

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

NEPR

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IN RE:

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

CASE NO. NEPR-MI-2021-0002

**SUBJECT: Motion Submitting Three Amended
Scopes of Work, and Request for Confidentiality
and Supporting Memorandum of Law**

**MOTION SUBMITTING THREE AMENDED SCOPES OF WORK, AND 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, respectfully submits the following:

I. Submittal of Amended Scopes of Work

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 Augst 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 263 initial scopes

of work (“ISOWs”) to date. The Energy Bureau has approved all the SOWs submitted by LUMA as of August 23, 2024.

3. On April 14, 2021, PREPA filed a *Motion in Compliance with the Resolution and Order Entered on March 26, 2021*, which included a list of projects under the categories of transmission, distribution, and substations. PREPA submitted the list of projects to the Energy Bureau at least thirty (30) calendar days before their submittal to COR3 and/or FEMA, aligning with the March 26th Order.

4. Then, on April 22, 2021, the Energy Bureau issued a Resolution and Order (“April 22nd Order”). It was determined that additional information was required to thoroughly evaluate the projects submitted by PREPA and evaluate their compliance with the March 26th Order. The Energy Bureau ordered PREPA to provide detailed information: (i) on or before April 28, 2021, for each project already submitted to COR3 and/or FEMA; and (ii) on or before May 21, 2021, for each project in that will be submitted to COR3 and/or FEMA under the different project categories. It also ordered PREPA to include a list of all the substations to be relocated to mitigate possible future flooding damage.

5. In compliance with the April 22nd Order, on April 28, 2021, PREPA filed a *Motion in Compliance with the Resolution and Order entered on April 22, 2021*. PREPA submitted the Scopes of Work (“SOW”) provided to COR3 and FEMA in compliance with the April 22nd Order. The SOWs submitted by PREPA included the “FAASt – Line 36100- Dos Bocas HP to Monacillos TC (Transmission)” and the “FAASt Garzas 1 HP to Garzas 2 HP – Line 1100 (Transmission)” T&D Projects.

6. On June 8, 2021, the Energy Bureau entered a Resolution and Order in which it determined that many of the SOWs for T&D projects submitted by PREPA were necessary to improve the system's reliability ("June 8th Order"). Therefore, it approved the majority of the projects presented in the April 28th Submission, including the "FAASt – Line 36100- Dos Bocas HP to Monacillos TC (Transmission)" and the "FAASt Garzas 1 HP to Garzas 2 HP – Line 1100 (Transmission)" T&D Projects. Further, the Energy Bureau ordered PREPA to submit a copy of the approval by COR3 and/or FEMA of the projects, which shall contain the costs obligated for each project within ten (10) days of receiving such approval.

7. On October 4, 2021, LUMA filed a *Motion Submitting Updated List of Transmission and Distribution Projects and Thirty-Eight Scopes of Work*, whereby LUMA submitted thirty-eight (38) SOWs for T&D Projects for the Energy Bureau's review and approval before submitting them to COR3 and FEMA ("October 4th Motion"). Among the SOWs submitted to this Energy Bureau was the "Santurce Planta (Sect) 1116" T&D Project.

8. On October 18, 2021, the Energy Bureau entered a Resolution and Order in which, among other considerations, it approved all thirty-eight (38) T&D projects submitted by LUMA in the October 4th Motion, including the "Santurce Planta (Sect) 1116" T&D Project, and deemed it necessary to improve the system's reliability ("October 18th Order"). Further, the Energy Bureau ordered LUMA to seek the Energy Bureau's approval immediately should the scope of the approved project change.

9. LUMA has since identified the need to submit an amended "FAASt – Line 36100- Dos Bocas HP to Monacillos TC (Transmission)" T&D Project because it will be developed and submitted as eight (8) separate projects ("Program for Line 36100 Dos Bocas HP to Monacillos

TC Sections”). The Program for Line 36100 Dos Bocas HP to Monacillos TC Sections also reflects updated costs, design standards, and additional items.

10. Similarly, LUMA requires amendments to the “FAASt Garzas 1 HP to Garzas 2 HP – Line 1100 (Transmission)” and “Santurce Planta (Sect) 1116” T&D Projects (“Transmission Line 1100-Garzas 1 HP to Garzas 2 HP” and “Santurce Planta Substations 1116 and 1117”). These amended SOWs include revised costs, design standards, and additional items.

11. LUMA requests that the Energy Bureau replace the previously approved SOWs, as detailed in this motion, and substitute them with those submitted as *Exhibits 1, 2, and 3* to this Motion. LUMA also requests that this Energy Bureau approve the Amended SOWs that are submitted with this Motion, to wit, “Program for Line 36100 Dos Bocas HP to Monacillos TC Sections,” “Transmission Line 1100-Garzas 1 HP to Garzas 2 HP,” and “Santurce Planta Substations 1116 and 1117” T&D SOWs.

II. Request for Confidentiality and Supporting Memorandum of Law

12. LUMA hereby submits as *Exhibits 1, 2, and 3* to this Motion, the “Program for Line 36100 Dos Bocas HP to Monacillos TC Sections,” “Transmission Line 1100-Garzas 1 HP to Garzas 2 HP,” and “Santurce Planta Substations 1116 and 1117” T&D SOWs.

13. LUMA hereby requests that *Exhibits 1, 2, and 3* be maintained confidential and submit redacted versions of each for public disclosure, as well as confidential unredacted versions.

14. LUMA submits a Memorandum of Law stating the legal basis for which the unredacted versions of *Exhibits 1, 2, and 3* should be filed under seal of confidentiality. As will be explained below, the unredacted versions of SOWs in *Exhibits 1, 2, and 3*, 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 (the “SOW with CEII”). *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.

15. In addition, the SOWs include personal identifying information of individuals who are LUMA staff or contractors protected under Puerto Rico’s legal framework on privacy emanating from the Puerto Rico Constitution and should also be protected pursuant to the Energy Bureau’s Policy on Management of Confidential Information.

III. Memorandum of Law in Support of Request for Confidentiality

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

16. 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 (2024). 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).

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

18. 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.

19. Moreover, the Energy Bureau’s Policy on Management of Confidential Information details the procedures a party should follow to request that a document or portion thereof be afforded confidential treatment. In essence, the referenced Policy requires identifying confidential information and filing a memorandum of law explaining the legal basis and support for a request to file information confidentially. *See* CEPR-MI-2016-0009, Section A, as amended by the Resolution of September 20, 2016, CEPR-MI-2016-0009. The memorandum should also include a table that identifies the confidential information, a summary of the legal basis for the confidential designation, and why each claim or designation conforms to the applicable legal basis of confidentiality. *Id.* at ¶ 3. The party 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.

20. The Energy Bureau’s Policy on Management of Confidential Information states the following with regard to access to CEII:

Critical Energy Infrastructure Information (“CEII”)

The information designated by the [Energy Bureau] as Validated Confidential Information on the grounds of being CEII may be accessed by the parties’ authorized representatives only after they have executed and delivered the Nondisclosure Agreement.

Those authorized representatives who have signed the Non-Disclosure Agreement may only review the documents validated as CEII at the [Energy Bureau] or the Producing Party’s offices. During the review, the authorized representatives may not copy or disseminate the reviewed information and may bring no recording device to the viewing room.

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

21. Furthermore, 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.”

B. Discussion in Support of Request for Confidential Treatment

22. 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.

23. Generally, CEII or critical infrastructure information is exempted from public disclosure because it involves assets and information which 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.

24. 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.*

25. 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”).¹ 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).²

¹ 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
 - (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.

² 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

26. The Amended SOWs included in *Exhibits 1, 2, and 3* contain CEII that, under relevant federal law and regulations, are protected from public disclosure. LUMA stresses that the unredacted versions of the Amended SOWs 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.³ In at least two proceedings on Data Security⁴ and Physical Security,⁵ this Energy Bureau, *motu proprio*, has conducted proceedings confidentially, thereby recognizing the need to protect CEII from public disclosure.

27. The Amended SOWs 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 could potentially be helpful to a person planning an attack on this or other energy infrastructure facilities

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.

³ 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).

⁴ *In re Review of the Puerto Rico Electric Power Authority Data Security Plan*, NEPR-MI-2020-0017.

⁵ *In re Review of the Puerto Rico Electric Power Authority Physical Security Plan*, NEPR-MI-2020-0018.

interconnected with or served by this facility and equipment. In addition, the Amended SOWs qualify as CEII because each document contains the express coordinates to power transmission and distribution facilities (18 C.F.R. § 388.113(iv)). These specific coordinates could potentially be helpful to a person planning an attack on the energy facilities listed in the SOWs. The pages that contain the CEII are identified within the table in Part C of this motion, which summarizes the hallmark requests for confidentiality for the Amended SOWs. The information identified as confidential in the table 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 SOWs with CEII in *Exhibit 1*, *2*, and *3* from disclosure, given the nature and scope of the details included in those portions of the Exhibit.

28. This Energy Bureau has granted requests by LUMA to protect CEII in connection with LUMA's submissions of ISOWs in the present docket. *See e.g.* Resolution and Order of July 24, 2024, table 1 on page 4 (four (4) ISOWs); Resolution and Order of June 28, 2024, table 2 on page 3 (one (1) ISOW); Resolution and Order of June 28, 2024, table 1 on page 3 (one (1) Amended ISOW); Resolution and Order of May 7, 2024, table 2 on pages 4-5 (one (1) Amended ISOW and eleven (11) ISOWs). Relatedly, The Energy Bureau has also granted LUMA's requests 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).

29. LUMA respectfully submits that the designation of portions of the SOWs as CEII 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 *Exhibits 1, 2, and 3*. 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.

30. In addition, portions of the Amended SOWs contain the name, signature, and role of individuals who are LUMA employees or contractors who reviewed the SOW 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 maintained 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 applies *ex proprio vigore* and against private parties. *See also e.g. Vigoreaux v. Quiznos*, 173 DPR 254, 262 (2008); *Bonilla Medina v. P.N.P.*, 140 DPR 294, 310-11 (1996), *Pueblo v. Torres Albertorio*, 115 DPR 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). 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 SOWs nor interfere with processes before this Energy Bureau. Therefore, on balance, the public interest to protect privacy weighs in favor of protecting the relevant portions of the SOWs.

31. Relatedly, the Energy Bureau has also granted requests by LUMA to protect individual's personal information in connection with LUMA's submissions of ISOWs in the present docket. *See e.g.* Resolution and Order of July 24, 2024, table 1 on page 4 (four (4) ISOWs);

Resolution and Order of June 28, 2024, table 2 on page 3 (one (1) ISOW); Resolution and Order of June 28, 2024, table 1 on page 3 (one (1) Amended ISOW); Resolution and Order of May 7, 2024, table 2 on pages 4-5 (one (1) Amended ISOW and eleven (11) ISOWs).

C. Identification of Confidential Information

32. 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	Program for Line 36100 Dos Bocas HP to Monacillos TC Sections	Pages 1 and 4	Right to privacy (<i>see, e.g.</i> , Const. ELA, Art. II, Sections 8 and 10)	December 12, 2024
		Page 5	Critical Energy Infrastructure Information, 18 C.F.R. § 388.113; 6 U.S.C. §§ 671-674.	December 12, 2024

Document	Name	Pages in which Confidential Information is Found, if applicable	Summary of Legal Basis for Confidentiality Protection, if applicable	Date Filed
Exhibit 2	Transmission Line 1100-Garzas 1 HP to Garzas 2 HP	Pages 1 and 4	Right to privacy (<i>see, e.g.</i> , Const. ELA, Art. II, Sections 8 and 10)	December 12, 2024
		Page 5	Critical Energy Infrastructure Information, 18 C.F.R. § 388.113; 6 U.S.C. §§ 671-674.	December 12, 2024
Exhibit 3	Santurce Planta Substations 1116 and 1117	Pages 1 and 4	Right to privacy (<i>see, e.g.</i> , Const. ELA, Art. II, Sections 8 and 10)	December 12, 2024
		Pages 5, 8, and 9	Critical Energy Infrastructure Information, 18 C.F.R. § 388.113; 6 U.S.C. §§ 671-674.	December 12, 2024

WHEREFORE, LUMA respectfully requests that the Energy Bureau **take notice** of the aforementioned; **approve** the three Amended SOWs for T&D Projects submitted as *Exhibit 1, 2, and 3* to this Motion; and **grant** the request for confidential treatment of *Exhibit 1, 2, and 3*.

RESPECTFULLY SUBMITTED.

In San Juan, Puerto Rico, this 12th day of December 2024.

We hereby certify that we filed this Motion using the electronic filing system of this Energy Bureau and that we will send an electronic copy of this Motion to counsel for PREPA, Alexis Rivera, arivera@gmlex.net, and to Genera PR LLC, through its counsel of record, Jorge Fernández-Reboredo, jfr@sbgblaw.com and Alejandro López Rodríguez, alopez@sbgblaw.com.



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Exhibit 1

Redacted Version (Unredacted Version Submitted under Seal of Confidentiality)

	Document Title: FEMA Project Scope of Work	Project ID: 167446
	Project Name: Line 36100 Dos Bocas HP to Monacillos TC	DR-4339-PR Public Assistance


FEMA Project Scope of Work (Initial)

Project Name:
Program for Line 36100 Dos Bocas HP to Monacillos TC Sections
Revision: 0

APPROVALS

The signatures below provide LUMA leadership's formal approval of the Initial Scope of Work.

Program Brief Management Leadership (PBML)		
Program Brief Owner	Signature	Date
		10/26/2024
Grants Manager	Signature	Date
		09/27/2024

	Document Title: FEMA Project Scope of Work	Project ID: 167446
	Project Name: Line 36100 Dos Bocas HP to Monacillos TC	DR-4339-PR Public Assistance

DOCUMENT REVISION HISTORY

This table contains the history of the revisions made to this FEMA Project Scope of Work.

Rev.	Effective Date	Description of Change
0	September 27, 2024	Initial Release



	Document Title: FEMA Project Scope of Work	Project ID: 167446
	Project Name: Line 36100 Dos Bocas HP to Monacillos TC	DR-4339-PR Public Assistance

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1.0 OVERVIEW

Project Name:	Program Line 36100 Dos Bocas HP to Monacillos TC Sections
Project type:	Restoration to Codes/Standards: Restores the facility(s) to pre-disaster function and to approved
Region:	San Juan, Guaynabo, Bayamón, Toa Alta, Toa Baja, Corozal, Morovis, Ciales, Utuado, Arecibo
Program Brief Owner:	
Project Sponsor:	
Damage Number:	429483
Damaged Inventory / Asset Category:	Island Wide Transmission Line System
FEMA Project Number:	176446

2.0 INTRODUCTION

The purpose of this document is to present and update an Initial Scope of Work (ISOW) with Cost Estimates to be submitted to the Central Office for Recovery, Reconstruction and Resilience for Puerto Rico (COR3) and the Federal Emergency Management Agency (FEMA) for projects under DR-4339-PR Public Assistance. The completed document will be reviewed by COR3 and FEMA to create and version a specific project worksheet and post fixed-cost estimates to repair, restore, or replace eligible facilities including Section 406 hazard mitigation for a specific project.


This document provides a description of the project including an initial scope of work, cost estimates as well as Environmental & Historical Preservation (EHP) relevant information and proposed 406 hazard mitigation work.

LUMA Energy provides the Operation and Maintenance of the Puerto Rico Transmission and Distribution System. The Puerto Rico Power Electric Authority (PREPA) is the government agency that owns the facilities, sites, and systems identified in this Scope of Work that are eligible as critical services facilities as defined in the PAAP (Section 428) and BBA 2018 guidance documents.

3.0 FACILITIES

3.1 Facilities Description

Transmission Line 36100 consists of 8 sections (identified in the table in Section 3.2, below) which start at the Dos Bocas Hydroelectric Plant substation and run east to the Monacillos Transmission Center (TC). Each of the 8 sections will be developed and submitted as 8 separate projects. The structures along the line segments consist of wood multi-pole structures with guy wires. Interspersed among those poles are self-supporting steel monopoles. Portions of the transmission line also have distribution feeders attached to the structures and below the transmission line (distribution underbuilds). The transmission line traverses mountainous terrain.

	Document Title: FEMA Project Scope of Work	Project ID: 167446
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Components of the transmission line include the structures supporting the overhead conductor (including their foundation), framing for the support structures, insulators, load break switches (manual and automated), conductor, guy wires, anchors, and grounding assemblies.

3.2 Facilities List


The facilities listed below are part of the 49 circuit miles of overhead transmission line from Dos Bocas HP to Monacillos TC. Transmission Line 36100 is part of the Near-Term Group #1: 12-Transmission Existing (115 & 230 kV) project in the PREPA 10-Year Infrastructure Plan at page 60 (June 2021)

Name	Number	GPS Start	GPS End
Dos Bocas HP to Ciales TC	36100		
Ciales TC to Morovis TC	36100		
Morovis TC to Unibón TC	36100		
UnibónTC to Monterrey TC	36100		
Monterrey TC to Pina GIS TC	36100		
Pina GIS TC to Cana TC	36100		
Cana TC to Bayamón TC	36100		
Bayamón TC to Monacillos TC	36100		

The scope of work for the individual sections of Transmission Line 36100 will consist of the repair and replacement of damaged elements of the overhead portion of the line and will bring to consensus-based codes both disaster damaged and non-damaged but functionally interdependent structures of the transmission line.

Transmission structures will be replaced to meet applicable codes and standards. The transmission line will be modeled and analyzed to validate design criteria, including electrical clearances and mechanical loading requirements. Field assessments of overhead conductor and facilities will identify damage and assets to be repaired or replaced. The results of this detailed assessment will be used to define the scope of work.

The work will include: replace insulators with polymer insulators; repair, replace, or add guy wires; repair or replace anchors, structure connections, structure foundations, or portions of the foundations; restore the integral ground of the structure and overhead ground conductor; restore communications associated with the transmission line; replace conductor spans when broken with splices, bird cages, pitting, burns, kinks, or stretched conductors; repair or add vibration and/or drag dampers or armor rods; other repairs necessary to conform with codes and standards based upon engineering design specifications and requirements.

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Vegetation management practices will be implemented where vegetation is encroaching on existing transmission facilities to be repaired or where new facilities will be installed. The scope of vegetation removal will be defined during the preliminary engineering phase

4.0 TYPE OF PROJECT

Choose One (Restoration, Improved or Alternate)
Restoration to Codes/Standards: Restores the facility(s) to pre-disaster function and to approved.
This work will follow FEMA (Public Assistance Alternative Procedures (Section 428) Guide for Permanent Work FEMA-4339-DR-PR February 2020).

Note: If preliminary A&E work has not been completed, the type of 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.

5.0 PRELIMINARY ENGINEERING


Is architectural and engineering (A&E) funding required to help define the intended scope of work?

Yes, architectural and engineering funding required to help define the intended scope of work.

6.0 CODES AND STANDARDS

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

1. Consensus-based codes, per FEMA (Public Assistance Alternative Procedures (Section 428) Guide for Permanent Work FEMA-4339-DR-PR February 2020).
2. Industry standards per FEMA Recovery Policy FP-104-009-5, Version 2, Implementing Section 20601 of the 2018 Bipartisan Budget Act (BBA) 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 most of the consensus-based codes, specifications, and standards listed in FEMA Recovery Interim Policy 104-009-11 Version 2.1 (December 20, 2019).

	Document Title: FEMA Project Scope of Work	Project ID: 167446
	Project Name: Line 36100 Dos Bocas HP to Monacillos TC	DR-4339-PR Public Assistance

Codes, Specifications, and Standards

Yes, applicable codes and standards will be identified and incorporated into the plans and specifications.

Industry Standards

Yes: applicable industry standards will be identified and incorporated into the plans and specifications.

7.0 COST 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 includes materials, construction labor and equipment, engineering, permitting, management, and contingencies.

Estimated Budget for Architectural & Engineering Design:	\$11,475,581
Estimated Budget for Procurement & Construction:	\$167,240,717
Estimated Overall Budget for the Project:	\$178,716,298


8.0 406 HAZARD MITIGATION PROPOSAL

9.1 406 Mitigation Opportunity Scope of Work

During the preliminary design phase, LUMA will develop 406 Hazard Mitigation proposals consistent with the damage. These proposals will be supported with BCAs.

9.2 406 Mitigation Opportunity Cost Estimate

Estimated Budget for Architectural & Engineering to Design:	Unknown at this time.
Estimated Budget for Procurement:	Unknown at this time.
Estimated Budget for Construction:	Unknown at this time.
Estimated Overall Budget for the Project:	Unknown at this time.

	Document Title: FEMA Project Scope of Work	Project ID: 167446
	Project Name: Line 36100 Dos Bocas HP to Monacillos TC	DR-4339-PR Public Assistance

9.0 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, which must be approved by FEMA prior to construction activities.


10.0 ATTACHMENTS

Attachments are not included.

END OF DOCUMENT

Exhibit 2

Redacted Version (Unredacted Version Submitted under Seal of Confidentiality)

	Document Title: FEMA Initial Scope of Work Rev# 1	Project ID: Provided by FEMA
	Project Name: Transmission Line 1100-Garzas 1 HP to Garzas 2 HP	DR-4339-PR Public Assistance

FEMA Project Scope of Work (Initial)


Project Name:
Transmission Line 1100-Garzas 1 HP to Garzas 2 HP
Revision: 1

Date: September 13, 2024

APPROVALS

The signatures below provide LUMA leadership’s formal approval of this Initial Scope of Work.

Program Brief Management Leadership (PBML)		
Program Brief Owner	Signature	Date
<div></div>	<div></div>	09/19/2024
Grants Manager	Signature	Date
<div></div>	<div></div>	10/11/2024

	Document Title: FEMA Initial Scope of Work Rev# 1	Project ID: Provided by FEMA
	Project Name: Transmission Line 1100-Garzas 1 HP to Garzas 2 HP	DR-4339-PR Public Assistance

DOCUMENT REVISION HISTORY

This table contains the history of the revisions made to this FEMA Project Scope of Work.

Rev.	Effective Date	Description of Change
0	February 19, 2021	Initial Release
1	September 13, 2024	Updated cost estimate.



	Document Title: FEMA Initial Scope of Work Rev# 1	Project ID: Provided by FEMA
	Project Name: Transmission Line 1100-Garzas 1 HP to Garzas 2 HP	DR-4339-PR Public Assistance

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	Document Title: FEMA Initial Scope of Work Rev# 1	Project ID: Provided by FEMA
	Project Name: Transmission Line 1100-Garzas 1 HP to Garzas 2 HP	DR-4339-PR Public Assistance

1.0 OVERVIEW

Project Name:	Transmission Line 1100-Garzas 1 HP to Garzas 2 HP
Region:	Ponce
Program Brief Owner:	[REDACTED]
Project Sponsor:	[REDACTED]
Project Manager:	[REDACTED]
Damage Number:	448388
Damaged Inventory / Asset Category:	Island Wide Transmission Line System
FEMA Project Number:	176954

2.0 INTRODUCTION

The purpose of this document is to present and update an Initial Scope of Work (ISOW) with Cost Estimates to be submitted to the Central Office for Recovery, Reconstruction and Resilience for Puerto Rico (COR3) and the Federal Emergency Management Agency (FEMA) for projects under DR-4339-PR Public Assistance. The completed document will be reviewed by COR3 and FEMA to create and version a specific project worksheet and post fixed-cost estimates to repair, restore, or replace eligible facilities including Section 406 hazard mitigation for a specific project.


This document provides a description of the project including an initial scope of work, cost estimates as well as Environmental & Historical Preservation (EHP) relevant information and proposed 406 hazard mitigation work.

LUMA Energy provides the Operation and Maintenance of the Puerto Rico Transmission and Distribution System. The Puerto Rico Power Electric Authority (PREPA) is the government agency that owns the facilities, sites, and systems identified in this Scope of Work that are eligible as critical services facilities as defined in the PAAP (Section 428) and BBA 2018 guidance documents.

3.0 FACILITIES

3.1 Facilities Description

Transmission Line 1100 is a 1.7-mile 38kV overhead transmission line connecting Hydro Generation Plants Garzas 1 HP (Hydro Plant) and Garzas 2 HP. This line experienced hurricane-related disaster damage after Hurricane Maria and is currently out of service. Transmission Line 1100 is necessary to connect the Garzas 2 Hydro Power facility to the grid. The line consists of a variety of different types of poles, and is in a rural, mostly forested area with mountainous and hilly terrain. Existing poles on this line are not accessible by vehicle. There is a total of eight (8) existing structures that were severely damaged from the hurricane, having broken structure members, conductors, and guy wires. The project will install a total of 17 new steel poles: eight (8) existing poles will be replaced with new steel poles, and nine (9) new steel poles will be added. The transmission line will remain along its existing route and within the existing right-of-way.

	Document Title: FEMA Initial Scope of Work Rev# 1	Project ID: Provided by FEMA
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The existing Transmission Line infrastructure will no longer be in use and will be demolished and removed from the location. This will include all the existing steel/wood pole structure, conductor, guy wire, anchor, insulator, and hardware. The construction contractor is responsible for debris removal and disposal

3.2 Facilities List

Name	Number	GPS Start	GPS End	Voltage Level (kV)
1100-Garzas 1 HP to Garzas 2 HP	448388			38 kV

4.0 PROJECT SCOPE OF WORK

4.1 Scope of Work Description


The scope of work for Line 1100 will consist of the repair and replacement of damaged elements of the overhead portion of the transmission line. Both disaster-damaged and non-damaged facilities, which are functionally interdependent, will be designed and constructed to meet current consensus-based codes.

Transmission poles and structures will be replaced to meet applicable codes and standards. The transmission line will be modeled and analyzed to validate design criteria, including electrical clearances and mechanical loading requirements. Field assessments of overhead conductor and facilities will identify damage and assets to be repaired or replaced. The results of this detailed assessment will be used to define the scope of work.

The work will include: replace insulators with polymer insulators; repair, replace, or add guy wires; repair or replace anchors, structure connections, structure foundations, or portions of the foundations; restore the integral ground of the structure and overhead ground conductor; restore communications associated with the transmission line; replace conductor spans when broken with splices, bird cages, pitting, burns, kinks, or stretched conductors; repair or add vibration and/or drag dampers or armor rods; other repairs necessary to conform with codes and standards based upon engineering design specifications and requirements.

Vegetation management will be implemented where vegetation is encroaching on existing transmission facilities to be repaired or where new facilities will be installed. The scope of vegetation removal will be defined during the 30% engineering phase.

The 30% engineering will determine if soil borings or testing is needed to evaluate suitability for installation of structures/poles or underground cable systems. When possible, facilities will remain along their existing route and within the existing right-of-way.

	Document Title: FEMA Initial Scope of Work Rev# 1	Project ID: Provided by FEMA
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5.0 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.

Restoration to Codes/Standards: Restores the facility(s) to pre-disaster function and to approved codes/standards.

This work will be in compliance with FEMA (Public Assistance Alternative Procedures (Section 428) Guide for Permanent Work FEMA-4339-DR-PR February 2020).

Note: If preliminary A&E work has not been completed, the type of 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.

6.0 PRELIMINARY ENGINEERING

Is architectural and engineering (A&E) funding required to help define the intended scope of work?

Yes, architectural and engineering funding is required to help define the intended scope of work.

7.0 CODES AND STANDARDS


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

1. Consensus-based codes, per FEMA (Public Assistance Alternative Procedures (Section 428) Guide for Permanent Work FEMA-4339-DR-PR February 2020).
2. Industry standards per FEMA Recovery Policy FP-104-009-5, Version 2, Implementing Section 20601 of the 2018 Bipartisan Budget Act (BBA) 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 most 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, applicable codes and standards will be identified and incorporated into the plans and specifications.

Industry Standards

	Document Title: FEMA Initial Scope of Work Rev# 1	Project ID: Provided by FEMA
	Project Name: Transmission Line 1100-Garzas 1 HP to Garzas 2 HP	DR-4339-PR Public Assistance

Yes: applicable industry standards will be identified and incorporated into the plans and specifications.

8.0 COST ESTIMATE

Cost estimates for this work are prepared in conformance with class 5 accuracy, which is between -50% and +100% of the final project cost. The estimate includes and is not limited to materials, construction labor and equipment, engineering, management, and contingencies.

Estimated Budget for Architectural & Engineering Design:	\$986,553
Estimated Budget for Procurement & Construction:	\$4,301,143
Estimated Overall Budget for the Project:	\$5,287,696

9.0 406 HAZARD MITIGATION PROPOSAL

9.1 406 Mitigation Opportunity Scope of Work

LUMA will develop 406 Hazard Mitigation proposals during the preliminary engineering phase that are consistent with the damage.


9.2 406 Mitigation Opportunity Cost Estimate

Estimated Budget for Architectural & Engineering to Design:	Unknown at this time.
Estimated Budget for Procurement:	Unknown at this time.
Estimated Budget for Construction	Unknown at this time.
Estimated Overall Budget for the Project:	Unknown at this time.

Note: If available, detailed engineering cost estimates will be included as an attachment.

10.0 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, which must be approved by FEMA prior to construction activities.

	Document Title: FEMA Initial Scope of Work Rev# 1	Project ID: Provided by FEMA
	Project Name: Transmission Line 1100-Garzas 1 HP to Garzas 2 HP	DR-4339-PR Public Assistance


11.0 ATTACHMENTS

Attachments are not included.

END OF DOCUMENT

Exhibit 3

Redacted Version (Unredacted Version Submitted under Seal of Confidentiality)

	Document Title: FEMA Project Scope of Work (Initial)	Project ID: 10022
	Project Name: Santurce Planta Substations 1116 and 1117	DR-4339-PR Public Assistance


FEMA Project Scope of Work (Initial)

Project Name:
Santurce Planta Substations 1116 and 1117
Revision: 1

APPROVALS

The signatures below are LUMA leadership's formal approval on this Initial Scope of Work.

Program Brief Management Leadership (PBML)		
Program Brief Owner	Signature	Date
		11/08/2024
Grants Manager	Signature	Date
		11/15/2024

	Document Title: FEMA Project Scope of Work (Initial)	Project ID: 10022
	Project Name: Santurce Planta Substations 1116 and 1117	DR-4339-PR Public Assistance

DOCUMENT REVISION HISTORY

This table contains the history of the revisions made to this FEMA Project Scope of Work.

Rev.	Effective Date	Description of Change
0	January 21, 2024	Initial Release
1	September 11, 2024	Scope and Cost Review; Modification of name of project to add "Substations 1116 and 1117"



	Document Title: FEMA Project Scope of Work (Initial)	Project ID: 10022
	Project Name: Santurce Planta Substations 1116 and 1117	DR-4339-PR Public Assistance

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	Document Title: FEMA Project Scope of Work (Initial)	Project ID: 10022
	Project Name: Santurce Planta Substations 1116 and 1117	DR-4339-PR Public Assistance

1.0 OVERVIEW

Project Name:	Santurce Planta Substations 1116 and 1117
Project type:	Restoration to Codes/Standards: Restores the facility(s) to pre-disaster function and to approved
Region:	San Juan
Program Brief Owner:	[REDACTED]
Project Sponsor:	[REDACTED]
Damage Number:	223189
Damaged Inventory / Asset Category:	Island Wide Substation
FEMA Project Number:	TBD

2.0 INTRODUCTION

The purpose of this document is to present and update an Initial Scope of Work (ISOW) with Cost Estimates to be submitted to the Central Office for Recovery, Reconstruction and Resilience for Puerto Rico (COR3) and the Federal Emergency Management Agency (FEMA) for projects under DR-4339-PR Public Assistance. The completed document will be reviewed by COR3 and FEMA to create and version a specific project worksheet and post fixed-cost estimates to repair, restore, or replace eligible facilities including Section 406 hazard mitigation for a specific project.

This document provides a description of the project including an initial scope of work, cost estimates as well as Environmental & Historical Preservation (EHP) relevant information and proposed 406 hazard mitigation work.


LUMA Energy provides the Operation and Maintenance of the Puerto Rico Transmission and Distribution System. The Puerto Rico Power Electric Authority (PREPA) is the government agency that owns the facilities, sites, and systems identified in this Scope of Work that are eligible as critical services facilities as defined in the PAAP (Section 428) and BBA 2018 guidance documents.

3.0 FACILITIES

3.1 Facilities Description

The Santurce Planta consists of two substations 1116 and 1117 that provide 38 kV service to line 10600 from Villamil and line 4200 from Viaducto TC.

The facilities of the Santurce Planta substations consist of:

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- One (1) 38/13.2 kV, 18/33.6 MVA, Wye-Wye, step down transformer (Year 2020) 1116 Santurce Planta.
- One (1) 38/13.2 kV, 18/33.6 MVA, Wye-Wye, step down transformer (Year 1999) 1117 Santurce Planta 2.
- Twelve (12) distribution breakers of 1,200 A each.
- Two (2) main breakers of 2,000 A each
- One (1) bus tie breaker of 2,000 A
- Five (5) 38 kV circuit breakers:
 - Four (4) oil circuit breakers (OCB)
 - One (1) gas circuit breaker (GCB)

Critical loads have been identified for this substation.

The existing distribution switchgear and the 38 kV infrastructure are aging and present reliability, safety, and corrosion issues.

The proposed project will bring the Santurce Planta substations to LUMA and industry standards, improve system resiliency and reliability, mitigate safety hazards, and address environmental concerns.

3.2 Facilities List

Name	Number	Voltage (kV)	GPS Location	Construction Year
Santurce Planta	1116, 1117	38, 13.2		2020,1999

4.0 PROJECT SCOPE OF WORK

The Scope of Work (SOW) consists of the reconstruction of Santurce Planta substations 1116 and 1117 to current codes and standards.

The project requires engineering services for the design and rebuild of the two 13.2 kV substations and switchgear to replace one transformer, install breakers, install and ION meter and related metering equipment, incorporate a 13.2 kV double bus configuration, and expand the distribution lines on substation 1116. The project will require the acquisition of adjacent land.


The final SOW (plans and specifications) and cost estimate are expected to be completed by **April, 2025** and construction is estimated to be completed by **April, 2028**.

Proposed New 38 kV Infrastructure

- 38 kV new single bus with services for:
 - Line 10600 from Villamil
 - Line 4200 from Viaducto
 - Reinstall one (1) 38/13.2 kV step down transformer
 - Install one new (1) 38/13.2 kV step down transformer

Proposed New Distribution Infrastructure

- Santurce Planta Substation 1116 - Major equipment requirements for 38/13.2 kV substation rebuild:
 - Reinstall one (1) 38/13.2 kV, 18/33.6 MVA, Wye-Wye, step down transformer.

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- Install one (1) 13.2 kV main breaker, 2,000A
 - Install one (1) 13.2 kV bus coupler breaker, 2,000A
 - Install one (1) 13.2 kV mobile tie breaker, 2,000A
 - Install seven (7) 13.2 kV breakers 1,200 A (4 feeders. 1 service station transformer and MTU and 2 spare)
 - Install one (1) 15 kV bus tie breaker, 2,000 A. This breaker will interconnect the 13.2 kV buses of the rebuilt 1116 and 1117 substations. They will operate normally open (N/O) to avoid parallel operation of the transformers and reduce short circuit levels. It will be closed only when one of the 38/13.2 kV distribution transformers is out of service
 - Install ION meter and related metering equipment.
 - Provide current measurements for all phases of each distribution feeder.
- Santurce Planta Substation 1117 - Major equipment requirements for new 38/13.2 kV substation:
 - Install one new (1) 38/13.2 kV transformer with a 20/33.6 MVA capacity, transformer
 - Install one (1) 13.2 kV main breaker, 2,000A
 - Install one (1) 13.2 kV bus coupler breaker, 2,000A
 - Install six (6) 13.2 kV breakers 1,200 A (4 feeders. 1 service station transformer and MTU and 1 spare)
 - Install one (1) 15 kV bus tie breaker, 2,000 A. This breaker will interconnect the 13.2 kV buses of the rebuilt 1116 and 1117 substations. They will operate normally open (N/O) to avoid parallel operation of the transformers and reduce short circuit levels. It will be closed only when one of the 38/13.2 kV distribution transformers is out of service
 - Incorporate space for a future 13.2 kV feeder in the design.
 - Install ION meter and related metering equipment.
 - Provide current measurements for all phases of each distribution feeder.


5.0 TYPE OF PROJECT

Choose One (Restoration, Improved or Alternate)
Restoration to Codes/Standards: Restores the facility(s) to pre-disaster function and to approved.
This work will follow FEMA (Public Assistance Alternative Procedures (Section 428) Guide for Permanent Work FEMA-4339-DR-PR February 2020).

Note: If preliminary A&E work has not been completed, the type of 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.

6.0 PRELIMINARY ENGINEERING

Is architectural and engineering (A&E) funding required to help define the intended scope of work?

	Document Title: FEMA Project Scope of Work (Initial)	Project ID: 10022
	Project Name: Santurce Planta Substations 1116 and 1117	DR-4339-PR Public Assistance

Yes, architectural and engineering funding required to help define the intended scope of work.

7.0 CODES AND STANDARDS

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

1. Consensus-based codes, per FEMA (Public Assistance Alternative Procedures (Section 428) Guide for Permanent Work FEMA-4339-DR-PR February 2020).
2. Industry standards per FEMA Recovery Policy FP-104-009-5, Version 2, Implementing Section 20601 of the 2018 Bipartisan Budget Act (BBA) 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 most 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, applicable codes and standards will be identified and incorporated into the plans and specifications.

Industry Standards


Yes: applicable industry standards will be identified and incorporated into the plans and specifications.

8.0 COST ESTIMATE

Cost estimates for this work are prepared in conformance with class 5 accuracy, which is between -50% and +100% of the final project cost. The estimate includes and is not limited to materials, construction labor and equipment, engineering, management, and contingencies.

Estimated Budget for Architectural & Engineering Design:	\$2,639,507.91
Estimated Budget for Procurement & Construction:	\$35,136,270.79
Estimated Overall Budget for the Project:	\$37,775,778.70

9.0 406 HAZARD MITIGATION PROPOSAL

	Document Title: FEMA Project Scope of Work (Initial)	Project ID: 10022
	Project Name: Santurce Planta Substations 1116 and 1117	DR-4339-PR Public Assistance

9.1 406 Mitigation Opportunity Scope of Work

During the preliminary engineering phase, LUMA will develop 406 Hazard Mitigation proposals that are consistent with mitigating the chance of similar damage from future hurricanes during. Preliminarily, LUMA envisions installing a generator (GEN SET ready) to provide emergency power to DC relays and telecommunications equipment in the event of an extended outage due to a future disaster. In addition, LUMA envisions incorporating synchro phasor technology (PMU) in conjunction with the relay replacement to reduce event investigation and restoration times during disasters.

9.2 406 Mitigation Opportunity Cost Estimate

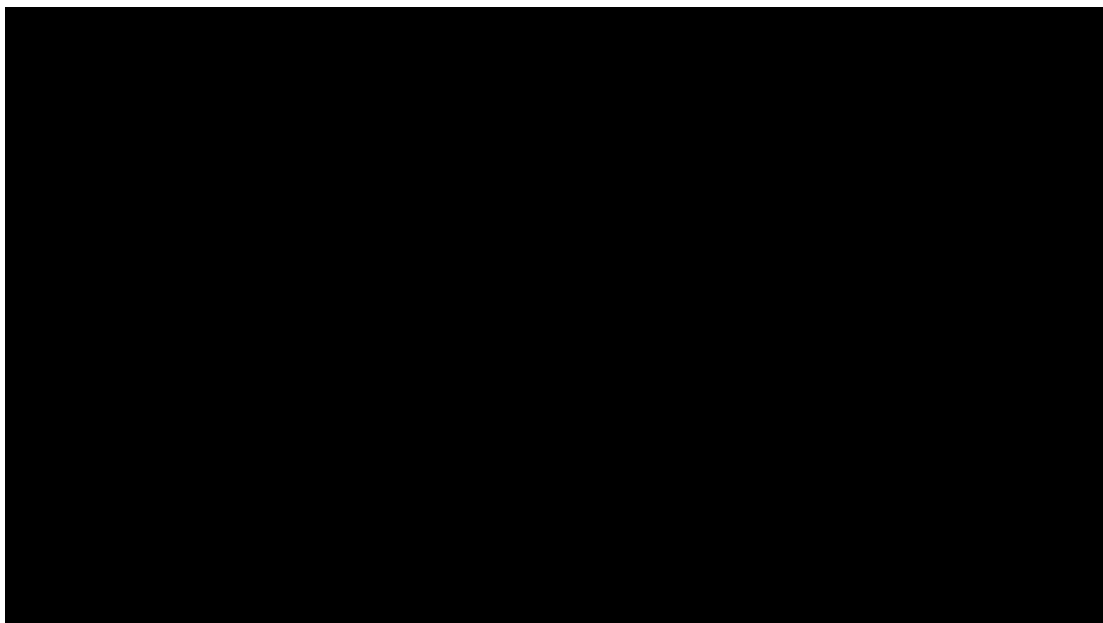
Estimated Budget for Architectural & Engineering to Design:	Unknown at this time.
Estimated Budget for Procurement & Construction:	Unknown at this time.
Estimated Overall Budget for the Project:	Unknown at this time.


10.0 ENVIRONMENTAL & HISTORIC PRESERVATION REQUIREMENTS

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

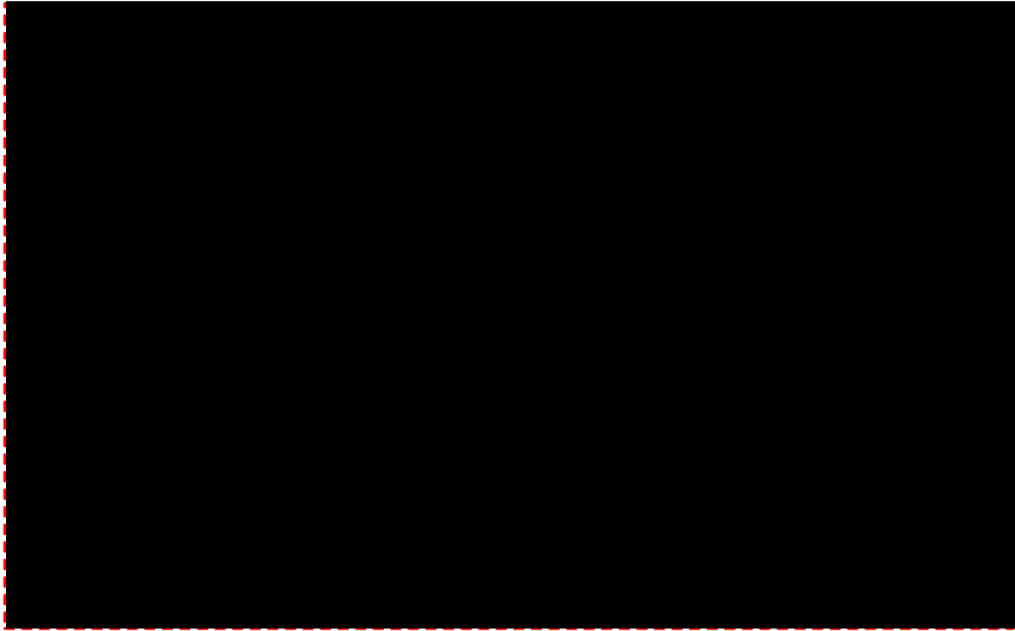
11.0 ATTACHMENTS

Existing Single Line Diagram (SLD) of Santurce Planta Substations 1116 and 1117:

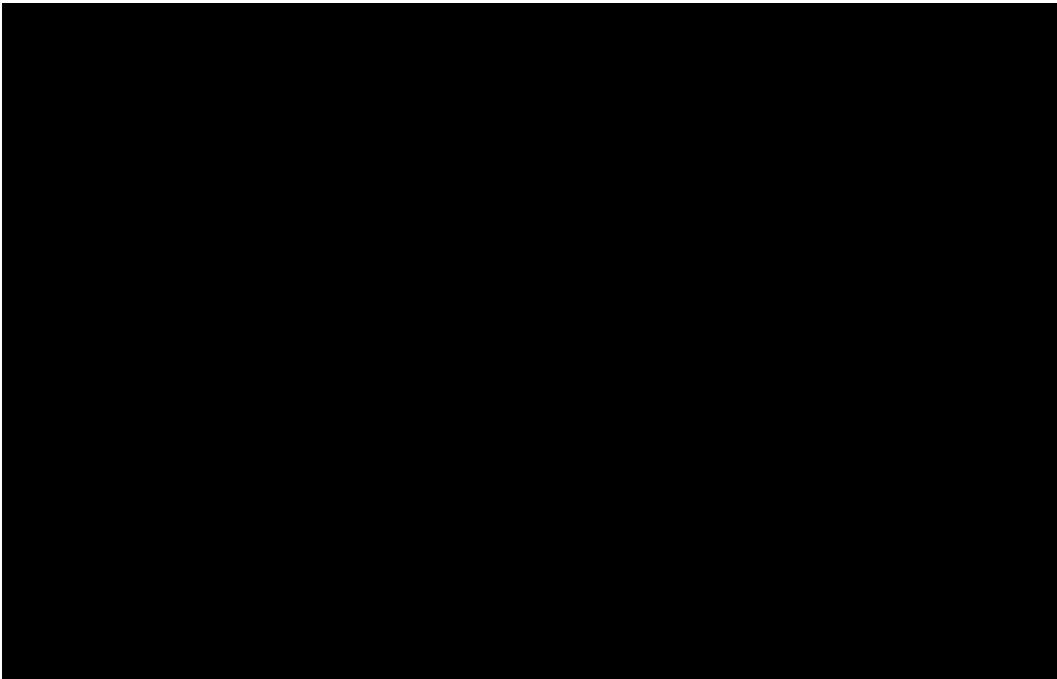



	Document Title: FEMA Project Scope of Work (Initial)	Project ID: 10022
	Project Name: Santurce Planta Substations 1116 and 1117	DR-4339-PR Public Assistance

Proposed SLD of Santurce Planta Substations 1116 and 1117:



Site View:



	Document Title: FEMA Initial Scope of Work (Initial)	Project ID: 10022
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END OF DOCUMENT