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

IN RE:	**CASE NO. NEPR-MI-2021-0002**
IN RE: REVIEW OF THE PUERTO RICO ELECTRIC POWER AUTHORITY'S 10-YEAR INFRASTRUCTURE PLAN-DECEMBER 2020	**SUBJECT: Submission of Two Area Plans, Request for Confidentiality, and Supporting Memorandum of Law**

MOTION SUBMITTING TWO AREA PLANS, REQUEST FOR CONFIDENTIALITY, AND SUPPORTING MEMORANDUM OF LAW

TO THE PUERTO RICO ENERGY BUREAU:

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

I. Submittal of Two Area Plans and Request for Confidentiality

1. On March 26, 2021, this Puerto Rico Energy Bureau ("Energy Bureau") issued a Resolution and Order in the instant proceeding (the "March 26 Order"), ordering —in pertinent part— that the Puerto Rico Electric Power Authority ("PREPA") submit to the Energy Bureau the specific projects to be funded with Federal Emergency Management Agency ("FEMA") funds or any other federal funds at least thirty (30) calendar days prior to submitting these projects to the Puerto Rico Central Office for Recovery, Reconstruction and Resiliency ("COR3"), FEMA or any other federal agency. *See* March 26 Order on pages 18-19. The Energy Bureau thereafter determined that this directive should be applied to both PREPA and LUMA. *See* Resolution and Order of August 20, 2021 ("August 20 Order") on page 3.

2. Consequently, LUMA has submitted several Transmission and Distribution projects to this Energy Bureau beginning on July 8, 2021. LUMA has submitted 265 initial scopes

of work ("SOW") and One Area Plan to date. The Energy Bureau has approved all the SOWs and Area Plan submitted by LUMA as of June 27, 2025.

3. Following the extensive infrastructure damage caused by Hurricane Fiona in September 2022, LUMA is advancing permanent restoration efforts under FEMA's traditional Section 406 of the Stafford Act Public Assistance program. Unlike the Section 428 of the Stafford Act fixed-cost model used for Hurricane Maria (FEMA Accelerated Award Strategy ["FAASt"]), the traditional Public Assistance program process reimburses actual costs to restore eligible, disaster-damaged infrastructure. This requires rigorous documentation, damage validation, environmental review, and regulatory compliance. Therefore, LUMA has adopted a structured Area Plan approach to align with the Energy Bureau's proceedings requirements and ensure transparency and regulatory coordination. Each Area Plan outlines LUMA's comprehensive recovery goals for a specific geographic region, including funded and unfunded scope elements across FEMA's Fiona program, Maria's FAASt program, and other sources. Due to their interregional nature, transmission projects are addressed separately through regional planning. LUMA submits these Area Plans to the Energy Bureau for review and approval before project formulation, ensuring consistency with energy policy goals.

4. In view of the above and in accordance with the March 26th Order, LUMA hereby submits to the Energy Bureau two Area Plans for this Energy Bureau's review and approval prior to submittal to COR3 and FEMA in thirty (30) days for the following projects: "Fiona Permanent Work Area Plan: Mayagüez Areas A-L," dated January 15, 2026, as *Exhibit 1* to this Motion and "Fiona Permanent Work Area Plan: Mayagüez Region Transmission," dated January 15, 2026, as *Exhibit 2* to this Motion.

5. LUMA hereby requests that *Exhibits 1* and *2* be maintained confidential and is submitting two redacted versions for public disclosure and two unredacted non-public versions under seal of confidentiality. LUMA submits its Memorandum of Law below, stating the legal basis for which the unredacted versions of *Exhibits 1* and *2* should be filed under seal of confidentiality. As will be explained below, the Area Plans in *Exhibits 1* and *2* should be protected from public disclosure as these documents contain confidential information associated with Critical Energy Infrastructure Information ("CEII") as defined in federal regulations, 18 C.F.R. §388.113; 6 U.S.C. §§ 671-674, and per the Energy Bureau's Policy on Management of Confidential Information. *See* Energy Bureau's Policy on Management of Confidential Information, CEPR-MI-2016-0009 ("Policy on Management of Confidential Information"), issued on August 31, 2016, as amended by the Resolution dated September 20, 2016.

6. In addition, the Area Plans include personal identifying information of LUMA staff protected under Puerto Rico's legal framework on privacy emanating from the Puerto Rico Constitution. It should also be protected pursuant to the Energy Bureau's Policy on Management of Confidential Information.

II. Memorandum of Law in Support of Request for Confidentiality

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

7. The bedrock provision on the management of confidential information filed before this Energy Bureau, is Section 6.15 of Act 57-2014, known as the "Puerto Rico Energy Transformation and Relief Act".". It provides, in pertinent part, that: "[i]f any person who is required to submit information to the [Energy Bureau] believes that the information to be submitted has any confidentiality privilege, such person may request the [Energy Bureau] to treat such information as such […]" 22 LPRA §1054n. If the Energy Bureau determines, after

appropriate evaluation, that the information should be protected, "it shall grant such protection in a manner that least affects the public interest, transparency, and the rights of the parties involved in the administrative procedure in which the allegedly confidential document is submitted." *Id*. §1054n(a).

8. Access to confidential information shall be provided "only to the lawyers and external consultants involved in the administrative process after the execution of a confidentiality agreement." *Id*. §1054n(b). Finally, Act 57-2014 provides that this Energy Bureau "shall keep the documents submitted for its consideration out of public reach only in exceptional cases. In these cases, the information shall be duly safeguarded and delivered exclusively to the personnel of the [Energy Bureau] who need to know such information under nondisclosure agreements. However, the [Energy Bureau] shall direct that a non-confidential copy be furnished for public review." *Id*. §1054n(c).

9. Relatedly, in connection with the duties of electric power service companies, Section 1.10 (i) of Act 17-2019 provides that electric power service companies shall provide the information requested by customers, except for confidential information, in accordance with the Puerto Rico Rules of Evidence.

10. Moreover, the Energy Bureau's Policy on Management of Confidential Information details the procedures a party should follow to request that a document or portion thereof be afforded confidential treatment. In essence, the referenced Policy requires identifying confidential information and filing a memorandum of law explaining the legal basis and supporting the request to file the information confidentially. *See* CEPR-MI-2016-0009, Section A, as amended by the Resolution of September 20, 2016, CEPR-MI-2016-0009. The memorandum should also include a table identifying the confidential information, a summary of the legal basis for the confidential

designation, and an explanation of why each claim or designation conforms to the applicable legal basis for confidentiality. *Id. at* ⁋ 3. The party who seeks confidential treatment of information filed with the Energy Bureau must also file both a "redacted" or "public version" and an "unredacted" or "confidential" version of the document that contains confidential information. *Id. at* ⁋ 6.

11. The Energy Bureau's Policy on Management of Confidential Information states the following regarding access to validated Trade Secret Information and CEII:

> 1. Trade Secret Information
>
> > Any document designated by the [Energy Bureau] as Validated Confidential Information because it is a trade secret under Act 80-2011 may only be accessed by the Producing Party and the [Energy Bureau], unless otherwise set forth by the [Energy Bureau] or any competent court.
>
> 2. Critical Energy Infrastructure Information ("CEII")
>
> > The information designated by the [Energy Bureau] as Validated Confidential Information on the grounds of being CEII may be accessed by the parties' authorized representatives only after they have executed and delivered the Nondisclosure Agreement.
> >
> > Those authorized representatives who have signed the Non-Disclosure Agreement may only review the documents validated as CEII at the [Energy Bureau] or the Producing Party's offices. During the review, the authorized representatives may not copy or disseminate the reviewed information and may bring no recording device to the viewing room.

Id. at § D (on Access to Validated Confidential Information).

12. Energy Bureau Regulation No. 8543, Regulation on Adjudicative, Notice of Noncompliance, Rate Review, and Investigation Proceedings, also includes a provision for filing confidential information in proceedings before this Energy Bureau. To wit, Section 1.15 provides that "a person has the duty to disclose information to the [Energy Bureau] considered to be privileged pursuant to the Rules of Evidence, said person shall identify the allegedly privileged

information, request the [Energy Bureau] the protection of said information, and provide supportive arguments, in writing, for a claim of information of privileged nature. The [Energy Bureau] shall evaluate the petition and, if it understands [that] the material merits protection, proceed according to […] Article 6.15 of Act No. 57-2015, as amended." *See also* Energy Bureau Regulation No. 9137 on Performance Incentive Mechanisms, § 1.13 (addressing disclosure before the Energy Bureau of Confidential Information and directing compliance with Resolution CEPR-MI-2016-0009).

B. Request for Confidentiality

13. The Area Plans with CEII in *Exhibits 1* and *2* contain portions of CEII that, under relevant federal law and regulations, are protected from public disclosure. LUMA stresses that the Area Plans with CEII warrant confidential treatment to protect critical infrastructure from threats that could undermine the system and negatively affect electric power services to the detriment of the interests of the public, customers, and citizens of Puerto Rico. In several proceedings, this Energy Bureau has considered and granted requests by PREPA to submit CEII under seal of confidentiality.[1] In at least two proceedings on Data Security[2] and Physical Security,[3] this Energy

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

[2] *In re Review of the Puerto Rico Electric Power Authority Data Security Plan,* NEPR-MI-2020-0017.

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

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

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

15. As mentioned above, the Energy Bureau's Policy on Management of Confidential Information provides for the management of CEII. It directs that the parties' authorized representatives access information validated as CEII only after executing and delivering a Non-Disclosure Agreement.

16. Generally, CEII or critical infrastructure information is exempted from public disclosure because it involves assets and information that pose public security, economic, health, and safety risks. Federal Regulations on CEII, particularly 18 C.F.R. § 388.113, state that:

> Critical energy infrastructure information means specific engineering, vulnerability, or detailed design information about proposed or existing critical infrastructure that:
>
> (i) Relates details about the production, generation, transportation, transmission, or distribution of energy;
> (ii) Could be useful to a person in planning an attack on critical infrastructure;
> (iii) Is exempt from mandatory disclosure under the Freedom of Information Act, 5 U.S.C. 552; and
> (iv) Does not simply give the general location of the critical infrastructure.

Id.

17. Additionally, "[c]ritical electric infrastructure means a system or asset of the bulk-power system, whether physical or virtual, the incapacity or destruction of which would negatively affect national security, economic security, public health or safety, or any combination of such matters. *Id*. Finally, "[c]ritical infrastructure means existing and proposed systems and assets, whether physical or virtual, the incapacity or destruction of which would negatively affect security, economic security, public health or safety, or any combination of those matters." *Id*.

18. The Critical Infrastructure Information Act of 2002, 6 U.S.C. §§ 671-674 (2020), part of the Homeland Security Act of 2002, protects critical infrastructure information ("CII").[4]

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

> (A) shall be exempt from disclosure under the Freedom of Information Act;
> (B) shall not be subject to any agency rules or judicial doctrine regarding ex parte communications with a decision-making official;
> (C) shall not, without the written consent of the person or entity submitting such information, be used directly by such agency, any other Federal, State, or local authority, or any third party, in any civil action arising under Federal or State law if such information is submitted in good faith;
> (D) shall not, without the written consent of the person or entity submitting such information, be used or disclosed by any officer or employee of the United States for purposes other than the purposes of this part, except—
> (i) in furtherance of an investigation or the prosecution of a criminal act; or
> (ii) when disclosure of the information would be--
> (I) to either House of Congress, or to the extent of matter within its jurisdiction, any committee or subcommittee thereof, any joint committee thereof or subcommittee of any such joint committee; or

CII is defined as "information not customarily in the public domain and related to the security of critical infrastructure or protected systems [...]" 6 U.S.C. § 671 (3).[5]

19. The Area Plans contain diagrams that qualify as CEII because they contain information on the engineering and design of critical infrastructure, as existing and proposed, relating to the transmission of electricity, which is provided in sufficient detail that it could potentially be helpful to a person planning an attack on this or other energy infrastructure facilities interconnected with or served by these facilities and equipment. The information identified as confidential in this paragraph is not common knowledge and is not made publicly available. Therefore, it is respectfully submitted that, on balance, the public interest in protecting CEII weighs in favor of protecting the relevant portions of the Area Plans with CEII in *Exhibits 1* and *2* from disclosure, given the nature and scope of the details included in those portions.

(II) to the Comptroller General, or any authorized representative of the Comptroller General, in the course of the performance of the duties of the Government Accountability Office

(E) shall not, be provided to a State or local government or government agency; of information or records;

(i) be made available pursuant to any State or local law requiring disclosure of information or records;

(ii)otherwise be disclosed or distributed to any party by said State or local government or government agency without the written consent of the person or entity submitting such information; or

(iii)be used other than for the purpose of protecting critical Infrastructure or protected systems, or in furtherance of an investigation or the prosecution of a criminal act.

(F) does not constitute a waiver of any applicable privilege or protection provided under law, such as trade secret protection.

[5] CII includes the following types of information:

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

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

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

20. Based on the above, LUMA respectfully submits that the Area Plans with CEII should be designated as CEII. This designation is a reasonable and necessary measure to protect the specific location and other engineering and design information of the energy facilities listed or discussed in these Area Plans in *Exhibits 1* and *2*. Given the importance of ensuring the safe and efficient operation of the generation assets and the T&D System, LUMA respectfully submits that these materials constitute CEII that should be maintained confidentially to safeguard their integrity and protect them from external threats.

21. In addition, the Area Plans in *Exhibits 1* and *2* contain the name, signature, and role of two LUMA employees, who reviewed the Area Plans as part of LUMA's internal review and approval of each document. LUMA respectfully requests that information on the names, signatures, and roles of these individuals be kept confidentially in the context that these reveal details of their employment duties and that their protection is in the public interest and aligned with Puerto Rico's legal framework on privacy, which protects from the disclosure of personal information. *See e.g.*, Const. ELA, Art. II, Sections 8 and 10, which protect the right to control personal information and distinctive traits, which apply *ex proprio vigore* and against private parties. *See also e.g. Vigoreaux v. Quiznos,* 173 D.P.R. 254, 262 (2008); *Bonilla Medina v. P.N.P.*, 140 D.P.R. 294, 310-11 (1996), *Pueblo v. Torres Albertorio*, 115 D.P.R. 128, 133-34 (1984). See also Act 122-2019, Article 4(vi) (which provides, as an exception to the rule on public disclosure, information the disclosure of which could invade the privacy of third parties or affect their fundamental rights); and Article 3(c) of Act 122-2019 (stating that personnel files and similar information does not constitute public information subject to disclosure). It is respectfully submitted that the redaction of the aforementioned information does not affect the public's or the Energy Bureau's review of the Area Plan nor interfere with processes before this Energy Bureau.

Therefore, on balance, the public interest in protecting privacy weighs in favor of protecting the relevant portions of the Area Plans.

C. Identification of Confidential Information

22. In compliance with the Energy Bureau's Policy on Management of Confidential Information, CEPR-MI-2016-0009, below, find a table summarizing the hallmarks of this request for confidential treatment.

Document	**Name**	**Pages in which Confidential Information is Found, if applicable**	**Summary of Legal Basis for Confidentiality Protection, if applicable**	**Date Filed**
Exhibit 1	Fiona Permanent Work Area Plan: Mayagüez Areas A-L	Page 1	Right to privacy (*see, e.g.*, Const. ELA, Art. II, Sections 8 and 10)	January 16, 2026
		Page 8	Critical Energy Infrastructure Information, 18 C.F.R. § 388.113; 6 U.S.C. §§ 671-674.	January 16, 2026
Exhibit 2	Fiona Permanent Work Area Plan: Mayagüez Region Transmission	Page 1	Right to privacy (*see, e.g.*, Const. ELA, Art. II, Sections 8 and 10)	January 16, 2026

Document	Name	Pages in which Confidential Information is Found, if applicable	Summary of Legal Basis for Confidentiality Protection, if applicable	Date Filed
		Page 5	Critical Energy Infrastructure Information, 18 C.F.R. § 388.113; 6 U.S.C. §§ 671-674.	January 16, 2026

WHEREFORE, LUMA respectfully requests that the Energy Bureau **take notice** of the aforementioned; **approve** the Area Plans for the T&D Project submitted as *Exhibits 1* and *2* to this Motion; and **grant** the request for confidential treatment of *Exhibits 1* and *2*.

RESPECTFULLY SUBMITTED.

We hereby certify that we filed this Motion using the electronic filing system of this Energy Bureau. We will send an electronic copy of this Motion to PREPA via Alexis Rivera, alexis.rivera@prepa.pr.gov, and through its counsel of record, Natalia Zayas Godoy, nzayas@gmlex.net, Richard Cruz Franqui, rcruzfranqui@gmlex.net, and Mirelis Valle Cancel, mvalle@gmlex.net, to Genera PR LLC, through its counsel of record, Jorge Fernández-Reboredo, jfr@sbgblaw.com, José J. Díaz Alonso, jdiaz@sbgblaw.com, and Francisco Santos, francisco-santos@genera-pr.com.

In San Juan, Puerto Rico, this 16th day of January 2026.

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Exhibit 1

Fiona Permanent Work Area Plan: Mayagüez Areas A-L

Redacted Version (Unredacted Version Submitted Under Seal of Confidentiality)

FEMA Project Scope of Work

Project Name:

Fiona Permanent Work Area Plan: Mayagüez Areas A-L

Revision 1

Date: January 15, 2026

APPROVALS

The signatures below formally approve the FEMA Project Scope of Work Template.

Area Plan Owner	Signature	Date
[redacted]	[redacted]	1/15/2026
Grants Manager	**Signature**	**Date**
[redacted]	[redacted]	1/15/2026

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Overview

Project Name:	Fiona Permanent Work Area Plan: Mayagüez Areas A-L
Project Type:	Overview/narrative of proposed work approach for Fiona permanent repairs and hazard mitigation
Region:	Mayagüez
Damage Number:	N/A
Damaged Inventory/Asset Category:	Distribution and Substation
FEMA Project Number: *(formerly Project Worksheet)*	N/A

Introduction

This document provides the Puerto Rico Energy Bureau (PREB) with a system-level summary of the standard Federal Emergency Management Agency (FEMA) formulation process for permanent work associated with Hurricane Fiona. On September 18, 2022, Hurricane Fiona made landfall in Puerto Rico as a Category 1 hurricane. The existing moisture condition in the area pushed ahead of the system brought some additional rainfall to the island in advance of Hurricane Fiona. Subsoils conditions for the island were near saturation and rivers were running at normal to above normal levels for much of the island of Puerto Rico. Rainfall activity intensified more than 16 inches along the Cordillera and El Yunque. Total rainfall accumulations of more than 30 inches were registered in Ponce, Caguas, and San Lorenzo. Mudslides and flooding were reported in affected areas.

The magnitude of the damage on the island of Puerto Rico exceeded the government's capabilities to respond to the incident. On September 21, 2022, the President of the United States of America granted a disaster declaration (DR-4671-PR) for Puerto Rico allowing FEMA to provide Public Assistance (PA) funds for an incident period of September 17, 2022 - September 21, 2022.

This narrative outlines the steps and procedures covering various aspects such as, the repair and replace approach, adherence to codes and standards, FEMA Section 406 mitigation and the application of Environmental and Historic Preservation (EHP) guidelines.

Facilities

Facilities Description

The specific facilities included in this project proposal are:

Distribution Feeders that include poles and structures (with foundations), cross-arms and framing, insulators and hardware, 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.

Substations and Transmission Centers that include power, distribution and monitoring transformers, circuit breakers, disconnects, substation bus and associated connections, capacitor banks, control

houses, control and communications batteries, yard equipment and support structures, underground conduit and wiring, system protection and control devices, physical security components to include fences, gates and access roads.

Facilities List

The facilities listed below are part of the Distribution feeder and Substation and Transmission Center (TC) system in the Mayagüez Region. These interconnected and interdependent distribution feeders and facilities (site) establish the electrical transmission and distribution system. The feeder originates from a Substation/Transmission Center (start) and serves customers along the route to various locations (end) for power delivery. GPS Coordinates for the start and the end points of each electrical feeder project are noted in the table below and depicted on the attached feeder maps. These feeders and facilities are in the PREPA 10-Year Infrastructure Plan.

Distribution Feeders (kV)	Area
4.16 kV Distribution Line Number 7012-01	Mayagüez A
4.16 kV Distribution Line Number 7004-06	Mayagüez A
4.16 kV Distribution Line Number 7005-03	Mayagüez A
4.16 kV Distribution Line Number 7006-03	Mayagüez A
4.16 kV Distribution Line Number 7012-02	Mayagüez A
4.16 kV Distribution Line Number 7006-01	Mayagüez A
4.16 kV Distribution Line Number 7504-01	Mayagüez A
4.16 kV Distribution Line Number 7504-02	Mayagüez A
13.2 kV Distribution Line Number 7008-05	Mayagüez B
13.2 kV Distribution Line Number 7008-04	Mayagüez B
13.2 kV Distribution Line Number 7011-03	Mayagüez B
13.2 kV Distribution Line Number 7011-01	Mayagüez B
4.16 kV Distribution Line Number 7104-05	Mayagüez B
4.16 kV Distribution Line Number 7003-02	Mayagüez B
4.16 kV Distribution Line Number 7002-01	Mayagüez B
4.16 kV Distribution Line Number 7002-03	Mayagüez B
4.16 kV Distribution Line Number 7002-04	Mayagüez B
4.16 kV Distribution Line Number 7003-05	Mayagüez B
13.2 kV Distribution Line Number 7008-07	Mayagüez B
13.2 kV Distribution Line Number 7008-08	Mayagüez B
4.16 kV Distribution Line Number 7003-03	Mayagüez B
4.16 kV Distribution Line Number 7101-03	Mayagüez B
4.16 kV Distribution Line Number 7101-04	Mayagüez B
4.16 kV Distribution Line Number 7104-06	Mayagüez B
4.16 kV Distribution Line Number 7101-02	Mayagüez B
4.16 kV Distribution Line Number 7201-02	Mayagüez C
4.16 kV Distribution Line Number 7201-03	Mayagüez C
4.16 kV Distribution Line Number 7201-04	Mayagüez C
4.16 kV Distribution Line Number 7201-05	Mayagüez C

Distribution Feeders (kV)	Area
4.16 kV Distribution Line Number 7301-03	Mayagüez C
4.16 kV Distribution Line Number 7301-04	Mayagüez C
4.16 kV Distribution Line Number 7301-01	Mayagüez C
4.16 kV Distribution Line Number 7301-02	Mayagüez C
4.16 kV Distribution Line Number 7301-05	Mayagüez C
13.2 kV Distribution Line Number 7302-01	Mayagüez C
4.16 kV Distribution Line Number 7303-03	Mayagüez D
4.16 kV Distribution Line Number 6101-04	Mayagüez D
4.16 kV Distribution Line Number 6101-05	Mayagüez D
4.16 kV Distribution Line Number 7303-01	Mayagüez D
4.16 kV Distribution Line Number 7303-02	Mayagüez D
4.16 kV Distribution Line Number 6101-03	Mayagüez D
4.16 kV Distribution Line Number 6101-01	Mayagüez D
4.16 kV Distribution Line Number 6101-02	Mayagüez D
4.16 kV Distribution Line Number 7103-04	Mayagüez D
4.16 kV Distribution Line Number 7103-01	Mayagüez D
4.16 kV Distribution Line Number 7103-02	Mayagüez D
4.16 kV Distribution Line Number 7901-03	Mayagüez E
4.16 kV Distribution Line Number 7403-02	Mayagüez E
4.16 kV Distribution Line Number 7801-03	Mayagüez E
13.2 kV Distribution Line Number 7805-11	Mayagüez E
13.2 kV Distribution Line Number 7805-13	Mayagüez E
4.16 kV Distribution Line Number 7901-04	Mayagüez E
4.16 kV Distribution Line Number 7901-02	Mayagüez E
13.2 kV Distribution Line Number 7903-06	Mayagüez E
4.16 kV Distribution Line Number 7901-01	Mayagüez E
4.16 kV Distribution Line Number 6201-03	Mayagüez E
4.16 kV Distribution Line Number 6201-02	Mayagüez E
4.16 kV Distribution Line Number 6201-01	Mayagüez E
4.16 kV Distribution Line Number 7403-01	Mayagüez E
4.16 kV Distribution Line Number 7403-03	Mayagüez E
4.16 kV Distribution Line Number 7802-01	Mayagüez E
4.16 kV Distribution Line Number 7802-03	Mayagüez E
4.16 kV Distribution Line Number 7802-04	Mayagüez E
4.16 kV Distribution Line Number 7801-01	Mayagüez E
4.16 kV Distribution Line Number 6305-02	Mayagüez F
4.16 kV Distribution Line Number 6301-02	Mayagüez F
4.16 kV Distribution Line Number 6306-02	Mayagüez F
4.16 kV Distribution Line Number 7902-01	Mayagüez F
4.16 kV Distribution Line Number 7902-03	Mayagüez F

Distribution Feeders (kV)	Area
4.16 kV Distribution Line Number 6301-01	Mayagüez F
4.16 kV Distribution Line Number 6301-03	Mayagüez F
4.16 kV Distribution Line Number 6303-01	Mayagüez F
7.2 kV Distribution Line Number 6702-04	Mayagüez H
7.2 kV Distribution Line Number 6703-01	Mayagüez H
7.2 kV Distribution Line Number 6705-01	Mayagüez H
7.2 kV Distribution Line Number 6601-01	Mayagüez H
7.2 kV Distribution Line Number 6601-02	Mayagüez H
7.2 kV Distribution Line Number 6601-03	Mayagüez H
7.2 kV Distribution Line Number 6601-04	Mayagüez H
7.2 kV Distribution Line Number 6702-03	Mayagüez H
7.2 kV Distribution Line Number 6703-02	Mayagüez H
7.2 kV Distribution Line Number 6703-03	Mayagüez H
4.16 kV Distribution Line Number 6008-04	Mayagüez I
13.2 kV Distribution Line Number 6015-02	Mayagüez I
13.2 kV Distribution Line Number 6014-02	Mayagüez I
4.16 kV Distribution Line Number 6001-03	Mayagüez I
13.2 kV Distribution Line Number 6014-01	Mayagüez I
13.2 kV Distribution Line Number 6014-03	Mayagüez I
4.16 kV Distribution Line Number 6001-05	Mayagüez I
4.16 kV Distribution Line Number 6003-01	Mayagüez I
4.16 kV Distribution Line Number 6004-02	Mayagüez I
4.16 kV Distribution Line Number 6004-05	Mayagüez I
4.16 kV Distribution Line Number 6008-02	Mayagüez I
4.16 kV Distribution Line Number 6001-01	Mayagüez I
4.16 kV Distribution Line Number 6001-02	Mayagüez I
13.2 kV Distribution Line Number 6012-02	Mayagüez J
4.16 kV Distribution Line Number 6005-02	Mayagüez J
13.2 kV Distribution Line Number 6012-03	Mayagüez J
4.16 kV Distribution Line Number 6002-05	Mayagüez J
13.2 kV Distribution Line Number 6012-01	Mayagüez J
13.2 kV Distribution Line Number 6012-05	Mayagüez J
4.16 kV Distribution Line Number 6005-01	Mayagüez J
4.16 kV Distribution Line Number 6801-02	Mayagüez K
13.2 kV Distribution Line Number 6802-05	Mayagüez K
13.2 kV Distribution Line Number 6802-01	Mayagüez K
13.2 kV Distribution Line Number 6802-02	Mayagüez K
13.2 kV Distribution Line Number 6802-04	Mayagüez K
4.16 kV Distribution Line Number 6010-01	Mayagüez K
4.16 kV Distribution Line Number 6010-02	Mayagüez K

Distribution Feeders (kV)	Area
4.16 kV Distribution Line Number 6010-03	Mayagüez K
4.16 kV Distribution Line Number 6801-03	Mayagüez K
4.16 kV Distribution Line Number 6801-01	Mayagüez K
4.16 kV Distribution Line Number 6007-02	Mayagüez K
4.16 kV Distribution Line Number 7502-02	Mayagüez L
4.16 kV Distribution Line Number 7503-05	Mayagüez L
13.2 kV Distribution Line Number 7505-05	Mayagüez L
4.16 kV Distribution Line Number 7503-02	Mayagüez L
4.16 kV Distribution Line Number 7502-01	Mayagüez L
4.16 kV Distribution Line Number 7502-03	Mayagüez L
4.16 kV Distribution Line Number 7502-04	Mayagüez L
4.16 kV Distribution Line Number 7503-01	Mayagüez L
4.16 kV Distribution Line Number 7503-03	Mayagüez L
4.16 kV Distribution Line Number 7503-04	Mayagüez L

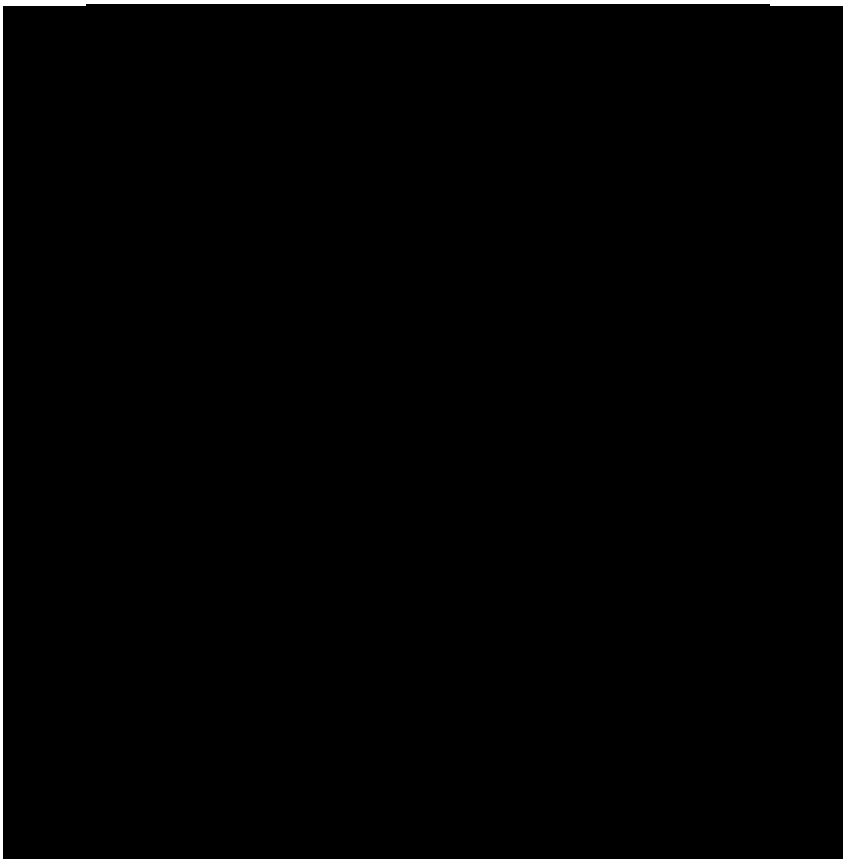
Substations/ Transmission Centers	Area
Ramey Field 2	Mayagüez A
Ramey Field 1	Mayagüez A
Ceiba Baja	Mayagüez A
Ramey Field 3	Mayagüez A
Ojo de Agua	Mayagüez B
Moca	Mayagüez B
Añasco TC	Mayagüez D
Atalaya	Mayagüez D
Capa	Mayagüez D
Lares	Mayagüez E
Las Marias	Mayagüez E
Guajataca	Mayagüez E
Bartolo	Mayagüez F
Maricao	Mayagüez F
Once de Agosto	Mayagüez I
Mckinley	Mayagüez J
Mayagüez TC	Mayagüez J
Zona Libre	Mayagüez K
Las Acacias	Mayagüez K
Mora TC	Mayagüez L

Project Scope

Scope of Work Description (e.g., Plan for Repair)

Permanent Repairs Area Strategy – Mayagüez Areas A-L

LUMA's project permanent formulation strategy is based on Area Planning for a more systematic approach. LUMA has been conducting Area Planning studies across 71 areas within six Regions (Mayagüez, Ponce, Caguas, San Juan, Bayamón, and Arecibo) to assess adequacy of capacity for each substation transformer and feeder in a planning area under normal operation and contingencies.



The Area Planning will identify damages that prevent the Substation/TCs and Distribution feeders from safely and reliably supplying electrical service to customers and define a scope of work (SOW) and objectives. Evaluating all damages as a system will ensure that all the components are safe, efficient, and meet all applicable codes and regulations. Electric power systems are a prime example of the interdependence of the overall system to its components. Each component of the system should be evaluated in conjunction with expected hazards and by understanding how each interrelated component impacts another. The studies will show the need to increase reliability and resiliency to improve the functionality and ultimately restore system functionality of the distribution system.

The holistic design and implementation will take into consideration all factors that threaten the electrical system, such as flooding, considerations for reducing risks for high wind events and fire protection.

The first Area selected for study, design to codes, standards and mitigation was Mayagüez Area G. The damages for all Regions and Areas have been inspected, documented, and represent all emergency repairs executed and the damages and impacts that still need permanent repairs. Since the submission and approval of Mayagüez Area G, LUMA has expanded the strategy and approach to the remainder of

the Mayagüez Region with Area Planning submitted for Areas A-L following the same template and alignment to the overall Fiona recovery solution. This strategy and approach will also extend into all Regions and Areas.

Permanent Damages Per Area Strategy

LUMA has requested FEMA to include Architectural and Engineering (A&E) services in the formulation of permanent repairs for DR-4671. This allocation of A&E resources is not only justifiable but necessary due to location, topographical complexities, integration of particular components and existing systems which will require on-site visits with design professionals to reach a Detailed Scope of Work (DSOW). These services are essential to meeting FEMA's compliance requirements, ensuring cost-effective project management, enhancing the resilience of our infrastructure, and restoring the confidence of the people of Puerto Rico.

Due to the complexity of the system, all damaged facilities will be formulated as individual projects, which after obligation will be designed as an integrated system with the intention of creating a more resilient infrastructure that monitors, protects, and automatically optimizes the operation of its interconnected elements.

As part of the reconstruction of the system, and to incorporate all DR-4671 damages and emergency repairs into the Public Assistance Process, LUMA developed a Final Damage Summary Report.

This report will guide all stakeholders in understanding and analyzing every emergency repair that was executed during the incident and identify damage between disasters so FEMA will be able to carry out the Adjudication of damage between DR-4671 and DR-4339.

LUMA Final Damage Summary

The FEMA formulation process begins with the identification and documentation of disaster-related damages to the electrical system as the result of the declared event. The Final Damage Summary Report is the consolidation and analysis of all electrical facility repairs executed during the emergency period. The result of this analysis compares damages captured via Work Order Packages (WOP), LUMA Damage Assessments Reports, Survey 123, and Site Inspections with FEMA.

Damage Assessment

LUMA engineers and crews performed assessments on the facilities, reflecting all damages and repairs performed during the emergency period. These reports were submitted to FEMA as part of the initial eligibility determination and recommendation for federal disaster assistance.

Damage Inventory List – (DILI)

The report identifies that the facilities claimed for permanent work were listed in LUMA's first report of Damages to the Central Officer for Recovery, Reconstruction and Resiliency (COR3) and FEMA.

Work Order Packages (WOP)

This report contains the list of facilities with documented damages that LUMA assessed during the emergency period and documents all repairs and materials required to restore the facility during the emergency period.

Survey 123

Survey 123 is an internal LUMA program used to capture damage assessments and repair data. Field crews use it to document damages and repairs seen in the field, which then populates a

database. Survey 123 integrates with GIS to provide maps and reports summarizing historical damage and repair records.

Site Inspections

Teams conducted on-site evaluations of damaged energy infrastructure to assess the extent of the damage to eventually determine eligibility for FEMA assistance under DR-4671.

Internal Adjudication Analysis

The Adjudication Analysis involves analyzing Fiona inspection results and cross-referencing them with Maria DSOWs data and the 428 Settlement. This process aims to determine which damages reported in Fiona were previously claimed in a Maria Project, to support the formulation of permanent work and avoid duplication.

Damage Analysis

The Damage Analysis is a final summary that cross references all damages and repairs to demonstrate to FEMA that LUMA has conducted a thorough review and there is no duplication of damage or benefits between disasters, ensuring that all damages are accurately captured and validated for Fiona. The damage will be eventually used in the creation of permanent work projects with a SOW and cost estimate for the repairs.

Reliability Report

LUMA's records on all maintenance executed carried out on the facilities prior to DR-4671 and supporting documentation of the island wide electrical outage suffered in 2022 as a result of the storm.

Scope of Work

Scope of Work Version Zero (V0)

LUMA will provide the Final Damage Summary to FEMA for the creation of the SOW V0. This first version of the SOW focuses on the method of repairs and costs to repair the facility to its pre-disaster conditions. FEMA will be developing this version of the project scope and cost in collaboration with LUMA to ensure all repairs are captured and appropriate costs are applied.

Repair and Replace Approach

When repairing to the pre-disaster state: Infrastructure is restored to its previous design, function, and standards.

A&E Funds

FEMA will estimate the A&E funds required based on a percentage of total damage to the facility. Additional A&E funds to bring the facility from emergency repairs, which stabilized the system, up to codes & standards can be included at this stage.

Obligation - Permanent Work Individual Facilities

Once all facilities projects are obligated per area as V0, following the LUMA Planning Strategy, all damaged facilities will be evaluated, and a SOW developed incorporating Industry Standards and Mitigation opportunities.

Version 1 Permanent Repairs Projects

With obligated A&E funds, LUMA will work on the design, including codes and standards and mitigation proposals for SOW Version 1. This process will take into consideration all facilities for the area evaluated independently by FEMA but designed and integrated as an interconnected system.

Damage, Description and Dimensions

A more thorough and accurate assessment of the disaster-related damage, often informed by additional inspections, engineering assessments, and input from experts. This includes structural damage, functionality losses, and the condition of specific components of infrastructure or facilities.

Scope of Work Version 1

LUMA SOW Version 1 is a refined and detailed version of the SOW V0 developed by FEMA in the first permanent work evaluation. It builds on preliminary assessments and damage documentation to outline a comprehensive plan for permanent work.

Specific details regarding the repair or replacement of damaged infrastructure. Unlike SOW V0, which focuses on immediate, basic restoration, SOW Version 1 incorporates detailed engineering designs, specifications, and a clear plan for how the infrastructure will be restored or replaced.

Codes and Standards

All repairs and new construction outlined must meet updated local, state, and federal codes and standards. This includes energy-related regulations, building codes, safety protocols, and any industry-specific standards for infrastructure.

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

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

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

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

Hazard Mitigation Proposal

These measures are aimed at reducing future damage and risks from similar disasters. Mitigation measures may include upgrading materials, reinforcing structures, and implementing flood, wind, or seismic protections. The goal is to enhance the resilience of the restored infrastructure and consider the interconnected engineering attributes of the Mayagüez Region's infrastructure.

Cost Estimate

The cost estimate considers all permanent repairs to pre-disaster conditions, codes and standards implementation and mitigation proposal.

Environmental and Historic Preservation (EHP) Compliance

Compliance with FEMA's Environmental and Historic Preservation (EHP) regulations will be presented to FEMA. This includes detailed environmental assessments and any necessary

consultations or approvals regarding potential impacts on protected species, habitats, water quality, air quality, and historic sites.

Type of Project

Choose One (Restoration, Improved or Alternate) If improved, provide the changes in facility size, capacity, dimension, or footprint. If alternate, provide rationale for recommendations.
Restoration Project
This work will be in compliance with FEMA Public Assistance Procedures (Section 406) Guide for Permanent Work.

Note: If preliminary A&E work has not been completed, the type of work designation is considered initial and is based on currently available information. The type of work designation may be revised based on the results of the completed preliminary A&E work.

Preliminary Engineering

Is architectural and engineering funding required to help define the intended scope of work?

Yes

Codes and Standards

Which of the following types of codes, specifications, and standards apply to the restoration, replacement, relocation, or alternate scope of work?

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

1. Consensus-based codes, per FEMA (Public Assistance Alternative Procedures (Section 428) Guide for Permanent Work FEMA-4339-DR-PR February 2020).
2. Industry standards per FEMA Recovery Policy FP-104-009-5, Version 2, Implementing Section 20601 of the 2018 Bipartisan Budget Act through the Public Assistance Program.
3. FEMA Recovery Interim Policy FP-104-009-11 Version 2.1, Consensus-Based Codes, Specifications, and Standards for Public Assistance.
4. LUMA's latest Design Criteria Document (DCD) which aggregates the design considerations of the vast majority of the consensus-based codes, specifications, and standards listed in FEMA Recovery Interim Policy 104-009-11 Version 2.1 (December 20, 2019).

Codes, Specifications, and Standards

Yes If yes, describe how incorporated below.
Applicable codes and standards will be identified and incorporated into the plans and specifications.

Industry Standards

Yes If yes, describe how incorporated below.
Applicable industry standards will be identified and incorporated into the plans and specifications.

Preliminary Repair Estimate

Cost estimates to complete the work have been generated at a class 5 level, which is between -50% and +100% of the final project cost. The estimate encompasses both permanent work repair and anticipated hazard mitigation costs to include materials, construction labor and equipment, engineering, management, and contingencies.

A&E Costs are included in the forecasted estimate and anticipated at ten percent (10%) of the Total Repair Cost per Standard FEMA Public Assistance Guidance.

Estimated Distribution Repair Cost:	$19,937,919.37
Estimated Substations Repair Cost:	$ 12,751,496.36
Estimated Total Repair Cost:	$32,689,415.73

406 Hazard Mitigation Proposal

406 Mitigation Opportunity Scope of Work

In addition to the developed project scope and cost to address the direct repair of the damage and impacts from Hurricane Fiona, each individual facility will have proposed hazard mitigation added to those repairs to prevent future and similar infrastructure damage and harden the facilities to withstand tropical force impacts and other natural disaster impacts.

For Distribution assets and infrastructure, the mitigation proposals include but are not limited to pole and structure upgrades up to codes and standard to harden against hurricane force winds. Conductor replacements and upgrades, hardware and insulator upgrades and hardening will also be standard approaches to mitigate the damage caused by Fiona. Additional support and hardening proposals may also include the addition of guywires and anchoring systems and/or increased foundation installations to further harden the overall infrastructure.

Additionally, expanded hazard mitigation proposals to upgrade and harden interconnected and interdependent structures and components are being explored specifically in relation to facilities and structures adjacent to and impacted by the recorded and validated damages. Current FEMA policy does not allow the repair and replacement of “undamaged” infrastructure but to preserve overall functionality and improve overall system level resilience and prevention of future damages, LUMA in collaboration with FEMA will be proposing opportunities to further harden the system and its interconnected components.

In relation to substation and Transmission Center repairs the approaches for hazard mitigation and hardening of the facilities and associated components take much the same direction as with transmission and distribution assets. The Fiona permanent work eligibility is derived directly from the recorded and validated damages in implementing the repair to those damages “in kind”. Hazard mitigation proposals will also be directly related to the damage and enhance the repairs in preventing future and similar damage. Opportunities within the substations and TCs to expand the hazard mitigation proposals will be explored and proposed at every opportunity where interconnected or dependent components function together as a system to include receiving impacts and damages from natural events and disasters such as hurricanes, earthquakes and flooding for example.

Hazard mitigation proposals and scope of work associated with Substations and TCs will include but not be limited to equipment replacement and hardening, support structure replacements and hardening or yard repairs and enhancements to prevent future damage or harden against impacts from wind-blown debris and flooding hazards. Mitigation proposals may also include system protection and control upgrades and hardening due to direct damage and impacts or to facilitate other repairs where required

functionality and operability drive the need to mitigate to meet system needs and reduce future risks of damage or protect life and property.

Overall, the combination of the damage being repaired and hardening of the repairs through hazard mitigation will improve system reliability, safety and performance at the facility level and in large part is anticipated to improve those functions at the system level as well. While the grid overall still retains large portions of vulnerable and fragile areas of infrastructure, the implementation of Fiona PA repairs and mitigations aligned to the recovery solution currently being driven by the Maria FAASt recovery will continue to repair, replace and harden the system as whole as both disasters and their recovery efforts are combined and concentrated into a one recovery solution execution.

Environmental & Historic Preservation Requirements

EHP considerations will be identified and evaluated during the preliminary design phase and submitted to FEMA for review. Requirements will be incorporated into the final design and construction documents to be approved by FEMA prior to construction activities.

Exhibit 2

Fiona Permanent Work Area Plan: Mayagüez Region Transmission

Redacted Version (Unredacted Version Submitted Under Seal of Confidentiality)

FEMA Project Scope of Work

Project Name:

Fiona Permanent Work Area Plan: Mayagüez Region Transmission

Revision: 1

Date: January 15, 2026

APPROVALS

The signatures below formally approve the FEMA Project Scope of Work Template.

Area Plan Owner	Signature	Date
[redacted]	[redacted]	1/15/2026
Grants Manager	**Signature**	**Date**
[redacted]	[redacted]	1/15/2026

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Codes and Standards 9
Estimate 10
406 Hazard Mitigation Proposal 10

Overview

Project Name:	Fiona Permanent Work Area Plan: Mayagüez Region: Transmission
Project Type:	Overview/narrative of proposed work approach for Fiona permanent repairs and hazard mitigation
Region:	Mayagüez
Damage Number:	Multiple
Damaged Inventory/Asset Category:	Transmission Lines
FEMA Project Number: *(formerly Project Worksheet)*	Multiple Projects, Logically Grouped

Introduction

This document provides the Puerto Rico Energy Bureau (PREB) with a system-level summary of the standard Federal Emergency Management Agency (FEMA) formulation process for permanent work associated with Hurricane Fiona. On September 18, 2022, Hurricane Fiona made landfall in Puerto Rico as a Category 1 hurricane. The existing moisture condition in the area pushed ahead of the system brought some additional rainfall to the island in advance of Hurricane Fiona. Subsoils condition for the island were near saturation and rivers were running at normal to above normal levels for much of the island of Puerto Rico. Rainfall activity intensified more than 16 inches along the Cordillera and El Yunque. Total rainfall accumulations of more than 30 inches were registered in Ponce, Caguas, and San Lorenzo. Mudslides and flooding were reported in affected areas.

The magnitude of the damage on the island of Puerto Rico exceeded the government's capabilities to respond to the incident. On September 21, 2022, the President of the United States of America granted a disaster declaration (DR-4671-PR) for Puerto Rico allowing FEMA to provide Public Assistance funds for an incident period of September 17, 2022 - September 21, 2022.

This narrative outlines the steps and procedures covering various aspects such as, the repair and replacement approach, adherence to codes and standards, FEMA Section 406 mitigation and the application of Environmental and Historic Preservation (EHP) guidelines.

Facilities

Facilities List

The facilities listed below are representative of the Transmission system in the Mayagüez Region. These interconnected and interdependent Transmission Lines are the backbone on the electrical power system for transmitting the generated power around and across the island eventually feeding the Transmission Centers (TCs), Substations and subsequently the Distribution grid for delivery to the customers. These Transmission Lines are in the PREPA 10-Year Infrastructure Plan.

Mayagüez Region Transmission Lines:

Region	Name of damage/facility	Permanent Project V0 Estimate
Mayagüez	38 kV Sub Transmission Line Number 300	$ 1,989,055.05
Mayagüez	38 kV Sub Transmission Line Number 1200	$ 513,588.62
Mayagüez	38 kV Sub Transmission Line Number 1500	$ 299,681.24
Mayagüez	38 kV Sub Transmission Line Number 1600	$ 483,278.39
Mayagüez	38 kV Sub Transmission Line Number 2000	$ 305,877.90
Mayagüez	38 kV Sub Transmission Line Number 2700	$ 781,749.45
Mayagüez	38 kV Sub Transmission Line Number 2800	$ 155,767.05
Mayagüez	38 kV Sub Transmission Line Number 3700	$ 3,143,936.25
Mayagüez	38 kV Sub Transmission Line Number 5600	$ 446,298.30
Mayagüez	38 kV Sub Transmission Line Number 6500	$ 922,999.95
Mayagüez	38 kV Sub Transmission Line Number 8300	$ 1,064,103.45
Mayagüez	38 kV Sub Transmission Line Number 9200	$ 93,460.20
Mayagüez	38 kV Sub Transmission Line Number 13400	$ 219,273.86
Mayagüez	38 kV Sub Transmission Line Number 13700	$ 336,180.68
Mayagüez	38 kV Sub Transmission Line Number 15700	$ 92,536.93
Mayagüez	115 kV Transmission Line Number 36700	$ 506,928.90
Mayagüez	115 kV Transmission Line Number 37100	$ 1,003,847.10
Mayagüez	115 kV Transmission Line Number 37200	$ 79,933.01
Mayagüez	115 kV Transmission Line Number 39800	$ 182,455.73
Mayagüez	230 kV Transmission Line Number 50400	$ 316,341.45
		$ 12,937,293.50

Facilities Description

The specific facilities included in this project asset notification are: transmission lines, 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 hardware and components.

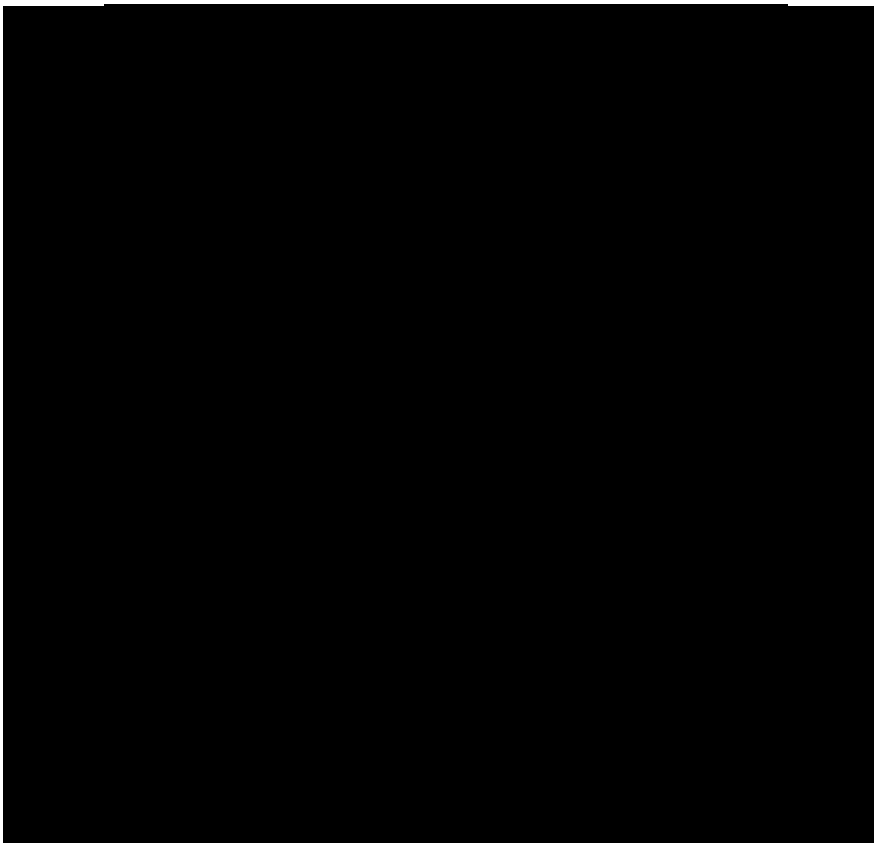
Project Scope

Scope of Work Description (e.g., Plan for Repair)

Permanent Repairs Area Strategy – Mayagüez Regional Transmission

LUMA's project permanent formulation strategy is based on Area Planning for a more systematic approach. LUMA has been conducting Area Planning studies across 71 areas within the power grids six Regions (Mayagüez, Ponce, Caguas, San Juan, Bayamón, and Arecibo) to assess adequacy of capacity

for each transmission Line, TC, substation and distribution feeder in a planning area under normal operation and contingencies.



The Area Planning was implemented to identify damages that prevent the Power System from supplying electrical service and define a scope of work (SOW) and objectives to address damages and repairs. This Area Plan strategy continues with Transmission as a separate asset due to the nature of its construction and the fact that Transmission Lines span over many areas and into adjacent Regions, thus a Regional approach was adopted for Fiona Transmission repairs. Evaluating all damages as a system will ensure that all the components are safe, reliable, resilient, and meet all applicable codes and regulations. Electric power systems are a prime example of the interdependence of the overall system to its components and functions. Each component of the system should be evaluated in conjunction with expected hazards and by understanding how each interrelated component impacts and functions with another. The studies show the need to increase reliability and resiliency to improve the functionality and ultimately restore system functionality of the overall Power System to provide critical service to the customers and withstand future storm events and natural disasters.

The planning, design and implementation of the scope of work will take into consideration all factors that threaten the electrical system, such as heavy rain and flooding, considerations for reducing risks for high wind events and fire protection and mitigation.

The first Area that was selected for study, design to codes and standards and propose hazard mitigation is Mayagüez Area G, followed by additional submissions and expansion of the strategy into Mayagüez Areas A-L. With the inclusion of Transmission facilities into the overall planning and execution, LUMA can assure that all the Regional and Area damages have been inspected and documented, showing all emergency repairs executed and damage that may still require permanent repairs.

Permanent Damages Per Area Strategy

LUMA has requested FEMA to include Architectural and Engineering (A&E) services in the formulation of permanent repairs for DR-4671. This allocation of A&E resources is not only justifiable but necessary due to location, topographical complexities, integration of particular components and existing systems which will require on-site visits with design professionals to reach a detailed scope of work. These services are essential to meeting FEMA's compliance requirements, ensuring cost-effective project management, enhancing the resilience of our infrastructure, and restoring the confidence of the people of Puerto Rico.

Due to the complexity of the system, all damaged facilities will be formulated as individual projects or logically grouped where appropriate for efficiency in formulation, which after obligation will be designed as an integrated system with the intention of creating a more resilient infrastructure that monitors, protects, and automatically optimizes the operation of its interconnected elements.

As part of the reconstruction of the system, and to incorporate all DR-4671 damages and emergency repairs into the Public Assistance Process, LUMA developed a Final Damage Summary Report.

This report will guide all stakeholders in understanding and analyzing every emergency repair that was executed during the incident and identify damage between disasters so FEMA will be able to carry out the Adjudication of damage between DR-4671(Fiona) and DR-4339 (Maria).

LUMA Final Damage Summary

The FEMA formulation process begins with the identification and documentation of disaster-related damages to the electrical system as the result of the declared event. The Final Damage Summary Report is the consolidation and analysis of all electrical facility repairs executed during the emergency period. The result of this analysis compares damages captured via Work Order Packages (WOP), LUMA Damage Assessments Reports, Survey 123, and Site Inspections with FEMA.

Damage Assessment

LUMA engineers and crews performed assessments on the facilities, reflecting all damages and repairs performed during the emergency period. These reports were submitted to FEMA as part of the initial eligibility determination and recommendation for federal disaster assistance.

Damage Inventory List – (DILI)

The report identifies that the facilities claimed for permanent work were listed in LUMA's first report of Damages to the Central Officer for Recovery, Reconstruction and Resiliency (COR3) and FEMA.

Work Order Packages (WOP)

This report contains the list of damage LUMA assessed during the emergency period and documents all repairs and materials required to restore the facility during the emergency period.

Survey 123

Survey 123 is an internal LUMA program used to capture damage assessments and repair data. Field crews use it to document damages and repairs seen in the field, which then populates a database. Survey 123 integrates with GIS to provide maps and reports summarizing historical damage and repair records.

Site Inspections

Teams conducted on-site evaluations of damaged energy infrastructure to assess the extent of the damage to eventually determine eligibility for FEMA assistance under DR-4671.

Internal Adjudication Analysis

The Adjudication Analysis involves analyzing Fiona inspection results and cross-referencing them with Maria detailed SOWs (DSOWs) data and the 428 Settlement. This process aims to determine which damages reported in Fiona were previously claimed in a Maria Project, to support the formulation of permanent work and avoid duplication.

Damage Analysis

The Damage Analysis is a final summary that cross references all damages and repairs to demonstrate to FEMA that LUMA has conducted a thorough review and there is no duplication of benefit between disasters, ensuring that all damages are accurately captured and validated for Fiona. The damage will be eventually used in the creation of the SOW that directly addresses the repairs and recovery solution for the asset.

Reliability Report

LUMA's records on all maintenance executed carried out on the facilities prior to DR-4671 and supporting documentation of the island wide electrical outage suffered in 2022 as a result of the storm.

Scope of Work

Scope of Work Version Zero (V0)

LUMA will provide the Final Damage Summary to FEMA for the creation of the SOW V0. This first version of the SOW focuses on the method of repairs and costs to repair the facility to its pre-disaster conditions.

Repair and Replace Approach

When repairing to the pre-disaster state: Infrastructure is restored to its previous design, function, and standards.

A&E Funds

FEMA will estimate the A&E funds required based on a percentage of the total damage to the facility. Additionally, A&E funds to bring the facility from emergency repairs, which stabilized the system, up to codes & standards can be included at this stage.

Obligation - Permanent Work Individual Facilities

Once all facilities projects are obligated per area as V0, following the LUMA Planning Strategy, all damaged facilities will be evaluated, and a SOW developed incorporating Industry Standards and Mitigation opportunities.

Version 1 Permanent Repairs Projects

With obligated A&E funds, LUMA will work on the design, including codes and standards and mitigation proposals for SOW Version 1. This process will take into consideration all facilities for the area evaluated independently by FEMA but designed and integrated as an interconnected system.

Damage, Description and Dimensions

A more thorough and accurate assessment of the disaster-related damage, often informed by additional inspections, engineering assessments, and input from experts. This includes structural

damage, functionality losses, and the condition of specific components of infrastructure or facilities.

Scope of Work Version 1

LUMA SOW Version 1 is a refined and detailed version of the SOW V0 developed by FEMA in the first permanent work evaluation. It builds on preliminary assessments and damage documentation to outline a comprehensive plan for permanent work.

Specific details regarding the repair or replacement of damaged infrastructure. Unlike SOW V0, which focuses on immediate, basic restoration, SOW Version 1 incorporates detailed engineering designs, specifications, and a clear plan for how the infrastructure will be restored or replaced.

Codes and Standards

All repairs and new construction outlined must meet updated local, state, and federal codes and standards. This includes energy-related regulations, building codes, safety protocols, and any industry-specific standards for infrastructure.

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

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

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

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

Hazard Mitigation Proposal

These measures are aimed at reducing future damage and risks from similar disasters. Mitigation measures may include upgrading materials, reinforcing structures, and implementing flood, wind, or seismic protections. The goal is to enhance the resilience of the repaired infrastructure and consider the interconnected engineering attributes of the regional transmission lines to ensure the final SOW addresses both repairs to the damage but also measures to prevent future and similar damage.

Cost Estimate

The cost estimate considers all permanent repairs to pre-disaster conditions, codes and standards implementation and mitigation proposal.

Environmental and Historic Preservation (EHP) Compliance

Compliance with FEMA's Environmental and Historic Preservation (EHP) regulations will be presented to FEMA. This includes detailed environmental assessments and any necessary consultations or approvals regarding potential impacts on protected species, habitats, water quality, air quality, and historic sites.

Type of Project

Choose One (Restoration, Improved or Alternate) If improved, provide changes in facility size, capacity, dimension, or footprint. If alternate, provide rationale for recommendations.
Restore to Codes & Standards Project
This work will be in compliance with FEMA Public Assistance Procedures (Section 406) Guide for Permanent Work.

Note: If preliminary A&E work has not been completed, the type of work designation is considered initial and is based on currently available information. The type of work designation may be revised based on the results of the completed preliminary A&E work.

Preliminary Engineering

Is architectural and engineering funding required to help define the intended scope of work?

Yes

Codes and Standards

Which of the following types of codes, specifications, and standards apply to the restoration, replacement, relocation, or alternate scope of work?

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

1. Consensus-based codes, per FEMA (Public Assistance Alternative Procedures (Section 428) Guide for Permanent Work FEMA-4339-DR-PR February 2020).
2. Industry standards per FEMA Recovery Policy FP-104-009-5, Version 2, Implementing Section 20601 of the 2018 Bipartisan Budget Act through the Public Assistance Program.
3. FEMA Recovery Interim Policy FP-104-009-11 Version 2.1, Consensus-Based Codes, Specifications, and Standards for Public Assistance.
4. LUMA's latest Design Criteria Document (DCD) which aggregates the design considerations of the vast majority of the consensus-based codes, specifications, and standards listed in FEMA Recovery Interim Policy 104-009-11 Version 2.1 (December 20, 2019).

Codes, Specifications, and Standards

Yes If yes, describe how incorporated below.
Applicable codes and standards will be identified and incorporated into the plans and specifications.

Industry Standards

Yes If yes, describe how incorporated below.
Applicable industry standards will be identified and incorporated into the plans and specifications.

Estimate

Cost estimates to complete the work have been generated at a class 5 level, which is between -50% and +100% of the final project cost. The estimate encompasses both permanent work repair and anticipated hazard mitigation costs to include materials, construction labor and equipment, engineering, management, and contingencies.

A&E Costs are included in the forecasted estimate and anticipated at ten percent (10%) of the Total Repair Cost per Standard FEMA Public Assistance Guidance.

Estimated Budget for Architectural & Engineering Design:	$1,293,729.35
Estimated Overall Budget for the Project:	$12,937,293.50

406 Hazard Mitigation Proposal

406 Mitigation Opportunity Scope of Work

These measures are aimed at reducing future damage and risks from similar disasters. Mitigation measures may include upgrading materials, reinforcing structures, and implementing flood, wind, or seismic protection. The goal is to enhance the resiliency of the restored infrastructure. LUMA will provide FEMA general HMP for electrical facilities for V0.

In addition to the developed project scope and cost to address the direct repair of the damage and impacts from Hurricane Fiona, each individual facility will have proposed hazard mitigation added to those repairs to prevent future and similar infrastructure damage and harden the facilities to withstand tropical force impacts and other natural disaster impacts.

For Transmission assets and infrastructure, the mitigation proposals include but are not limited to pole, tower and structure upgrades up to codes and standard to harden against hurricane force winds. Conductor replacements and upgrades, hardware and insulator upgrades and hardening will also be standard approaches to mitigate the damage caused by Fiona. Additional support and hardening proposals may also include the addition of guywires and anchoring systems and/or increased foundation installations to further harden the overall infrastructure.

Additionally, expanded hazard mitigation proposals to upgrade and harden interconnected and interdependent structures and components are being explored specifically in relation to facilities and structures adjacent to and impacted by the recorded and validated damages. Current FEMA policy does not allow the repair and replacement of “undamaged” infrastructure but to preserve overall functionality and improve overall system level resilience and prevention of future damages, LUMA in collaboration with FEMA will be proposing opportunities to further harden the system and its interconnected components.

In relation to substation and TC repairs, where Transmission Lines terminate and deliver power, the approaches for hazard mitigation and hardening of the facilities and associated components take much the same direction as with Substation, Transmission Center and Distribution assets. The Fiona permanent work eligibility is derived directly from the recorded and validated damages in implementing the repair to those damages “in kind” to restore to pre-disaster condition. Hazard mitigation proposals will also be directly related to the damage and enhance the repairs in preventing future and similar damage. Opportunities within the Substations and TCs to expand the hazard mitigation proposals will be explored and proposed at every opportunity where interconnected or dependent components, such as

Transmission Lines, function together as a system to include receiving impacts and damages from natural events and disasters such as hurricanes, earthquakes and flooding for example.

Hazard mitigation proposals and scope of work associated with Substations and TCs will include but not be limited to equipment replacement and hardening, support structure replacements and hardening or yard repairs and enhancements to prevent future damage or harden against impacts from wind-blown debris and flooding hazards. Mitigation proposals may also include system protection and control upgrades and hardening due to direct damage and impacts or to facilitate other repairs where required functionality and operability drive the need to mitigate to meet system needs and reduce future risks of damage or protect life and property.

Overall, the combination of the damage being repaired and hardening of the repairs utilizing hazard mitigation will improve system reliability, safety and performance at the facility level and in large part is anticipated to improve those functions at the system level as well. While the grid overall still retains large portions of vulnerable and fragile areas of infrastructure, the implementation of Fiona PA repairs and mitigations aligned to the recovery solution currently being driven by the Maria FAASt recovery will continue to repair, replace and harden the system as whole as both disasters and their recovery efforts are combined and concentrated into a one recovery solution execution.

Environmental & Historic Preservation Requirements

EHP considerations will be identified and evaluated during the preliminary design phase and submitted to FEMA for review. Requirements will be incorporated into the final design and construction documents to be approved by FEMA prior to construction activities.