

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

NEPR v0

Received:

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General Info

Project #	668592	PW#	10891	Project Type	Specialized
Project Category	F - Utilities			Applicant	PR Electric Power Authority (000-UA2QU-00)
Project Title	FAASt [Line 9800 Bayamon TC - Guaraguao Sect] (Transmission)			Event	4339DR-PR (4339DR)
Project Size	Large			Declaration Date	9/20/2017
Activity Completion Date	9/20/2027			Incident Start Date	9/17/2017
Process Step	Obligated			Incident End Date	11/15/2017

Damage Description and Dimensions

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

Damage #661239; FAASt Line 9800 Bayamon TC - Guaraguao Sect] (Transmission)

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:** Line 9800 Bayamon TC - Guaraguao Sect
- **Facility Description:** Structures along the line 9800 Bayamon TC - Guaraguao Sect. includes single wooden poles and single concrete structures. Part of this line is underground, but the rest of the line and all of its structures are accessible through roads and/or situated on private properties. Some vegetation management is needed along certain portions of the line.
- **Approx. Year Built:** 1980
- **Start GPS Latitude/Longitude:** 18.39819, -66.14077
- **End GPS Latitude/Longitude:** 18.37823, -66.14391

General Damage Information:

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

Final Scope

661239 FAASt Line 9800 Bayamon TC - Guaraguao Sect] (Transmission)

Introduction

The purpose of this document is to submit for approval the detailed Scope of Work ("SOW") to COR3 and FEMA for the Transmission Priority Pole Replacement – Line 9800 Project under DR-4339-PR Public Assistance. The document provides a description of the project including scope, schedule, and cost estimates as well as Environmental & Historical Preservation ("EHP") requirements. LUMA Energy is seeking approval from 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 2.70 mile long 38 kV overhead transmission Line 9800. This line is a Near-Term rebuild priority identified by LUMA. However, these structures were identified as having System Remediation Plan (SRS) issues and were considered degraded during a High-Level Assessment (HLA). Because of risk to the public these structures will be replaced by the Transmission Priority Pole Replacement Program on an expedited basis. Later, the remainder of the line will be rebuilt, except for the structures that would already have been replaced to LUMA Codes & Standards.

Line		FD	Coordinates		Voltage Level (kV)	Construction Date
L9800	Bayamon TC - Guaraguao Sect	11298397	18.378466	-66.143498	38 kV	1998
		11298405	18.378749	-66.142346		
		11298410	18.378882	-66.143367		
		11298445	18.378437	-66.141788		
		1000414391	18.378782	-66.142975		

Project Scope of Work

Proposed 428 Public Assistance Scope of Work:

Bayamon TC - Guaraguao Sect Structures Scope:

- Remove five 60ft wood poles and install five 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.

Project 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.

Project Cost Estimate	428 Public Assistance
Planning	\$27,756
Management	\$16,229
Transmission Line Construction	\$315,384
General Conditions	\$47,531
Contingency	\$57,951

Total Project Cost Estimate	\$464,850
FAASt Project #668592 Total	\$420,866
FAASt Project #335168 Total	\$43,984

Work To Be Completed (WTBC): \$464,850

A&E Deduction (Global A&E FAASt 335168) -\$43,984

Project Total Cost: \$420,866

For detailed cost estimate, please refer to document labeled: 668592-DR4339PR-Appendix G - Detailed Cost Estimate - Line 9800 Rev0.pdf.

Project Notes:

1. Refer to detailed SOW provided in document 668592-DR4339PR-Detailed SOW - Line 9800 Rev.0.pdf
2. For reference documents Appendix A thru J, see file labeled: 668592-Transmission Priority Pole Replacement-Line 9800-Attachment A-J.zip
3. For EHP Requirements, refer to pages 8 to 11 of the detailed SOW and reference documents: Appendix I & J.
4. 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

There is no feasible Hazard Mitigation opportunity identified nor requested by sub-applicant.

Cost

Code	Quantity	Unit	Total Cost	Section
3510 (Engineering And Design Services (Global A&E PREPA FAASt Project 335168))	1.00	Lump Sum	(\$43,984.00)	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	\$464,850.00	Uncompleted

CRC Gross Cost \$420,866.00

Total 406 HMP Cost \$0.00

Total Insurance Reductions \$0.00

CRC Net Cost \$420,866.00

Federal Share (90.00%) \$378,779.40

Non-Federal Share (10.00%) \$42,086.60

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-10891(12473)	\$420,866.00	90 %	\$378,779.40	9/15/2022

Drawdown History

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

Obligation History

Version #	Date Obligated	Obligated Cost	Cost Share	IFMIS Status	IFMIS Obligation #
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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

8/11/2022

GENERAL INFORMATION

Event: 4339DR-PR

Project: SP-668592

Category of Work: Cat F - Utilities

Applicant: PR Electric Power Authority

Event Type: Hurricane / Maria

Cause of Loss: Wind / Wind Driven Rain

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

Total Public Assistance Amount: CRC Gross Cost \$420,866.00

COMMERCIAL INSURANCE INFORMATION

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

Policyholder per Policy Documents: "Puerto Rico Electric Power Authority"

Policies Issued by: Multinational Insurance Company and Mapfre

Policy Numbers:

· 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 \$0.00.

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

The amount of Anticipated Insurance Proceeds for Project: \$0.00

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

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

Damaged Inventory (DI) #661239:

FAAST Line 9800 Bayamon TC - Guaragao Sect] (Transmission)

Location Description: Structures along the line 9800 Bayamon TC - Guaragao Sect. includes single wooden poles and single concrete structures. Part of this line is underground, but the rest of the line and all of its structures are accessible through roads and/or situated on private properties. Some vegetation management is needed along certain portions of the line.

GPS Coordinates: start: 18.39819, -66.14077; end: 18.37823, -66.14391

Cause of Loss: Wind / Wind Driven Rain

SOV / Schedule #: N/A

SOV / Schedule Amount: N/A

Applicable Deductible Amount: N/A

Damage Inventory Amount: CRC Gross Cost \$420,866.00

-

Prior Obtain and Maintain Requirement:

No prior insurance requirements were found for this facility

-

Reduction(s):

No Reduction is being made to this facility. An anticipated insurance reduction was applied in FAAST project #136271.

Obtain and Maintain Requirement:

No Obtain & Maintain Requirement is being mandated for (FAAST Line 9800 Bayamon TC - Guaragao Sect] (Transmission)) 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.

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 (“retained risk”).

**Charlotte De Jesus Negrón, PA Insurance Specialist
CRC Atlantic, Guaynabo, PR**

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U&M Requirements

There are no Obtain and Maintain Requirements on **FAAST [Line 9800 Bayamon TC - Guaraguao Sect] (Transmission)**.

406 Mitigation

There is no additional mitigation information on **FAAST [Line 9800 Bayamon TC - Guaraguao Sect] (Transmission)**.

Environmental Historical Preservation

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

Yes

EHP Conditions

- Any change to the approved scope of work will require re-evaluation for compliance with NEPA and other Laws and Executive Orders.
- This review does not address all federal, state and local requirements. Acceptance of federal funding requires recipient to comply with all federal, state and local laws. Failure to obtain all appropriate federal, state and local environmental permits and clearances may jeopardize funding.
- If ground disturbing activities occur during construction, applicant will monitor ground disturbance and if any potential archaeological resources are discovered, will immediately cease construction in that area and notify the State and FEMA.
- Endangered Species Act (ESA) The below Conservation Measures are to be used in concert with the Puerto Rico and US Virgin Islands ESA Compliance Determination Matrix and shall serve as required project conditions to avoid and reduce adverse effects to threatened and endangered species when applied to FEMA grant projects. Reptiles Puerto Rican and Virgins Island Boas 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

- 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. If transformers: The applicant is responsible to ensure damaged transformers are handled, managed and disposed of in accordance with all federal and state laws and requirements. Downed electrical equipment may contain toxic and hazardous materials, such as polychlorinated biphenyls (PCBs), and may spill these materials if a rupture occurs. Applicant is responsible for screening transformers that do or may contain PCBs and the area where any related spill occurred. The applicant is then responsible to handle, manage, dispose of, or recycle damaged equipment and contaminated soil as appropriate. Where possible, temporary measures should be implemented to prevent, treat, or contain further releases or mitigate the migration of PCBs into the environment. If damaged equipment or material storage containers must be stored temporarily, containers should be placed on hardened surface areas, such as a concrete or an asphalt for no more than 90 days. Excavated contaminated material should be disposed of in accordance with federal and state laws and requirements. 3. Unusable equipment, debris, white goods, scrap metal any other material shall be disposed in approved manner and location. In the event significant items are discovered during the implementation or development of the project the Applicant shall handle, manage and dispose petroleum products, hazardous materials and toxic waste in accordance to the requirements of the local and federal agencies. Noncompliance with these requirements may jeopardize receipt of federal funds. 1.

EHP Additional Info

There is no additional environmental historical preservation on **FAASt [Line 9800 Bayamon TC - Guaraguao Sect] (Transmission)**.

Final Reviews

Final Review

Reviewed By MARTINEZ SANTIAGO, ISRAEL

Reviewed On 08/26/2022 7:00 AM AST

Review Comments

FEMA Final Completed. Project ready for Recipient Review.

Recipient Review

Reviewed By Salgado, Gabriel

Reviewed On 08/26/2022 8:28 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 \$420,866.00 for subaward number 10891 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 09/14/2022

Department of Homeland Security Federal Emergency Management Agency

General Info

Project #	674072	PW#	10906	Project Type	Specialized
Project Category	F - Utilities			Applicant	PR Electric Power Authority (000-UA2QU-00)
Project Title	FAASt [Distribution Pole and Conductor Repair - Caguas Group 1] (Distribution)			Event	4339DR-PR (4339DR)
Project Size	Large			Declaration Date	9/20/2017
Activity Completion Date	9/20/2027			Incident Start Date	9/17/2017
Process Step	Obligated			Incident End Date	11/15/2017

Damage Description and Dimensions

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

Damage #1231657; FAASt [Pole and Conductor Repair - Caguas Group 1] (Humacao T.C. 2602-03, Verdemar 2605-01, Naguabo 2701-01, Naguabo 2701-03, Yabucoa Pueblo 2901-03, Juan Martin 2906-02)

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:** Humacao T.C. 2602-03, Verdemar 2605-01, Naguabo 2701-01, Naguabo 2701-03, Yabucoa 2901-03 and Pueblo Juan Martin 2906-02
- **Facility Description:** The specific facilities included in this project 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:** 1967
- **Start GPS Latitude/Longitude:** 18.13686, -65.82681
- **End GPS Latitude/Longitude:** 18.11108, -65.82210

General Damage Information:

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

Final Scope

1231657

FAASt [Pole and Conductor Repair - Caguas Group 1] (Humacao T.C. 2602-03, Verdemar

2605-01, Naguabo

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 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 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	Feeder Number	GPS Start	GPS End	Phase	Voltage Level (kV)	Construction Date
Humacao T.C.	2602-03	18.13686 -65.82681	18.11108 -65.82210	3 Phase	8.32	More than 20 Years
Verdemar	2605-01	18.16140 -65.75548	18.17063 -65.78973	3 Phase	13.2	More than 20 Years
Naguabo	2701-01	18.20723 -65.73286	18.23772 -65.71547	3 Phase	8.32	More than 20 Years
Naguabo	2701-03	18.20727 -65.73284	18.21300 -65.74133	3 Phase	8.32	More than 20 Years
Yabucoa Pueblo	2901-03	18.04979 -65.88370	18.01998 -65.85792	3 Phase	8.32	More than 20 Years
Juan Martin	2906-02	18.04278 -65.85075	18.07279 -65.87301	3 Phase	13.2	More than 20 Years

Project Scope of Work

Proposed 428 Public Assistance Scope of Work:

Feeder 2602-03 Scope:

- Remove seven 40ft wood poles and install seven 45ft H4 concrete poles in the same location. Cross arms, insulators and all associated hardware will also be replaced along with the new structure.
- Remove one 65ft concrete pole and install one 45ft H6 concrete pole in the same location. Cross arms, insulators and all associated hardware will also be replaced along with the new structure.

Feeder 2605-01 Scope:

- Remove three 35ft wood poles and install three 45ft H4 concrete poles in the same location. Cross arms, insulators and all

associated hardware will also be replaced along with the new structure.

- Remove ten 40ft wood poles and install ten 45ft H4 concrete poles in the same location. Cross arms, insulators and all associated hardware will also be replaced along with the new structure.
- Remove one 40ft concrete pole and install one 45ft H4 concrete pole in the same location. Cross arms, insulators and all associated hardware will also be replaced along with the new structure.
- Remove one 40ft S3 galvanized steel pole and install one 45ft H4 concrete pole in the same location. Cross arms, insulators and all associated hardware will also be replaced along with the new structure.

Feeder 2701-01 Scope:

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

Feeder 2701-03 Scope:

- Remove one 35ft wood pole and install one 45ft H4 concrete pole in the same location. Cross arms, insulators and all associated hardware will also be replaced along with the new structure.
- Remove two 40ft wood poles and install two 45ft H4 concrete poles in the same location. Cross arms, insulators and all associated hardware will also be replaced along with the new structure.

Feeder 2901-03 Scope:

- Remove five 35ft wood poles and install five 45ft H4 concrete poles in the same location. Cross arms, insulators and all associated hardware will also be replaced along with the new structure.
- Remove two 40ft wood poles and install two 45ft H4 concrete poles in the same location. Cross arms, insulators and all associated hardware will also be replaced along with the new structure.
- Remove one 45ft wood pole and install one 45ft H4 concrete pole in the same location. Cross arms, insulators and all associated hardware will also be replaced along with the new structure.

Feeder 2906-02 Scope:

- Remove seven 35ft wood poles and install seven 45ft H4 concrete poles in the same location. Cross arms, insulators and all associated hardware will also be replaced along with the new structure.
- Remove one 35ft wood pole and install one 45ft H6 concrete pole in the same location. Cross arms, insulators and all associated hardware will also be replaced along with the new structure.

Project 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.

Project Cost Estimate	428 Public Assistance
Planning, Permits and Applications	\$22,596
Environmental Management	\$32,298
Engineering	\$77,794
Project Management	\$38,897
Distribution Line	\$777,939
Contingency	\$94,952
Total Project Cost Estimate	\$1,044,476

FAASt Project #674072 (428) Total	\$872,891
FAASt A&E #335168	\$171,585

Work To Be Completed (WTBC): \$1,044,476

A&E Deduction (Global A&E FAASt 335168) -\$171,585

Project Total Cost: \$872,891

For detailed cost estimate, please refer to document labeled: 674072-DR4339PR-Appendix H - Detail Cost Estimate - Caguas Group 1 Rev0.xlsx.

Project Notes:

1. Refer to detailed SOW provided in document 674072-DR4339PR-Detailed SOW Caguas Group 1 Rev0.pdf
2. For reference documents Appendix A thru K, see file labeled: 674072-DR4339PR-Appendix A - K
3. For EHP Requirements, refer to pages 10 to 13 of the detailed SOW and reference documents: Appendix J & , and RFI's responses in documents labeled: *32000-FEMA-LUMA-RFI-0011(Response).doc*, and, *674072_Distribution-PCRepair_Caguas-G1_PreliminaryRFI (002) (Responses).doc*.
4. Architectural and Engineering (A&E) costs are deducted given previously obligated Global A&E Project for the subject FAASt PREPA work (see project: 335168 - FAASt A&E PREPA).
5. This project is part of a FAASt (donor) project, [136271] MEPA078 Puerto Rico Electrical Power Authority Island Wide FAASt.

406 HMP Scope

Project number: 674072

Damage #1231657; FAASt [Pole and Conductor Repair - Caguas Group 1] (Humacao T.C. 2602-03, Verdemar 2605-01, Naguabo 2701-01, Naguabo 2701-03, Yabucoa Pueblo 2901-03, Juan Martin 2906-02)

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

Location: Cataño, Puerto Rico

Start GPS Latitude/Longitude: 18.13686, -65.82681 ; End GPS Latitude/Longitude: 18.11108, -65.82210

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 #674072 [Distribution Critical Poles & Conductors Repair/Replacement].**

The Distribution Pole and Conductor Repair-Bayamon Group 1 consists of 6 interconnected and inter-functional distribution feeders (sites) establish the electrical distribution system as follow: (Humacao T.C. 2602-03, Verdemar 2605-01, Naguabo 2701-01, Naguabo 2701-03, Yabucoa Pueblo 2901-03, Juan Martin 2906-02).

The 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 2602-03 Scope: 8EA. poles.

Replace seven (7) 45ft concrete H4 poles by seven (7) 50ft galvanized steel S8 poles.
Replace one (1) 45ft concrete H6 pole by one (1) 50ft galvanized steel S8 pole.

2. Feeder 2605-01 Scope: 15EA.poles.

Replace fifteen (15) 45ft concrete H4 poles by fifteen (15) 50ft galvanized steel S8 poles.

3. Feeder 2701-01 Scope:

No 406 Hazard Mitigation work identified at this time.

4. Feeder 2701-03 Scope: 3EA. Poles.

Replace three (3) 45ft concrete H4 poles by three (3) 50ft galvanized steel S8 poles.

5. Feeder 2901-03 Scope: 8EA. poles.

Replace eight (8) 45ft concrete H4 poles by eight (8) 50ft galvanized steel S8 poles.

6. Feeder 2906-02 Scope: 8EA. poles.

Replace seven (7) 45ft concrete H4 poles by seven (7) 50ft galvanized steel S8 poles.
Replace one (1) 45ft concrete H6 pole by one (1) 45ft galvanized steel S3 pole.

Hazard Mitigation Proposal (HMP) Cost:

Total Net Hazard Mitigation Cost (Base Cost) =	\$ 188,303.00
+ HM (Applicant A&E, Management & General Conditions) =	\$ <u>49,900.30</u>
Hazard Mitigation Total Cost =	\$238,203.00

HMP Cost-Effectiveness Calculations:

Eligible Cost of PA repair Scope of Work per DI: \$777,939.00

Net Cost of 406 HMP per DI: \$188,303.00

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

HMR = (\$188,303.00 / \$777,939.00) x 100 = 24.21%

The cost of this Hazard Mitigation Proposal (HMP) is **24.21%** 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 (Global A&E FAASSt 335168))	1.00	Lump Sum	(\$171,585.00)	Uncompleted
9201 (PAAP Fixed Estimate (No Value - Tracking Purposes Only))	1.00	Lump Sum	\$0.00	Completed
9001 (Contract (FAASSt Project 136271))	1.00	Lump Sum	\$1,044,476.00	Uncompleted

CRC Gross Cost	\$872,891.00
Total 406 HMP Cost	\$238,203.00
Total Insurance Reductions	\$0.00
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CRC Net Cost	\$1,111,094.00
Federal Share (90.00%)	\$999,984.60
Non-Federal Share (10.00%)	\$111,109.40

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-10906(12475)	\$1,111,094.00	90 %	\$999,984.60	9/15/2022

Drawdown History

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

Obligation History

Version #	Date Obligated	Obligated Cost	Cost Share	IFMIS Status	IFMIS Obligation #
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Subgrant Conditions

- As described in Title 2 Code of Federal Regulations (C.F.R.) § 200.333, financial records, supporting documents, statistical records and all other non-Federal entity records pertinent to a Federal award must be retained for a period of three (3) years from the date of submission of the final expenditure report or, for Federal awards that are renewed quarterly or annually, from the date of the submission of the quarterly or annual financial report, respectively, as reported to the Federal awarding agency or pass-through entity in the case of a subrecipient. Federal awarding agencies and pass-through entities must not impose any other record retention requirements upon non-Federal entities. Exceptions are stated in 2 C.F.R. §200.333(a) – (f)(1) and (2). All records relative to this project are subject to examination and audit by the State, FEMA and the Comptroller General of the United States and must reflect work related to disaster-specific costs.
- The 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

8/17/2022

GENERAL INFORMATION

Event: DR4339-PR

Project: SP 674072

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: \$1,111,094.00 (CRC Gross Amount \$872,891.00 + Mitigation Amount \$238,203.00)

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) #1231657:

FAASt [Pole and Conductor Repair - Caguas Group 1] (Humacao T.C. 2602-03, Verdemar 2605-01, Naguabo 2701-01, Naguabo 2701-03, Yabucoa Pueblo 2901-03, Juan Martin 2906-02)

Location Description: Humacao T.C. 2602-03, Verdemar 2605-01, Naguabo 2701-01, Naguabo 2701-03, Yabucoa 2901-03 and Pueblo Juan Martin 2906-02

GPS Coordinates: Start 18.13686, -65.82681 to 18.11108, -65.82210 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: \$1,111,094.00 (CRC Gross Amount \$872,891.00 + Mitigation Amount \$238,203.00)

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 [Pole and Conductor Repair - Caguas Group 1] (Humacao T.C. 2602-03, Verdemar 2605-01, Naguabo 2701-01, Naguabo 2701-03, Yabucoa Pueblo 2901-03, Juan Martin 2906-02) because the facility does not meet the definition of building, equipment, contents, or vehicle.

Insurance Proceeds Statement:

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

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

Standard Insurance Comments

FEMA Policy 206-086-1

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

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

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

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

O&M Requirements

There are no Obtain and Maintain Requirements on **FAAST [Distribution Pole and Conductor Repair - Caguas Group 1] (Distribution)**.

406 Mitigation

There is no additional mitigation information on **FAASt [Distribution Pole and Conductor Repair - Caguas 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) - Required Conservation Measures for Puerto Rican Boa: 1. Inform all personnel about the potential presence of the PR boa and the VI boa in areas where the proposed work will be conducted. Photographs of the PR and VI Boa are to be prominently displayed at the site. The recipient must ensure that project personnel is able to correctly identify a PR or VI boa. For information on PR boa, please visit: <https://ecos.fws.gov/ecp/species/6628>. 2. Prior to any construction activity, including removal of vegetation and earth movement, the boundaries of the project area must be delineated, buffer zones, and areas to be excluded and protected, should be clearly marked in the project plan and in the field to avoid further habitat degradation into forested areas. Once areas are clearly marked, and prior to any construction activity, including site preparation, project personnel able to correctly identify a PR or VI boa must survey the areas to be cleared to ensure that no boas are present within the work area. Vehicle and equipment operation must remain on designated access roads/paths and within rights-of-way. 3. If a PR boa is found within any of the working or construction areas, activities should stop in the area where the boa was found. Do not capture the boa. If boas need to be moved out of harm's way, project personnel designated by the recipient shall immediately contact the Puerto Rico Department of Natural and Environmental Resources (PRDNER) Rangers for safe capture and relocation of the animal (PRDNER phone #: 787-724-5700, 787-230-5550, 787-771-1124). If immediate relocation is not an option, project-related activities at this area must stop until the boa moves out of harm's way on its own. Activities at other work sites, where no boas have been found after surveying the area, may continue. 4. Measures should be taken to avoid and minimize PR boa casualties by heavy machinery or motor vehicles being used on site. Any heavy machinery left on site (staging) or near potential PR boa habitat (within 50 meters of potential boa habitat), needs to be thoroughly inspected each morning before work starts to ensure that no boas have sheltered within engine compartments or other areas of the equipment. If PR boas are found within vehicles or equipment, do not capture the animal and let it move on its own or call PRDNER Rangers for safe capture and relocation of the boa (PRDNER phone #: 787-724-5700, 787-230-5550, 787-771-1124). If not possible, the animal should be left alone until it leaves the vehicle on its own. 5. PR boas may seek shelter in debris piles. Measures should be taken to avoid and minimize boa casualties associated with sheltering in debris piles as a result of project activities. Debris piles should be placed far away from forested areas. Prior to moving, disposing or shredding, debris piles should be carefully inspected for the presence of boas. If PR boas are, found within debris piles, do not capture the animal and let it move on its own or call PRDNER Rangers for safe capture and relocation of the animal. If debris piles will be left on site, we recommend they be placed in areas that will not be disturbed in the future. 6. For all boa sightings (dead or alive), personnel designated by the recipient must record the time and date of the sighting and the specific location where the boa was found. Data should also include a photo of the animal dead or alive, and site GPS coordinates, and comments on how the animal was detected and

its behavior. If the PR boa was accidentally killed as part of the project actions, please include information on what conservation measures had been implemented and what actions will be taken to avoid further killings. All boa-sighting reports should be sent to the USFWS Caribbean Ecological Services Field Office, Marelisa Rivera - Deputy Field Supervisor, 787-851-7297 extension 206, 787-510-5207, marelisa_rivera@fws.gov.

- Endangered Species Act (ESA) - Required Conservation Measures for Coquí Guajón: 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 where 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. The guide is available at: i. <https://www.fws.gov/southeast/pdf/guidelines/post-disaster-guidance-for-projects-in-streams-and-waterways-of-puerto-rico.pdf>
- Endangered Species Act (ESA) - Required Conservation Measures for Puerto Rican parrot and Puerto Rican broad-winged hawk: 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 broad-winged hawk (*Buteo platypterus*): December-June; For all nest sightings, the Applicant must record the time and date of the sighting and the specific location where it was found. Data should also include a photo of the nest and eggs, relocation site GPS coordinates, and the time and date of the relocation. All sightings and incidental lethal take reports should be sent to the USFWS Caribbean Ecological Services Field Office, Marelisa Rivera - Deputy Field Supervisor, 787-851-7297 extension 206, 787-510-5207, marelisa_rivera@fws.gov.
- 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.
- NEPA Determination All borrow or fill material must come from pre-existing stockpiles, material reclaimed from maintained roadside ditches (provided the designed width or depth of the ditch is not increased), or commercially procured material from a source existing prior to the event. For any FEMA-funded project requiring the use of a non-commercial source or a commercial source that was not permitted to operate prior to the event (e.g., a new pit, agricultural fields, road ROWs, etc.) in whole or in part, regardless of cost, the Applicant must notify FEMA and the Recipient prior to extracting material. FEMA must review the source for compliance with all applicable federal environmental planning and historic preservation laws and executive orders prior to a Sub-recipient or their contractor beginning borrow extraction. Consultation and regulatory permitting may be required. Non-compliance with this requirement may jeopardize receipt of federal funding.

Documentation of borrow sources utilized is required at close-out and must include fill type (private, commercial, etc.), name, fill site GPS coordinates (not of the company/governmental office), address, and type of material.

EHP Additional Info

There is no additional environmental historical preservation on **FASt [Distribution Pole and Conductor Repair - Caguas Group 1] (Distribution)**.

Final Reviews

Final Review

Reviewed By MARTINEZ SANTIAGO, ISRAEL

Reviewed On 08/29/2022 7:57 AM AST

Review Comments

FEMA Final Completed. Project ready for Recipient Review.

Recipient Review

Reviewed By Salgado, Gabriel

Reviewed On 08/29/2022 9:53 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 \$1,111,094.00 for subaward number 10906 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 09/14/2022

Department of Homeland Security Federal Emergency Management Agency

General Info

Project #	674092	PW#	10893	Project Type	Specialized
Project Category	F - Utilities			Applicant	PR Electric Power Authority (000-UA2QU-00)
Project Title	FAASt [Distribution Pole and Conductor Repair - Caguas Group 5] (Distribution)			Event	4339DR-PR (4339DR)
Project Size	Large			Declaration Date	9/20/2017
Activity Completion Date	9/20/2027			Incident Start Date	9/17/2017
Process Step	Obligated			Incident End Date	11/15/2017

Damage Description and Dimensions

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

Damage #1231772; FAASt [Pole and Conductor Repair - Caguas Group 5] (Cayey T.C. 3401-02, Cayey Rural 3405-01, Cayey Rural 3405-03, Aibonito Pds 3502-02, Cidra 3601-02, Cidra 3601-04)

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:** Cayey T.C. 3401-02, Cayey Rural 3405-01, Cayey Rural 3405-03, Aibonito Pds 3502-02, Cidra 3601-02 and Cidra 3601-02
- **Facility Description:** The specific facilities included in this project 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:** 1967
- **Start GPS Latitude/Longitude:** 18.12039, -66.17109
- **End GPS Latitude/Longitude:** 18.11256, -66.17463

General Damage Information:

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

Final Scope

1231772

FAASt [Pole and Conductor Repair - Caguas Group 5] (Cayey T.C. 3401-02, Cayey Rural 3405-01, Cayey R

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 5 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 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	Feeder Number	GPS Start	GPS End	Phase	Voltage Level (kV)	Construction Date
Cayey T.C.	3401-02	18.12039 - 66.17109	18.11256 - 66.17463	3 Phase	8.32	More than 20 years
Cayey Rural	3405-01	18.10323 - 66.16674	18.11508 - 66.14493	3 Phase	8.32	More than 20 years
Cayey Rural	3405-03	18.10323 - 66.16674	18.09876 - 66.18150	3 Phase	8.32	More than 20 years
Aibonito Pds	3502-02	18.13083 - 66.28555	18.14853 - 66.27444	3 Phase	8.32	More than 20 years
Cidra	3601-02	18.17477 - 66.16178	18.16178 - 66.20247	3 Phase	8.32	More than 20 years
Cidra	3601-04	18.17477 - 66.16178	18.21259 - 66.16495	3 Phase	8.32	More than 20 years

Project Scope of Work

Proposed 428 Public Assistance Scope of Work:

Feeder 3401-02 Scope:

- Remove one 40ft wood pole and install one 45ft H4 concrete pole in the same location. Cross arms, insulators and all associated hardware will also be replaced along with the new structure.

Feeder 3405-01 Scope:

- No 428 PA work identified at this time.

Feeder 3405-03 Scope:

- No 428 PA work identified at this time.

Feeder 3502-02 Scope:

- Remove three 35ft wood poles and install three 45ft H4 concrete poles in the same location. Cross arms, insulators and all associated hardware will also be replaced along with the new structure.
- Remove five 40ft wood poles and install five 45ft H4 concrete poles in the same location. Cross arms, insulators and all associated hardware will also be replaced along with the new structure.
- Remove one 40ft wood pole and install one 45ft H6 concrete 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 pole and install one 45ft H4 concrete pole in the same location. Cross arms, insulators and all associated hardware will also be replaced along with the new structure.
- Remove one 45ft steel pole and one 40ft wood pole and install one 45ft H6 concrete pole 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 65ft H6 concrete pole in the same location. Cross arms, insulators and all associated hardware will also be replaced along with the new structure.

Feeder 3601-02 Scope:

- No 428 PA work identified at this time.

Feeder 3601-04 Scope:

- Remove one 40ft steel pole and install one 45ft H4 concrete pole in the same location. Cross arms, insulators and all associated hardware will also be replaced along with the new structure.
- Remove two 40ft concrete poles and install two 45ft H4 concrete poles in the same location. Cross arms, insulators and all associated hardware will also be replaced along with the new structure.
- Remove one 60ft wood pole and install one 65ft H6 concrete pole in the same location. Cross arms, insulators and all associated hardware will also be replaced along with the new structure.
- Remove one 65ft wood pole and install one 65ft H6 concrete pole in the same location. Cross arms, insulators and all associated hardware will also be replaced along with the new structure.

Project 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.

Project Cost Estimate	428 Estimate	Total
Planning, Permits and Applications (FAASt 335168)	\$9,684	
Environmental Management (FAASt 335168)	\$13,842	
Project Management (FAASt 335168)	\$19,684	

Engineering (FAASt 335168)	\$39,368	
Construction	\$393,682	
Contingency	\$47,626	
Total Project Estimate	\$523,886	
FAASt Project #674092 (428) Total		\$441,308
FAASt A&E #335168 Total		\$82,578

Work To Be Completed (WTBC): \$523,886

A&E Deduction (Global A&E FAASt 335168) -\$82,578

Project Total Cost: \$523,886 -\$82,578 (Global A&E FAASt 335168) = \$441,308.00

For detailed cost estimate, please refer to document labeled: 674092-DR4339PR-Appendix H - Detail Cost Estimate - Caguas Group 5 Rev1

Project Notes:

1. The Applicant provided a SOW in Grants Manger which has been modified to follow new SOW, after informal RFI. Refer to detailed SOW provided in document 674092-DR4339PR-Detailed SOW Caguas Group 5 Rev1.
2. For reference documents Appendix A thru K, see file labeled: 674092-DR439PR-DSOW-Dist Pole and Conductor Repair-Caguas Group 5-Attachments A-K.zip
3. For EHP Requirements, refer to pages 9 to 12 of the detailed SOW and reference documents: Appendix J & K.
4. Architectural and Engineering (A&E) costs are deducted given previously obligated Global A&E Project for the subject FAASt PREPA work (see project: 335168 - FAASt A&E PREPA).

406 HMP Scope

Project number: 674092

Damage #1231772; FAASt [Pole and Conductor Repair - Caguas Group 5] (Cayey T.C. 3401-02, Cayey Rural 3405-01, Cayey Rural 3405-03, Aibonito Pds 3502-02, Cidra 3601-02, Cidra 3601-04).

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

Location: Caguas, Puerto Rico

Start GPS Latitude/Longitude: 18.12039, -66.17109; End GPS Latitude/Longitude: 18.11256, -66.17463

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 #674092 (Distribution Critical Poles & Conductors Repair/Replacement).

The Distribution Pole and Conductor Repair - Caguas Group 5 consists of 6 interconnected and inter-functional distribution feeders (sites) establish the electrical distribution system as follow: (Cayey T.C. 3401-02, Cayey Rural 3405-01, Cayey Rural 3405-03, Aibonito Pds 3502-02, Cidra 3601-02, Cidra 3601-04).

The 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 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 3401-02 Scope: 1EA.poles.

- Replace one (1) 45ft concrete H4 pole by one (1) 45ft galvanized steel S3 pole.

2. Feeder 3405-01 Scope:

- No 406 Hazard Mitigation work identified at this time.

3. Feeder 3405-03 Scope:

- No 406 Hazard Mitigation work identified at this time.

4. Feeder 3502-02 Scope: 12EA. Poles.

- Replace nine (9) 45ft concrete H4 poles by nine (9) 50ft galvanized steel S8 poles.
- Replace two (2) 45ft concrete H6 poles by two (2) 50ft galvanized steel S8 poles.
- Replace one (1) 65' concrete H6 pole "self-support" concrete base $\{[(5'(L) \times 5'(W) \times 10'(D)) - (1.75'(L) \times 1.75'(W) \times 9'(D))]\} / 27 = 8.5$ CY: by one (1) 70' galvanized steel S8 pole "self-support" concrete base $\{[(5.5'(L) \times 5.5'(W) \times 12'(D)) - (2.75'(L) \times 2.75'(W) \times 11'(D))]\} / 27 = 10.5$ CY.

5. Feeder 3601-02 Scope:

- No 406 Hazard Mitigation work identified at this time.

6. Feeder 3601-04 Scope: 5EA. Poles.

- Replace three (3) 45ft concrete H4 poles by three (3) 50ft galvanized steel S8 poles.
- Replace two (2) 65' concrete H6 pole "self-support" concrete base $\{[(5'(L) \times 5'(W) \times 10'(D)) - (1.75'(L) \times 1.75'(W) \times 9'(D))]\} / 27 = 8.5$ CY: by two (2) 70' galvanized steel S8 pole "self-support" concrete base $\{[(5.5'(L) \times 5.5'(W) \times 12'(D)) - (2.75'(L) \times 2.75'(W) \times 11'(D))]\} / 27 = 10.5$ CY.

Hazard Mitigation Proposal (HMP) Cost:

Total Net Hazard Mitigation Cost (Base Cost) = \$71,480.00

+ HM (Applicant A&E, Management & General Conditions) = \$18,942.00

Hazard Mitigation Total Cost = \$90,422.00

HMP Cost-Effectiveness Calculations:

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

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

$HMR = (\text{Total Net Hazard Mitigation Cost} / \text{Project Net In-Kind Repair Cost}) \times 100$

$HMR = (\$71,480.00 / \$393,682.00) \times 100 = 18.16\%$

The cost of this Hazard Mitigation Proposal (HMP) is **18.16%** of the repair or restoration costs and is deemed cost effective per FEMA Public Assistance Program and Policy Guide (PAPPG) V3.1 April 2018, 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 (3510 (Engineering And Design Services (Global A&E FAASSt 335168)))	1.00	Lump Sum	(\$82,578.00)	Uncompleted
9201 (PAAP Fixed Estimate (No Value - Tracking Purposes Only))	1.00	Lump Sum	\$0.00	Completed
9001 (9001 (Contract (FAASSt Project 136271)))	1.00	Lump Sum	\$523,886.00	Uncompleted

CRC Gross Cost \$441,308.00

Total 406 HMP Cost \$90,422.00

Total Insurance Reductions \$0.00

CRC Net Cost \$531,730.00

Federal Share (90.00%) \$478,557.00

Non-Federal Share (10.00%) \$53,173.00

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-10893(12474)	\$531,730.00	90 %	\$478,557.00	9/15/2022

Drawdown History

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

Obligation History

Version #	Date Obligated	Obligated Cost	Cost Share	IFMIS Status	IFMIS Obligation #
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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

8/12/2022

GENERAL INFORMATION

Event: DR4339-PR

Project: SP 674092

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: \$531,730.00 (CRC Gross Amount \$441,308.00 + Mitigation Amount \$90,422.00)

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) #1231772:

FAASt [Pole and Conductor Repair - Caguas Group 5] (Cayey T.C. 3401-02, Cayey Rural 3405-01, Cayey Rural 3405-03, Aibonito Pds 3502-02, Cidra 3601-02, Cidra 3601-04)

Location Description: Cayey T.C. 3401-02, Cayey Rural 3405-01, Cayey Rural 3405-03, Aibonito Pds 3502-02, Cidra 3601-02 and Cidra 3601-02

GPS Coordinates: Start 18.12039, -66.17109 to 18.11256, -66.17463 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: \$531,730.00 (CRC Gross Amount \$441,308.00 + Mitigation Amount \$90,422.00)

-

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 [Pole and Conductor Repair - Caguas Group 5] (Cayey T.C. 3401-02, Cayey Rural 3405-01, Cayey Rural 3405-03, Aibonito Pds 3502-02, Cidra 3601-02, Cidra 3601-04) 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 Pole and Conductor Repair - Caguas Group 5] (Distribution)**.

406 Mitigation

There is no additional mitigation information on **FAAST [Distribution Pole and Conductor Repair - Caguas Group 5] (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 *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.

- Endangered Species Act (ESA) - USFWS Required Conservation Measures for *Patagioenas inornata wetmorei*: 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.
- Resource Conservation and Recovery Act, aka Solid Waste Disposal Act (RCRA) 1. 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. 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. 3. 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.

EHP Additional Info

There is no additional environmental historical preservation on **FAASt [Distribution Pole and Conductor Repair - Caguas Group 5] (Distribution)**.

Final Reviews

Final Review

Reviewed By MARTINEZ SANTIAGO, ISRAEL

Reviewed On 08/23/2022 4:32 PM AST

Review Comments

FEMA Final Completed. Project ready for Recipient Review.

Recipient Review

Reviewed By Salgado, Gabriel

Reviewed On 08/23/2022 4:43 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 \$531,730.00 for subaward number 10893 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 09/14/2022