

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

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| NEPR Received: Aug 25, 2023 5:17 PM |
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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 One Scope of Work,
Request for Confidentiality, and Supporting
Memorandum of Law**

**MOTION SUBMITTING ONE SCOPE OF WORK, 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 submit the following:

I. Submittal of Scope 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 determined that this directive applied to both PREPA and LUMA. *See* Resolution and Order of August 20, 2021 (“August 20 Order”) on page 3.

¹ Register No. 439372.

² Register No. 439373.

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 (“SOWs”) 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), March 29, 2023 (two (2) SOWs and an updated list of T&D projects), April 24, 2023 (one (1) SOW), and April 27, 2023 (three (3) SOWs). The Energy Bureau has approved all the T&D Project SOWs submitted by LUMA as of April 27, 2023.

3. In accordance with the March 26 Order issued in this instant proceeding, LUMA hereby submits to the Energy Bureau one (1) SOW for T&D Projects for this Energy Bureau’s review and approval prior to submittal to COR3 and FEMA in thirty (30) days for the following project: “4 x 25 MW BESS Interconnections on LUMA System” dated August 22, 2023. *See Exhibit 1.*

4. 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, portions of one (1) SOW in *Exhibit 1*- i.e., “4 x 25 MW BESS Interconnections

on LUMA System” - 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, the SOW contains 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

5. 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 LPRC §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).

6. 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).

7. 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.

8. 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 “redacted” or “public version” and an “unredacted” or “confidential” version of the document that contains confidential information. *Id.* at ¶ 6.

9. The Energy Bureau’s Policy on Management of Confidential Information states the following with regard 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).

10. 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

11. 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

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 Minigrad 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.

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

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

13. Similarly, the Energy Bureau has granted LUMA's requests for confidential treatment of portions of SOWs submitted for approval in the present case. Notably, the Energy Bureau designated portions of SOWs as confidential CEII in its Resolution and Order of February 22, 2023, *see* Table 1 on page 3, Resolution and Order of April 5, 2023, *see* Table 1 on page 4, and Resolution and Order of May 5, 2023, *see* table 1 at page 3.

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 that pose public security, economic, health, and safety risks. Federal Regulations on CEII, particularly 18 C.F.R. § 388.113, state that:

Critical energy infrastructure information means specific engineering, vulnerability, or detailed design information about proposed or existing critical infrastructure that:

- (i) Relates details about the production, generation, transportation, transmission, or distribution of energy;
- (ii) Could be useful to a person in planning an attack on critical infrastructure;
- (iii) Is exempt from mandatory disclosure under the Freedom of Information Act, 5 U.S.C. 552; and
- (iv) Does not simply give the general location of the critical infrastructure.

Id.

16. 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.*

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

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

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

18. The SOW 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

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- (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.

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 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.

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 SOW with CEII in *Exhibit 1* qualifies as CEII because the documents contain the express 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 the SOW. 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 SOW 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 SOW 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 this SOW 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 materials constitute CEII that should be maintained confidentially to safeguard their integrity and protect them from external threats.

20. In addition, the SOW in *Exhibit 1* contains the name, signature, and role of two individuals 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 SOW 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 SOW.

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 | 4 x 25 MW BESS Interconnections on LUMA System | Page 1 | Right to privacy (<i>see e.g.</i> , Const. ELA, Art. II, Sections 8 and 10) | August 25, 2023 |
| | | Pages 4, 8, 9, and 10. | Critical Energy Infrastructure Information, 18 C.F.R. § 388.113; 6 U.S.C. §§ 671-674. | August 25, 2023 |

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

RESPECTFULLY SUBMITTED.

In San Juan, Puerto Rico, this 25th day of August 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, jmarrero@diazvaz.law.



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Exhibit 1

One Scope of Work

Redacted Version (Unredacted Version Submitted under Seal of Confidentiality)



FEMA Project Initial Scope of Work

Project Name: 4x25 MW BESS Interconnections at LUMA 38 kV System

Revision:0

Date: August 23, 2023

APPROVALS

The signatures below formally approve the Project Initial Scope of Work.

| Grant Manager's Name | Signature | Date |
|----------------------------|------------|------------|
| [REDACTED] | [REDACTED] | 08/22/2023 |
| Department Director's Name | Signature | Date |
| [REDACTED] | [REDACTED] | 08/22/2023 |



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Overview

| | |
|--|--|
| Project Name: | 4x25 MW BESS Interconnections at LUMA 38 kV System |
| Project Type: | Restoration to Codes and Standards |
| Damage Number: | 223189 |
| Damaged Inventory/Asset Category: | Island wide Substation |
| FEMA Project Number: | <To be provided by FEMA> |

Introduction

The purpose of this document is to submit to COR3 and FEMA the Initial Scope of Work ("ISOW") for the 4x25 MW BESS Interconnections at LUMA 38 kV System.

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 Operations and Maintenance of the electric service to the entire island 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 Description:

This project addresses the need to increase the reliability, resiliency, restore system functionality, and mitigate safety hazards, through the 38 kV transmission grid, by interconnection of Energy Storage Systems (ESS) to four locations across Puerto Rico. The project impacts from west to north to the metropolitan area of the Island. The points of interconnection (POI) for the proposed ESS would be determined following additional analysis.

The new transmission elements shall meet, or exceed, LUMA's applicable design practices and requirements. Construction of the new 4 x 25 MW- 100 MWh ESS is being done to improve the reliability and resiliency of the Puerto Rico electric transmission system.

Hurricanes Maria, Irma, and Fiona have been significant reminders that increased grid resiliency is needed to serve Puerto Rico. The experience of multiple island-wide blackouts over the past five years, with intense impacts on the economic life and communities in the territory, as well as the need for black-start operations, and alternatives for providing power, including renewable resources, to major load centers to re-energize the grid has made it clear that enhanced redundancy and resiliency is required. This resiliency will become more relevant as the increased reality of natural hazards through major weather events such as hurricanes affects Puerto Rico and the United States.

Project Scope

Scope of Work Description:

The Initial Scope of Work consists of the repair, replacement, and additions of the following infrastructure:

- Four Energy Storage Systems are considered for this project. The ESS size is to be 25 MW/100 MWh for a 38 kV interconnection.
- Each ESS shall be equipped with the Power Station (bi-directional inverters - PCS, step-up transformers – as needed - and AC switchgear), DC block (batteries and associated BMS), controls and monitoring systems, protection systems (DC and AC levels), heating/cooling systems (thermal management), fire prevention, gas monitoring and protection systems, and communication systems.
- Thirty-six (36) new 38/.48kV 3 MVA Dry Type Transformers



- The fast frequency regulation (FFR) will be the primary use case that shall be considered in the ESS sizing calculation.
- The frequency regulation is based on a measurement from an accurate Power Quality Meter (PQM) at PCC location that is certified for precise measurements. The high-accuracy grid frequency measurements from PQM shall be utilized for driving the FFR application.

The final SOW (plans and specifications) and cost estimate are expected to be completed by September 2023 and construction is estimated to be completed by June, 2025

Type of Project:

| |
|---|
| Restoration 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) aggregates the design considerations of the vast majority of the consensus-based codes, specifications, and standards listed in FEMA Recovery Interim Policy 104-009-11 Version 2.1 (December 20, 2019).



Codes, Specifications, and Standards

| |
|---|
| Yes |
| 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. |

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, management, and contingencies per site is:

Site #1

| | |
|---|-------------------------|
| Estimated Budget for Architectural & Engineering Design: | \$ 5,281,988.00 |
| Estimated Budget for Procurement & Construction: | \$ 48,862,869.00 |
| Estimated Overall Budget for the Project: | \$ 54,144,857.00 |

Site #2

| | |
|---|-------------------------|
| Estimated Budget for Architectural & Engineering Design: | \$ 5,281,988.00 |
| Estimated Budget for Procurement & Construction: | \$ 48,862,869.00 |
| Estimated Overall Budget for the Project: | \$ 54,144,857.00 |

Site #3

| | |
|---|-------------------------|
| Estimated Budget for Architectural & Engineering Design: | \$ 5,281,988.00 |
| Estimated Budget for Procurement & Construction: | \$ 48,862,869.00 |
| Estimated Overall Budget for the Project: | \$ 54,144,857.00 |



Site #4

| | |
|---|-------------------------|
| Estimated Budget for Architectural & Engineering Design: | \$ 5,281,988.00 |
| Estimated Budget for Procurement & Construction: | \$ 48,862,869.00 |
| Estimated Overall Budget for the Project: | \$ 54,144,857.00 |

Total ESS Project Cost

| | |
|---|--------------------------|
| Estimated Budget for Architectural & Engineering Design: | \$ 21,127,952.00 |
| Estimated Budget for Procurement & Construction: | \$ 195,451,476.00 |
| Estimated Overall Budget for the Project: | \$ 216,579,428.00 |

406 Hazard Mitigation Proposal

406 Mitigation Opportunity Scope of Work

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

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.

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.

Attachments

| Document Name | Description |
|--|---|
| Proposed Sites | Proposed Location Maps and Site Picture |
| Sample Control and communication Diagram | Sample Control and communication Diagram for the ESS Facility |
| Sample DC Block and power station | DC Block and Power Station Architecture |

Sample Control and communication Diagram for the ESS Facility

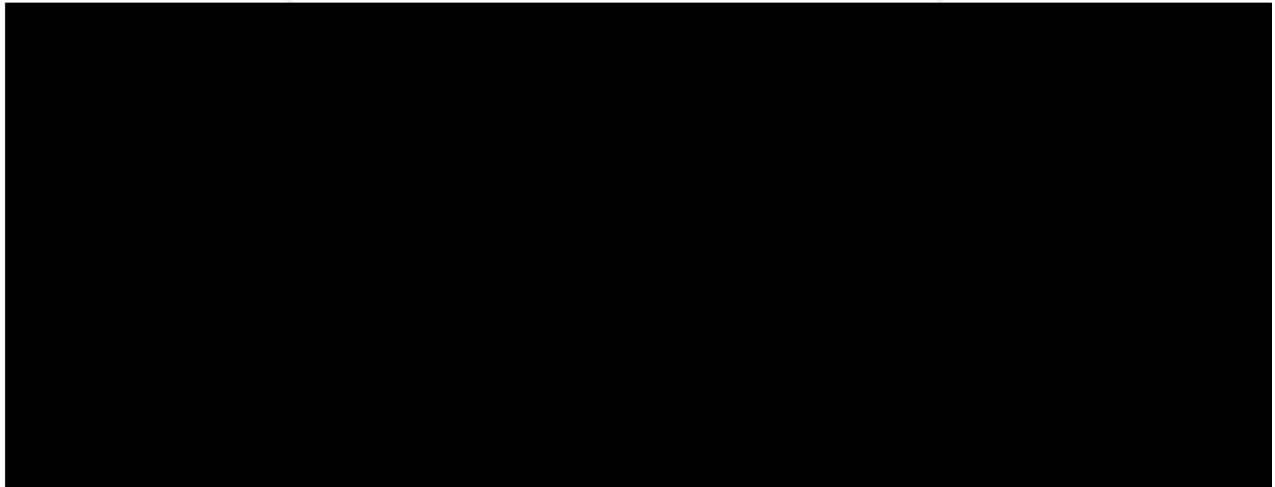


Figure 3 1 Simplified SINGLE LINE DIAGRAM for the ESS facility.

Block and Power Station Architecture

Figure A-1 represents a sample and referential Single Line Diagram focusing on main components such as DC block, power station, step-up transformers, and main power transformers. The ESS design shall consider at least 2 main power transformers with their corresponding redundancy.

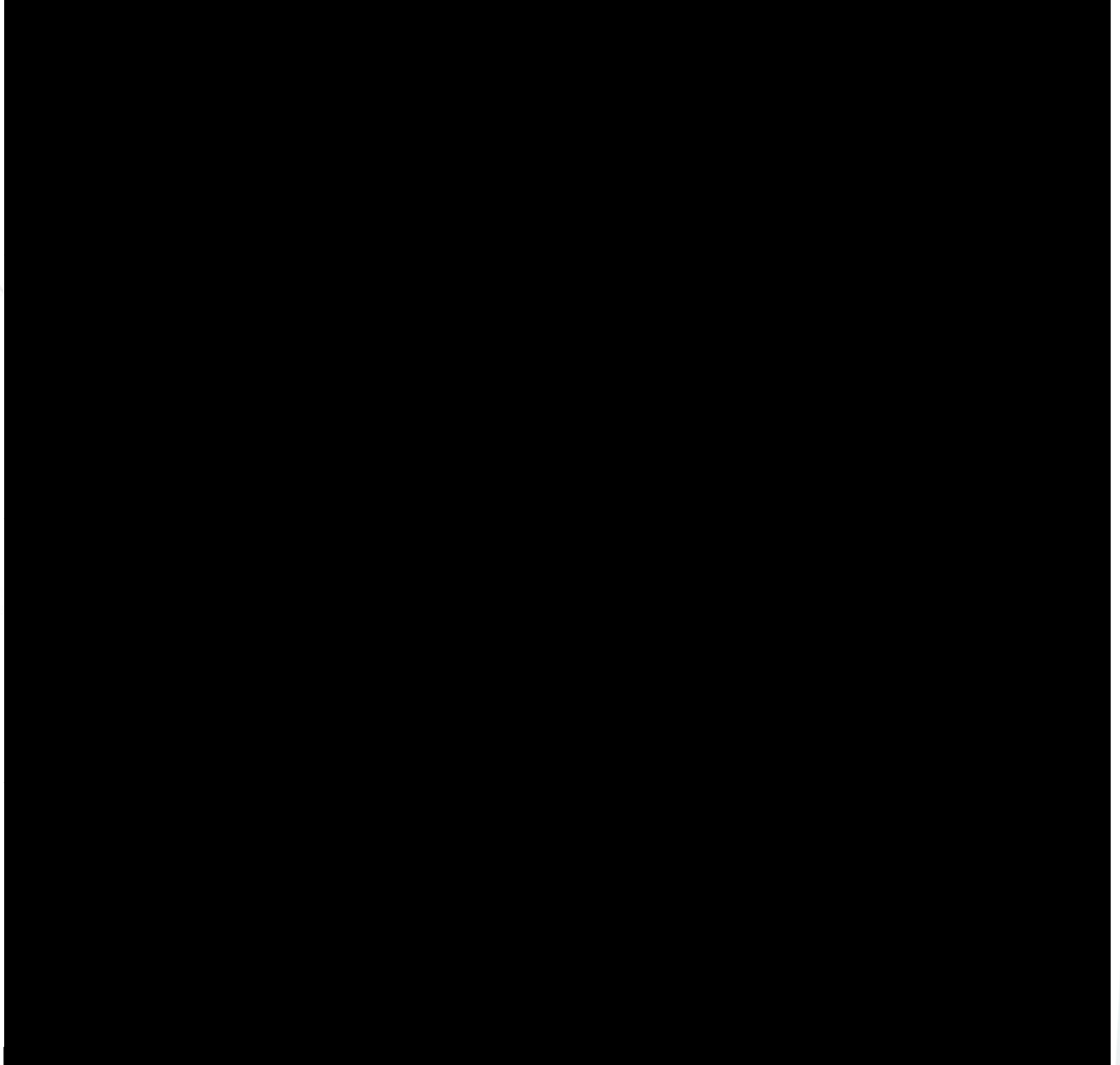


Figure A-2 Sample DC Block and power station architecture for the ESS Facility



Document Revision History

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

| Rev. | Effective Date | Brief Description of Change |
|------|-----------------|-----------------------------|
| 0 | August 23, 2023 | Initial Release |