with the April 22nd Order. Among the SOWs submitted to this Energy Bureau was the FAASt Manati TC - BRKS 230 kV

(Substation) T&D Project to repair the Manatí substation and associated distribution feeders, to modernize and harden them.

5. On June 8, 2021, the Energy Bureau entered a Resolution and Order. It determined that the majority of the SOWs for T&D projects submitted by PREPA were necessary to improve the system's reliability ("June 8th Order"). Therefore, it approved most of the projects presented in the April 28th Submission, including the FAASt Manati TC - BRKS 230 kV (Substation) T&D Project SOW. Further, the Energy Bureau ordered PREPA 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.

6. Thereafter, 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 COR-3 and FEMA. The SOWs submitted by LUMA included the Distribution Feeders – Caguas Short Term Group 4 and the Ponce Short Term Group 1 T&D Projects.

7. On August 20, 2021, the Energy Bureau issued a Resolution and Order. It determined that the majority of the SOWs for T&D projects submitted by LUMA were necessary to improve the system's reliability ("August 20th Order"). Therefore, it approved most of the projects presented in the July 8th Motion, including the Distribution Feeders – Caguas Short Term Group 4 and the Ponce Short Term Group 1 T&D Projects SOWs. The Energy Bureau also 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.

8. 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) SOWs for T&D Projects 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 Distribution Streetlighting T&D Project, which encompassed street lighting projects throughout different municipalities of Puerto Rico.

9. 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 Distribution Streetlighting 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.

10. In compliance with the June 8th, August 20th, and September 22nd Orders, LUMA hereby submits a copy of the approval by FEMA of the FAASt Manati TC - BRKS 230 kV (Substation), copies of two approvals by FEMA of the Distribution Feeders – Caguas Short Term Group 4 and Ponce Short Term Group 1 T&D Projects, and a copy of the approval by FEMA of the Distribution Streetlighting T&D project for the municipality of Guánica, all received on May

25, 2022.[3] *See* **Exhibit 1** to this Motion. The documents state FEMA's approval and include the cost obligated for each project.

WHEREFORE, LUMA respectfully requests that the Energy Bureau **take notice** of the aforementioned and **accept** the copies of the FEMA approvals 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 Katiuska Bolaños-Lugo, kbolanos@diazvaz.law.

In San Juan, Puerto Rico, this 1st 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
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[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.

Exhibit 1

FEMA Approvals

Department of Homeland Security
Federal Emergency Management Agency

General Info

Project #	334323 **P/W #** 10630	**Project Type**	Specialized
Project Category	F - Utilities	**Applicant**	PR Electric Power Authority (000-UA2QU-00)
Project Title	FAASt Distribution Feeders - Ponce Short Term Group 1 (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
		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 #661229; FAASt Distribution Feeders Ponce Short Term Group 1 (Rambla 5004-06; Rambla 5004-07; Rambla 5004-09; Canas T.C. 5018-03; Yauco Hidro 5303-01; Guayanilla Pueblo 5501-04; Guánica TC 5602-02)

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

General Facility Information:

- **Facility Type:** Power generation, transmission, and distribution facilities
- **Facility:** Distribution Feeders - Ponce Short term Group 1
- **Facility Description:** Ponce Short Term Group 1 consists of 7 interconnected and inter-functional distribution feeders (sites) establish the electrical distribution system as follows: Rambla 13KV (5004-06), Rambla 13KV (5004-07), Rambla 13KV (5004-09), Canas T.C. 13KV (5018-03), Yauco Hidro Ii (5303-01), Guayanilla Pueblo (5501-04) and Guanica TC (5602-02). The typical components are poles and structures (including their foundations), framing and insulators, load break switches (manual and automated), capacitor banks, voltage regulators, transformers (including lightning arresters and fuse cut-outs), conductors, guy wires, anchoring, grounding assemblies, underground cable, underground cable systems, fault interrupting equipment (fuses, reclosers, and sectionalizers), and any other associated components.
- **Approx. Year Built:** 1980
- **Location Description:** Refer to documents section in the project for more details about the different locations: "DI 661229 -DR4339 -10012-EN-SOW-0001_Rev0 - FEMA SOW Distribution Feeders - Ponce Short Term Group 1 Signed.pdf"
- **Start GPS Latitude/Longitude:** 18.02361, -66.60176
- **End GPS Latitude/Longitude:** 18.02959, -66.61015

General Damage Information:

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

Final Scope

661229

FAASt Distribution Feeders Ponce Short Term Group 1 (Rambla 5004-06; Rambla 5004-07; Rambla 5004-09;

Introduction

The purpose of this document is to submit for approval the detailed Scope of Work ("SOW") to COR3 and FEMA for the Distribution Pole and Conductor Repair - Ponce Group 1 Project under DR-4339-PR Public Assistance. The document provides a description of the project including scope, schedule, and cost estimates as well as Environmental & Historical Preservation ("EHP") requirements and proposed 406 hazard mitigation work. LUMA Energy is seeking approval from COR3 and FEMA for project funding to repair, restore, or replace the eligible facilities.

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

Facilities

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

Name Feeder Number, GPS Start, GPS End, Phase Voltage Level (kV), and Construction Date, are provided in a table in Facilities section document labelled: 3*34323-DR4339PR-Detailed SOW Distribution Pole and Conductor Repair - Ponce Group 1.pdf, page 5/13.*

Project Scope of Work Distribution:

Proposed 428 Public Assistance Scope of Work:

Feeder 5004-06 Scope:

A. Remove one 65ft wood pole and install one 70ft galvanized steel S8 concrete supported pole in the same location. Cross arms, insulators and all associated hardware will also be replaced along with the new structure.

B. Remove one 50ft concrete 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.

Feeder 5004-07 Scope:

C. No 428 PA work identified at this time, refer to 406 HMGP description below.

Feeder 5004-09 Scope:

D. No 428 PA work identified at this time, refer to 406 HMGP description below.

Feeder 5018-03 Scope:

E. Remove one 45ft 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.

Feeder 5303-01 Scope:

F. No 428 PA work identified at this time, refer to 406 HMGP description below.

Feeder 5501-04 Scope:

G. Remove four 40ft 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.

H. 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.

Feeder 5602-02 Scope:

I. 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.

J. 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.

For detailed structure coordinates, please refers to document labeled: *334323-DSOW-Appendix G - Structure Coordinates - Distribution Pole and Conductor Repair-Ponce Group 1 -Rev2.pdf.*

For location maps and pictures, please refers to the document labeled: *334323-DSOW-Appendix B - Maps and Pictures-Distribution Pole and Conductor Repair-Ponce Group 1 -Rev1.pdf.*

Project Cost Estimate

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

Planning Permits & Applications	$ 7,000
Environmental Management	$ 10,000
Engineering - 10% (FAASt 335168)	$ 26,179
Project Management - 5%	$ 13,090
Distribution Line	$ 261,794
Contingency - 10%	$ 31,806
Total	**$ 349,871**

Work to be Completed: $349,871 - $26,179 (FAASt A&E 335168) = $323,692.00

Project Notes

1. Refer to detailed SOW provided in document: 334323-DR4339PR-Detailed SOW-Distribution Pole and Conductor Repair – Ponce Group 1-Rev3.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: 334323

Damage #661229; FAASt Distribution Feeders - Ponce Short Term Group 1 (Distribution)

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

Location: Ponce, Puerto Rico

Start GPS Latitude/Longitude: 18.02361, -66.60176; End GPS Latitude/Longitude: 18.02959, -66.61015

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 #334323 (Version 0) [Distribution Critical Poles & Conductors Repair/Replacement].**

The Ponce Short Term Group 1 consists of 7 interconnected and inter-functional distribution feeders (sites) establish the electrical distribution system as follows: Rambla 13KV (5004-06), Rambla 13KV (5004-07), Rambla 13KV (5004-09), Canas T.C. 13KV (5018-03), Yauco Hidro II (5303-01), Guayanilla Pueblo (5501-04) and Guanica TC (5602-02).

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

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

Hazard Mitigation Proposal (HMP) Scope of Work:

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

Mitigation Measures *(Replacement)*

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

* [Distribution Critical Poles Replacement] 406 Mitigation Scope:

1. Feeder 5004-06 Scope: Replace 50' concrete H6 poles by 50' galvanized steel S8 poles.
2. Feeder 5004-07 Scope: No 406 Mitigation work identified at this time.
3. Feeder 5004-09 Scope: No 406 Mitigation work identified at this time.
4. Feeder 5018-03 Scope: Replace 45' concrete H4 poles by 50' galvanized steel S8 poles.
5. Feeder 5303-01 Scope: No 406 Mitigation work identified at this time.
6. Feeder 5501-04 Scope: Replace 45' concrete H4 poles by 50' galvanized steel S8 poles.
7. Feeder 5602-02 Scope: Replace 45' concrete H4 poles by 50' galvanized steel S8 poles.

Hazard Mitigation Proposal (HMP) Cost:

Total Net Hazard Mitigation Cost (Base Cost) = $ 54,648.00

+ HM (Applicant A&E, Management & General Conditions) = $ 14,482.00

Hazard Mitigation Total Cost = **$ 69,130.00**

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HMP Cost-Effectiveness Calculations:

Eligible Cost of PA repair Scope of Work per DI: $223,239.28

Net Cost of 406 HMP per DI: $54,648.00

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

HMR = ($54,648.00/ $223,239.28) x 100 = **24.48%**

The cost of this Hazard Mitigation Proposal (HMP) is **24.48%** 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.

Cost

Code	Quantity	Unit	Total Cost	Section
3510 (Engineering And Design Services (A&E Deduction from Project 335168 - FAASt A&E PREPA))	1.00	Lump Sum	($26,179.00)	Uncompleted
9201 (PAAP Fixed Estimate (No Value - Tracking Purposes Only))	1.00	Lump Sum	$0.00	Completed
9001 (Contract (Total Cost Estimate) FAASt Project 136271)	1.00	Lump Sum	$349,871.00	Uncompleted

CRC Gross Cost	$323,692.00
Total 406 HMP Cost	$69,130.00
Total Insurance Reductions	$0.00
CRC Net Cost	$392,822.00
Federal Share (90.00%)	$353,539.80
Non-Federal Share (10.00%)	$39,282.20

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-10630(11788)	$392,822.00	90 %	$353,539.80	5/25/2022

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.
- 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

5/11/2022

GENERAL INFORMATION

Event: DR4339-PR

Project: SP 334323

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: $392,822.00 (Repairs Amount $323,692.00 + Mitigation Amount $69,130.00)

COMMERCIAL INSURANCE INFORMATION

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

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

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

Mapfre Praico Insurance Company (1398178000644)

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

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

Policy Limits: $300,000,000.00

RCV or ACV: Replacement Cost Value

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

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

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

Damaged Inventory (DI) #661229:

FAASt Distribution Feeders Ponce Short Term Group 1 (Rambla 5004-06; Rambla 5004-07; Rambla 5004-09; Canas T.C. 5018-03; Yauco Hidro 5303-01; Guayanilla Pueblo 5501-04; Guánica TC 5602-02)

Location Description: Distribution Feeders - Ponce Short term Group 1

GPS Coordinates: Start 18.02361, -66.60176 to 18.02959, -66.61015 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: $392,822.00 (Repairs Amount $323,692.00 + Mitigation Amount $69,130.00)

Prior Obtain and Maintain Requirement:

No prior insurance requirements were found for this facility.

Reduction(s):

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

Obtain and Maintain Requirement:

No Obtain & Maintain Requirement is being mandated for the FAASt Distribution Feeders Ponce Short Term Group 1 (Rambla 5004-06; Rambla 5004-07; Rambla 5004-09; Canas T.C. 5018-03; Yauco Hidro 5303-01; Guayanilla Pueblo 5501-04; Guánica TC 5602-02) because facility does not meet the definition of building, equipment, contents, or vehicle.

Insurance Proceeds Statement:

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

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

Standard Insurance Comments

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

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

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

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

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

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

O&M Requirements

There are no Obtain and Maintain Requirements on **FAASt Distribution Feeders - Ponce Short Term Group 1 (Distribution)**.

406 Mitigation

There is no additional mitigation information on **FAASt Distribution Feeders - Ponce Short Term Group 1 (Distribution)**.

Environmental Historical Preservation

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

EHP Conditions

- Any change to the approved scope of work will require re-evaluation for compliance with NEPA and other Laws and Executive Orders.
- This review does not address all federal, state and local requirements. Acceptance of federal funding requires recipient to comply with all federal, state and local laws. Failure to obtain all appropriate federal, state and local environmental permits and clearances may jeopardize funding.
- If ground disturbing activities occur during construction, applicant will monitor ground disturbance and if any potential archaeological resources are discovered, will immediately cease construction in that area and notify the State and FEMA.
- Executive Order 11988 - Floodplains - Applicant must obtain any required permits from the Planning Board prior to initiating work and comply with any conditions of the permit. All coordination (emails, letters, documented phone calls) pertaining to these activities and compliance must be provided and maintained in the Applicant's permanent files.
- Endangered Species Act (ESA) - The Applicant must provide documentation at close-out that proves completion of required Conservation Measures
- Endangered Species Act (ESA) - USFWS Required Conservation Measures for Caprimulgus noctitherus: 1. During breeding seasons (see below), nest surveys shall be conducted if a project occurs in a species' range. Nest searches must be conducted by qualified personnel with the appropriate DNER permits prior to start of work. If nesting activity is detected, all construction activities or human disturbance must be avoided within a 200-meter buffer to the closest nest. This avoidance strategy must be kept until fledglings successfully leave the nest permanently. Outside the nesting season, if a nest is encountered, work shall not interfere with the species until they have left the site. If nesting activity is detected, all construction activities or human disturbance must be avoided within a 200-meter buffer to the closest nest. This avoidance strategy must be kept until juvenile birds fledge the nest and are permanently gone. Nesting season: Puerto Rican parrot (Amazona vittata): February to June; Puerto Rican plain pigeon (Patagioenas inornata wetmorei [Columba inornata]): April-September; Puerto Rican broad-winged hawk (Buteo platypterus): December-June; Puerto Rican sharp-shinned hawk (Accipiter striatus venator): December-June; Puerto Rican nightjar (Antrostomus noctitherus): February-August; Elfin-woods warbler (Setophaga angelae): March-June; yellow-shouldered blackbird (Agelaius xanthomus): February through November. For all nest sightings, the Applicant must record the time and date of the sighting and the specific location where it was found. Data should also include a photo of the nest and eggs, relocation site GPS coordinates, and the time and date of the relocation. All sightings and incidental lethal take reports should be sent to the USFWS Caribbean Ecological Services Field Office, Marelisa Rivera - Deputy Field Supervisor, 787-851-7297 extension 206, 787-510-5207, marelisa_rivera@fws.gov
- Endangered Species Act (ESA) - USFWS Required Conservation Measures for Epicrates inornatus: 1. Inform all personnel about the potential presence of the PR boa and the VI boa in areas where the proposed work will be conducted. Photographs of the PR and VI Boa are to be prominently displayed at the site. The recipient must ensure that project personnel is able to correctly identify a PR or VI boa. For information on PR boa, please visit: https://ecos.fws.gov/ecp/species/6628. 2. Prior to any construction activity, including removal of vegetation and earth movement, the boundaries of the project area must be delineated, buffer zones, and areas to be excluded and protected,

should be clearly marked in the project plan and in the field to avoid further habitat degradation into forested areas. Once areas are clearly marked, and prior to any construction activity, including site preparation, project personnel able to correctly identify a PR or VI boa must survey the areas to be cleared to ensure that no boas are present within the work area. Vehicle and equipment operation must remain on designated access roads/paths and within rights-of way. 3. If a PR boa is found within any of the working or construction areas, activities should stop in the area where the boa was found. Do not capture the boa. If boas need to be moved out of harm's way, project personnel designated by the recipient shall immediately contact the Puerto Rico Department of Natural and Environmental Resources (PRDNER) Rangers for safe capture and relocation of the animal (PRDNER phone #s: 787-724-5700, 787-230-5550, 787-771-1124). If immediate relocation is not an option, project-related activities at this area must stop until the boa moves out of harm's way on its own. Activities at other work sites, where no boas have been found after surveying the area, may continue. 4. Measures should be taken to avoid and minimize PR boa casualties by heavy machinery or motor vehicles being used on site. Any heavy machinery left on site (staging) or near potential PR boa habitat (within 50 meters of potential boa habitat), needs to be thoroughly inspected each morning before work starts to ensure that no boas have sheltered within engine compartments or other areas of the equipment. If PR boas are found within vehicles or equipment, do not capture the animal and let it move on its own or call PRDNER Rangers for safe capture and relocation of the boa (PRDNER phone #s: 787-724-5700, 787-230-5550, 787-771-1124). If not possible, the animal should be left alone until it leaves the vehicle on its own. 5. PR boas may seek shelter in debris piles. Measures should be taken to avoid and minimize boa casualties associated with sheltering in debris piles as a result of project activities. Debris piles should be placed far away from forested areas. Prior to moving, disposing or shredding, debris piles should be carefully inspected for the presence of boas. If PR boas are, found within debris piles, do not capture the animal and let it move on its own or call PRDNER Rangers for safe capture and relocation of the animal. If debris piles will be left on site, we recommend they be placed in areas that will not be disturbed in the future. 6. For all boa sightings (dead or alive), personnel designated by the recipient must record the time and date of the sighting and the specific location where the boa was found. Data should also include a photo of the animal dead or alive, and site GPS coordinates, and comments on how the animal was detected and its behavior. If the PR boa was accidentally killed as part of the project actions, please include information on what conservation measures had been implemented and what actions will be taken to avoid further killings. All boa-sighting reports should be sent to the USFWS Caribbean Ecological Services Field Office, Marelisa Rivera - Deputy Field Supervisor, 787- 851-7297 extension 206, 787-510-5207, marelisa_rivera@fws.gov.

- Resource Conservation and Recovery Act, aka Solid Waste Disposal Act (RCRA) 1. The Applicant shall handle, manage, and dispose of all types of hazardous waste in accordance with requirements of local, state, and federal laws, regulations, and ordinances. In addition, the Applicant shall ensure that all debris is separated and disposed of in a manner consistent with the PR DNER guidelines at a permitted site or landfill. The contractor/applicant will be responsible for the proper disposition of construction debris in authorized landfills providing the name, location, coordinates and permits of the facility to the corresponding authorities. 2. 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.

EHP Additional Info

There is no additional environmental historical preservation on **FAASt Distribution Feeders - Ponce Short Term Group 1 (Distribution)**.

Final Reviews

Final Review

Reviewed By MARTINEZ SANTIAGO, ISRAEL **Reviewed On** 05/18/2022 8:51 AM AST

Review Comments

FEMA Final Review completed. Project ready for Recipient Review.

Recipient Review

Reviewed By Salgado, Gabriel **Reviewed On** 05/18/2022 8:56 AM AST

Review Comments

Recipient review completed. Project is ready for Applicant review.

Fixed Cost Offer

As a Public Assistance (PA) Subrecipient PR Electric Power Authority (000-UA2QU-00), in accordance with Section 428 of the Robert T. Stafford Disaster Relief and Emergency Assistance Act, the Applicant agrees to accept a permanent work subaward based on a Fixed Cost Offer in the amount of $392,822.00 for subaward number 10630 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** 05/19/2022

Department of Homeland Security
Federal Emergency Management Agency

General Info

Project #	334488 **P/W #** 10635	**Project Type**	Specialized
Project Category	F - Utilities	**Applicant**	PR Electric Power Authority (000-UA2QU-00)
Project Title	FAASt [Distribution Feeders - Caguas Short Term Group 4] (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
		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 #661629; FAASt [3004 - 01 Caguas T.C]

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:** 3004-01 Caguas T.C
- **Facility Description:** The feeder 3004-01 (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:** 18.23951, -66.03646
- **End GPS Latitude/Longitude:** 18.24808, -66.09112

General Damage Information:

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

Damage #661630; FAASt [3006 - 02 Caguas T.C. 13.2 kV]

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:** 3006-02 Caguas T.C. 13.2 kV
- **Facility Description:** The feeder 3006-02 (13.2kV) consists of poles and structures (including their foundations), framing and insulators, load break switches (manual and automated), capacitor banks, voltage regulators, transformers (including lightning arresters and fuse cut-outs), conductors, guy wires, anchoring, grounding assemblies, underground cable, underground cable systems, fault interrupting

equipment (fuses, reclosers, and sectionalizers), and any other associated components.
- **Approx. Year Built:** 1980
- **Start GPS Latitude/Longitude:** 18.23945, -66.03674
- **End GPS Latitude/Longitude:** 18.22044, -66.06369

General Damage Information:

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

Damage #661631; FAAST [3006 -03 Caguas T.C. 13.2 kV]

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:** 3006-03 Caguas T.C. 13.2 kV
- **Facility Description:** The feeder 3006-03 (13.2kV) consists of poles and structures (including their foundations), framing and insulators, load break switches (manual and automated), capacitor banks, voltage regulators, transformers (including lightning arresters and fuse cut-outs), conductors, guy wires, anchoring, grounding assemblies, underground cable, underground cable systems, fault interrupting equipment (fuses, reclosers, and sectionalizers), and any other associated components.
- **Approx. Year Built:** 1980
- **Start GPS Latitude/Longitude:** 18.23945, -66.03674
- **End GPS Latitude/Longitude:** 18.24441, -66.00805

General Damage Information:

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

Damage #661632; FAASt [3006 - 05 Caguas T.C. 13.2 kV]

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:** 3006-05 Caguas T.C. 13.2 kV
- **Facility Description:** The feeder 3006-05 (13.2kV) consists of poles and structures (including their foundations), framing and insulators, load break switches (manual and automated), capacitor banks, voltage regulators, transformers (including lightning arresters and fuse cut-outs), conductors, guy wires, anchoring, grounding assemblies, underground cable, underground cable systems, fault interrupting equipment (fuses, reclosers, and sectionalizers), and any other associated components.
- **Approx. Year Built:** 1980
- **Start GPS Latitude/Longitude:** 18.23945, -66.03674
- **End GPS Latitude/Longitude:** 18.28225, -66.04259

General Damage Information:

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

Damage #661634; FAASt [3013 - 02 Villas De Castro]

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:** 3013-02 Villas De Castro
- **Facility Description:** The feeder 3013-02 (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:** 18.21797, -66.00515
- **End GPS Latitude/Longitude:** 18.19760, -65.97319

General Damage Information:

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

Final Scope

661629 FAASt [3004 - 01 Caguas T.C]

Introduction

The purpose of this document is to submit for approval the Detailed Scope of Work (SOW) to COR3 and FEMA for the Distribution Pole and Conductor Repair Caguas Group 4 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 Powe Authority ("PREPA"), the Puerto Rico Public-Private Partnerships Authority ("P3A") and LUMA Energy, and in accordance with the Consent to Federal Fundir 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, t undertake work in connection with any Federal Funding requests related to the Transmission and Distribution System submitted to FEMA.

DI 661629 FAASt [3004 - 01 Caguas T.C]

Facilities

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

Name: Caguas T.C. / **Feeder Number:** 3004-01

GPS Start: 18.23951, -66.03646 / **GPS End:** 18.24808, -66.09112

Phase: 3 Phase / **Voltage Level (kV):** 8.32

Construction Date: More than 20 years

Proposed 428 Public Assistance Scope of Work (SOW):

Feeder 3004-01 Scope:

• No 428 PA work identified at this time.

Project Cost Estimate

• No 428 PA costs identified at this time.

DI 661629 Work to be Completed (WTBC) Costs: **$0.00**

Total Project Costs (All DIs):

Planning Permits & Applications	$3,500
Environmental Management	$5,000
Engineering - 10% (FAASt 335168)	$11,465
Project Management - 5%	$5,732
Distribution Pole and Conductor Repair	$114,650
Contingency - 10%	$14,035
Total	**$154,382**

Project WTBC Costs: $154,382 - $11,465 (FAASt PREPA A&E Deduction) = $142,917

Project Notes

1. For a full description of the Scope of Work contents for this project, plus related Appendix, please refer to file: *334488-DR4339PR-Detailed SOW-Distribution Pole and Conductor Repair Caguas-Group 4 Rev1.pdf.*

2. WTBC costs were obtained from Applicant provided document: *334488-Appendix H - Detail Cost Estimate-Distribution Pole and Conductor - Caguas Group 4 Rev1.pdf*, as applicable for the 428 SOW portion of the estimate (no 406 HM).

3. Any claim or disbursement related to Engineering or Architecture (A&E) services for this project must be claimed/disbursed from Project 335168, which was prepared to cover A&E expenses related to this Applicant's FAASt Projects. The A/E funds for $11,465 have been calculated for this project (all DIs). However, the actual A&E costs will be claimed in GM project #335168. This amount will be included in this project with a negative dollar amount, to avoid duplicity of funds.

4. Refer to *334488-Appendix G-Distribution Pole and Conductor Repair-Coordinates-Caguas Group 4 Rev1.pdf* for the location specific scopes of work.

406 HMP Scope

Project number: 334488

Damage #661629; FAASt [3004 - 01 Caguas T.C]

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

Location: Caguas, Puerto Rico

Start GPS Latitude/Longitude: 18.23951, -66.03646; End GPS Latitude/Longitude: 18.24808, -66.09112

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 #334488 (Version 0) [Distribution Critical Poles & Conductors Repair/Replacement].**

The Caguas Short Term Group 4 consists of 5 interconnected and inter-functional distribution feeders (sites) establish the electrical distribution system as follows: Caguas T.C. (3004-01), Caguas T.C. 13.2 kV (3006-02, 3006-03 & 3006-05), and Villas De Castro (3013-02).

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 indicates that for Version 0, no 428 (PA) and 406 (HM) works have been identified at this time.

661630 FAASt [3006 - 02 Caguas T.C. 13.2 kV]

DI 661630 FAASt [3006 - 02 Caguas T.C. 13.2 kV]

Facilities

The facilities listed below are part of the feeder systems in the Caguas Region. These interconnected and inter-functional distribution feeders (sites) are part of

the electrical distribution system. All the feeders originate from a substation (start) and serve customers along the route to various locations (end). The coordinates shown below as "GPS End" represent the end of the mainline backbone of each feeder.

Name: Caguas T.C. 13.2 kV / **Feeder Number:** 3006-02

GPS Start: 18.23945, -66.03674 / **GPS End:** 18.22044, -66.06369

Phase: 3 Phase / **Voltage Level (kV):** 13.2

Construction Date: More than 20 years

Proposed 428 Public Assistance Scope of Work (SOW):

Feeder 3006-02 Scope:

• Remove one 45ft concrete pole and install one 50ft galvanized steel pole S8 pole in the same location. Cross arms, insulators and all associated hardware will also be replaced along with the new structure.

DI 661630 Work to be Completed (WTBC) Costs:

Planning Permits & Applications	$620
Environmental Management	$886
Engineering - 10% (FAASt 335168)	$2,032
Project Management - 5%	$1,016
Distribution Pole and Conductor Repair	$20,322
Contingency - 10%	$3,187
Total	**$28,063**

DI 661630 WTBC Costs: $28,063 - $2,032 (FAASt PREPA A&E Deduction) = $26,031

406 HMP Scope

Project number: 334488

Damage #661630; FAASt [3006 - 02 Caguas T.C. 13.2 kV]

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

Location: Caguas, Puerto Rico

Start GPS Latitude/Longitude: 18.23945, -66.03674; End GPS Latitude/Longitude: 18.22044, -66.06369

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 #334488 (Version 0) [Distribution Critical Poles & Conductors Repair/Replacement].**

The Caguas Short Term Group 4 consists of 5 interconnected and inter-functional distribution feeders (sites) establish the electrical distribution system as follows: Caguas T.C. (3004-01), Caguas T.C. 13.2 kV (3006-02, 3006-03 & 3006-05), and Villas De Castro (3013-02).

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 3006-02 Scope: Replace one (1) 45' concrete H4 poles by 50' galvanized steel S8 poles.

Hazard Mitigation Proposal (HMP) Cost:

Total Net Hazard Mitigation Cost (Base Cost) =	$ 3,949.00
+ HM (Applicant A&E, Management & General Conditions) =	$ 1,047.00
Hazard Mitigation Total Cost =	**$ 4,996.00**

HMP Cost-Effectiveness Calculations:

Eligible Cost of PA repair Scope of Work per DI: $20,321.94

Net Cost of 406 HMP per DI: $3,949.00

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

HMR = ($3,949.00/ $20,321.94) x 100 = **19.43%**

The cost of this Hazard Mitigation Proposal (HMP) is **19.43%** 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.

661631 FAAST [3006 -03 Caguas T.C. 13.2 kV]

661631 FAAST [3006 -03 Caguas T.C. 13.2 kV]

Facilities

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

Name: Caguas T.C. 13.2 kV / **Feeder Number:** 3006-03

GPS Start: 18.23945, -66.03674/ **GPS End:** 18.24441, -66.00805

Phase: 3 Phase / **Voltage Level (kV):** 13.2

Construction Date: More than 20 years

Proposed 428 Public Assistance Scope of Work (SOW):

Feeder 3006-03 Scope:

• No 428 PA work identified at this time.

Cost Estimate

• No 428 PA costs identified at this time.

DI 661631 Work to be Completed (WTBC) Costs: **$0.00**

406 HMP Scope

Project number: 334488

Damage #661631; FAAST [3006 -03 Caguas T.C. 13.2 kV]

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

Location: Caguas, Puerto Rico

Start GPS Latitude/Longitude: 18.23945, -66.03674; End GPS Latitude/Longitude: 18.24441, -66.00805

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 #334488 (Version 0) [Distribution Critical Poles & Conductors Repair/Replacement].**

The Caguas Short Term Group 4 consists of 5 interconnected and inter-functional distribution feeders (sites) establish the electrical distribution system as follows: Caguas T.C. (3004-01), Caguas T.C. 13.2 kV (3006-02, 3006-03 & 3006-05), and Villas De Castro (3013-02).

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 indicates that for Version 0, no 428 (PA) and 406 (HM) works have been identified at this time.

661632 FAASt [3006 - 05 Caguas T.C. 13.2 kV]

661632 FAASt [3006 - 05 Caguas T.C. 13.2 kV]

Facilities

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

Name: Caguas T.C. 13.2 kV / **Feeder Number:** 3006-05

GPS Start: 18.23945, -66.03674/ **GPS End:** 18.28225, -66.04259

Phase: 3 Phase / **Voltage Level (kV):** 13.2

Construction Date: More than 20 years

Proposed 428 Public Assistance Scope of Work (SOW):

Feeder 3006-05 Scope:

• No 428 PA work identified at this time.

Cost Estimate

• No 428 PA costs identified at this time.

DI 661632 Work to be Completed (WTBC) Costs: $0.00

406 HMP Scope

Project number: 334488

Damage # 661632; FAASt [3006 - 05 Caguas T.C. 13.2 kV]

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

Location: Caguas, Puerto Rico

Start GPS Latitude/Longitude: 18.23945, -66.03674; End GPS Latitude/Longitude: 18.28225, -66.04259

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 #334488 (Version 0) [Distribution Critical Poles & Conductors Repair/Replacement].**

The Caguas Short Term Group 4 consists of 5 interconnected and inter-functional distribution feeders (sites) establish the electrical distribution system as follows: Caguas T.C. (3004-01), Caguas T.C. 13.2 kV (3006-02, 3006-03 & 3006-05), and Villas De Castro (3013-02).

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 indicates that for Version 0, no 428 (PA) and 406 (HM) works have been identified at this time.

661634 FAASt [3013 - 02 Villas De Castro]

661634 FAASt [3013 - 02 Villas De Castro]

Facilities

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

Name: Villas de Castro / **Feeder Number:** 3013-02

GPS Start: 18.21797, -66.00515/ **GPS End:** 18.19760, -65.97319

Phase: 3 Phase / **Voltage Level (kV):** 8.32

Construction Date: More than 20 years

Proposed 428 Public Assistance Scope of Work (SOW):

Feeder 3013-02 Scope:

• Remove one 40ft wood pole and install one 50ft galvanized steel pole S8 pole in the same location. Cross arms, insulators and all associated hardware will also be replaced along with the new structure.

• Remove one 45ft wood poles and install one 70ft galvanized steel S8 poles in the same location. Cross arms, insulators and all associated hardware will also be replaced along with the new structure.

• Remove one 55ft wood pole and install one 70ft galvanized steel pole S8 pole in the same location. Cross arms, insulators and all associated hardware will also be replaced along with the new structure.

Cost Estimate

DI 661634 Work to be Completed (WTBC) Costs:

Planning Permits & Applications	$2,880
Environmental Management	$4,114
Engineering - 10% (FAASt 335168)	$9,433
Project Management - 5%	$4,716
Distribution Pole and Conductor Repair	$94,328
Contingency - 10%	$10,848

Total	**$126,319**

Project WTBC Costs: $126,319 - $9,433 (FAASt PREPA A&E Deduction) = $116,886

406 HMP Scope

Project number: 334488

Damage # 661634; FAASt [3013 - 02 Villas De Castro]

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

Location: Caguas, Puerto Rico

Start GPS Latitude/Longitude: 18.21797, -66.00515; End GPS Latitude/Longitude: 18.19760, -65.97319

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 #334488 (Version 0) [Distribution Critical Poles & Conductors Repair/Replacement].**

The Caguas Short Term Group 4 consists of 5 interconnected and inter-functional distribution feeders (sites) establish the electrical distribution system as follows: Caguas T.C. (3004-01), Caguas T.C. 13.2 kV (3006-02, 3006-03 & 3006-05), and Villas De Castro (3013-02).

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 3013-02 Scope: Replace one (1) 45' concrete H4 poles by 50' galvanized steel S8 poles.

Hazard Mitigation Proposal (HMP) Cost:

Total Net Hazard Mitigation Cost (Base Cost) = $ 4,609.00

+ HM (Applicant A&E, Management & General Conditions) = $ 1,221.00

Hazard Mitigation Total Cost = **$ 5,830.00**

-

HMP Cost-Effectiveness Calculations:

Eligible Cost of PA repair Scope of Work per DI: $19,082.94

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

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

HMR = ($4,609.00/ $19,082.94) x 100 = **24.15%**

The cost of this Hazard Mitigation Proposal (HMP) is **24.15%** 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.

Cost

Code	Quantity	Unit	Total Cost	Section
9201 (PAAP Fixed Estimate (No Value - Tracking Purposes Only))	1.00	Lump Sum	$0.00	Completed
9001 (Contract (Donor FAASt Project 136271))	1.00	Lump Sum	$0.00	Uncompleted
3510 (Engineering And Design Services (Deducted given 335168 FAASt PREPA A&E))	1.00	Lump Sum	($2,032.00)	Uncompleted
9201 (PAAP Fixed Estimate (No Value - Tracking Purposes Only))	1.00	Lump Sum	$0.00	Completed
9001 (Contract (Donor FAASt Project 136271))	1.00	Lump Sum	$28,063.00	Uncompleted
9201 (PAAP Fixed Estimate (No Value - Tracking Purposes Only))	1.00	Lump Sum	$0.00	Completed
9001 (Contract (Donor FAASt Project 136271))	1.00	Lump Sum	$0.00	Uncompleted
9001 (Contract (Donor FAASt Project 136271))	1.00	Lump Sum	$0.00	Uncompleted
9201 (PAAP Fixed Estimate (No Value - Tracking Purposes Only))	1.00	Lump Sum	$0.00	Completed
3510 (Engineering And Design Services (Deducted given 335168 FAASt PREPA A&E))	1.00	Lump Sum	($9,433.00)	Uncompleted
9201 (PAAP Fixed Estimate (No Value - Tracking Purposes Only))	1.00	Lump Sum	$0.00	Completed
9001 (Contract (Donor FAASt Project 136271))	1.00	Lump Sum	$126,319.00	Uncompleted

CRC Gross Cost	$142,917.00
Total 406 HMP Cost	$10,826.00
Total Insurance Reductions	$0.00
CRC Net Cost	$153,743.00
Federal Share (90.00%)	$138,368.70
Non-Federal Share (10.00%)	$15,374.30

Award Information

Version Information

Version #	Eligibility Status	Current Location	Bundle Number	Project Amount	Cost Share	Federal Share Obligated	Date Obligated
0	Eligible	Awarded	PA-02-PR-4339-PW-10635(11790)	$153,743.00	90 %	$138,368.70	5/25/2022

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

5/13/2022

GENERAL INFORMATION

Event: DR4339-PR

Project: SP 334488

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: $153,743.00 (Repairs Amount $142,917.00 + Mitigation Amount $10,826.00)

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:** (5)

Damaged Inventory (DI) #661629:

FAASt [3004 - 01 Caguas T.C]

Location Description: 3004-01 Caguas T.C

GPS Coordinates: Start 18.23951, -66.03646 to 18.24808, -66.09112 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 [3004 - 01 Caguas T.C] because the facility does not meet the definition of building, equipment, contents, or vehicle.

Damaged Inventory (DI) #661630:

FAASt [3006 - 02 Caguas T.C. 13.2 kV]

Location Description: 3006-02 Caguas T.C. 13.2 kV

GPS Coordinates: Start 18.23945, -66.03674 to 18.22044, -66.06369 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: $31,027.00 (Repairs Amount $26,031.00 + Mitigation Amount $4,996.00)

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 [3006 - 02 Caguas T.C. 13.2 kV] because the facility does not meet the

definition of building, equipment, contents, or vehicle.

Damaged Inventory (DI) #661631:

FAAST [3006 -03 Caguas T.C. 13.2 kV]

Location Description: 3006-03 Caguas T.C. 13.2 kV

GPS Coordinates: Start 18.23945, -66.03674 to 18.24441, -66.00805 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 [3006 -03 Caguas T.C. 13.2 kV] because the facility does not meet the definition of building, equipment, contents, or vehicle.

Damaged Inventory (DI) #661632:

FAASt [3006 - 05 Caguas T.C. 13.2 kV]

Location Description: 3006-05 Caguas T.C. 13.2 kV

GPS Coordinates: Start 18.23945, -66.03674 to 18.28225, -66.04259 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 [3006 - 05 Caguas T.C. 13.2 kV] because the facility does not meet the definition of building, equipment, contents, or vehicle.

Damaged Inventory (DI) #661634:

FAASt [3013 - 02 Villas De Castro]

Location Description: 3013-02 Villas De Castro

GPS Coordinates: Start 18.21797, -66.00515 to 18.19760, -65.97319 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: $122,716.00 (Repairs Amount $116,886.00 + 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 [3013 - 02 Villas De Castro] 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 - Caguas Short Term Group 4] (Distribution)**.

406 Mitigation

There is no additional mitigation information on **FAASt [Distribution Feeders - Caguas Short Term Group 4] (Distribution)**.

Environmental Historical Preservation

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

EHP Conditions

- Any change to the approved scope of work will require re-evaluation for compliance with NEPA and other Laws and Executive Orders.
- This review does not address all federal, state and local requirements. Acceptance of federal funding requires recipient to comply with all federal, state and local laws. Failure to obtain all appropriate federal, state and local environmental permits and clearances may jeopardize funding.
- If ground disturbing activities occur during construction, applicant will monitor ground disturbance and if any potential archaeological resources are discovered, will immediately cease construction in that area and notify the State and FEMA.
- Executive Order 11988 - Floodplains - Applicant must obtain any required permits from the Planning Board prior to initiating work and comply with any conditions of the permit. All coordination (emails, letters, documented phone calls) pertaining to these activities and compliance must be provided and maintained in the Applicant's permanent files

- Endangered Species Act (ESA) - The Applicant must provide documentation at close-out that proves completion of required Conservation Measures
- Endangered Species Act (ESA) - Conditions for the Puerto Rican Boa 1. Inform all personnel about the potential presence of the PR boa and the VI boa in areas where the proposed work will be conducted. Photographs of the PR and VI Boa are to be prominently displayed at the site. The recipient must ensure that project personnel is able to correctly identify a PR or VI boa. For information on PR boa, please visit: https://ecos.fws.gov/ecp/species/6628. 2. Prior to any construction activity, including removal of vegetation and earth movement, the boundaries of the project area must be delineated, buffer zones, and areas to be excluded and protected, should be clearly marked in the project plan and in the field to avoid further habitat degradation into forested areas. Once areas are clearly marked, and prior to any construction activity, including site preparation, project personnel able to correctly identify a PR or VI boa must survey the areas to be cleared to ensure that no boas are present within the work area. Vehicle and equipment operation must remain on designated access roads/paths and within rights-of way. 3. If a PR boa is found within any of the working or construction areas, activities should stop in the area where the boa was found. Do not capture the boa. If boas need to be moved out of harm's way, project personnel designated by the recipient shall immediately contact the Puerto Rico Department of Natural and Environmental Resources (PRDNER) Rangers for safe capture and relocation of the animal (PRDNER phone #s: 787-724-5700, 787-230-5550, 787-771-1124). If immediate relocation is not an option, project-related activities at this area must stop until the boa moves out of harm's way on its own. Activities at other work sites, where no boas have been found after surveying the area, may continue. 4. Measures should be taken to avoid and minimize PR boa casualties by heavy machinery or motor vehicles being used on site. Any heavy machinery left on site (staging) or near potential PR boa habitat (within 50 meters of potential boa habitat), needs to be thoroughly inspected each morning before work starts to ensure that no boas have sheltered within engine compartments or other areas of the equipment. If PR boas are found within vehicles or equipment, do not capture the animal and let it move on its own or call PRDNER Rangers for safe capture and relocation of the boa (PRDNER phone #s: 787-724-5700, 787-230-5550, 787-771-1124). If not possible, the animal should be left alone until it leaves the vehicle on its own. 5. PR boas may seek shelter in debris piles. Measures should be taken to avoid and minimize boa casualties associated with sheltering in debris piles as a result of project activities. Debris piles should be placed far away from forested areas. Prior to moving, disposing or shredding, debris piles should be carefully inspected for the presence of boas. If PR boas are, found within debris piles, do not capture the animal and let it move on its own or call PRDNER Rangers for safe capture and relocation of the animal. If debris piles will be left on site, we recommend they be placed in areas that will not be disturbed in the future. 6. For all boa sightings (dead or alive), personnel designated by the recipient must record the time and date of the sighting and the specific location where the boa was found. Data should also include a photo of the animal dead or alive, and site GPS coordinates, and comments on how the animal was detected and its behavior. If the PR boa was accidentally killed as part of the project actions, please include information on what conservation measures had been implemented and what actions will be taken to avoid further killings. All boa-sighting reports should be sent to the USFWS Caribbean Ecological Services Field Office, Marelisa Rivera - Deputy Field Supervisor, 787- 851-7297 extension 206, 787-510-5207, marelisa_rivera@fws.gov.
- Endangered Species Act (ESA) - Conditions for the Coquí Guajón (Puerto Rican Rock Frog) a. Inform all project personnel about the potential presence of the coquí guajón in areas where the proposed work will be conducted. A pre -construction meeting shall be conducted to inform all project personnel about the requirement of avoiding harm to the species. An educational poster or sign with photos or illustrations of the species should be displayed at the project site. b. Project boundaries, buffer zones and areas to be excluded or protected shall be clearly marked in the project plans and in the field, prior to any construction activity, including removal of vegetation and earth movement. c. Erosion and Sedimentation Control Best Management Practices (BMP's) shall be included in the project scope of work when working within or adjacent to the coquí guajón habitat (e.g. rivers, streams, drainages, ravines, big boulder areas) to avoid or minimize erosion and sedimentation. Sediment runoff from the project can adversely affect the species and its habitat by filling the caves and crevices were the species occurs and uses to lay its eggs. As water is a very important component of the species' habitat, any stream, creek, or similar body of water with the habitat characteristics indicated above may harbor the species, hence it shall be protected to the maximum extent possible. d. All project associated with streams, rivers, bridges, culverts, etc., shall follow the Post-Disaster Guidance for Repair, Replacement, and Clean-up Projects in Streams and Waterways of Puerto Rico from Hurricane María.
- Endangered Species Act (ESA) - Conditions for Patagioenas inornata wetmorei (Puerto Rican Plain Pigeon). 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 plain pigeon (Patagioenas inornata wetmorei [Columba inornata]): 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. 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.

- Resource Conservation and Recovery Act, aka Solid Waste Disposal Act (RCRA) - 1. The Applicant shall handle, manage, and dispose of all types of hazardous waste in accordance with requirements of local, state, and federal laws, regulations, and ordinances. In addition, the Applicant shall ensure that all debris is separated and disposed of in a manner consistent with the PR DNER guidelines at a permitted site or landfill. The contractor/applicant will be responsible for the proper disposition of construction debris in authorized landfills providing the name, location, coordinates and permits of the facility to the corresponding authorities. 2. The applicant is responsible to ensure damaged transformers are handled, managed and disposed of in accordance with all federal and state laws and requirements. Downed electrical equipment may contain toxic and hazardous materials, such as polychlorinated biphenyls (PCBs), and may spill these materials if a rupture occurs. Applicant is responsible for screening transformers that do or may contain PCBs and the area where any related spill occurred. The applicant is then responsible to handle, manage, dispose of, or recycle damaged equipment and contaminated soil as appropriate. Where possible, temporary measures should be implemented to prevent, treat, or contain further releases or mitigate the migration of PCBs into the environment. If damaged equipment or material storage containers must be stored temporarily, containers should be placed on hardened surface areas, such as a concrete or an asphalt for no more than 90 days. Excavated contaminated material should be disposed of in accordance with federal and state laws and requirements. 3. Unusable equipment, debris, white goods, scrap metal any other material shall be disposed in approved manner and location. In the event significant items are discovered during the implementation or development of the project the Applicant shall handle, manage and dispose petroleum products, hazardous materials and toxic waste in accordance to the requirements of the local and federal agencies. Noncompliance with these requirements may jeopardize receipt of federal funds.

EHP Additional Info

There is no additional environmental historical preservation on **FAASt [Distribution Feeders - Caguas Short Term Group 4] (Distribution)**.

Final Reviews

Final Review

Reviewed By MARTINEZ SANTIAGO, ISRAEL **Reviewed On** 05/18/2022 3:58 PM AST

Review Comments

FEMA final review completed. Project ready for recipient review.

Recipient Review

Reviewed By Salgado, Gabriel **Reviewed On** 05/18/2022 4:07 PM AST

Review Comments

Recipient review completed. Project is ready for applicant review.

Fixed Cost Offer

As a Public Assistance (PA) Subrecipient PR Electric Power Authority (000-UA2QU-00), in accordance with Section 428 of the Robert T. Stafford Disaster Relief and Emergency Assistance Act, the Applicant agrees to accept a permanent work subaward based on a Fixed Cost Offer in the amount of $153,743.00 for subaward number 10635 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** 05/21/2022

v0

Department of Homeland Security
Federal Emergency Management Agency

General Info

Project #	542756 **P/W #** 10538	**Project Type**	Specialized
Project Category	F - Utilities	**Applicant**	PR Electric Power Authority (000-UA2QU-00)
Project Title	FAASt [Streetlighting - Guánica] (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
		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 #918121; FAASt [Distribution Streetlighting - Guánica]

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

General Facility Information:

- **Facility Type:** Power generation, transmission, and distribution facilities
- **Facility:** Distribution Streetlighting - Guánica
- **Facility Description:** the Guánica municipality has a total of 3306 luminaires of which damage was estimated for 70% of these luminaires. Pole – This can be either a standalone structure intended to house a streetlight, or a utility pole shared with other overhead utilities. Arm – A piece of hardware affixed to a pole to which a luminaire is mounted. The arm serves to position the streetlight over the street for optimal lighting. Luminaire/Light Bulb – The light emitting part of a streetlight. Light controller (e.g., photocell) – A hardware device affixed to the luminaire which controls the operating mode. Communication network – A wired or wireless system that allows the smart streetlight to communicate with other devices and the control system. Technology control system – A software platform that allows a remote operator to set the operating parameters for the smart streetlight or manually override the parameter if needed.
- **Approx. Year Built:** 1970
- **Location Description:** Please refer to "DI918121-DR4339PR- FEMA Project Scope of Work - Guánica" for more details about all sites location.
- **GPS Latitude/Longitude:** 17.96866, -66.93992

General Damage Information:

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

Final Scope

918121 FAASt [Distribution Streetlighting

Introduction

The purpose of this document is to submit for approval the Detailed Scope of Work (SOW) to COR3 and FEMA for the Distribution Streetlighting Guánica project (Guánica municipality) 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, replace, and upgrade the eligible facilities in the municipality of Guánica.

LUMA submits this Detailed SOW pursuant to the T&D O&M Agreement between Puerto Rico. Puerto Rico Electric Power Authority ("PREPA"), the Puerto Rico Public-Private Partnerships Authority ("P3A") and LUMA Energy, and in accordance with the Consent to Federal Funding Letter issued by PREPA and P3A and provided herein as Appendix E 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

This project is part of the breakdown division for the Distribution Streetlighting Program which will be impacting each of the municipalities. Characteristics were previously defined to serve the municipality of Guánica according to the priorities and findings after conducting the assessments.

Physical Address: Guanica, PR

Coordinates: Please refer to Appendix F on document labeled: Distribution Streetlighting-Guanica-Attachments A-M.zip for Coordinates.

Project Scope of Work

Streetlight Repairs - Proposed 428 Public Assistance Scope of Work:

A. Replacement of lighting components including photocontrols, luminaires, arms and associated hardware.
B. Replacement of concrete octagonal streetlight poles in the same location.
C. Replacement of aluminum streetlight poles with or without breakaway base in the same location.
D. Replacement of concrete base (foundation) for aluminum streetlight poles in the same location.
E. Replacement of distribution secondary wood, metal or concrete poles with associated lighting components and installation of guy wires where necessary in the same location.
F. Construction of trenches for secondary underground circuits for streetlighting in existing trench locations.
G. Replace aerial secondary wiring connections.

Refer to document labeled: 542756-DR4339PR-SOW.pdf for the location of specific scopes of works.

Project Estimate

A.	Planning, Permits and Applications (FAASt 335168):	$3,491
B.	Environmental Management (FAASt 335168):	$195,210
C.	Project Management (FAASt 335168):	$445,356
D.	Engineering (FAASt 335168):	$880,759
E.	Construction - Labor & Materials:	$8,907,122
F.	Construction - Site Management (FAASt 335168):	$267,214
G.	Construction - Quality Inspections (FAASt 335168):	$445,356
H.	Contingency:	$780,116
	Total	$11,924,624

Work To Be Completed (WTBC): $11,924,624

A&E Deduction (Global A&E FAASt 335168): -$2,237,386

Project Total Cost: $9,687,238

Please refer to document labeled: 542756-DR4339PR-.SOW.xlsx for Cost Estimate Details.

For more information, please refer to: *542756-DR4339PR-SOW.pdf.*

Project Notes:

1. All streetlight trench rebuilds will be performed in the same location and with the same dimensions as the existing damaged one.
2. No new trenches are considered under the project.
3. The trenches are described by LUMA Trench Standard STL-16 (attached in the project), which states that the typical trench width is 1 foot, and the typical trench depth is 3.5 feet. For this project, the typical trench was defined to have an average length of 100 feet and following a straight line between the streetlight poles.

406 HMP Scope

Project number: 542756

Damage #918121; FAASt Guánica Distribution Streetlighting

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

Location: Luquillo, Puerto Rico

GPS Latitude/Longitude: 17.96866, -66.93992

Hazard Mitigation Narrative

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

In the Guánica Municipality, PREPA has a total of 2,973 streetlights luminaries. The Method of Repair (MOR) include the replacement of the damage lighting components including photocells, luminaires, arms, and associated hardware. Also include the replacement of the damage distribution and streetlight poles (wood, concrete, galvanized & aluminum), the replacement of the aerial secondary wiring connections, the construction of new concrete base for the aluminum streetlight poles and new trenches for the streetlighting secondary underground circuits. 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, arms, aluminum poles breakaway bases, and foundations (concrete bases) by increasing the wind tolerance of all materials to 160mph. Note: The FEMA Accelerated Award Strategy (FAASt) MOR included the PREPA distribution standards and specifications that were based on a 90mph sustained winds for all materials. Although in PREPA Technical Communication #13-02 (August 22, 2013) a design-criteria of 145mph winds were published, the specifications for streetlighting material were never revised, and in the specification documents, the 90mph winds stayed as the requirement for procurement purposes of all streetlighting materials. The 160mph wind tolerance mitigation measure, will protect and make the affected infrastructure more resistant, stronger, and resilient to similar hazards.

Hazard Mitigation Proposal (HMP) Scope of Work:

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

Mitigation Measures *(Replacement)*

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

Eligible Cost of PA repair Scope of Work per DI: $6,287,957.00

Net Cost of 406 HMP per DI: $276,976.00

Cost of 406 HMP w/factors: **$370,808.00**

HMP Cost/ Benefit = (Net Cost of Hazard Mitigation/ Cost for HM Eligible PA Repair SOW) x 100 Ratio of HMP C/B = ($276,976.00/ $6,287,957.00) x 100 = 4.40% (< 15% and Appendix J).

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

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

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

Additional PA Notes:

1. All streetlight trench rebuilds will be performed in the same location and with the same dimensions as the existing damaged one.

2. No new trenches are considered under the project.
3. The trenches are described by LUMA Trench Standard STL-16 (attached in the project), which states that the typical trench width is 1 foot, and the typical trench depth is 3.5 feet. For this project, the typical trench was defined to have an average length of 100 feet and following a straight line between the streetlight poles.

Cost

Code	Quantity	Unit	Total Cost	Section
3510 (Engineering And Design Services (FAASt Global 335168))	1.00	Lump Sum	($2,237,386.00)	Uncompleted
9201 (PAAP Fixed Estimate (No Value - Tracking Purposes Only))	1.00	Lump Sum	$0.00	Completed
9001 (Contract (FAASt Project 136271))	1.00	Lump Sum	$11,924,624.00	Uncompleted

CRC Gross Cost	$9,687,238.00
Total 406 HMP Cost	$370,808.00
Total Insurance Reductions	$0.00
CRC Net Cost	$10,058,046.00
Federal Share (90.00%)	$9,052,241.40
Non-Federal Share (10.00%)	$1,005,804.60

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-10538(11786)	$10,058,046.00	90 %	$9,052,241.40	5/25/2022

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

4/14/2022

GENERAL INFORMATION

Event: DR4339-PR

Project: SP 542756

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: $10,058,046.00 (Repairs Amount $9,687,238.00 + Mitigation Amount $370,808.00)

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: 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) #918121:

FAASt [Distribution Streetlighting – Guanica]

Location Description: Guanica, Puerto Rico

GPS Coordinates: 17.96866, -66.93992

Cause of Loss: Wind / Wind Driven Rain

SOV / Schedule #: N/A

SOV / Schedule Amount: N/A

Applicable Deductible Amount: N/A

Damage Inventory Amount: $10,058,046.00 (Repairs Amount $9,687,238.00 + Mitigation Amount $370,808.00)

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:

No Obtain & Maintain Requirement is being mandated for the FAASt [Distribution Streetlighting – Guanica] because facility does not meet the definition of building, equipment, contents, or vehicle.

Insurance Proceeds Statement:

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

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

Standard Insurance Comments

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

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

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

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

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

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

O&M Requirements

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

406 Mitigation

There is no additional mitigation information on **FAASt [Streetlighting - Guánica] (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.
- Endanger Species Act (ESA) PR 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 #s: 787-724-5700, 787-230-5550, 787-771-1124). If immediate relocation is not an option, project-related activities at this area must stop until the boa moves out of harm's way on its own. Activities at other work sites, where no boas have been found after surveying the area, may continue. 4. Measures should be taken to avoid and minimize PR boa casualties by heavy machinery or motor vehicles being used on site. Any heavy machinery left on site (staging) or near potential PR boa habitat (within 50 meters of potential boa habitat), needs to be thoroughly inspected each morning before work starts to ensure that no boas have sheltered within engine compartments or other areas of the equipment. If PR boas are found within vehicles or equipment, do not capture the animal and let it move on its own or call PRDNER Rangers for safe capture and relocation of the boa (PRDNER phone #s: 787-724-5700, 787-230-5550, 787-771-1124). If not possible, the animal should be left alone until it leaves the vehicle on its own. 5. PR boas may seek shelter in debris piles. Measures should be taken to avoid and minimize boa casualties associated with sheltering in debris piles as a result of project activities. Debris piles should be placed far away from forested areas. Prior to moving, disposing or shredding, debris piles should be carefully inspected for the presence of boas. If PR boas are found within debris piles, do not capture the animal and let it move on its own or call PRDNER Rangers for safe capture and relocation of the animal. If debris piles will be left on site, we recommend they be placed in areas that will not be disturbed in the future. 6. For all boa sightings (dead or alive), personnel designated by the recipient must record the time and date of the sighting and the specific location where the boa was found. Data should also include a photo of the animal dead or alive,

and site GPS coordinates, and comments on how the animal was detected and its behavior. If the PR boa was accidentally killed as part of the project actions, please include information on what conservation measures had been implemented and what actions will be taken to avoid further killings. All boa sighting reports should be sent to the USFWS Caribbean Ecological Services Field Office, Marelisa Rivera - Deputy Field Supervisor, 787-851-7297 extension 206, 787-510-5207, marelisa_rivera@fws.gov. ***The Applicant must provide documentation at close-out that proves completion of required Conservation Measures.

- Endanger Species Act (ESA) Sea Turtles: 8. During nesting season (March1-November 30) a qualified sea turtle monitor shall survey each beach work area for possible sea turtle nests during the morning. Any nests found within the area will be marked or flagged in place. Outside of peak nesting season, beaches where work will occur shall be surveyed at least twice a week. If required, debris removal Construction activities on beaches shall initiate only after the sea turtle monitor has completed surveys that morning and nests are clearly marked. Surveys shall be conducted by sea turtle permit holders or trained personnel following DNER/DPNR protocols (see list of PR sea turtle groups, for USVI contact DPNR). Nests laid adjacent to the work area shall be marked by flagging with a 10-foot square roped off buffer and an unobstructed path seaward from the nest to the water. Surveys will start 45 minutes prior to any construction activity. Sea turtle monitoring groups shall have site specific information for nests in their areas and inform work crews of areas to avoid. This measure will be conducted in accordance with FEMA/USFWS/DNER-approved SOP for employee sea turtle awareness training, project site preparation, and nest season monitoring. 9. During the sea turtle nesting season, repair or replacement of structures shall occur in the same location or footprint of the previously permitted structure. If the current project footprint does not stay within previously permitted structure footprint, then the applicant must consult with USFWS. 10. Relocation of sea turtle nests to accommodate construction is not authorized. 11. All project activity shall be confined to daylight hours and shall not occur prior to 0800 AST or following the completion of all necessary marine turtle surveys and conservation activities. These a turtle monitor shall be available via phone after the initial inspection for any coordination throughout the workday. This measure will be conducted in accordance with FEMA/USFWS/DNER-approved SOP for employee sea turtle awareness training, project site preparation, and nest season monitoring. 12. Only native plant species are authorized to be planted. Existing native dune vegetation shall be disturbed to the minimum extent necessary. For information on appropriate coastal plants see Fish and Wildlife Service BMP document, Sea Turtle Friendly Vegetation. Removal of standing and live coastal vegetation (e.g. sea grapes, mangroves) that are not a hazard is unauthorized. No sea grass, sea weeds, algae nor beach sand shall be removed during beach debris removal efforts. Any vegetation planting shall be installed by hand labor and tools. Irrigation systems shall not be installed within nesting habitat. Applicant will submit a vegetation plan that confirms compliance with these requirements and submit to USFWS at: caribbean_es@fws.gov. If a sea turtle nest is disturbed or uncovered during vegetation planting activity or project excavation, all work shall cease, and the sea turtle monitor shall immediately be contacted. If a nest(s) cannot be safely avoided during construction, all activity within the affected project area shall be delayed until complete hatching and emergence of the nest. This measure will be conducted in accordance with FEMA/USFWS/DNER approved SOP for employee sea turtle awareness training, project site preparation, and nest season monitoring. 13. Placement of fill shall not occur within 10 feet of or in any area seaward of a marked sea turtle nest. Nests shall be marked in place with a roped off 10-foot buffer. Dependent upon the fill volume and slope, distance offset from marked turtle nests may be required to be larger to avoid indirect impacts (e.g., fill slumping) to the nest. If the turtle nest cannot be avoided by this distance due to the scope of the project, all work near the nest must be postponed until completion of the sea turtle nesting season (November 30). This measure will be conducted in accordance with FEMA/USFWS/DNER-approved SOP for employee sea turtle awareness training, project site preparation, and nest season monitoring. 14. All excavations and temporary alteration of beach topography shall be contoured or leveled to the natural beach profile prior to dusk each day. This includes raking of tire ruts, filling pits or holes where debris was removed, etc. Any potential obstructions such as debris piles, equipment, etc. shall also be removed from the beach by the end of each day. Fill must be placed as landward as practicable to establish or repair dune features. The existing or pre-disaster beach and dune profile must be considered when determining the appropriate siting of fill to provide reasonable longevity of the project. This measure will be conducted in accordance with FEMA/USFWS/DNER-approved SOP for employee sea turtle awareness training, project site preparation, and nest season monitoring. 15. No vehicles, equipment, staging or debris should be used, parked or stored landward of the primary dune or in vegetated areas. Staging/parking/storage areas shall be located on paved surfaces as much as possible and outside of vegetated areas. Lightweight, allterrain style vehicles, with tire pressures of 10 psi or less can operate on the beach and are the preferred transportation method. However, use of heavy equipment on the beach can be allowed provided it is taken off the beach by 1600 AST local time every night using an approved and designated beach access. All driving on the beach shall be between the high-water mark and the water¿s edge. This measure will be conducted in accordance with FEMA/USFWS/DNER-approved SOP for employee sea turtle awareness training, project site preparation, and nest season monitoring. 16. Removal of vegetation, fence installation, construction activities, and light installation shall be limited within 50 meters from the high tide line. This measure will be conducted in accordance with FEMA/USFWS/DNER-approved SOP for employee sea turtle awareness training, project site preparation, and nest season monitoring. 17. No construction involving lights shall be used during the nesting season. For Puerto Rico and the USVI, a lighting plan utilizing sea turtle friendly lights for coastal areas is required where lights will be repaired or newly installed. Lighting plans shall be sent to USFWS at: caribbean_es@fws.gov. Once the plan is fully implemented, a lighting inspection shall be conducted by the Applicant to identify and correct any remaining

problematic lights. For projects in Puerto Rico the project shall comply with Puerto Rico Law 218 of 2008, Control and Prevention of the Lighting Pollution of Puerto Rico and the PR EQB 2016 Regulation to Control and Prevent Light Contamination. 18. If an unmarked sea turtle crawl is encountered during or prior to project activity, the work crew shall not disturb the integrity of the crawl. Project personnel shall follow the crawl up the beach or into the dune and contact the qualified sea turtle monitor to inform of the location of the crawl. Care shall be taken to avoid walking or driving equipment over or near a crawl so that a potential nest is not damaged. This measure will be conducted in accordance with FEMA/USFWS/DNER-approved SOP for employee sea turtle awareness training, project site preparation, and nest season monitoring. 19. All sea turtle sightings and incidents involving nesting sea turtles or hatchlings shall be reported to DNER/DPNR and the USFWS: Caribbean Ecological Services Field Office, P.O. Box 491, Boquerón, PR, Marelisa Rivera - Deputy Field Supervisor, 787-851-7297 extension 2016, 787-510-5207, marelisa_rivera@fws.gov. This measure will be conducted in accordance with FEMA/USFWS/DNER approved SOP for employee sea turtle awareness training, project site preparation, and nest season monitoring. ***The Applicant must provide documentation at close-out that proves completion of required Conservation Measures.

- Endanger Species Act (ESA) Conditions for the Puerto Rican Crested Toad (PRCT): 32. The Puerto Rican Crested Toad (PRCT): Outside breeding events, the species is difficult to detect. The PRCT 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 USFWS 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 preconstruction meeting shall be conducted to inform all project personnel about the need to avoid harming the species as well as penalties for harassing or harming PRCTs. 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 shall 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 shall 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, a 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. G) If a PRCT is in an imminent risk of being affected by the project, contact DNER and the USFWS. H) For all PRCT sightings (dead or alive), record the time and date of the sighting and the specific location and contact the USFWS. If you have any questions regarding the above conservation measures, please contact the USFWS: i. Marelisa Rivera, Deputy Field Supervisor ii. Email: marelisa_rivera@fws.gov iii. Office phone 787-851-7297 ext. 206 or mobile 787-510-5207.
- Endanger Species Act (ESA) conservation measures for Amazona vittata (Puerto Rican parrot), Buteo platypterus brunnescens (Puerto Rican broad-winged hawk) and Caprimulgus noctitherus (Puerto Rican Nightjar): 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/breeding season: Puerto Rican parrot (Amazona vittata): February to June; Puerto Rican plain pigeon (Patagioenas inornata wetmorei [Columba inornata]): April-September; Puerto Rican broad-winged hawk (Buteo platypterus): December-June; Puerto Rican sharp-shinned hawk (Accipiter striatus venator): December-June; Puerto Rican nightjar (Antrostomus noctitherus): February-August; Elfin-woods warbler (Setophaga angelae): March-June; yellow-shouldered blackbird (Agelaius xanthomus): February through November. For all nest sightings, the Applicant must record the time and date of the sighting and the specific location where it was found. Data should also include a photo of the nest and eggs, relocation site GPS coordinates, and the time and date of the relocation. All sightings and incidental lethal take reports should be sent to the USFWS Caribbean Ecological Services Field Office, Marelisa Rivera - Deputy Field Supervisor, 787-851-7297 extension 206, 787-510-5207, marelisa_rivera@fws.gov. ***The Applicant must provide documentation at close-out that proves completion of required Conservation Measures.
- Resource Conservation and Recovery Act, aka Solid Waste Disposal Act (RCRA): 1. The Applicant shall handle, manage, and dispose of all types of hazardous waste in accordance with requirements of local, state, and federal laws, regulations, and ordinances. In addition, the Applicant shall ensure that all debris is separated and disposed of in a manner consistent

with the PR DNER guidelines at a permitted site or landfill. The contractor/applicant will be responsible for the proper disposition of construction debris in authorized landfills providing the name, location, coordinates and permits of the facility to the corresponding authorities. 2. 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.

EHP Additional Info

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

Final Reviews

Final Review

Reviewed By MARTINEZ SANTIAGO, ISRAEL **Reviewed On** 05/17/2022 1:29 PM AST

Review Comments

FEMA Final Review completed. Project ready for Recipient Review.

Recipient Review

Reviewed By Salgado, Gabriel **Reviewed On** 05/17/2022 1:36 PM AST

Review Comments

Recipient Final Review completed. Project 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 $10,058,046.00 for subaward number 10538 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** 05/21/2022

Date Downloaded: 5/26/22 9:46am AST

Department of Homeland Security
Federal Emergency Management Agency

General Info

Project #	179558 **P/W #** 10632	**Project Type**	Specialized
Project Category	F - Utilities	**Applicant**	PR Electric Power Authority (000-UA2QU-00)
Project Title	FAASt - Manatí TC - BRKS 230 kV - (Substation)	**Event**	4339DR-PR (4339DR)
Project Size	Large	**Declaration Date**	9/21/2017
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 #452285; FAASt Manatí TC - BRKS 230 kV

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:** Manatí TC - BRKS 230 kV
- **Facility Description:** Manatí TC is a 230/115/38-kV switchyard with multiple circuit breakers, transformers, switches, control house, a distribution substation, and other electrical components and related equipment.
- **Approx. Year Built:** 1980
- **GPS Latitude/Longitude:** 18.43369, -66.45609

General Damage Information:

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

Final Scope

452285 FAASt Manatí TC - BRKS 230 kV

Project Name	179558 Manati TC - BKRS 230kV

Region	Arecibo
Damaged Inventory/Asset Category	Island Wide Substations
FEMA Project Number	179558

Work to be Completed

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

Facilities

The Manati TC – BRKS 230 kV Substation experienced substantial damages due to Hurricane Maria in September 2017. The purpose of this project is to repair damages, mitigate flooding issues and harden the substation to improve the reliability and resiliency of the Puerto Rico electrical grid.

Physical Address	Road #2, km 45.7 Bo. Cotto Norte
Coordinate	18.43369N, -66.45609W
Date of Construction	1976

Project Scope of Work (Section 428)

Substation:

A. Replace two 230kV Oil Circuit Breakers (OCBs) 0090T and 50214 with two new 230kV Gas Circuit Breakers (GCBs) SF6 on existing foundations.

B. Install new high voltage conductor, secondary control cable and all ancillary equipment associated for the functionality of the two new breakers.

Total Project Estimate: $2,282,360

Architectural & Engineering Services Deduction (Project 335168 - FAASt A&E PREPA): -$688,917

Work to be Completed Total: $1,593,443

Project Notes

1. The Applicant has not identified 406 Hazard Mitigation (HM) opportunities as described in document: *179558-DR4339PR - Detailed SOW - Manati TC - BRKS 230kV (10106-CP-SOW-0002 Rev1).pdf* and related Appendices.
2. The zip code for the subject facility is 00674.
3. WTBC costs were obtained from Applicant provided document: 179558-DR4339PR-DSOW-Manati TC-BRKS-Appendix A-J.zip - Appendix J - LPCE Estimate Breakdown, as applicable for the 428 SOW portion of the estimate (no 406 HM).
4. Any claim or disbursement related to Engineering or Architecture (A&E) services for this project must be claimed/disbursed from Project 335168, which was prepared to cover A&E expenses related to this Applicants FAASt Projects. The A/E funds for the amount of $688,917 have been calculated for this project, however, the actual A&E costs will be claimed in GM project #335168. This dollar amount will be included in this project with a negative dollar amount, to avoid duplicity of funds.
5. For additional information (e.g. EHP) regarding the scope of work for this project, please refer to: *179558-DR4339PR - Detailed SOW - Manati TC - BRKS 230kV (10106-CP-SOW-0002 Rev1).pdf*.

406 HMP Scope

This project has been reviewed and submitted in Grants Manager. Hazard Mitigation was accomplished by Method of Repair using Best Construction Practices and Code and Standards. There is no additional cost-effective and feasible mitigation measures identified for this project nor requested by Sub-Applicant.

Cost

Code	Quantity	Unit	Total Cost	Section
3510 (Engineering And Design Services (A&E Deduction from Project 335168 - FAASt A&E PREPA))	1.00	Lump Sum	($688,917.00)	Uncompleted
9201 (PAAP Fixed Estimate (No Value - Tracking Purposes Only))	1.00	Lump Sum	$0.00	Completed
9001 (Estimated Budget for Construction & Procurement (FAASt Project 136271))	1.00	Lump Sum	$2,282,360.00	Uncompleted

CRC Gross Cost	$1,593,443.00
Total 406 HMP Cost	$0.00
Total Insurance Reductions	$0.00
CRC Net Cost	$1,593,443.00
Federal Share (90.00%)	$1,434,098.70
Non-Federal Share (10.00%)	$159,344.30

Award Information

Version Information

Version #	Eligibility Status	Current Location	Bundle Number	Project Amount	Cost Share	Federal Share Obligated	Date Obligated
0	Eligible	Awarded	PA-02-PR-4339-PW-10632(11789)	$1,593,443.00	90 %	$1,434,098.70	5/25/2022

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

5/12/2022

GENERAL INFORMATION

Event: DR4339-PR

Project: SP 179558

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: Repairs Amount $1,593,443.00

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: 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) #452285:

FAASt Manatí TC - BRKS 230 kV

Location Description: Manatí TC - BRKS 230 kV

GPS Coordinates: 18.43369, -66.45609

Cause of Loss: Wind / Wind Driven Rain

SOV / Schedule #: “Sub-stations”

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

Applicable Deductible Amount: $25,000,000.00

Damage Inventory Amount: Repairs Amount $1,593,443.00

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 Manatí TC - BRKS 230 kV in the amount of $1,593,443.00.

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).

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").

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:

1. 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
2. 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 Manatí TC - BRKS 230 kV in the amount of $1,593,443.00.	$1,593,443.00

406 Mitigation

There is no additional mitigation information on **FAASt - Manatí TC - BRKS 230 kV - (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.
- Endangered Species Act (ESA) - The Applicant must provide documentation at close-out that proves completion of required Conservation Measures. 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 #s: 787-724-5700, 787-230-5550, 787-771-1124). If immediate relocation is not an option, project-related activities at this area must stop until the boa moves out of harm's way on its own. Activities at other work sites, where no boas have been found after surveying the area, may continue. 4. Measures should be taken to avoid and minimize PR boa casualties by heavy machinery or motor vehicles

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

- Resource Conservation and Recovery Act, aka Solid Waste Disposal Act (RCRA) 1. The Applicant shall handle, manage, and dispose of all types of hazardous waste in accordance with requirements of local, state, and federal laws, regulations, and ordinances. In addition, the Applicant shall ensure that all debris is separated and disposed of in a manner consistent with the PR DNER guidelines at a permitted site or landfill. The contractor/applicant will be responsible for the proper disposition of construction debris in authorized landfills providing the name, location, coordinates and permits of the facility to the corresponding authorities. 2. The applicant is responsible to ensure damaged transformers are handled, managed and disposed of in accordance with all federal and state laws and requirements. Downed electrical equipment may contain toxic and hazardous materials, such as polychlorinated biphenyls (PCBs), and may spill these materials if a rupture occurs. Applicant is responsible for screening transformers that do or may contain PCBs and the area where any related spill occurred. The applicant is then responsible to handle, manage, dispose of, or recycle damaged equipment and contaminated soil as appropriate. Where possible, temporary measures should be implemented to prevent, treat, or contain further releases or mitigate the migration of PCBs into the environment. If damaged equipment or material storage containers must be stored temporarily, containers should be placed on hardened surface areas, such as a concrete or an asphalt for no more than 90 days. Excavated contaminated material should be disposed of in accordance with federal and state laws and requirements. 3. Unusable equipment, debris, white goods, scrap metal any other material shall be disposed in approved manner and location. In the event significant items are discovered during the implementation or development of the project the Applicant shall handle, manage and dispose petroleum products, hazardous materials and toxic waste in accordance to the requirements of the local and federal agencies. Noncompliance with these requirements may jeopardize receipt of federal funds.

EHP Additional Info

There is no additional environmental historical preservation on **FAASt - Manatí TC - BRKS 230 kV - (Substation)**.

Final Reviews

Final Review

Reviewed By MARTINEZ SANTIAGO, ISRAEL **Reviewed On** 05/19/2022 9:26 AM AST

Review Comments

FEMA final review completed. Project ready for Recipient Final Review.

Recipient Review

Reviewed By Salgado, Gabriel **Reviewed On** 05/19/2022 10:10 AM AST

Review Comments

Recipient Review Completed. Project is ready for Applicant review.

Fixed Cost Offer

As a Public Assistance (PA) Subrecipient PR Electric Power Authority (000-UA2QU-00), in accordance with Section 428 of the Robert T. Stafford Disaster Relief and Emergency Assistance Act, the Applicant agrees to accept a permanent work subaward based on a Fixed Cost Offer in the amount of $1,593,443.00 for subaward number 10632 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** 05/23/2022