

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

**NEPR**

**Received:**

**Apr 17, 2023**

**5:52 PM**

IN RE:  
LUMA'S RESPONSE TO HURRICANE  
FIONA

**CASE NO. NEPR-MI-2022-0003**

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

**MOTION SUBMITTING ELEVENTH 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 the Eleventh Update on Stabilization Plan for Temporary  
Emergency Generation Capacity**

1. In a Resolution and Order of October 7, 2022 ("October 7<sup>th</sup> 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 7<sup>th</sup> 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."<sup>1</sup>

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<sup>1</sup> 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 12<sup>th</sup> Order”).

3. Per the October 12<sup>th</sup> Order, LUMA was directed to submit the 1<sup>st</sup> and the 15<sup>th</sup> 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 27<sup>th</sup>, 2022, the Energy Bureau issued a Resolution and Order whereby it set a technical conference for November 1, 2022 (“October 27<sup>th</sup> 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 27<sup>th</sup> Order at page 1.

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

6. On October 31<sup>st</sup>, 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 15<sup>th</sup>, 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 1<sup>st</sup>, 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 15<sup>th</sup> (Ninth Update); and April 3<sup>rd</sup> (Tenth Update).

10. In compliance with the October 12<sup>th</sup> Order, LUMA hereby submits as *Exhibit I*, the Eleventh Update on the Stabilization Plan (“Eleventh Update”). The Eleventh Update includes, among others, a summary of the status of Stabilization Plan with reference to the tasks performed in the past weeks in coordination with USACE, FEMA and PREPA. As slides 3 through 8 of *Exhibit I* show, construction activities continue, 6 of the 7 gensets have now arrived at Palo Seco and are being assembled with the remaining genset expected to arrive early next month. Finally, the Eleventh Update identifies current issues and concerns with 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 20<sup>th</sup> 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 the pictures included as part of the Eleventh Report under the seal of confidentiality. As explained below, the Energy Bureau should protect the pictures 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 Eleventh Update**

The Eleventh Update contains 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 Eleventh 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”).<sup>2</sup> 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).<sup>3</sup>

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<sup>2</sup> 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.

<sup>3</sup> 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.<sup>4</sup> For example, in at least two proceedings on Data Security,<sup>5</sup> and Physical Security,<sup>6</sup> 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.<sup>7</sup>

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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.

<sup>4</sup> *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).

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

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

<sup>7</sup> *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 Eleventh Update because they depict the exact location, specifications and characteristics of the gensets and other large capacity equipment assembled and installed at Palo Seco. The pictures also depict the location of interconnection installations to be used for emergency generation. The pictures, therefore, 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 Eleventh 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.

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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 April 3, 2023	Pictures on pages 3, 4, 6, 7 and 8	Critical Energy Infrastructure Information 18 C.F.R. § 388.113; 6 U.S.C. §§ 671-674.	April 17, 2023

**WHEREFORE**, LUMA respectfully requests that this Energy Bureau **take notice** of the aforementioned, **accept** the Eleventh 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 **grants** the request to keep the pictures confidential.

**RESPECTFULLY SUBMITTED.**

In San Juan, Puerto Rico, this 17<sup>th</sup> day of April, 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](mailto:jmarrero@diazvaz.law).



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*Exhibit 1*  
*Eleventh Update on Stabilization Report*



# Generation Stabilization Plan Discussion

April 17, 2023

# Agenda

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



# Executive Summary

## Palo Seco site:

**United States Army Corps of Engineers (USACE) construction continues making significant progress,**

- Final commissioning is now targeted to be completed on May 15, with an in-service date of May 16, three weeks later than the April 4 posted schedule.

## **Generator Sets (gensets) and major equipment have arrived in Puerto Rico**

- 6 of 7 gensets have now arrived on site and being assembled; ~90% complete as of 4/10
- The remaining genset to arrive in May; and LNG Tank and Re-gas Skids remain near Palo Seco site

*Genset assembled and waiting to begin initial testing*

## **Environmental Protection Agency (EPA) Nitrogen Oxide (NOx) emissions compliance will be met using water injection technology**

- Received approval from USACE to proceed with required demineralized water treatment system; temporary equipment has been secured to minimize schedule risk until permanent equipment arrives

## San Juan site:

### **FEMA has awarded the emergency generation construction contract**

- Weston Solutions, teaming with New Fortress Energy was selected for the San Juan contract (same as Palo Seco)
- Activities continue to make-ready site for emergency gensets and associated equipment
- Early schedule targeting nine (9) gensets (200 MW) for arrival in mid-May

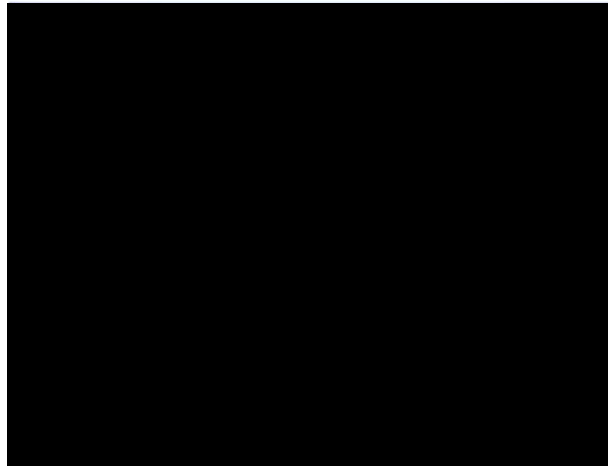




# Active work at both sites

## Palo Seco – Making progress on construction with near nonstop 24/7 work

- Continued forms and rebar mesh fabrication for several concrete foundations and slabs
- Continue mechanical set-up and electrical testing/check-out of gensets
- Set diesel fuel skids and continued with piping assembly
- Placed concrete pedestals for natural gas pipe run to gensets from LNG skid location
- Pulled-in multiple Medium Voltage (MV) conductors to substation and gensets
- Major causes of schedule slippage: unexpected work on LNG equipment foundations, additional water treatment design and equipment for NOx control and the weather



Site conditions on 4/8 that postponed work

## San Juan – Continuing to confirm viability of existing equipment

- The existing PREPA equipment is still showing some risks, as described below:
  - Unit #10 transformer presented 5 leaks that will be repaired and further tested for viability
  - Unit #7 transformer is being tested and will be repaired or replaced with an existing used transformer from Costa Sur as determined after testing
  - The existing PREPA pipe-type cable testing and repair by a contractor (TBD) is expected to take up to 6 weeks
- Unit #8 transformer passed the testing by PREPA
- The 300 MVA transformer will be moved by PREPA contractor once the foundation is completed

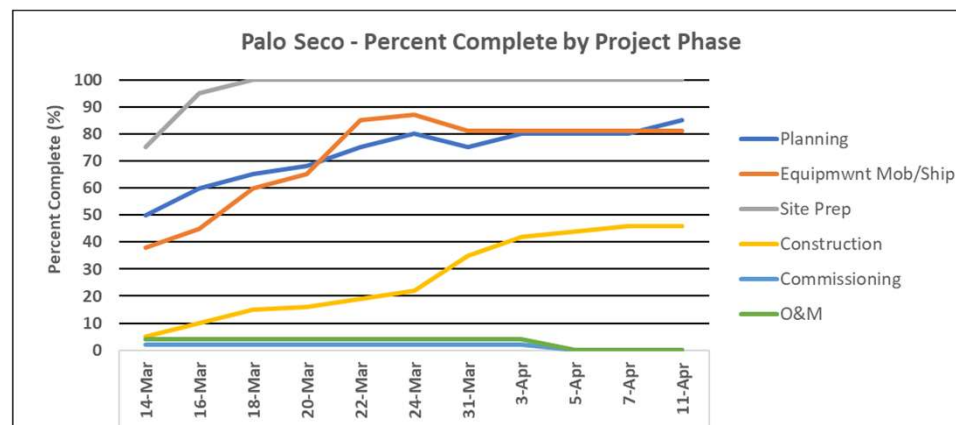
**With the recent award of the emergency generation construction contact by FEMA, activity at the San Juan site will increase rapidly**



# Construction Activities - Progress Tracking by Phase: Palo Seco

11-Apr-23					
Phase	Activity	Start	Finish	% Complete	Overall % Complete
Planning	Submittals	1-Mar	22-Apr	90%	85%
	RFIs	1-Mar	22-Apr	90%	
	Incidental Design	1-Mar	22-Apr	80%	
Equipment Mob/Shipping	Power Generators	1-Mar	6-Apr	90%	81%
	LNG Facility	1-Mar	19-Apr	65%	
	Balance of Plant	1-Mar	5-Apr	95%	
Site Prep	Diesel Fuel Supply	1-Mar	15-Mar	100%	100%
	LNG Facility	1-Mar	23-Mar	100%	
	Power Generators	1-Mar	15-Mar	100%	
Construction	Diesel Fuel Supply	7-Mar	18-Apr	70%	46%
	LNG Facility	16-Mar	3-May	20%	
	Power Generators	7-Mar	22-Apr	68%	
Commissioning	Diesel Fuel Supply	18-Apr	22-Apr	0%	0%
	LNG Facility	5-May	15-May	0%	
	Power Generators	28-Apr	3-May	0%	
O&M		16-May		0%	0%

- Yellow highlight on table identifies where the construction schedule was adjusted to reflect current status and projections



- Graph trends show a leveling of progress percentage in Planning, Equipment Mobilization and Construction
  - Incidental design adjustments and unanticipated work have moved out the in-service date to 5/16.



## Palo Seco site - LNG Foundation Construction

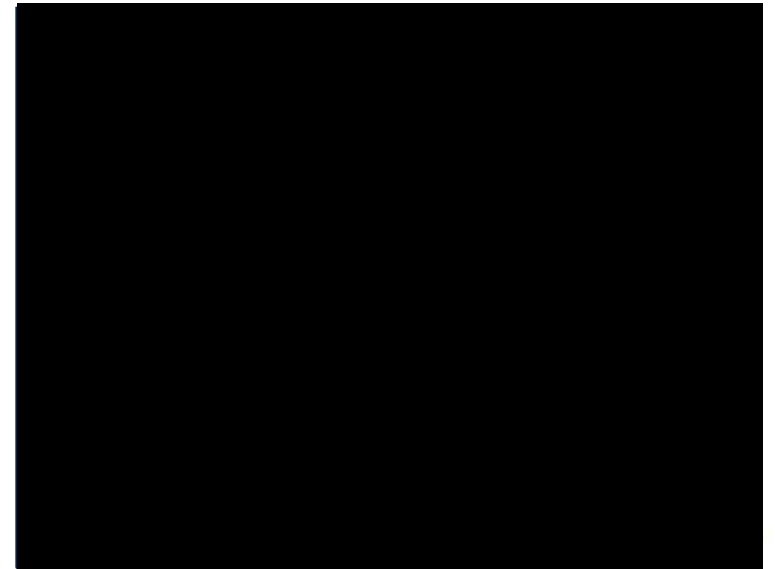
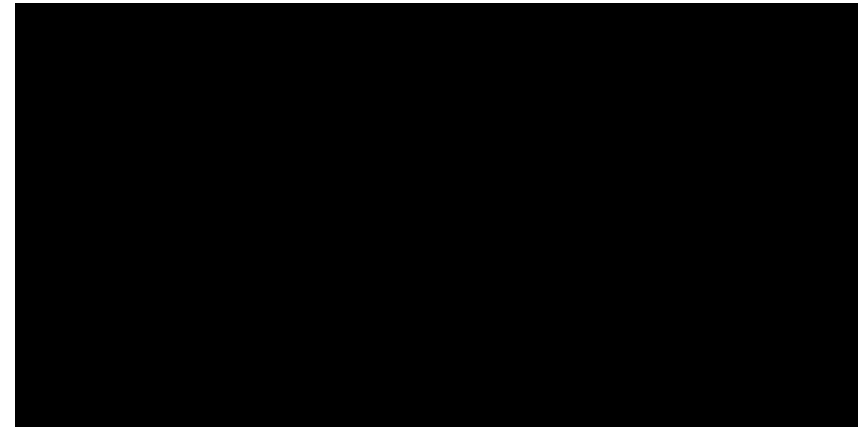
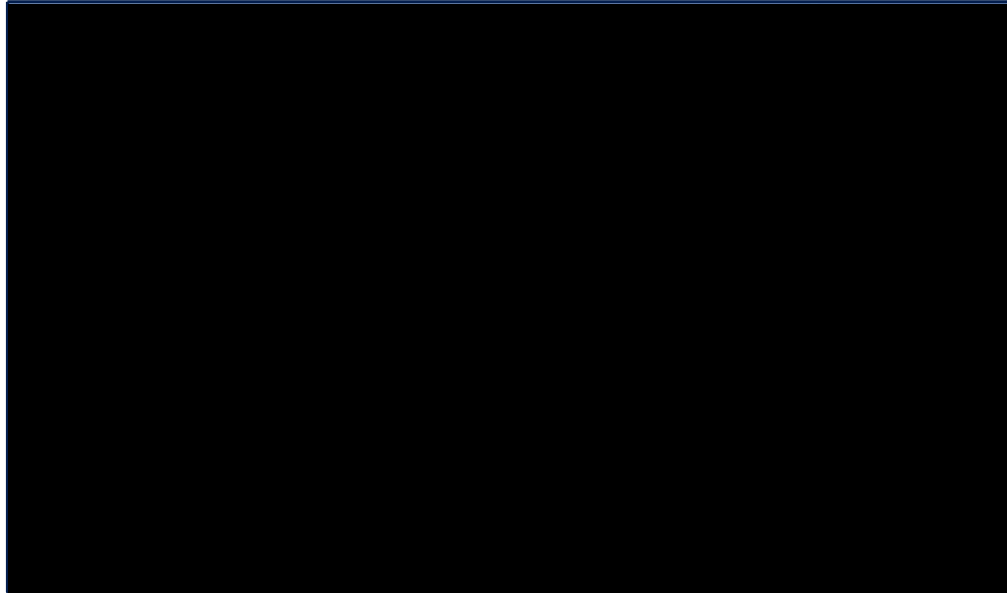
Each LNG tank pedestal requires three separate concrete pours and curing periods.

*Large concrete form being constructed for the LNG tank pedestal foundation*

*Concrete pumping truck allows the concrete to be placed when a long reach is needed, e.g., pouring this concrete slab in a congested area of the PS site.*



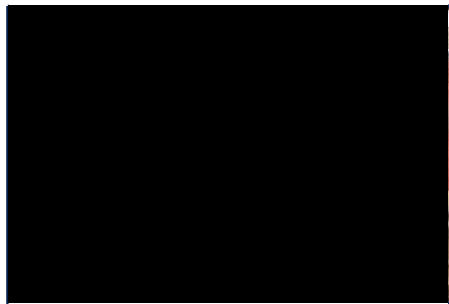
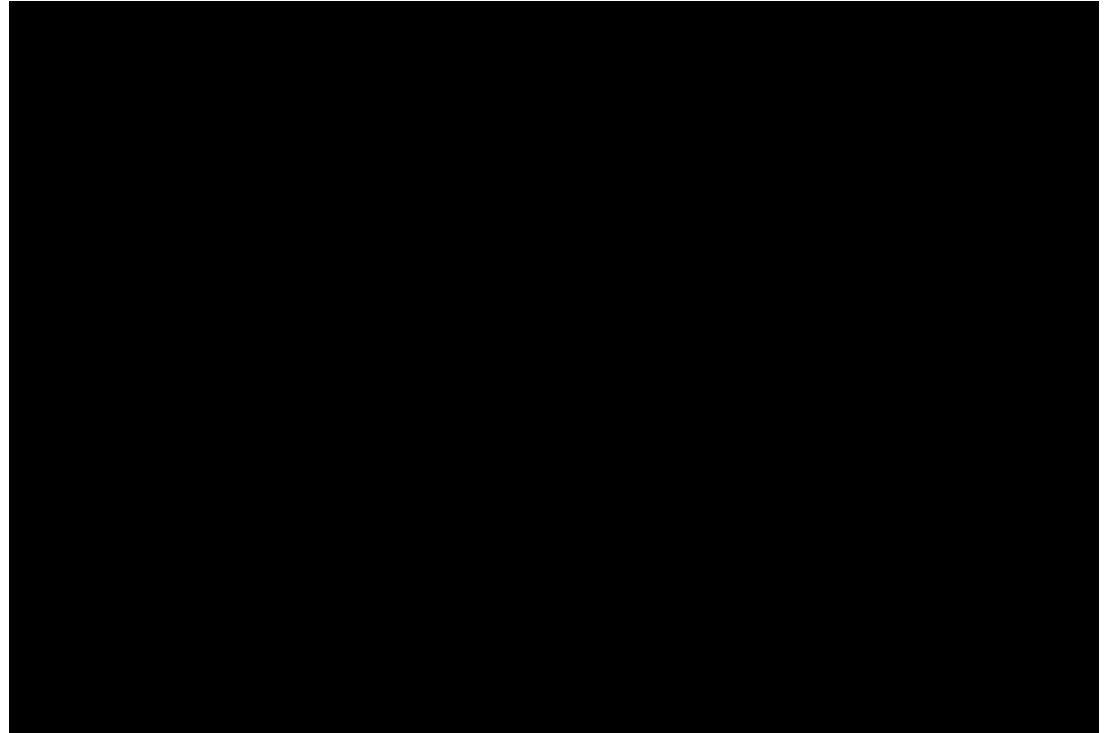
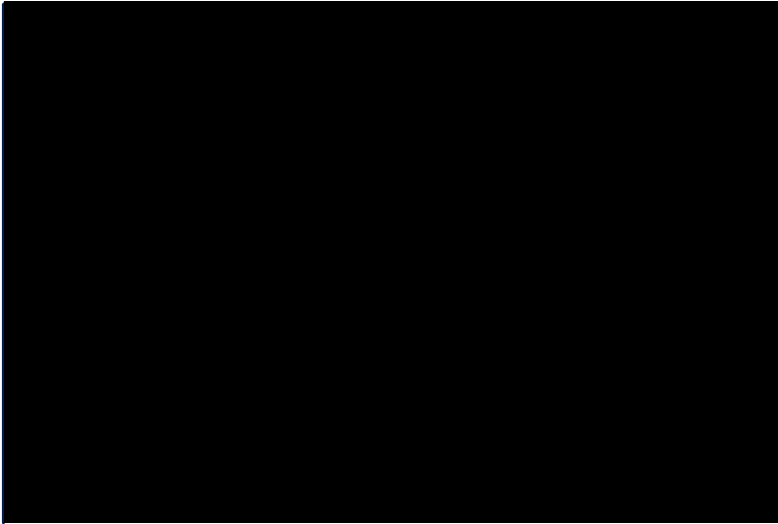
## Palo Seco site - LNG Equipment stowed at the San Juan port



- *LNG system staged at the San Juan port*
- *Contractor has applied for a typical Department of Transportation and Public Works (DTOP, for it's abbreviation is Spanish) permit to transport to the Palo Seco site; currently there are no concerns with the proposed route*
- *LUMA is coordinating the Planned Outages for T & D power lines on the proposed route for safety clearance compliance.*

4/17/2023

## Palo Seco site – Construction: Cable installation

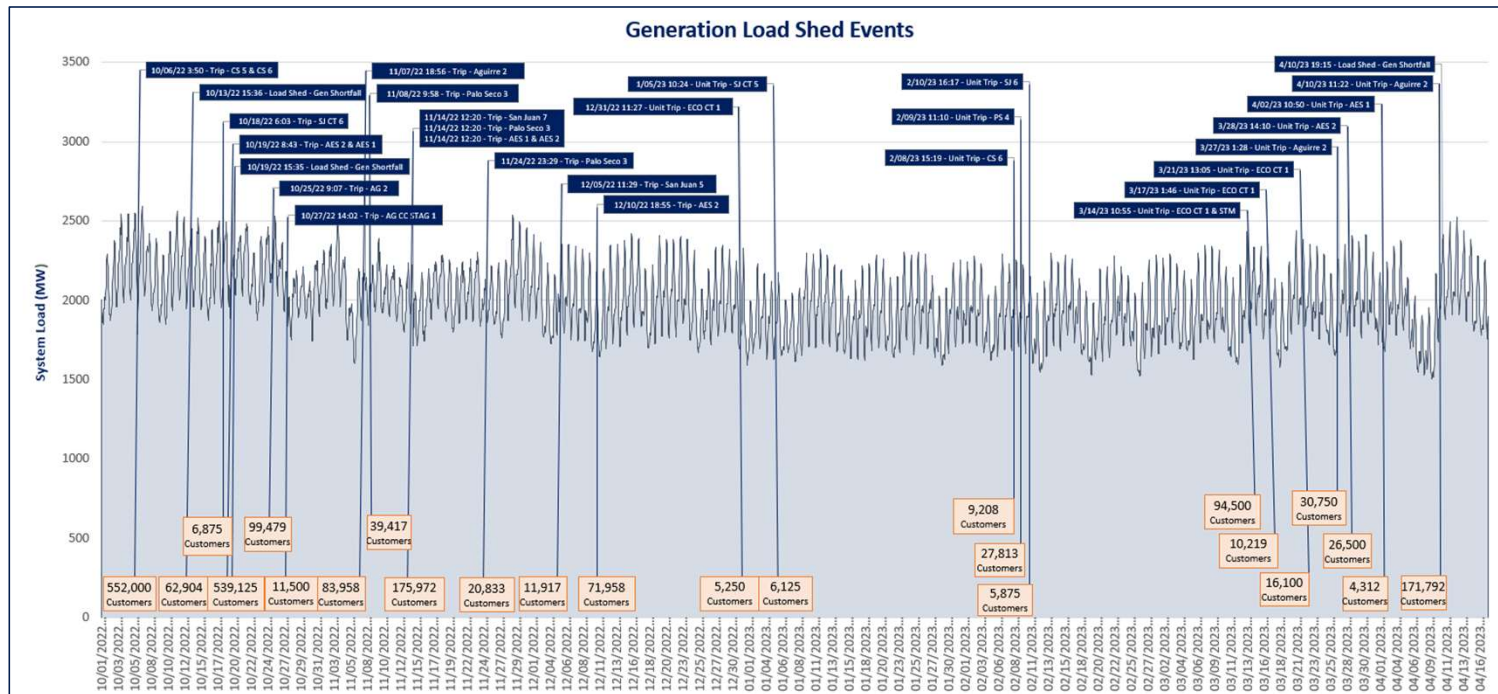


*Crews worked to install hundreds of feet of new cable trays and MV conductors at Palo Seco to interconnect the emergency generation.*



# Current Generation Operations – Load Shed Events: 26 load shed events have occurred since October 1, 2022.

Updated until 4/16/2023



**Two (2) load shed events have occurred since the last report on 4/3:**

- April 10, at 11:22 hours Aguirre 2 tripped, causing a manual load shed from 19:11 - 19:36 and
- Due to the unavailability of this unit, the system reserves remained in critical condition during the evening peak hours.



# Maintenance Schedule Changes:

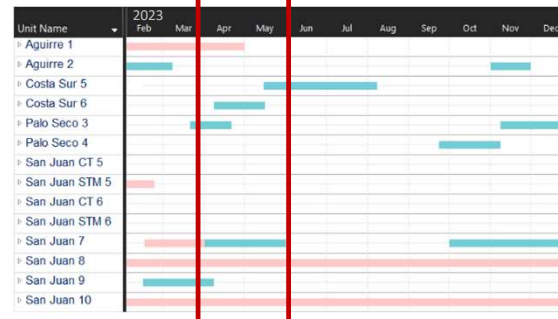
- No changes to schedule since last report on 4/3.

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
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 PO start			
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						
Rev. 01-17-23		Add PO in Nov 2023									Extend 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.		Add PO in Mar 2023. Delay PO start from Dec 2023 to May 2024.	Change PO in Feb to FO and extend duration. Delay PO start from Dec 2023 to May 2024.						
Rev. 03-08-23		Extend PO duration												
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	

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



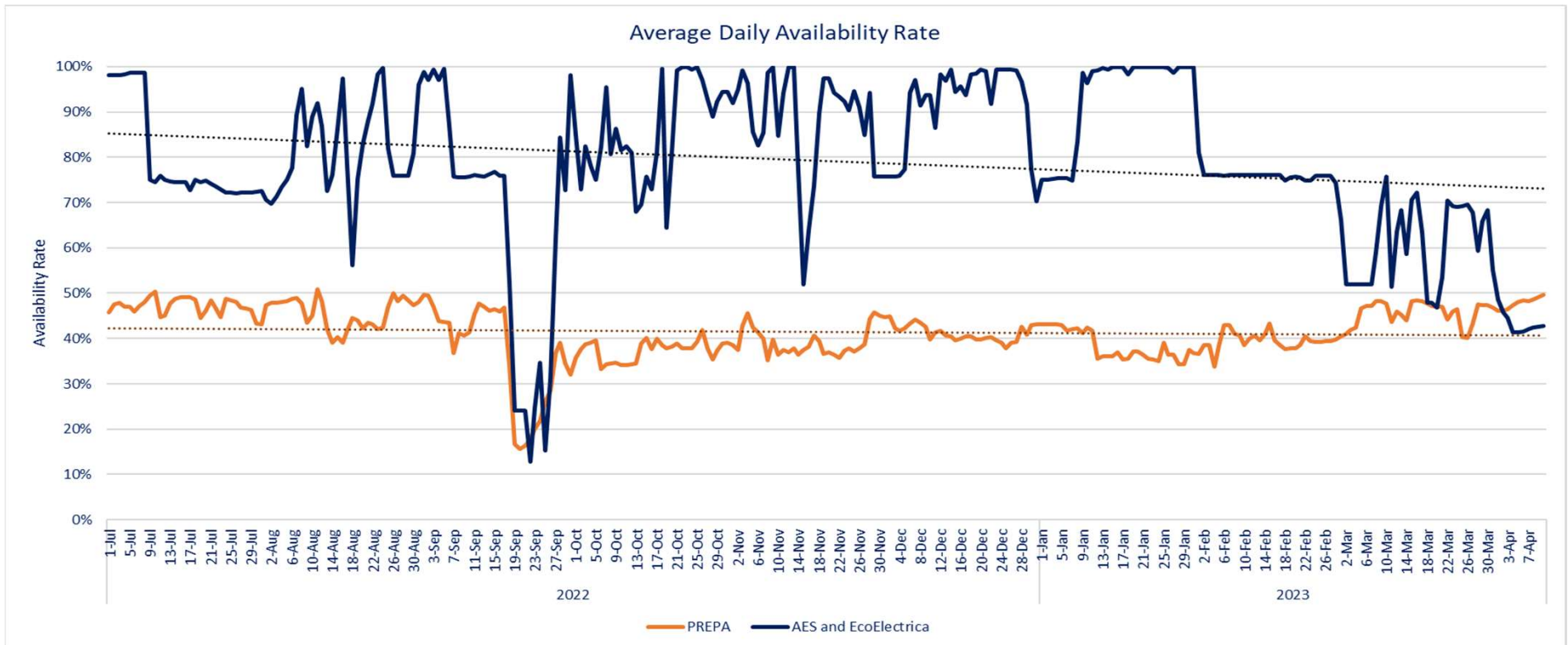
Rev. 03-20-23



- Although unchanged, the stacking of outages in April and May still contributes to the higher risk of load sheds during the period

# Availability of PREPA units shows slightly Increase in 2023

As of 4/9/2023

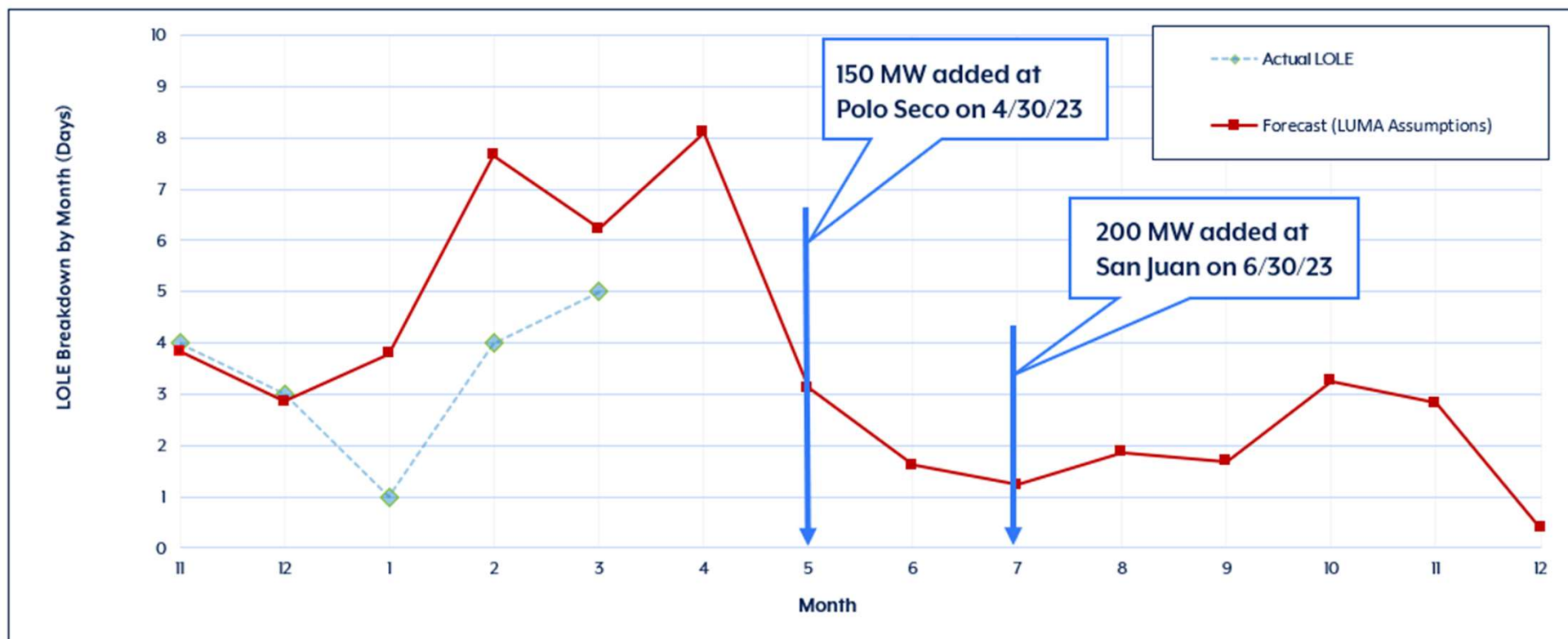


- Since July of 2022, trend of availability of PREPA units decreased to below 40%, compared to its stated goal of 65%. However, the first 4 months of 2023 PREPA availability show an improvement.
- EcoElectrica 2 had a one-month planned outage and AES 2 had a forced outage for twelve days, which caused the decrease in the AES & EcoElectrica availability during March and April





# New generators reduce risk of insufficient generation



- Forecast scenarios assume 350 MW of GSP capacity is added to the generation fleet in two steps as noted on the graph
- The impact of this added capacity significantly reduces the Loss of Load Expectation (LOLE)

