



LUMA – Generators Genera

May 23, 2025

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Agenda

- Updates on the 2025 IRP status
- Impact of Act 1-2025 and March 19, 2025 R&O
- Confirm data for existing and new generation assets
 - Assumed retirement dates for existing units
 - COD dates for new units
 - Operational characteristics such as minimum run times, minimum loads, etc.
- Questions and Discussion

■ Updates on 2025 IRP Status



2025 IRP Project Status

- On May 13, 2025, the Energy Bureau issued an R&O, recognizing the complexity and time-intensity of resource modeling, ordering new filing dates to submit the 2025 IRP:
 - LUMA must complete all Core scenario runs and consider them in the selection of a Preferred Resource Plan to be filed on October 17, 2025
 - LUMA can complete the Supplemental modeling runs after the 2025 IRP filing, with the PSSe Analysis on November 21, 2025, or shortly after
- LUMA is currently reviewing and updating the 2025 IRP assumptions to incorporate into the modeling software and plans to commence running the Core Scenarios on June 1, 2025

2025 IRP Project Status- Core Scenarios Approved by the Energy Bureau

#	Description	Load forecast	Solar and battery capital costs	Gas plant capital costs (CCs and GTs)	Level of DBESS control	Natural gas fuel cost	Include biodiesel as selectable option?	Hard Coded Resources
	Core Scenarios							
1	Base assumptions for all variables	Base	Base	Base	Base	Base	Yes	Base
2	High load (peakier / Low LF) with base assumptions for other variables	High	Base	Base	Base	Base	Yes	Base
3	Base load with high fossil capital costs	Base	Base	High	Base	Base	Yes	Base
4	Base load with low renewable energy capital costs and high fossil capital costs	Base	Low	High	Base	Base	Yes	Base
5	Base load with high gas fuel costs	Base	Base	Base	Base	High	Yes	Base
6	Base load with high gas fuel costs and high gas capital costs	Base	Base	High	Base	High	Yes	Base
7	LUMA Flexibility 1 or hybrid	LUMA TBD						
8	LUMA Flexibility 2 or hybrid							
9	LUMA Flexibility 3 of hybrid							
10	LUMA Flexibility 4 of hybrid							
11	LUMA Flexibility 5 or hybrid							
12	Biodiesel is unavailable/too costly on island	Base	Base	Base	Base	Base	No	Base



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2025 IRP Project Status – Supplemental Scenarios Approved by the Energy Bureau

#	Description	Load forecast	Solar and battery capital costs	Gas plant capital costs (CCs and GTs)	Level of DBESS control	Natural gas fuel cost	Include biodiesel as selectable option?	Hard Coded Resources
	Supplemental Scenarios							
13	High DBESS control with base assumptions for other variables	Base	Base	Base	High	Base	Yes	Base
14	No NGCC 460 MW San Juan	Base	Base	Base	Base	Base	Yes	No NGCC
15	Marine Cable	Base	Base	Base	Base	Base	Yes	Base
16	Alternative RPS 1	Base	Base	Base	Base	Base	Yes	Base
17	Alternative RPS 2	Base	Base	Base	Base	Base	Yes	Base

2025 IRP Project Status - Scenarios

- Scenario Assumptions described in the May 13 R&O:
 - Constant trajectory of distributed PV (DPV) installations for all scenarios
 - Identical trajectory of fuel oil costs for each heavy fuel oil and light fuel oil (diesel) for all scenarios
 - Identical trajectory of hard coded resources (MW and type and year of install); except #14 as noted. RPS soft target beginning 2035; except #16 and #17 (ramp to 2050)
 - Alternative RPS1 = RPS soft target beginning 2025 (ramp to 2050)
 - Alternative RPS2 = no RPS soft target at all until very late in the planning horizon (2040-2044, ramp to 2050)
 - All scenarios will use a separate resource option to reflect ASAP Phase 2 BESS at a lower cost than BESS low-cost assumption. All scenarios assume Aguirre ST 1&2 are out of service, and 800 MW of temporary generation is in service, starting in 2025. DBESS = Distributed Battery Energy Storage Systems
 - Solar PV and BESS costs are separate variables in the modeling: "base" and "low" capital costs seen here apply to each

Impact of Act 1-2025 and March 19, 2025 R&O



Impact of Act 1- 2025 and March 19, 2025, R&O (3000MW of new capacity)

- **Act 1- 2025** amends the Puerto Rico Energy Policy Act (“Act 17-2019”) and the Energy Diversification Act (“Act 82-2010”) and thus key assumptions
 - Extends use of coal -based power generation, until 2032 (AES)
 - Eliminates interim renewable energy targets and maintains the goal of achieving 100% renewable energy by 2050 (RPS)
- **March 19, 2025, R&O:** Consider costs and timelines for a total of 2,500 to 3,000 MW of new capacity for Puerto Rico
 - Resulted in recent P3A RFP

LUMA Recommendations on Act 1 -2025 and recent changes

- LUMA and the Energy Bureau discussed the requirements of Act 1-2025 and recent changes in the energy system that must be incorporated to align with the current reality of Puerto Rico. Below are the main changes in assumption:
 - Passing of Act 1-2025
 - Recent orders for the emergency generation (OE-2025-016)
 - RFP for 3,000 MW (NEPR-MI-2025-0001)
 - Need to define new assumptions regarding Aguirre 1 and 2's expected contribution to the resource plan
 - Recent updates to the expected capacities and commercial operational dates to Tranche 1 and 2 projects
 - The potential limitation on the maximum size of generation to 400MW, for reliability considerations

Emerging generation input assumptions

- Treatment of Aguirre steam plant (units 1 and 2)
 - The 2025 IRP Team will assume both units are out of service for all PREB ordered core and supplemental scenarios
- LUMA plans to use the current values in PLEXOS, subject to any updates, which includes two units greater than 400 MW capacity available for selection by PLEXOS
 - Energiza 460 MW unit
 - 551 MW generic combined cycle unit
- LUMA will consider fixed decisions in the modeling (Tranches 1, 2 and 4, General BESS and peakers, ASAP BESS)

800 MW of Temporary Generation

- LUMA will assume the 800MW of temporary generation to be in service based on the following proposed COD estimate:
 - 200 MW on October 1, 2025, in Aguirre
 - 200 MW on January 1, 2026, in Aguirre
 - 200 MW by March 1, 2026, in Costa Sur
 - 200 MW by June 1, 2026, in Costa Sur
- LUMA proposes the emergency units be assumed to be available for operation until six months after the planned COD date of the Energiza 460 MW unit

Confirm data for existing and new generation assets



Data for Existing Generation Assets (Baseload Generators)

Operating Status and Fuel Type

Generator	Operating Status	Fuel Type
Aguirre 1 CC	Existing	Diesel
Aguirre 2 CC	Existing	Diesel
Aguirre ST_1	Existing	Bunker
Aguirre ST_2	Existing	Bunker
Cambalache CT_2	Existing	Diesel
Cambalache CT_3	Existing	Diesel
Costa Sur 5	Existing	Bunker & Natural Gas
Costa Sur 6	Existing	Bunker & Natural Gas
Mayagüez GT 1	Existing	Diesel
Mayagüez GT 2	Existing	Diesel
Mayagüez GT 3	Existing	Diesel
Mayagüez GT 4	Existing	Diesel
Palo Seco 3	Existing	Bunker
Palo Seco 4	Existing	Bunker
San Juan 7	Existing	Bunker
San Juan 9	Existing	Bunker
San Juan 5 CC	Existing	Diesel & Natural Gas
San Juan 6 CC	Existing	Diesel & Natural Gas
Cambalache CT_1	Inactive	Diesel
Palo Seco 1	Inactive	Bunker
Palo Seco 2	Inactive	Bunker
San Juan 8	Inactive	Bunker
San Juan 10	Inactive	Bunker

Heat Rates (MMBtu/MWh)

Generator	HR @ Min Capacity	HR @ 75% Capacity	HR @ Max Capacity	HR input 2019 IRP
Aguirre 1 CC	12.21	12.21	12.21	11.14
Aguirre 2 CC	12.19	12.19	12.19	11.14
Aguirre ST_1	11.09	10.61	10.09	9.6
Aguirre ST_2	11.13	10.81	10.3	9.7
Cambalache CT 2	13.42	n/a	13.42	11.55
Cambalache CT 3	13.45	n/a	13.45	11.55
Costa Sur 5	12.07	11.25	10.64	9.71
Costa Sur 6	11.43	10.99	10.54	9.71
Mayagüez GT 1	10.46	10.46	10.46	9.32
Mayagüez GT 2	10.55	10.55	10.55	9.32
Mayagüez GT 3	10.56	10.56	10.56	9.32
Mayagüez GT 4	10.72	10.72	10.72	9.32
Palo Seco 3	10.96	10.64	10.3	9.73
Palo Seco 4	10.96	10.64	10.3	9.73
San Juan 7	11.88	12.69	11.88	10.5
San Juan 9	11.85	11.94	11.55	10.5
San Juan 5 CC	9.52	8.47	7.79	7.63
San Juan 6 CC	9.36	8.34	7.69	7.85

- Net Values
- HHV

* All data agreement and data transfers must be completed ASAP but no later than May 23 to allow time to load and check the new assumptions by May 30 in the PLEXOS model.

NEPR-AP-2023-0004

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Data for Existing Generation Assets (Baseload Generators)

Forced Outage rates (%)

Generator	FY 2026 Outage Rate	2024 RA Report FY 2025	CY 2024 Actual	4-Year 2021-2024 Average	Long-Term FOR Input (%)
Aguirre 1 CC	50%	50%	51%	51%	50%
Aguirre 2 CC	60%	40%	75%	71%	70%
Aguirre ST_1	30%	25%	47%	48%	30%
Aguirre ST_2	30%	15%	49%	27%	30%
Cambalache CT_2	15%	10%	21%	N/A	21%
Cambalache CT_3	15%	10%	47%	N/A	21%
Costa Sur 5	20%	20%	26%	25%	25%
Costa Sur 6	20%	15%	38%	22%	22%
Mayagüez GT 1	30%	30%	36%	N/A	40%
Mayagüez GT 2	30%	30%	39%	N/A	40%
Mayagüez GT 3	35%	30%	57%	N/A	40%
Mayagüez GT 4	35%	30%	53%	N/A	40%
Palo Seco 3	25%	15%	59%	24%	20%
Palo Seco 4	35%	60%	100%	46%	35%
San Juan 7	45%	40%	59%	39%	45%
San Juan 9	10%	8%	17%	13%	13%
San Juan 5 CC	10%	15%	9%	9%	15%
San Juan 6 CC	20%	15%	52%	22%	20%

Operational Run Data

Generator	Forced Outage Duration (Hrs)	Minimum Downtime (Hrs.)	Minimum Runtime (Hrs.)
Aguirre 1 CC	40	2	4
Aguirre 2 CC	40	2	4
Aguirre ST_1	72	4	8
Aguirre ST_2	72	4	8
Cambalache CT_2	125	7	7
Cambalache CT_3	125	7	7
Costa Sur 5	72	4	8
Costa Sur 6	72	4	8
Mayagüez GT 1	40	2	4
Mayagüez GT 2	40	2	4
Mayagüez GT 3	40	2	4
Mayagüez GT 4	40	2	4
Palo Seco 3	72	2	8
Palo Seco 4	72	2	8
San Juan 7	72	2	8
San Juan 9	72	2	8
San Juan 5 CC	40	2	4
San Juan 6 CC	40	2	4

Please provide an explanation why the heavy fuel oil units have a minimum run time of 720 hours (i.e., 30 days). This seems excessive.

- Net Values
- HHV

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Data for Existing Generation Assets (Baseload Generators)

Operational Start & Stop Data

Generator	Startup Energy Req (MMBtu)	Startup Cost Adder (\$000)	Ramp Up Rate (MW/hr)	Ramp Down Rate (MW/hr)
Aguirre 1 CC	265	4	300	300
Aguirre 2 CC	265	4	300	300
Aguirre ST_1	1100	80.451	300	300
Aguirre ST_2	1100	80.451	300	300
Cambalache CT_2	265	11.919	180	180
Cambalache CT_3	265	11.919	180	180
Costa Sur 5	1000	0	360	120
Costa Sur 6	1000	0	360	120
Mayagüez GT 1	45	0	300	300
Mayagüez GT 2	45	0	300	300
Mayagüez GT 3	45	0	300	300
Mayagüez GT 4	45	0	300	300
Palo Seco 3	2637	59	180	180
Palo Seco 4	2637	59	180	180
San Juan 7	350	0	180	180
San Juan 9	350	0	180	180
San Juan 5 CC	390	0	900	900
San Juan 6 CC	390	0	900	900

Operational Regulation and Reserves

Generator	Regulation Minimum Range (MW)	Regulation Maximum Range (MW)	Regulation Ramp Rate (MW/min)	Operating Reserve
Aguirre 1 CC	135	296	5	Quick Start
Aguirre 2 CC	135	296	5	Quick Start
Aguirre ST_1	230	430	5	Spin
Aguirre ST_2	230	430	5	Spin
Cambalache CT_2	54	78	3	Quick Start
Cambalache CT_3	54	78	3	Quick Start
Costa Sur 5	250	350	4	Spin
Costa Sur 6	250	350	4	Spin
Mayagüez GT 1	20	50	5	Quick Start
Mayagüez GT 2	20	50	5	Quick Start
Mayagüez GT 3	20	50	5	Quick Start
Mayagüez GT 4	20	50	5	Quick Start
Palo Seco 3	150	170	3	Spin
Palo Seco 4	150	170	3	Spin
San Juan 7	70	90	3	Spin
San Juan 9	70	90	3	Spin
San Juan 5 CC	123	165	15	Spin
San Juan 6 CC	123	165	15	Spin

- Net Values
- HHV

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Data for Existing Generation Assets (Baseload Generators)

Variable O&M Costs (\$/MWh)

Generator	FY 2025 VOM (\$/MWh)
Aguirre 1 CC	\$5.39
Aguirre 2 CC	\$5.39
Aguirre ST_1	\$2.48
Aguirre ST_2	\$2.48
Cambalache CT_2	\$26.59
Cambalache CT_3	\$26.59
Costa Sur 5	\$1.98
Costa Sur 6	\$1.98
Mayaguez GT 1	\$26.59
Mayaguez GT 2	\$26.59
Mayaguez GT 3	\$26.59
Mayaguez GT 4	\$26.59
Palo Seco 3	\$3.68
Palo Seco 4	\$3.68
San Juan 7	\$9.07
San Juan 9	\$9.07
San Juan 5 CC	\$11.63
San Juan 6 CC	\$11.63

Fixed O&M Costs (\$/MWh)

Generator	FY 2025 FOM (\$/kW-yr)
Aguirre 1 CC	\$33.20
Aguirre 2 CC	\$33.20
Aguirre ST_1	\$33.20
Aguirre ST_2	\$33.20
Cambalache CT_2	\$96.25
Cambalache CT_3	\$96.25
Costa Sur 5	\$45.52
Costa Sur 6	\$45.52
Mayaguez GT 1	\$96.25
Mayaguez GT 2	\$96.25
Mayaguez GT 3	\$96.25
Mayaguez GT 4	\$96.25
Palo Seco 3	\$74.03
Palo Seco 4	\$74.03
San Juan 7	\$59.67
San Juan 9	\$59.67
San Juan 5 CC	\$59.67
San Juan 6 CC	\$59.67

- The costs will be escalated for inflation in future years
- All data agreement and data transfers must be completed ASAP but no later than May 23 to allow time to load and check the new assumptions by May 30 in the PLEXOS model.



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Data for Existing Generation Assets (Baseload Generators)

Available Capacity (MW)

Generator	Minimum operating capacity (MW)	2025 RA Dependable Capacity (MW)	2024 RA Dependable Capacity (MW)	2023 RA Dependable Capacity (MW)	Nameplate Capacity (MW)
Aguirre 1 CC	0	165	100	220	296
Aguirre 2 CC	0	100	100	100	296
Aguirre ST_1	200	350	300	350	450
Aguirre ST_2	200	350	350	330	450
Cambalache CT_2	0	78	75	75	82
Cambalache CT_3	0	78	75	75	82
Costa Sur 5	220	380*	250	350	410
Costa Sur 6	220	360	350	350	410
Mayaguez GT 1	27	50	47.5	50	54
Mayaguez GT 2	27	50	47.5	50	54
Mayaguez GT 3	27	25	47.5	25	54
Mayaguez GT 4	27	25	47.5	50	54
Palo Seco 3	100	180	160	190	216
Palo Seco 4	100	200	160	190	216
San Juan 7	60	100	70	70	100
San Juan 9	60	100	90	90	100
San Juan 5 CC	- CT: 90 MW - CT+Steam: 130 MW	210	210	200	220
San Juan 6 CC	- CT: 90 MW - CT+Steam: 130 MW	210	210	200	220
Total Thermals		3765	3689	3953.38	4747

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* CS 5 need new firing curve. Once complete unit should reach 410mw in automatic.



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Data for Existing Generation Assets (Peakers)

Operating Status and Fuel Type

Generator	Operating Status	Fuel Type
GT01 - Palo Seco	Existing	Diesel
GT02 - Palo Seco	Existing	Diesel
GT11 - Yabucoa	Inactive	Diesel
GT19 - Jobos	Inactive	Diesel
GT20 - Jobos	Existing	Diesel
GT21 - Daguao	Existing	Diesel
GT22 - Daguao	Existing	Diesel
Palo Seco Mobile Pack 1	Existing	Diesel
Palo Seco Mobile Pack 2	Existing	Diesel
Palo Seco Mobile Pack 3	Existing	Diesel
Palo Seco TM Gen 4-1	Existing	Natural Gas/Diesel
Palo Seco TM Gen 4-2	Existing	Natural Gas/Diesel
Palo Seco TM Gen 6-1	Existing	Natural Gas/Diesel
Palo Seco TM Gen 6-2	Existing	Natural Gas/Diesel
San Juan TM Gen+6-1	Existing	Natural Gas/Diesel
San Juan TM Gen+6-2	Existing	Natural Gas/Diesel
San Juan TM Gen+6-3	Existing	Natural Gas/Diesel
San Juan TM Gen+6-4	Existing	Natural Gas/Diesel
San Juan TM Gen+6-5	Existing	Natural Gas/Diesel
San Juan TM Gen+6-6	Existing	Natural Gas/Diesel
San Juan TM Gen+6-7	Existing	Natural Gas/Diesel
San Juan TM Gen+6-8	Existing	Natural Gas/Diesel
San Juan TM Gen+6-9	Existing	Natural Gas/Diesel
San Juan TM Gen+6-10	Existing	Natural Gas/Diesel

Operating Status and Fuel Type

Generator	Operating Status	Fuel Type
GT03 - Palo Seco	Existing	Diesel
GT04 - Palo Seco	Inactive	Diesel
GT05 - Palo Seco	Inactive	Diesel
GT06 - Palo Seco	Inactive	Diesel
GT07 - Costa Sur	Inactive	Diesel
GT08 - Costa Sur	Inactive	Diesel
GT09 - Aguirre	Inactive	Diesel
GT10 - Aguirre	Inactive	Diesel
GT12 - Yabucoa	Existing	Diesel
GT13 - Vega Baja	Inactive	Diesel
GT14 - Vega Baja	Inactive	Diesel

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Data for Existing Generation Assets (Peakers)

Heat Rates (MMBtu/MWh)				
Generator	HR @ Min Capacity	HR @ 75% Capacity	HR @ Max Capacity	HR input 2019 IRP
GT01 – Palo Seco	12.26	12.26	12.26	14.4
GT02 – Palo Seco	12.26	12.26	12.26	14.4
GT11 – Yabucoa	12.26	12.26	12.26	14.4
GT19 – Jobos	12.26	12.26	12.26	14.4
GT20 – Jobos	12.26	12.26	12.26	14.4
GT21 – Daguaao	12.26	12.26	12.26	14.4
GT22 - Daguaao	12.26	12.26	12.26	14.4
Palo Seco MP 1	11.5	11.5	11.5	N/A
Palo Seco MP 2	11.5	11.5	11.5	N/A
Palo Seco MP 3	11.5	11.5	11.5	N/A
Palo Seco TM Gen 4-1	11.30	11.30	11.30	N/A
Palo Seco TM Gen 4-2	11.30	11.30	11.30	N/A
Palo Seco TM Gen 6-1	11.30	11.30	11.30	N/A
Palo Seco TM Gen 6-2	11.30	11.30	11.30	N/A
San Juan TM Gen+6-1	10.90	10.90	10.90	N/A
San Juan TM Gen+6-2	10.90	10.90	10.90	N/A
San Juan TM Gen+6-3	10.90	10.90	10.90	N/A
San Juan TM Gen+6-4	10.90	10.90	10.90	N/A
San Juan TM Gen+6-5	10.90	10.90	10.90	N/A
San Juan TM Gen+6-6	10.90	10.90	10.90	N/A
San Juan TM Gen+6-7	10.90	10.90	10.90	N/A
San Juan TM Gen+6-8	10.90	10.90	10.90	N/A
San Juan TM Gen+6-9	10.90	10.90	10.90	N/A
San Juan TM Gen+6-10	10.90	10.90	10.90	N/A

Forced Outage rates (%)					
Generator	FY 2026 Outage Rate	2024 RA Report FY 2025	CY 2024 Actual	4-Year 2021-2024 Average	Long-Term FOR Input (%)
GT01 - Palo Seco	45%	40%	51%	N/A	55%
GT02 - Palo Seco	45%	40%	62%	N/A	55%
GT11 - Yabucoa	45%	40%	N/A	N/A	55%
GT19 - Jobos	45%	40%	N/A	N/A	55%
GT20 - Jobos	45%	40%	36%	N/A	55%
GT21 - Daguaao	45%	40%	71%	N/A	55%
GT22 - Daguaao	45%	40%	64%	N/A	55%
Palo Seco Mobile Pack 1	50%	9%	58%	N/A	50%
Palo Seco Mobile Pack 2	50%	9%	45%	N/A	50%
Palo Seco Mobile Pack 3	50%	9%	59%	N/A	50%
Palo Seco TM Gen 4-1	15%	3%	14%	N/A	25%
Palo Seco TM Gen 4-2	15%	3%	24%	N/A	25%
Palo Seco TM Gen 6-1	15%	3%	27%	N/A	25%
Palo Seco TM Gen 6-2	15%	3%	26%	N/A	25%
San Juan TM Gen+6-1	20%	3%	27%	N/A	30%
San Juan TM Gen+6-2	20%	3%	15%	N/A	30%
San Juan TM Gen+6-3	20%	3%	29%	N/A	30%
San Juan TM Gen+6-4	20%	3%	37%	N/A	30%
San Juan TM Gen+6-5	20%	3%	27%	N/A	30%
San Juan TM Gen+6-6	20%	3%	28%	N/A	30%
San Juan TM Gen+6-7	20%	3%	18%	N/A	30%
San Juan TM Gen+6-8	20%	3%	27%	N/A	30%
San Juan TM Gen+6-9	20%	3%	29%	N/A	30%
San Juan TM Gen+6-10	20%	3%	26%	N/A	30%
GT03 – Palo Seco	45%	40%	59%	N/A	55%

* All data agreement and data transfers must be completed ASAP but no later than May 23 to allow time to load and check the new assumptions by May 30 in the PLEXOS model.



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Data for Existing Generation Assets (Peakers)

Operational Run Data

Generator	Forced Outage Duration (Hrs)	Minimum Downtime (Hrs.)	Minimum Runtime (Hrs.)
GT01 – Palo Seco	40	0	0
GT02 – Palo Seco	40	0	0
GT11 – Yabucoa	40	0	0
GT19 – Jobos	40	0	0
GT20 – Jobos	40	0	0
GT21 – Daguao	40	0	0
GT22 – Daguao	40	0	0
Palo Seco Mobile Pack 1	40	0	0
Palo Seco Mobile Pack 2	40	0	0
Palo Seco Mobile Pack 3	40	0	0
Palo Seco TM Gen 4-1	40	0	0
Palo Seco TM Gen 4-2	40	0	0
Palo Seco TM Gen 6-1	40	0	0
Palo Seco TM Gen 6-2	40	0	0
San Juan TM Gen+6-1	40	0	0
San Juan TM Gen+6-2	40	0	0
San Juan TM Gen+6-3	40	0	0
San Juan TM Gen+6-4	40	0	0
San Juan TM Gen+6-5	40	0	0
San Juan TM Gen+6-6	40	0	0
San Juan TM Gen+6-7	40	0	0
San Juan TM Gen+6-8	40	0	0
San Juan TM Gen+6-9	40	0	0
San Juan TM Gen+6-10	40	0	0

Operational Start & Stop Data

Generator	Startup Energy Req (MMBtu)	Startup Cost Adder (\$000)	Ramp Up Rate (MW/hr)	Ramp Down Rate (MW/hr)
GT01 – Palo Seco	45	0	300	300
GT02 – Palo Seco	45	0	300	300
GT11 – Yabucoa	45	0	300	300
GT19 – Jobos	45	0	300	300
GT20 – Jobos	45	0	300	300
GT21 – Daguao	45	0	300	300
GT22 – Daguao	45	0	300	300
Palo Seco Mobile Pack 1	45	0	300	300
Palo Seco Mobile Pack 2	45	0	300	300
Palo Seco Mobile Pack 3	45	0	300	300
Palo Seco TM Gen 4-1	45	0	1200	1200
Palo Seco TM Gen 4-2	45	0	1200	1200
Palo Seco TM Gen 6-1	45	0	1200	1200
Palo Seco TM Gen 6-2	45	0	1200	1200
San Juan TM Gen+6-1	45	0	1200	1200
San Juan TM Gen+6-2	45	0	1200	1200
San Juan TM Gen+6-3	45	0	1200	1200
San Juan TM Gen+6-4	45	0	1200	1200
San Juan TM Gen+6-5	45	0	1200	1200
San Juan TM Gen+6-6	45	0	1200	1200
San Juan TM Gen+6-7	45	0	1200	1200
San Juan TM Gen+6-8	45	0	1200	1200
San Juan TM Gen+6-9	45	0	1200	1200
San Juan TM Gen+6-10	45	0	1200	1200

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Data for Existing Generation Assets (Peakers)

Operational Regulation and Reserves

Generator	Ramp Rate (MW/min)	Operating Reserve
GT01 – Palo Seco	N/A	Quick Start
GT02 – Palo Seco	N/A	Quick Start
GT11 – Yabucoa	N/A	Quick Start
GT19 – Jobos	N/A	Quick Start
GT20 – Jobos	N/A	Quick Start
GT21 – Daguao	N/A	Quick Start
GT22 – Daguao	N/A	Quick Start
Palo Seco Mobile Pack 1	5	Quick Start
Palo Seco Mobile Pack 2	5	Quick Start
Palo Seco Mobile Pack 3	5	Quick Start
Palo Seco TM Gen 4-1	5	Quick Start
Palo Seco TM Gen 4-2	5	Quick Start
Palo Seco TM Gen 6-1	5	Quick Start
Palo Seco TM Gen 6-2	5	Quick Start
San Juan TM Gen+6-1	5	Quick Start
San Juan TM Gen+6-2	5	Quick Start
San Juan TM Gen+6-3	5	Quick Start
San Juan TM Gen+6-4	5	Quick Start
San Juan TM Gen+6-5	5	Quick Start
San Juan TM Gen+6-6	5	Quick Start
San Juan TM Gen+6-7	5	Quick Start
San Juan TM Gen+6-8	5	Quick Start
San Juan TM Gen+6-9	5	Quick Start
San Juan TM Gen+6-10	5	Quick Start

Variable O&M Costs (\$/MWh)

Generator	FY 2025 VOM (\$/MWh)
GT01 - Palo Seco	26.59
GT02 - Palo Seco	26.59
GT11 - Yabucoa	26.59
GT19 - Jobos	26.59
GT20 - Jobos	26.59
GT21 - Daguao	26.59
GT22 - Daguao	26.59
Palo Seco Mobile Pack 1	26.59
Palo Seco Mobile Pack 2	26.59
Palo Seco Mobile Pack 3	26.59
Palo Seco TM Gen 4-1	0
Palo Seco TM Gen 4-2	0
Palo Seco TM Gen 6-1	0
Palo Seco TM Gen 6-2	0
San Juan TM Gen+6-1	0
San Juan TM Gen+6-2	0
San Juan TM Gen+6-3	0
San Juan TM Gen+6-4	0
San Juan TM Gen+6-5	0
San Juan TM Gen+6-6	0
San Juan TM Gen+6-7	0
San Juan TM Gen+6-8	0
San Juan TM Gen+6-9	0
San Juan TM Gen+6-10	0

Fixed O&M Costs (\$/MWh)

Generator	FY 2025 FOM (\$/kW-yr)
GT01 - Palo Seco	\$96.25
GT02 - Palo Seco	\$96.25
GT14 - Vega Baja	\$96.25
GT19 - Jobos	\$96.25
GT20 - Jobos	\$96.25
GT21 - Daguao	\$96.25
GT22 - Daguao	\$96.25
Palo Seco Mobile Pack 1	\$96.25
Palo Seco Mobile Pack 2	\$96.25
Palo Seco Mobile Pack 3	\$96.25
Palo Seco TM Gen 4-1	\$0.00
Palo Seco TM Gen 4-2	\$0.00
Palo Seco TM Gen 6-1	\$0.00
Palo Seco TM Gen 6-2	\$0.00
San Juan TM Gen+6-1	\$0.00
San Juan TM Gen+6-2	\$0.00
San Juan TM Gen+6-3	\$0.00
San Juan TM Gen+6-4	\$0.00
San Juan TM Gen+6-5	\$0.00
San Juan TM Gen+6-6	\$0.00
San Juan TM Gen+6-7	\$0.00
San Juan TM Gen+6-8	\$0.00
San Juan TM Gen+6-9	\$0.00
San Juan TM Gen+6-10	\$0.00

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Data for Existing Generation Assets (Peakers)

Available Capacity (MW)				
Generator	2025 RA Dependable Capacity (MW)	2024 RA Dependable Capacity (MW)	2023 RA Dependable Capacity (MW)	Nameplate Capacity (MW)
GT01 – Palo Seco	21	21	21	21
GT02 – Palo Seco	21	21	21	21
GT11 – Yabucoa	21	21	21	21
GT19 – Jobos	21	21	21	21
GT20 – Jobos	21	21	21	21
GT21 – Daguao	21	21	21	21
GT22 – Daguao	21	21	21	21
Palo Seco Mobile Pack 1	27	27	27	27
Palo Seco Mobile Pack 2	27	27	27	27
Palo Seco Mobile Pack 3	27	27	27	27
Palo Seco TM Gen 4-1	20	20	N/A	20
Palo Seco TM Gen 4-2	20	20	N/A	20
Palo Seco TM Gen 6-1	25	25	N/A	25
Palo Seco TM Gen 6-2	25	25	N/A	25
San Juan TM Gen+6-1	25	25	N/A	25
San Juan TM Gen+6-2	25	25	N/A	25
San Juan TM Gen+6-3	25	25	N/A	25
San Juan TM Gen+6-4	25	25	N/A	25
San Juan TM Gen+6-5	25	25	N/A	25
San Juan TM Gen+6-6	25	25	N/A	25
San Juan TM Gen+6-7	25	25	N/A	25
San Juan TM Gen+6-8	25	25	N/A	25
San Juan TM Gen+6-9	25	25	N/A	25
San Juan TM Gen+6-10	25	25	N/A	25
Total	568	568	228	568

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Data for Genera (Peakers and BESS)

RICE and CT Units proposed by Genera

Location	Power Source	Expected Capacity (MW)	Fuel	Commercial Operation Date
Costa Sur	Peaker Unit	100	Natural Gas	2027
Daguao	Peaker Unit	56	Natural Gas	2027
Jobos	Peaker Unit	56	Natural Gas	2027
Yabucoa	Peaker Unit	56	Natural Gas	2027
Total Genera PR Peakers	Peaker Unit	268	Natural Gas	2027

BESS Resources proposed by Genera

Location	Power Source	Expected Capacity (MW)	Commercial Operation Date
Costa Sur	BESS	30	Apr-26
Aguirre	BESS	164	'Feb 2027
Yabucoa	BESS	40	Jun-26
Palo Seco	BESS	95	Mar-27
Vega Baja	BESS	49	Apr 2026
Cambalache	BESS	52	Feb-26

*COD dates are not considering construction schedules from proponents as these contracts are pending to be approved and signed. Also, dates are assuming decommissioning plans will be approved by Q4 2025. If there are any delays on contractor schedules or

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Data for Genera (BESS)

Costa Sur BESS			Aguirre BESS			Yabucoa BESS		
Units	40		Units	214		Units	52	
Capacity	150	MWh	Capacity	814	MWh	Capacity	195	MWh
Max Power	30	MW	Max Power	164	MW	Max Power	40	MW
Max SoC	100	%	Max SoC	100	%	Max SoC	100	%
Min Soc	0%	%	Min Soc	0%	%	Min Soc	0%	%
Charge Efficiency			Charge Efficiency			Charge Efficiency		
Discharge Efficiency			Discharge Efficiency			Discharge Efficiency		
Roundtrip Efficiency	89.7	%	Roundtrip Efficiency	89.7	%	Roundtrip Efficiency	89.7	%
FO&M Charge			FO&M Charge			FO&M Charge		
Max Cycles Year	Avg. 365, no more than 2 cycles per day		Max Cycles Year	Avg. 365, no more than 2 cycles per day		Max Cycles Year	Avg. 365, no more than 2 cycles per day	
Forced Outage Rate			Forced Outage Rate			Forced Outage Rate		
Mean Time to Repair			Mean Time to Repair			Mean Time to Repair		
Firm Capacity	150.8824	MWh	Firm Capacity	814	MWh	Firm Capacity	196.1471	MWh

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Data for Genera (BESS)

Cambalache BESS			Vega Baja BESS			Palo Seco BESS		
Units	68		Units	64		Units	124	
Capacity	258 MWh		Capacity	242 MWh		Capacity	470 MWh	
Max Power	52 MW		Max Power	49 MW		Max Power	95 MW	
Max SoC	100 %		Max SoC	100 %		Max SoC	100 %	
Min Soc	0% %		Min Soc	0% %		Min Soc	0% %	
Charge Efficiency			Charge Efficiency			Charge Efficiency		
Discharge Efficiency			Discharge Efficiency			Discharge Efficiency		
Roundtrip Efficiency	90.7 %		Roundtrip Efficiency	89.7 %		Roundtrip Efficiency	89.7 %	
FO&M Charge			FO&M Charge			FO&M Charge		
Max Cycles Year	Avg. 365, no more than 2 cycles per day		Max Cycles Year	Avg. 365, no more than 2 cycles per day		Max Cycles Year	Avg. 365, no more than 2 cycles per day	
Forced Outage Rate			Forced Outage Rate			Forced Outage Rate		
Mean Time to Repair			Mean Time to Repair			Mean Time to Repair		
Firm Capacity	259.5177 MWh		Firm Capacity	242 MWh		Firm Capacity	470 MWh	

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SETPR



SETPR

- SETPR meetings scheduled for May 13–15, 2025 cancelled; this decision follows the April 30 R&O, which postpones the submission of the 2025 IRP
- Meetings will be rescheduled prior to the submission of the final 2025 IRP Report on October 17, 2025

Questions and Discussion



Thank You

La gente primero.
La seguridad siempre.

