

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

NEPR

Received:

Jun 1, 2023

10:38 PM

IN RE:
LUMA'S RESPONSE TO HURRICANE
FIONA

CASE NO. NEPR-MI-2022-0003

**SUBJECT: Motion Submitting Fourteenth Update
on Stabilization Plan and Request for Confidential
Treatment of Portions Thereof**

**MOTION SUBMITTING FOURTEENTH UPDATE ON STABILIZATION PLAN FOR
TEMPORARY EMERGENCY GENERATION CAPACITY AND REQUEST FOR
CONFIDENTIAL TREATMENT OF PORTIONS THEREOF**

TO THE HONORABLE PUERTO RICO ENERGY BUREAU:

COME NOW LUMA Energy, LLC ("ManagementCo"), and **LUMA Energy ServCo, LLC** ("ServCo"), (jointly referred to as "LUMA"), and respectfully state the following:

**I. Submission of Fourteenth Update on Stabilization Plan for Temporary
Emergency Generation Capacity**

1. In a Resolution and Order of October 7, 2022 ("October 7th Order") with the subject "Baseload Generation Dispatch Status-Post Hurricane Fiona," this honorable Puerto Rico Energy Bureau ("Energy Bureau") convened a Technical Conference to discuss concerns raised by LUMA in a letter dated October 6, 2022, regarding Resource Adequacy and potential Generation resource deficiencies following Hurricane Fiona. Per the October 7th Order, the topics to be discussed at the Technical Conference were "(i) Dispatch Status of the available Baseload Generation post Hurricane Fiona and (ii) the identified temporary emergency mitigation measures thought to address the generation deficiencies arising from Hurricane Fiona."¹

¹ The Technical Conference was held as scheduled on October 11, 2022. During the Technical Conference, the Energy Bureau and consultants for the Energy Bureau posed questions to LUMA's representatives.

2. On October 12, 2022, the Energy Bureau entered a Resolution and Order whereby it ordered LUMA to develop a stabilization plan as a direct response to Hurricane Fiona, in coordination with the Federal Emergency Management Agency (“FEMA”) and the Puerto Rico Electric Power Authority (“PREPA”) “to address any baseload generation inadequacy or shortfall that affects the dispatch availability and has the potential to cause load shedding or a blackout event of the electric system (“Stabilization Plan”)” (“October 12th Order”).

3. Per the October 12th Order, LUMA was directed to submit the 1st and the 15th day of each month from the notice of the Order, an updated report addressing the efforts conducted by LUMA to assure the completion of the Stabilization Plan.

4. On October 27th, 2022, the Energy Bureau issued a Resolution and Order whereby it set a technical conference for November 1, 2022 (“October 27th Order”) in connection with the first update on the Stabilization Plan. The Energy Bureau stated that it is particularly interested in “learning about the (1) U.S. Army Corps of Engineers (“USACE”) Generation Assessment underway, (2) Emergency Temporary Generation under a potential FEMA Public Assistance Emergency assignment that can expeditiously mitigate the impact of Hurricane Fiona, and (3) Replacement of Emergency Temporary Generation that seeks to phase out the temporary generation with permanent capacity, noting that this permanent capacity is consistent with the approved Integrated Resource Plan (“IRP”).” *See* October 27th Order at page 1.

5. As per the October 27th Order, the Technical Conference was held as scheduled on November 1st. LUMA representatives appeared to discuss the Stabilization Plan and answered questions by this Energy Bureau.

6. On October 31st, 2022, LUMA submitted the First Update on the Stabilization Plan.

7. On November 15, 2022, LUMA submitted a Second Update on the Stabilization Plan (“Second Update”). In addition, LUMA submitted supplemental information to the Second Update arising from a joint press conference of November 15th, 2022, where the Governor of Puerto Rico, the Hon. Pedro Pierluisi and the Federal Coordinator for the Federal Emergency Management Agency (“FEMA”), Nancy Casper, announced that FEMA’s power stabilization initiative aims to install between 600 to 700 MW of temporary emergency generation capacity through the mobilization of power generation maritime barges and temporary land-based generators. *See Supplemental Submission to Second Update on Stabilization Plan to Inform of Announcement by the Puerto Rico Government and FEMA on Temporary Emergency Generation Capacity*, filed on November 15, 2022.

8. On December 1st, 2022, LUMA submitted the Third Update on the Stabilization Plan.

9. The most recent updates to the Stabilization Plan were filed on January 17, 2023 (Fifth Update); January 31, 2023 (Sixth Update); February 14, 2023 (Seventh Update); March 1, 2023 (Eight Update); March 15th (Ninth Update); April 3rd (Tenth Update); April 17th (Eleventh Update); May 1, 2023 (Twelfth Update); and May 15, 2023 (Thirteenth Update).

10. In compliance with the October 12th Order, LUMA hereby submits as *Exhibit 1*, the Fourteenth Update on the Stabilization Plan (“Fourteenth Update”). The Fourteenth Update includes, among others, a summary of the status of the Stabilization Plan with reference to the tasks performed in the past weeks in coordination with USACE, FEMA and PREPA, an update on the activities at the Palo Seco site that include construction and commissioning, and the status of construction activities at the San Juan site. Finally, the Fourteenth Update identifies the current scenario of generation availability and resource adequacy.

11. LUMA redacted portions of *Exhibit 1* and respectfully requests that those portions be kept confidential by this honorable Energy Bureau pursuant to the Energy Bureau's Policy on Management of Confidential Information, CEPR-MI-2016-0009, issued on August 31, 2016, and partially amended on September 16, 2016 and in accordance with the confidential nature of the December 20th closed Technical Conference. In compliance with this policy, LUMA hereby submits its Memorandum of Law in support of its request for confidentiality setting forth the legal basis for which LUMA is entitled to file portions of Fourteenth Report under the seal of confidentiality. As explained below, the Energy Bureau should protect several pictures included in *Exhibit 1* from public disclosure as they contain CEII as defined in federal regulations and the Energy Bureau's Policy on Management of Confidential Information. *See* 18 C.F.R. § 388.113; 6 U.S.C. §§ 671-674; 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.

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 Commission believes that the information to be submitted has any confidentiality privilege, such person may request the Commission to treat such information as such" 22 LPRA § 1054n. If after appropriate evaluation the Energy Bureau determines 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).

The 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).

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 under the Rules of Evidence of Puerto Rico.

Moreover, the Energy Bureau’s Policy on 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.

The Energy Bureau policy on CEII is regulated by Section D of the Resolution issued on August 31, 2016, in Case No. CEPR-MI-2016-0009. Section D establishes that CEII is Validated Confidential Information and only authorized representatives may review such information:

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).

Further on, Energy Bureau Regulation No. 8543, 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 accordingly to . . . Article 6.15 of Act No. 57-2015, as amended.

Regulation No. 8543, *Regulation on Adjudicative, Notice of Noncompliance, Rate Review, and Investigation Proceedings* § 1.15; *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 of the Pictures included in the Fourteenth Update

The Fourteenth Update contains pictures that identify or depict CEII that, under relevant federal law and regulations, is protected from public disclosure. LUMA stresses that the pictures which LUMA redacted from the public version of the Fourteenth Report warrant confidential treatment to protect the Puerto Rico Energy Transmission and Distribution System (“T&D System”) 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.

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, states 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. at § 388.113(2).

Additionally, Section 388.113(3) defines critical electric infrastructure as 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.* § 388.113(3). 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.* § 388.113(4).

The Critical Infrastructure Information Act of 2002, 6 U.S.C. §§ 671-674, part of the Homeland Security Act of 2002, protects critical infrastructure information (“CII”).² 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).³

² Regarding the 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.

³ 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

As mentioned above, the Energy Bureau's Policy on Confidential Information provides for the management of CEII. In several proceedings, this Energy Bureau has considered and granted requests to submit CEII under seal of confidentiality.⁴ For example, in at least two proceedings on Data Security,⁵ and Physical Security,⁶ this Energy Bureau, *sua sponte*, conducted proceedings confidentially, recognizing the need to protect CEII from public disclosure.

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, this Energy Bureau granted confidential designation to several portions of LUMA's Initial Budgets and Responses to Requests for Information in the proceedings on LUMA's proposed Initial Budgets and System Remediation Plan.⁷

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.

⁴ *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 the 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 designation and PREPA's request that included trade secrets and CEII); *but see* Resolution and Order of February 12, 2021 (reversing in part, grant of confidential designation).

⁵ *In re Review of the Puerto Rico Electric Power Authority Data Security Plan*, NEPR-MI-2020-0017.

⁶ *In re Review of the Puerto Rico Electric Power Authority Physical Security Plan*, NEPR-MI-2020-0018.

⁷ *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 at 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

The Energy Bureau should protect the pictures in the Fourteenth Update because they depict the exact location, specifications and characteristics of the gensets and other large capacity equipment assembled and installed at Palo Seco, as well as pictures of the San Juan site. The pictures could be useful to a person planning an attack on the transmission and distribution facilities, as they enable a person to identify their location and provide clear depictions of the equipment which could compromise the electric power services in Puerto Rico.

LUMA respectfully submits that the pictures in the Fourteenth Update should be designated CEII. This designation is a reasonable and necessary measure to protect critical infrastructure and enable LUMA to leverage the information and assessment of critical infrastructures without external threats. Given the importance of ensuring the safe and efficient operation of the generation assets and the T&D System, LUMA respectfully submits that the pictures be maintained confidential to safeguard the facility's integrity and protect it from external threats.

C. Identification of Confidential Information.

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

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.

	Document or file	Pages in which Confidential Information is Found, if applicable	Summary of Legal Basis for Confidentiality Protection, if applicable	Date Filed
1	Generation Stabilization Plan dated May 15, 2023	Pictures on pages 4, 6, through 11 of Exhibit 1.	Critical Energy Infrastructure Information 18 C.F.R. § 388.113; 6 U.S.C. §§ 671-674.	June 1, 2023

WHEREFORE, LUMA respectfully requests that this Energy Bureau **take notice** of the aforementioned, **accept** the Fourteenth Update submitted as *Exhibit 1* to this Motion, **deem** that LUMA complied with that portion of the October 12th Order that requires submission of bi-monthly updated reports on the Stabilization Plan, and **grant** the request for confidential treatment that is included in this Motion.

RESPECTFULLY SUBMITTED.

In San Juan, Puerto Rico, this 1st day of June, 2023

I hereby certify that this motion was filed using the electronic filing system of this Energy Bureau. I also certify that copy of this motion will be notified to the Puerto Rico Electric Power Authority, through its attorney of record: jmarrero@diazvaz.law.

[signature in the page that follows]



DLA Piper (Puerto Rico) LLC
500 Calle de la Tanca, Suite 401
San Juan, PR 00901-1969
Tel. 787-945-9107
Fax 939-697-6147

/s/ Ana Margarita Rodríguez Rivera
Ana Margarita Rodríguez Rivera
[RUA Núm. 16195](#)
ana.rodriguezrivera@us.dlapiper.com

Exhibit 1
Fourteenth Update on Stabilization Report



Generation Stabilization Plan Discussion

June 1, 2023

Agenda

- I. Executive Summary
- II. Construction Activities & Status
- III. Current Operations
- IV. Resource Adequacy: Loss Of Load Expectation (Risk Analysis)

Executive Summary

Palo Seco Site (150 MW):

- **Successful commissioning of generators (gensets) and support systems with both natural gas and diesel fuels**
 - Full-load test was successful
 - Commenced process for "In Service" (O&M phase) determination which requires FEMA, Corps of Engineers, and EPA approvals
 - Water Demineralization System on the critical path for emissions compliance.

San Juan Site (200 MW):

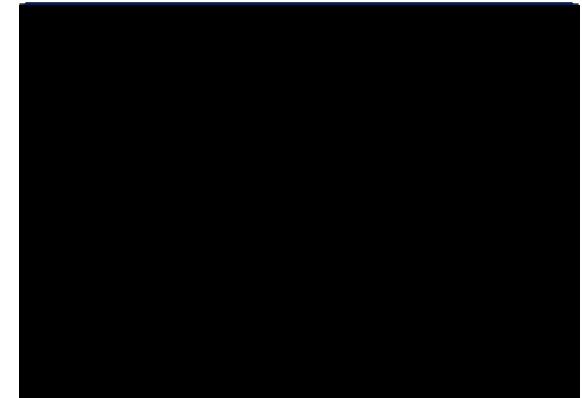
- **Construction and Mobilization continues while working through some obstacles - In Service Date yet to be defined**
 - Effort is focused on mobilization, assembly and set-up of the 5 gensets already on site
 - Planning for the placement of the new 300 MVA transformer and associated 115 KV line is ongoing with foundation design (including pilings) and resolving interference problems, e.g., relocation of high voltage power cables
 - Additional four gensets arrived, 5/30 as planned, which will make a total of nine gensets on site
 - The tenth and final genset is targeted to arrive during the third week of June
 - San Juan will follow the general construction plan as Palo Seco; current O&M phase target date: TBD



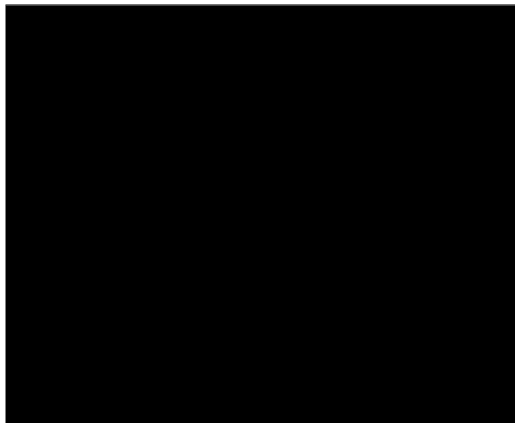
Worksite Highlights

Palo Seco – 6 gensets commissioned; seventh (spare) genset arrived. Approval activities continue for "in service" achievement.

- The seventh and last Genset (spare) arrived on site 5/24 and immediately began assembly with a first fire target date of 6/16
- Work continues to resolve minor glitches that are typical with generation start-up and the punch list is being created for the remaining tasks
- ISO trucks have been delivering LNG to the re-gas system at Palo Seco; approximately 70k gallons of LNG are in the new Palo Seco LNG buffer tank (~75% filled on 5/24)



^ Construction night crew working to unload the seventh Genset – 5/24/23



^ The orange cones mark the new location for the 300 MVA transformer at the San Juan site – 5/26/23

San Juan – Effort remains on project planning and preparation for construction

- Revising design to move 300 MVA transformer to avoid overhead lines
- Structural design on the wharf requires $\frac{3}{4}$ inch thick, 6-foot by 6-foot steel plates to be placed under the support legs of the gensets and are being sourced in Puerto Rico
- Installing fencing at the site for safety and security



Palo Seco - Process for In-Service (O&M phase) Approvals

Contractor – Construction and Commissioning phases

Weston Solutions (Contractor) has completed primary construction and proven commissioning of gensets and fuel systems. **Completed: 5/28/23**

Note: Punch list items will continue for several weeks without affecting Gensets

USACE – Must Confirm Commissioning is complete and can begin O&M phase

United States of America Corps of Engineers (USACE) has witnessed commissioning and will provide formal documentation to that effect.

EPA – Must Establish Compliance

US Environmental Protection Agency (EPA) allowed commissioning with temporary demineralized water system; permanent system targeted for completion on 06/30/23. Full EPA permitting pending review for O&M Phase.

FEMA – Validates In-Service status

US Federal Emergency Management Agency (FEMA) leadership final approval on the authorization to operate.

LUMA – Dispatches New Generation

LUMA System Operations Center will dispatch Gensets “in- service” operations (targeted by July 15)



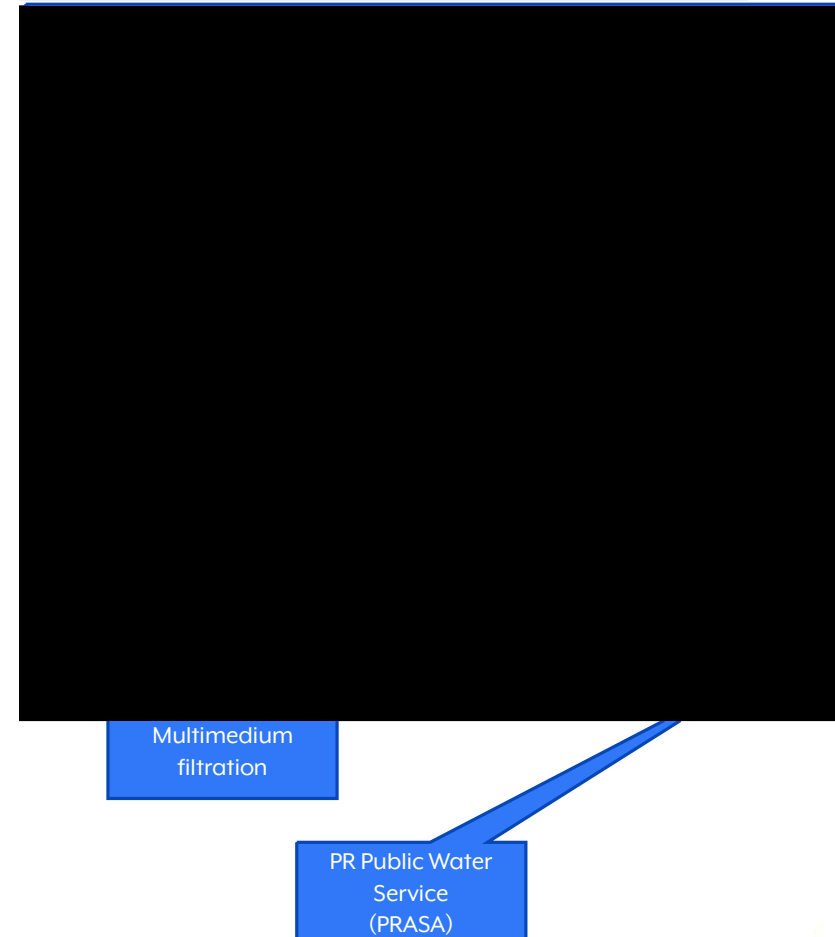
Palo Seco Site – Demineralized Water System (emissions control)

Demineralization System: Schedule Tracker – 5/30/23

Item	Status Date	Planned Finish Dates (5/8/23)	Actual Finish Date
1	Tank refurbishment		
1-1	Tank prep (e.g., remove mechanical connections, unsafe staircase, welding knuckle)	5-May	5-May
1-2	Internal: Near white metal blast, inspection	7-Jun	16-May
1-3	Internal coating	8-Jun	24-May
1-4	External prep and painting	9-Jun	29-May
1-5	Installation of water source, flowmeter, communication line and stairway	9-Jun	
1-6	Hydrostatic test	12-Jun	
2	Backwash/Reject Water Discharge - Mechanical		
2-1	Procurement of Polisher Sump pumps/piping	3-May	12-May
2-2	Shipping/Custom/Initial on-site materials deliveries	2-Jun	
2-3	Installation	6-Jun	
3	Backwash/Reject Water Discharge - Electrical		
3-1	Demo the existing sump pumps	5-Jun	
3-2	Connect the new sump pumps	6-Jun	
4	Treatment system		
4-1	Procurement	10-Apr	28-Apr
4-2-1	Shipping/Custom/On site delivery ("N" components)	2-Jun	
4-2-2	Shipping/Customs/Onsite delivery ("1" components)	14-Jun	
4-3	Set supports for containers	1-Jun	
4-4	Install the equipment containers/skids	5-Jun	
4-5	Electrical and mechanical connections	13-Jun	
4-6	Electrical and mechanical test and tune, fixing any issue	16-Jun	
4-7	Water sampling and analysis results and test piping to GTs	30-Jun	
4-8	Demin water system operational	30-Jun	

- Interior and exterior coating of storage tank is completed
- Reverse Osmosis & Multimedia Filtration skids arrived on site, 5/24
- System targeted to be operational on 6/30/23

V Demineralized water general arrangement plan - 5/30/23



San Juan Site – Preliminary General Arrangement Plan

Proposed location
for new generation
equipment area

San Ju
Plant

Original proposed
location for new 300
A transformer, **but**
it will not be installed at this
location (X) due to
covered interferences

San Jua
115kv Sw
Yard



Worksite Highlights - San Juan Site Gensets

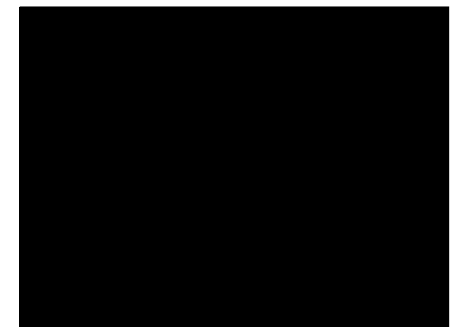
Genset Set-Up Progress (update 5/30/23)

(GE protocols for commissioning)

	Set Up/Level	Unit Stacking	Fine Align	Cable Interconnections	Instrumentation Testing	Electrical Testing	Black Start Diesel Power	Grounding to Grid	IWP/CWP
GT10	90%	100%	10%	90%					31%
GT09	90%	100%	5%	90%					30%
GT08	90%	100%	5%	90%					30%
GT07	90%	100%	5%	90%					30%
GT06	90%	100%	5%	90%					30%
GT05									
GT04									
GT03									
GT02									
GT01									

These four gensets arrive on 5/30

- Five of ten gensets arrived at San Juan site on 5/13 and began inspection, set-up and assembly tasks
- This table tracks the set-up progress following the GE Commissioning protocol steps

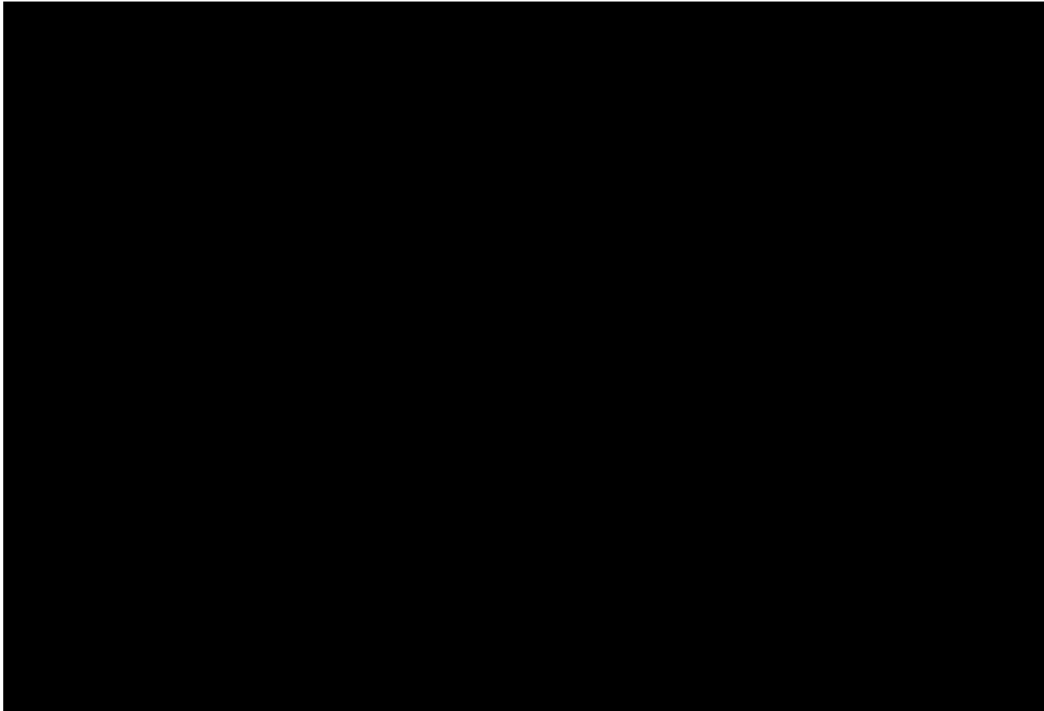


^ Steel plates under the genset legs

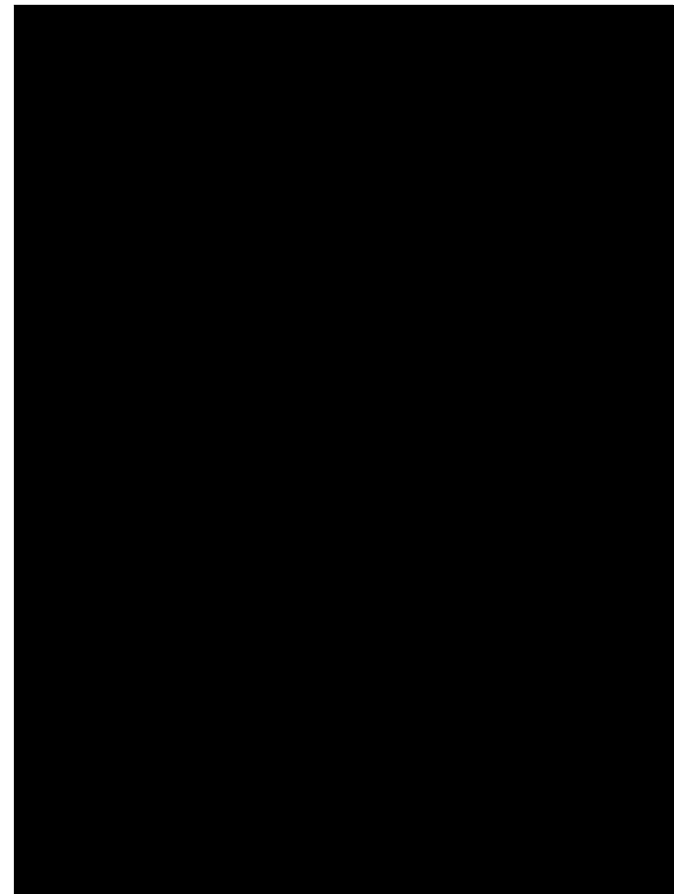
- Once Gensets are commissioned, "in-Service" approval will follow the same process as Palo Seco
- Progress on set-up and assembly ("stacking") of the units since delivery on site
- The leveling and alignment have slowed as the updated structural design requires large steel plates to be inserted under several support legs of the mobile gensets placed on the wharf



Palo Seco and San Juan Sites – Construction Aerial View

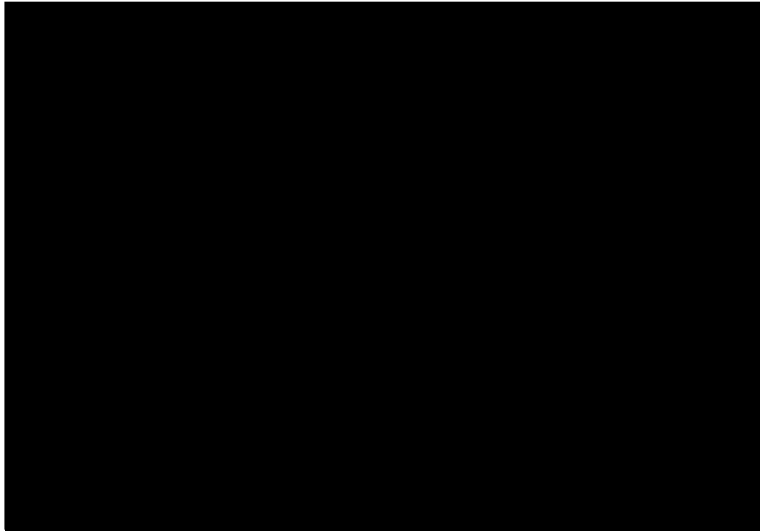


^ Palo Seco site, showing the newly installed gensets and supporting infrastructure - 5/26/23

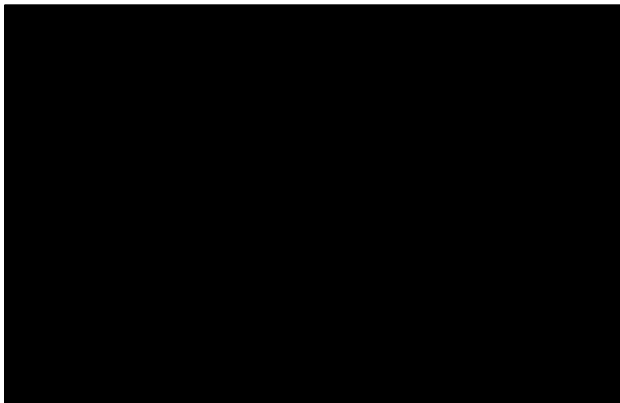


^ San Juan site, showing the 5 newly placed gensets being set-up and assembled on the wharf - 5/21/23

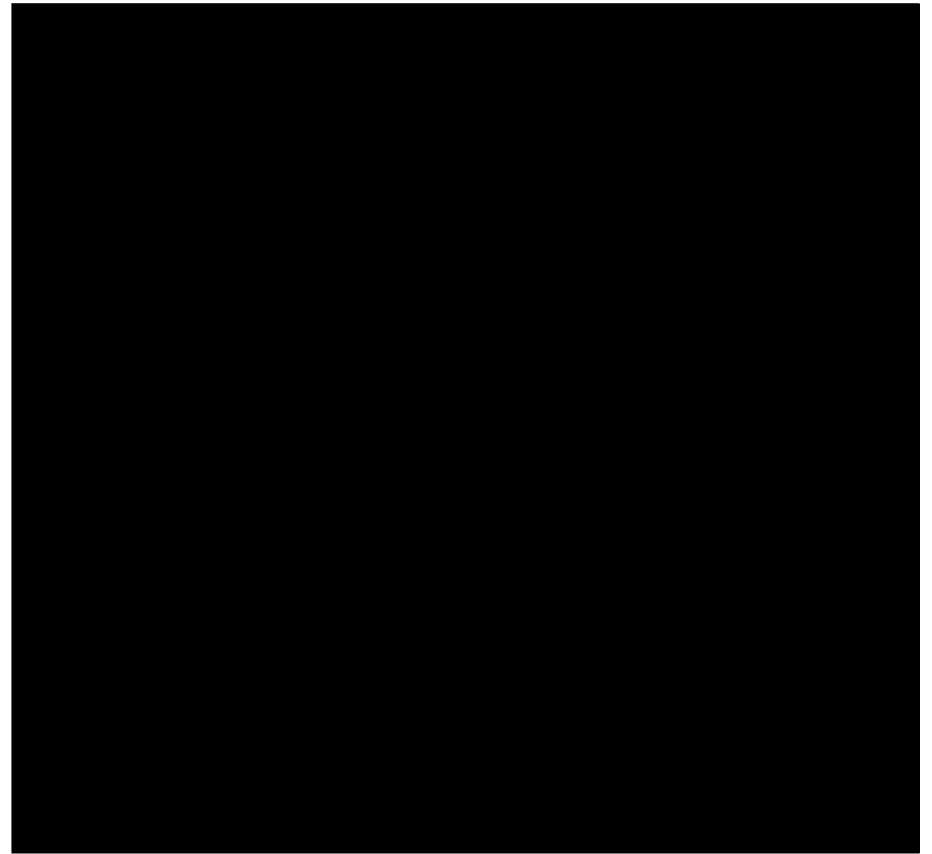
Palo Seco Site - LNG Infrastructure Construction Progress



^ LUMA installing a new electric service system to provide power to the LNG system - 5/26/23



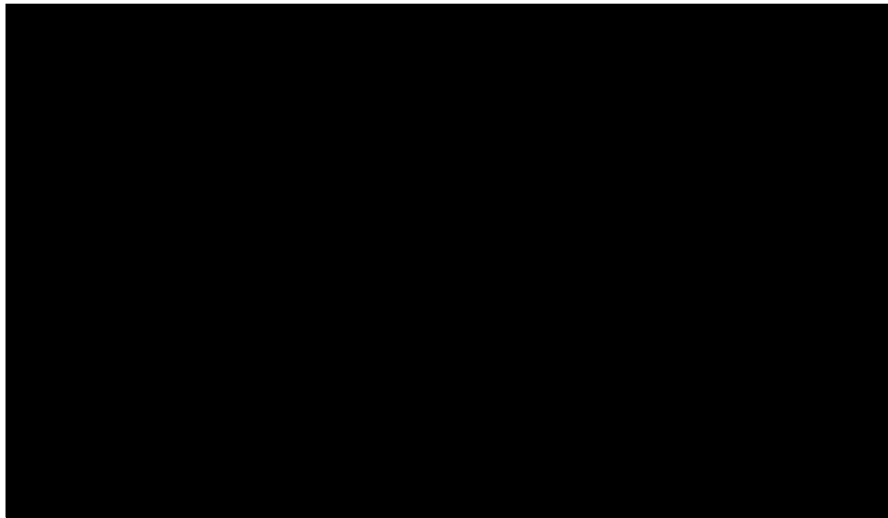
< LNG Cryogenic Pipe Insulation being installed 5/24/23



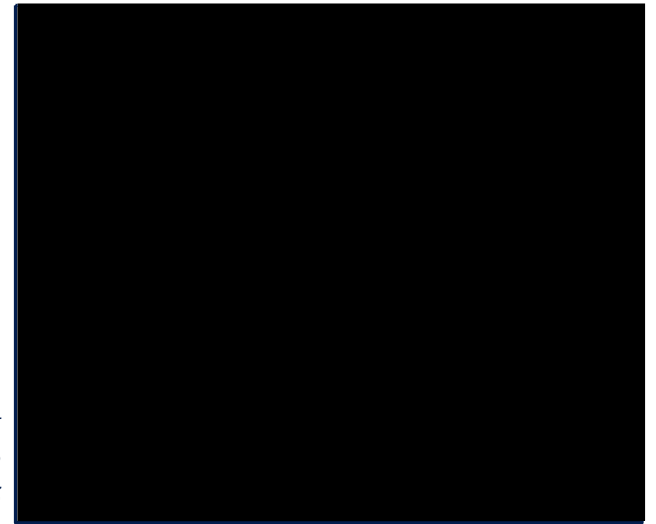
^ ISO truck delivering LNG at new off-load station 5/24/23



San Juan Site – Construction Progress

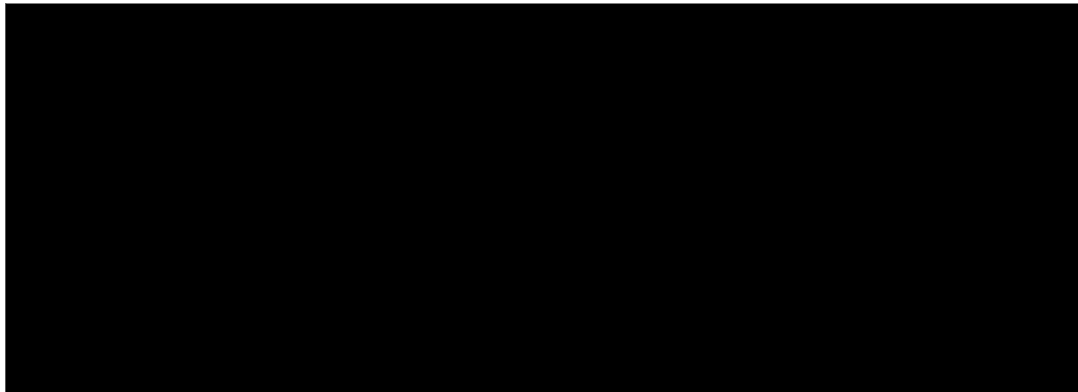


< “Stacking-out”
(assembling) Gensets
- 5/19/23



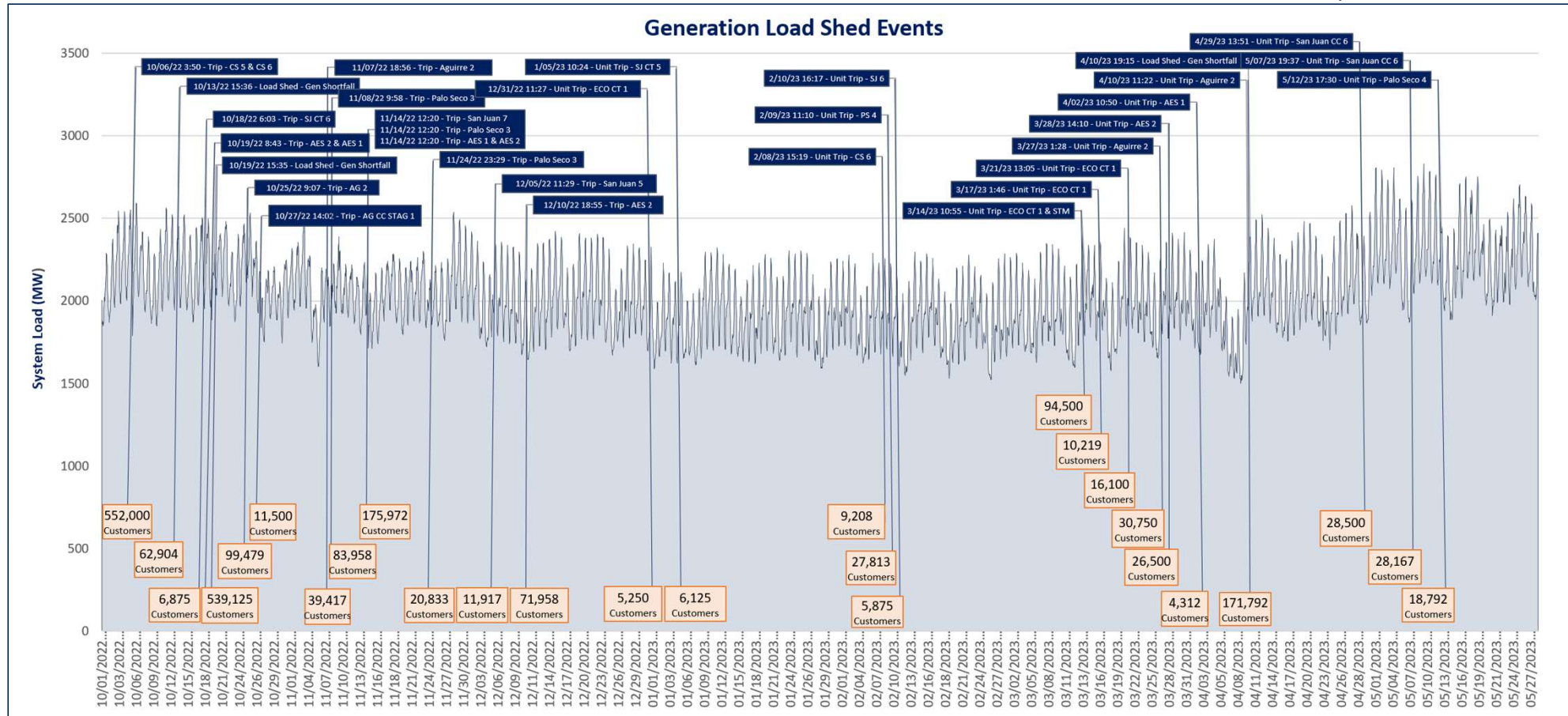
> Balance of Plant
Diesel Fuel filters on site
– 5/23/23

> Balance of Plant
Natural Gas metering
skid on site – 5/23/23



Current Generation Load Shed Events: 29 load shed events have occurred since October 1, 2022

Updated until 5/29/2023



- No load shed events have occurred since May 12



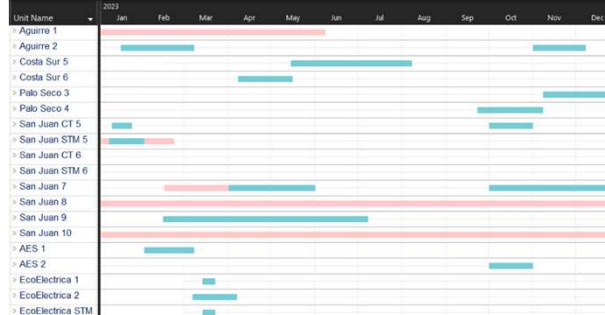
Repeated changes to maintenance schedule limit effective planning of outages for 2023 (unchanged since 5/04)

Schedule Revisions	Aguirre 1	Aguirre 2	Costa Sur 5	Costa Sur 6	Palo Seco 3	Palo Seco 4	San Juan CT 5	San Juan STM 5	San Juan CT 6	San Juan STM 6	San Juan 7	San Juan 8	San Juan 9	San Juan 10	ECO 1	ECO 2	ECO STM	AES 1	AES 2
Baseline Rev. 10-26-22																			
Rev. 10-28-22								Extend PO				Add OOS through 2023		Add OOS through 2023					
Rev. 12-08-22	Extend FO duration	Move up FO start	Delay PO start	Move up PO start	Delay PO start	Extend PO	Delay PO start	Extend PO duration			Delay Dec 2022 PO start							Move up Feb PO start 2wks	
Rev. 01-05-23		Delay PO start	Move up PO start	Shorten PO duration		Delay PO start	Add PO in Dec 2023	Extend PO duration											Add PO in Jul 2023
Rev. 01-17-23		Add PO in Nov 2023									Extend Apr PO duration	Change OOS to FO		Change OOS to FO					
Rev. 02-06-23									Add PO in 2024	Add PO in 2024									
Rev. 02-24-23	Extend FO duration to end of Apr 2023.				Move up PO start date from Apr 2023 to Mar 2023 and shorten duration. Add PO in Nov 2023.		Remove Dec PO.*	Change PO in Feb to FO and extend duration. Remove Dec PO.*											Delay Jul PO to Oct
Rev. 03-08-23		Extend PO duration													Delay Mar PO 1wk	Delay Mar PO 1wk	Delay Mar PO 1wk		
Rev. 03-20-23			Delay PO of May 2023	Delay PO of Apr 2023	Delay PO of Mar 2023						Add FO in Feb 2023		Extend PO of Feb 2023		Delay Mar PO 1wk		Delay Mar PO 1wk	Extend Feb PO 1wk	
Rev. 05-04-23	Extend FO to Jun	Extend Nov PO 1wk	Delay May PO to Oct	Delay Apr PO to Jun	Remove Mar PO		Add PO in Oct 2023				Extend April PO 5wks. Delay Oct PO to Nov.		Extend Feb PO 3mo			Extend Mar PO 1wk			

Rev. 10-28-22, filed on November 1, 2022



Rev. 05-04-23



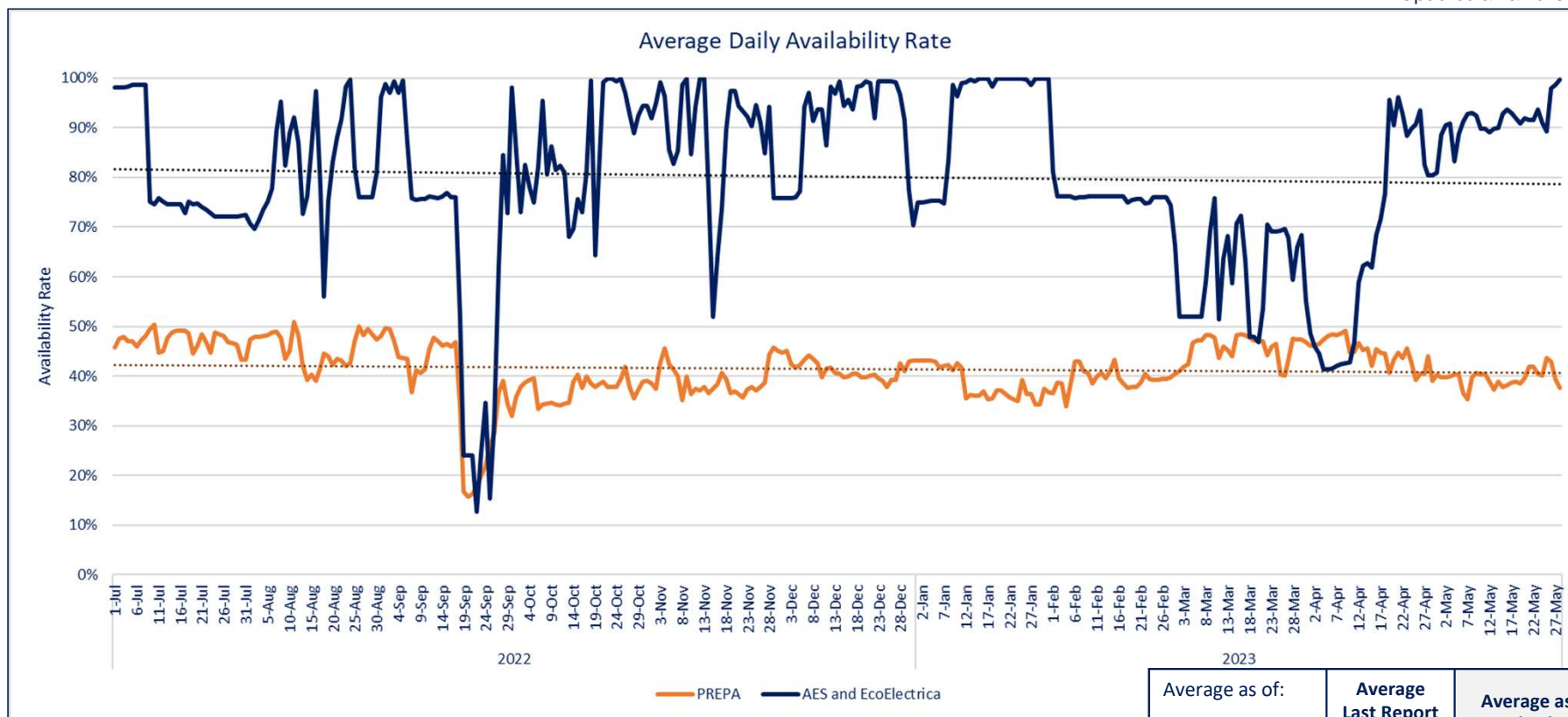
- There have been 40 outage schedule changes since 10/26/22
- In May to date there have been 9 outage schedule changes

Forced Outages

Planned Outages

Average Daily Availability of PREPA Generation Remains Low

Updated 5/28/2023



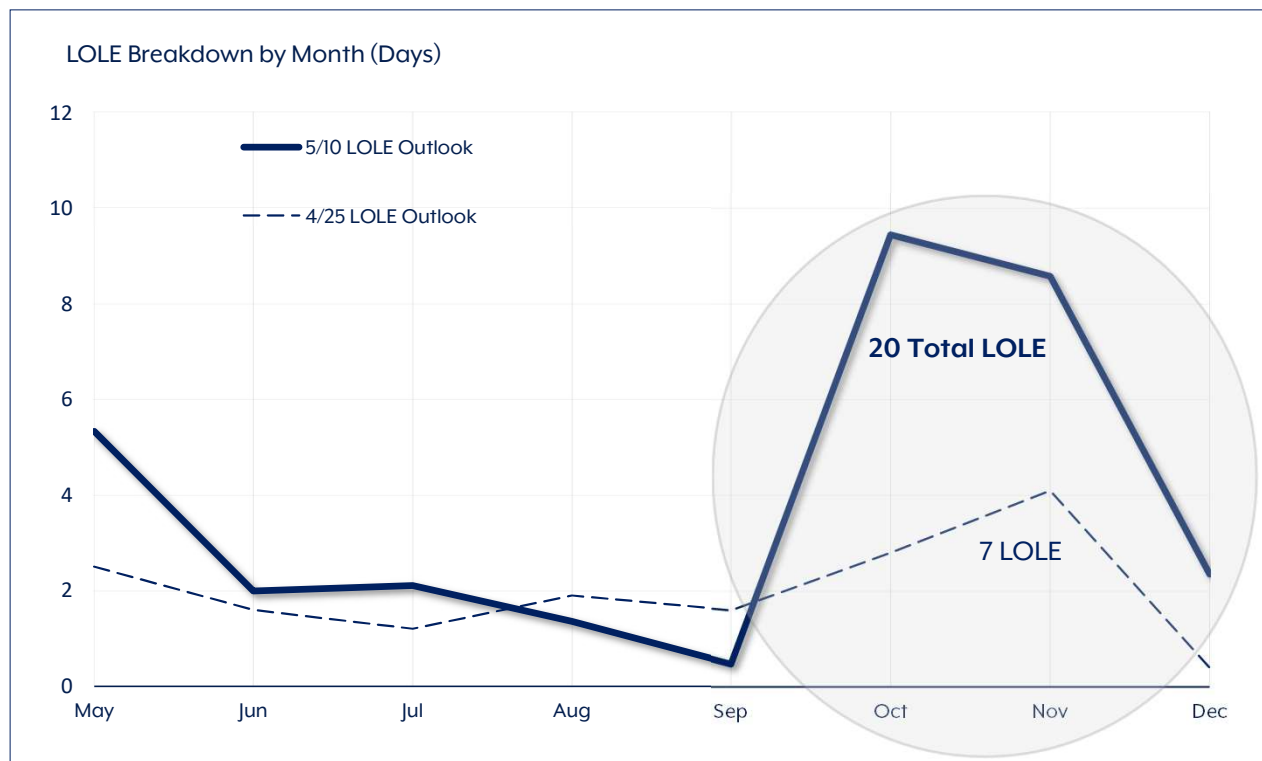
Note: The linear trendline smooths-out fluctuations in data to show a pattern or trend more clearly. It uses the average value as a single point in the trendline.

**Average Daily Availability Rate
During the period of 7/1/22 –
5/28/23**

Average as of:	Average Last Report 5/17/23	Average as of 5/28/23
PREPA	41%	↔ 41%
AES	70%	↑ 71%
EcoEléctrica	88%	↑ 89%
AES/EcoEléctrica	79%	↑ 80%

No material changes since last report on 5/17, concurrent outages in October and November still present heightened risk

Loss of Load Expectation (LOLE) Outlook comparison



- Increased LOLE risk driven by concurrent scheduled outages of seven Base Load units in October and November (AES2, CS5, PS3&4, AG2, and SJ5&7)
- LUMA System Operations to work with Genera (PREPA) and IPPs so the risks can be reduced by outage schedule planning
- The 350 MW of Emergency Generation is included in this analysis.

