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

Apr 27, 2023

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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: Submission of Three Scopes of Work, a List of Updated Projects, and a Request for Confidentiality and Supporting Memorandum of Law

MOTION SUBMITTING THREE SCOPES OF WORK, AN UPDATED LIST OF PROJECTS, AND A REQUEST FOR CONFIDENTIALITY AND SUPPORTING MEMORANDUM OF LAW

TO THE PUERTO RICO ENERGY BUREAU:

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

I. Submittal of Scopes of Work 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. This Energy Bureau thereafter

NEPR

Received:

¹ Register No. 439372.

² Register No. 439373.

determined that this directive 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 to this Energy Bureau several Transmission and Distribution projects ("T&D Projects") on July 8, 2021 (twenty-eight (28) Scopes of Work and an itemized list of T&D Projects), August 30, 2021 (twenty-nine (29) SOWs and an updated list of T&D Projects) and October 4, 2021 (thirty-eight (38) SOWs and an updated list of T&D Projects), February 2, 2022 (three (3) SOWs and an updated list of T&D Projects), May 20, 2022 (one (1) SOW and an updated list of T&D Projects), July 29, 2022 (four (4) SOWs and an updated list of T&D projects), August 10, 2022 (two (2) SOWs and an updated list of T&D projects), November 11, 2022 (sixty (60) SOWs and an updated list of T&D projects), November 16, 2022 (one (1) SOW and an updated list of T&D Projects), January 30, 2023 (one (1) SOW and an updated list of T&D Projects), January 30, 2023 (one (1) SOW and an updated list of T&D Projects), January 30, 2023 (one (1) SOW and an updated list of T&D Projects), January 30, 2023 (one (1) SOW and an updated list of T&D Projects), January 30, 2023 (one (1) SOW and an updated list of T&D Projects), January 30, 2023 (one (1) SOW and an updated list of T&D Projects), and April 24, 2023 (one (1) SOW). The Energy Bureau has approved all the T&D Project SOWs submitted by LUMA as of March 29, 2023.

3. In accordance with the March 26 Order issued in this instant proceeding, LUMA hereby submits to the Energy Bureau three SOW for T&D Project for this Energy Bureau's review and approval prior to submittal to COR3 and FEMA in thirty (30) days for the following projects: "Line 50200 from Costa Sur SP to Bayamon TC", dated April 6, 2023; "Line 50300 from Costa Sur Steam Plant to Aguirre Steam Plant", dated April 6, 2023; and "Line 51200 from Costa Sur Steam Plant to Cambalache Gas Plant," dated April 6, 2023. *See Exhibit 1*.

4. LUMA also submits to this Energy Bureau an updated Project List, containing a current list of the total initial SOWs submitted to the Energy Bureau, a list of approved projects

by the Energy Bureau with assigned FEMA Accelerated Awards Strategy ("FAASt") numbers and a list of projects with approved FEMA funding obligations. *See Exhibit 2*.

5. LUMA hereby requests that *Exhibit 1* be maintained confidential and is submitting a redacted version for public disclosure and an unredacted non-public version under seal of confidentiality. LUMA submits below its Memorandum of Law stating the legal basis for which the unredacted version of Exhibit 1 should be filed under seal of confidentiality. As will be explained below, the three (3) SOWs in *Exhibit 1*- i.e., "Line 50200 from Costa Sur SP to Bayamón TC", "Line 50300 from Costa Sur Steam Plant to Aguirre Steam Plant", and "Line 51200 from Costa Sur Steam Plant to Cambalache Gas Plant" - 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 "SOWs 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. In addition, all three (3) SOWs include personal identifying information of individuals who are LUMA staff or contractors that are 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.

II. Memorandum of Law in Support of Request for Confidentiality

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

6. 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).

7. 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).

8. 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.

9. 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 \mathbb{P} 3. The party who seeks confidential treatment of information filed with the Energy Bureau must also file both "redacted" or "public version" and an "unredacted" or "confidential" version of the document that contains confidential information. *Id.* at \mathbb{P} 6.

10. The Energy Bureau's Policy on Management of Confidential Information states the following with regards to 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).

11. 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

12. The SOWs with CEII included in *Exhibit 1* contain portions of CEII that, under relevant federal law and regulations, are protected from public disclosure. LUMA stresses that the SOWs 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.³ In at least two proceedings on Data Security,⁴ and Physical Security,⁵ this Energy Bureau, *motu proprio*, has conducted proceedings confidentially, thereby recognizing the need to protect CEII from public disclosure.

13. 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,

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.

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.

14. 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.

15. 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.

16. Additionally, "[c]ritical electric infrastructure means a system or asset of the bulkpower 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.* 17. 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").⁶ 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).⁷

- (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--

(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.

⁷ 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

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

⁽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

18. The SOWs contain diagrams that qualify as CEII because it contains 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 this facility and equipment. In addition, the SOWs with CEII in *Exhibit 1* qualify as CEII because each of these documents contains the <u>express</u> coordinates to power transmission and distribution facilities (18 C.F.R. § 388.113(iv)), and these specific coordinates could potentially be helpful to a person planning an attack on the energy facilities listed as part of these SOWs. 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 SOWs with CEII in Exhibit 1 from disclosure, given the nature and scope of the details included in those portions of the Exhibit.

19. Based on the above, LUMA respectfully submits that the SOWs 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 SOWs in *Exhibit 1*. Given the importance of ensuring the safe and efficient operation of the generation assets and the T&D System, LUMA respectfully submits that these

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.

materials constitute CEII that should be maintained confidentially to safeguard their integrity and protect them from external threats.

20. In addition, each SOW in *Exhibit 1* contains the name, signature, and role of two individuals who are LUMA employees and a contractor, respectively, 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 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 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.

C. Identification of Confidential Information

21. 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	Line 50200 from Costa Sur SP to Bayamon TC	Pages 1 and 9	Right to privacy (<i>see e.g.</i> , Const. ELA, Art. II, Sections 8 and 10)	April 27, 2023
		Page 4	Critical Energy Infrastructure Information, 18 C.F.R. § 388.113; 6 U.S.C. §§ 671- 674.	
Exhibit 1	Line 50300 from Costa Sur Steam Plant to Aguirre Steam Plant	Pages 1 and 9	Right to privacy (<i>see e.g.</i> , Const. ELA, Art. II, Sections 8 and 10)	April 27, 2023
		Page 4	Critical Energy Infrastructure Information, 18 C.F.R. § 388.113; 6 U.S.C. §§ 671- 674.	
Exhibit 1	Line 51200 from Costa Sur Steam Plant to Cambalache Gas Plant	Pages 1 and 9	Right to privacy (<i>see e.g.</i> , Const. ELA, Art. II, Sections 8 and 10)	April 27, 2023

Document	Name	Pages in which Confidential Information is Found, if applicable	Summary of Legal Basis for Confidentiality Protection, if applicable	Date Filed
		Page 4	Critical Energy Infrastructure Information, 18 C.F.R. § 388.113; 6 U.S.C. §§ 671- 674.	

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

RESPECTFULLY SUBMITTED.

In San Juan, Puerto Rico, this 27th day of April 2023.

I hereby certify that I filed this Motion using the electronic filing system of this Energy Bureau and that I will send an electronic copy of this Motion to the attorney for PREPA, Joannely Marrero-Cruz, <u>jmarrero@diazvaz.law</u>.



DLA Piper (Puerto Rico) LLC

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

Exhibit 1

Three Scopes of Work

Redacted Version (Unredacted Version Submitted under Seal of Confidentiality)



Document Name:

FEMA Project Scope of Work

Project Name:

Line 50200 from Costa Sur SP to Bayamon TC

Revision: 1

Date: 04/21/2023

APPROVALS

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

Grant Manager's Name	Signature	Date
		Apr 24, 2023
Department VP's Name	Signature	Date
		Apr 24, 2023



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Overview

Project Name:	Line 50200 from Costa Sur SP to Bayamon TC		
Project Type:	Restoration to Codes/Standards		
Region:	Ponce, Arecibo, & Bayamon		
Damage Number:	206253		
Damaged Inventory/Asset Category:	Island Wide Transmission Line System		

Introduction

The purpose of this document is to present and update a Project Scope of Work (SOW) with Cost Estimates to be submitted to COR3 and 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.

LUMA Energy provides the Operations and Maintenance of the electric service to all of Puerto Rico. Puerto Rico Electric Power Authority (PREPA) is the 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.

This document will be updated with information developed during the initial design and engineering phase through the construction phase.



Facilities

Facilities List

The facilities listed below are part of the 67.10 circuit-miles of overhead transmission line for 230 kV Line 50200 Costa Sur SP to Bayamon TC.

Name	Number	GPS Start	GPS End	Voltage Level (kV)
Costa Sur SP to Bayamon TC	50200			230kV

Facilities Description

The specific facilities included in this proposed project are structures (including their foundations), framing and insulators, load break switches (manual and automated), conductors, guy wires, anchoring, grounding assemblies, and any other associated components.

Transmission line 50200 from Costa Sur SP to Bayamon TC is a 230 kV line that spans approximately 67.10 miles and connects the Costa Sur Steam Plant to the Manatí Transmission Center substation (36.6 miles) and the Manatí Transmission Center to the Bayamon Transmission Center (30.5 miles). Structures along Line 50200 Costa Sur SP to Bayamon TC include aluminum lattice structures, guyed steel poles and self-supported steel poles. Both polymer and ceramic insulators support the conductors. The line is predominately located in forested and mountainous areas.



Project Scope

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

The scope of work for Line 50200 Costa Sur SP to Bayamon TC will consist of the repair, restoration, or replacement of damaged elements and functionally interdependent non-damaged elements of the overhead portions of these lines as allowed by FEMA Public Assistance Alternative Procedures (Section 428). This is a hardening project and an addition of a second circuit that will be running in parallel withing the existing right-of-way along the existing route. However, additional ROW may be needed due to the addition of the second circuit. The new structures should be able to accommodate two circuits.

Line 50200 Location



In certain circumstances, transmission structures may need to be replaced to meet applicable codes and standards. The transmission lines will undergo modeling and analysis to validate design criteria, including electrical clearances and mechanical loading requirements. The engineering team will perform field assessments of overhead facilities and document damaged assets to be repaired or replaced. The results of this detailed assessments will be used to define the scope of work. Field surveys to locate existing alignment and property boundaries as well as geotechnical investigations may also be performed to assist in the scoping efforts.

The repair or replacement of a transmission structures and components may include; replacing insulators with polymer type; repairing, replacing, or adding guy wires; repairing or replacing anchors, structure connections, structure foundations, or portions of the foundations; restoring the integral ground of the structure and overhead ground conductor; restoring communications associated with the transmission line; replacing conductor spans when broken with splices, bird cages, pitting, burns, kinks, or stretched conductors; repairing or adding vibration and/or drag dampers or armor rods; and other repairs necessary to conform with codes and standards based upon engineering design specifications and requirements.

In order to comply with codes and standards and to allow for construction access, vegetation removal and disposal will be considered in the scope of work. This part of the scope will be defined during the preliminary engineering phase.

The preliminary engineering phase may also dictate a need for soil boring or testing 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.

The final SOW (plans and specifications) will be completed by Q3 2024 and construction work will be completed by 2028.



Type of Project

- 1. **Restoration to Codes/Standards**: Restores the facility(s) to pre-disaster function and to approved codes/standards.
- 2. **Improved Project**: Restores the pre-disaster function of the facility(s) and incorporates improvements including any:
 - a. Other improvements, not required by codes and standards.
 - b. Changes in facility size, capacity, dimension, or footprint
- 3. Alternate Project: Does not restore the pre-disaster function of the damaged facility(s)

Choose One (Restoration, Improved or Alternate)

If improved, provide the changes in facility size, capacity, dimension, or footprint. If alternate, provide rationale for recommendation.

Restores to 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.

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).
- 5. LUMA TDC 4751-001: Transmission Design Criteria.



- 6. LUMA TDC 4451-001: Telecom Design Criteria
- 7. Engineering Bulletin: TC-001-05-13-22 Fiber Optics Requirements -Design criteria for OPGW 144 Fiber Strand for Transmission Lines
- 8. IEEE Std 1138: IEEE Standard for Testing and Performance of Optical Ground Wire (OPGW) for use on Electric Utility Power Lines
- 9. IEEE Std 1591.1IEEE: Standard for Testing and Performance of Hardware for Optical Ground Wire (OPGW)
- 10. IEC 60794-4-10: Optical ground wires (OPGW) along electrical power lines
- 11. LUMA 4452-002: Specification for Fiber Optic Cables
- 12. LUMA 4452-001: Specification for Fiber Optic (Cable Splicing and Termination)
- 13. LUMA 4451.037: Fiber Optics Requirements -Substation Telecommunications Underground Infrastructure
- 14. LUMA TDM 4751-002-V01Transmission Design Manual
- 15. Engineering Bulletin TC-004-06-22-22 New Hardware and Fiber Optics for OPGW Installations in 230/115 and 38 kV Transmission Lines

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

Estimated Budget for Architectural & Engineering Design:	\$ 8.17 M	
Estimated Budget for Procurement and Construction:	\$ 271.07 M	
Estimated Overall Budget for the Project:	\$ 279.24 M	



406 Hazard Mitigation Proposal

406 Mitigation Opportunity Scope of Work

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

406 Mitigation Opportunity Cost Estimate

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

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

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.

Attachments

Document Name	Description	n
<n a=""></n>	N/A	
<n a=""></n>	N/A	
<n a=""></n>	N/A	



Document Revision History

This table contains a history of the revisions made to this document.

Rev.	Effective Date	Lead Reviewer / Job Title	Brief Description of Change
A	01/27/2023		Initial Release
0	02/10/2023		Issue for Signatures
1	04/06/2023		Budget Revision



Document Name:

FEMA Project Scope of Work

Project Name:

Line 50300 from Costa Sur Steam Plant to Aguirre Steam Plant

Revision: 1

Date: 04/21/2023

APPROVALS

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

Grant Manager's Name	Signature	Date
		Apr 24, 2023
Department VP's Name	Signature	Date
		Apr 24, 2023



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Overview

Project Name:	Line 50300 from Costa Sur Steam Plant to Aguirre Steam Plant
Project Type:	Restoration to Codes/Standards
Region:	Ponce
Damage Number:	206253
Damaged Inventory/Asset Category:	Island Wide Transmission Line System

Introduction

The purpose of this document is to present and update a Project Scope of Work (SOW) with Cost Estimates to be submitted to COR3 and 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.

LUMA Energy provides the Operations and Maintenance of the electric service to all of Puerto Rico. Puerto Rico Electric Power Authority (PREPA) is the 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.

This document will be updated with information developed during the initial design and engineering phase through the construction phase.



Facilities

Facilities List

The facilities listed below are part of the 41.2 circuit-miles of overhead transmission line for 230 kV Line 50300 from Costa Sur Steam Plant to Aguirre Steam Plant.

Name	Number	GPS Start	GPS End	Voltage Level (kV)
Costa Sur Steam Plant to Aguirre Steam Plant	50300			230 kV

Facilities Description

The specific facilities included in this proposed project are structures (including their foundations), framing and insulators, load break switches (manual and automated), conductors, guy wires, anchoring, grounding assemblies, and any other associated components.

Transmission line 50300 from Costa Sur Steam Plant to Aguirre Steam Plant is a 230 kV line that spans approximately 41.2 miles. Structures along Line 50300 from Costa Sur Steam Plant to Aguirre Steam Plant include aluminum lattice structures, guyed steel poles and self-supported steel poles. Both polymer and ceramic insulators support the conductors. The line is predominately located in forested and mountainous areas.



Project Scope

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

The scope of work for Line 50300 from Costa Sur Steam Plant to Aguirre Steam Plant will consist of the repair, restoration, or replacement of damaged elements and functionally interdependent non-damaged elements of the overhead portions of these lines as allowed by FEMA Public Assistance Alternative Procedures (Section 428). This is a hardening project and an addition of a second circuit that will be running in parallel withing the existing right-of-way along the existing route. However, additional ROW may be needed due to the addition of the second circuit. The new structures should be able to accommodate two circuits.

Line 50300 Location



In certain circumstances, transmission structures may need to be replaced to meet applicable codes and standards. The transmission lines will undergo modeling and analysis to validate design criteria, including electrical clearances and mechanical loading requirements. The engineering team will perform field assessments of overhead facilities and document damaged assets to be repaired or replaced. The results of this detailed assessments will be used to define the scope of work. Field surveys to locate existing alignment and property boundaries as well as geotechnical investigations may also be performed to assist in the scoping efforts.

The repair or replacement of a transmission structures and components may include; replacing insulators with polymer type; repairing, replacing, or adding guy wires; repairing or replacing anchors, structure connections, structure foundations, or portions of the foundations; restoring the integral ground of the structure and overhead ground conductor; restoring communications associated with the transmission line; replacing conductor spans when broken with splices, bird cages, pitting, burns, kinks, or stretched conductors; repairing or adding vibration and/or drag dampers or armor rods; and other repairs necessary to conform with codes and standards based upon engineering design specifications and requirements.

In order to comply with codes and standards and to allow for construction access, vegetation removal and disposal will be considered in the scope of work. This part of the scope will be defined during the preliminary engineering phase.

The preliminary engineering phase may also dictate a need for soil boring or testing 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.

The final SOW (plans and specifications) will be completed by Q3 2024 and construction work will be completed by 2027.



Type of Project

- 1. **Restoration to Codes/Standards**: Restores the facility(s) to pre-disaster function and to approved codes/standards.
- 2. **Improved Project**: Restores the pre-disaster function of the facility(s) and incorporates improvements including any:
 - a. Other improvements, not required by codes and standards.
 - b. Changes in facility size, capacity, dimension, or footprint
- 3. Alternate Project: Does not restore the pre-disaster function of the damaged facility(s)

Choose One (Restoration, Improved or Alternate)

If improved, provide the changes in facility size, capacity, dimension, or footprint. If alternate, provide rationale for recommendation.

Restores to 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.

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).
- 5. LUMA TDC 4751-001: Transmission Design Criteria.



- 6. LUMA TDC 4451-001: Telecom Design Criteria
- 7. Engineering Bulletin: TC-001-05-13-22 Fiber Optics Requirements -Design criteria for OPGW 144 Fiber Strand for Transmission Lines
- 8. IEEE Std 1138: IEEE Standard for Testing and Performance of Optical Ground Wire (OPGW) for use on Electric Utility Power Lines
- 9. IEEE Std 1591.1IEEE: Standard for Testing and Performance of Hardware for Optical Ground Wire (OPGW)
- 10. IEC 60794-4-10: Optical ground wires (OPGW) along electrical power lines
- 11. LUMA 4452-002: Specification for Fiber Optic Cables
- 12. LUMA 4452-001: Specification for Fiber Optic (Cable Splicing and Termination)
- 13. LUMA 4451.037: Fiber Optics Requirements -Substation Telecommunications Underground Infrastructure
- 14. LUMA TDM 4751-002-V01Transmission Design Manual
- 15. Engineering Bulletin TC-004-06-22-22 New Hardware and Fiber Optics for OPGW Installations in 230/115 and 38 kV Transmission Lines

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

Estimated Budget for Architectural & Engineering Design:	\$5.6 M	
Estimated Budget for Procurement and Construction:	\$168.03 M	
Estimated Overall Budget for the Project:	\$173.1 M	



406 Hazard Mitigation Proposal

406 Mitigation Opportunity Scope of Work

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

406 Mitigation Opportunity Cost Estimate

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

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

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.

Attachments

Document Name	Description	n
<n a=""></n>	N/A	
<n a=""></n>	N/A	
<n a=""></n>	N/A	



DR-4339-PR Public Assistance

Document Revision History

This table contains a history of the revisions made to this document.

Rev.	Effective Date	Lead Reviewer / Job Title	Brief Description of Change
A	01/27/2023		Initial Release
0	02/10/2023		Issue for Signatures
1	04/06/2023		Budget Revision



Document Name:

FEMA Project Scope of Work

Project Name:

Line 51200 from Costa Sur Steam Plant to Cambalache Gas Plant

Revision: 1

Date: 04/21/2023

APPROVALS

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

Grant Manager's Name	Signature	Date
		Apr 24, 2023
Department VP's Name	Signature	Date
		Apr 24, 2023



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Overview

Project Name:	Line 51200 from Costa Sur Steam Plant to Cambalache Gas Plant		
Project Type:	Restoration to Codes/Standards		
Region:	Ponce & Arecibo		
Damage Number:	206253		
Damaged Inventory/Asset Category:	Island Wide Transmission Line System		

Introduction

The purpose of this document is to present and update a Project Scope of Work (SOW) with Cost Estimates to be submitted to COR3 and 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.

LUMA Energy provides the Operations and Maintenance of the electric service to all of Puerto Rico. Puerto Rico Electric Power Authority (PREPA) is the 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.

This document will be updated with information developed during the initial design and engineering phase through the construction phase.



Facilities

Facilities List

The facilities listed below are part of the 37.6 circuit-miles of overhead transmission line for 230 kV Line 51200 from Costa Sur Steam Plant to Cambalache Gas Plant.

Name	Number	GPS Start	GPS End	Voltage Level (kV)
Costa Sur SP to Bayamon TC	51200			230 kV

Facilities Description

The specific facilities included in this proposed project are structures (including their foundations), framing and insulators, load break switches (manual and automated), conductors, guy wires, anchoring, grounding assemblies, and any other associated components.

Transmission line 51200 from Costa Sur Steam Plant to Cambalache Gas Plant is a 230 kV line that spans approximately 37.6 miles. Structures along Line 51200 from Costa Sur Steam Plant to Cambalache Gas Plant include aluminum lattice structures, guyed steel poles and self-supported steel poles. Both polymer and ceramic insulators support the conductors. The line is predominately located in forested and mountainous areas.



Project Scope

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

The scope of work for Line 51200 from Costa Sur Steam Plant to Cambalache Gas Plant will consist of the repair, restoration, or replacement of damaged elements and functionally interdependent non-damaged elements of the overhead portions of these lines as allowed by FEMA Public Assistance Alternative Procedures (Section 428). This is a hardening project and an addition of a second circuit that will be running in parallel withing the existing right-of-way along the existing route. However, additional ROW may be needed due to the addition of the second circuit. The new structures should be able to accommodate two circuits.

Line 51200 Location



In certain circumstances, transmission structures may need to be replaced to meet applicable codes and standards. The transmission lines will undergo modeling and analysis to validate design criteria, including electrical clearances and mechanical loading requirements. The engineering team will perform field assessments of overhead facilities and document damaged assets to be repaired or replaced. The results of this detailed assessments will be used to define the scope of work. Field surveys to locate existing alignment and property boundaries as well as geotechnical investigations may also be performed to assist in the scoping efforts.

The repair or replacement of a transmission structures and components may include; replacing insulators with polymer type; repairing, replacing, or adding guy wires; repairing or replacing anchors, structure connections, structure foundations, or portions of the foundations; restoring the integral ground of the structure and overhead ground conductor; restoring communications associated with the transmission line; replacing conductor spans when broken with splices, bird cages, pitting, burns, kinks, or stretched conductors; repairing or adding vibration and/or drag dampers or armor rods; and other repairs necessary to conform with codes and standards based upon engineering design specifications and requirements.

In order to comply with codes and standards and to allow for construction access, vegetation removal and disposal will be considered in the scope of work. This part of the scope will be defined during the preliminary engineering phase.

The preliminary engineering phase may also dictate a need for soil boring or testing 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.

The final SOW (plans and specifications) will be completed by Q3 2024 and construction work will be completed by 2027.



Type of Project

- 1. **Restoration to Codes/Standards**: Restores the facility(s) to pre-disaster function and to approved codes/standards.
- 2. **Improved Project**: Restores the pre-disaster function of the facility(s) and incorporates improvements including any:
 - a. Other improvements, not required by codes and standards.
 - b. Changes in facility size, capacity, dimension, or footprint
- 3. Alternate Project: Does not restore the pre-disaster function of the damaged facility(s)

Choose One (Restoration, Improved or Alternate)

If improved, provide the changes in facility size, capacity, dimension, or footprint. If alternate, provide rationale for recommendation.

Restores to 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.

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?

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

Estimated Budget for Architectural & Engineering Design:	\$4.77 M	
Estimated Budget for Procurement and Construction:	\$156.36 M	
Estimated Overall Budget for the Project:	\$161.14 M	



406 Hazard Mitigation Proposal

406 Mitigation Opportunity Scope of Work

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

406 Mitigation Opportunity Cost Estimate

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

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

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		_	
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<u>Exhibit 2</u>

Excel Spreadsheet with Updated List of Projects Submitted via email