BEFORE THE PUBLIC UTILITIES COMMISSION
OF THE STATE OF CALIFORNIA

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Order Instituting Rulemaking to Continue Oversight of Electric Integrated Resource Planning and Procurement Processes.	R.25-06-019

ORANGE COUNTY POWER AUTHORITY'S 2026 INTEGRATED RESOURCE PLAN PUBLIC VERSION

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August 10, 2026

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OF THE STATE OF CALIFORNIA

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In accordance with the requirements of California Public Utilities Code Sections 454.51 and 454.52, California Public Utilities Commission Decision 22-02-004 and *Assigned Commissioner and Assigned Administrative Law Judges' Ruling Identifying Issues and Schedule of Review for 2026 Renewables Portfolio Standard Procurement Plans*, issued on January 16, 2026, the *Email Ruling Granting Joint Request for Extension of Load Serving Entity Integrated Resource Plan Filings*, issued on March 9, 2026, and other rulings and guidance in the above-captioned proceeding, Orange County Power Authority(OCPA), hereby provides its 2026 Integrated Resource Plan (IRP) to the Commission for certification.

OCPA is e-filing this document in the instant Rulemaking and serving all parties listed on the Commission's official service list for R.25-06-019. Confidential IRP documents and native-form workbooks are being submitted to Energy Division via the Commission's file transfer protocol concurrently. Included here are the following IRP documents:

- Verification of Joseph M. Mosca
- OCPA's IRP Narrative Template (Public Version)
- Resource Data Template Version 3 (Public Version)
- Clean System Power Calculator (Public Version)

- Notice of Availability of the public version of its IRP document

OCPA respectfully requests that the Commission certify its 2026 Integrated Resource Plan.

Respectfully submitted,

BEST BEST & KRIEGER LLP



RYAN M. F. BARON

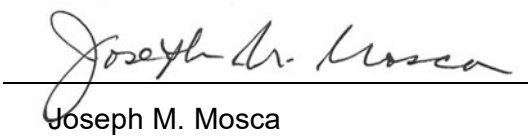
August 10, 2026

VERIFICATION

I am the Chief Executive Officer for Orange County Power Authority, a public agency, and I am authorized to make this verification on its behalf. The statements in the foregoing document are true of my own knowledge, except as to matters stated on information or belief, and as to those matters I believe them to be true. The spreadsheet templates used within this filing have not been altered from the version issued or approved by Energy Division.

I declare under penalty of perjury that the foregoing is true and correct.

Executed on August 10, 2026, at Irvine, California.

By: 

Joseph M. Mosca
Chief Executive Officer
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Public Version

Standard LSE Plan

ORANGE COUNTY POWER AUTHORITY

2026 INTEGRATED RESOURCE PLAN

AUGUST 10, 2026

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I. Executive Summary

Description of OCPA

The Orange County Power Authority (OCPA) is a Joint Powers Authority (JPA) formed in November 2020 to provide community choice aggregation (CCA) service. As a JPA, OCPA is a local government agency. OCPA is governed by a five-member board composed of representatives of its member local governments. Through these representatives, OCPA is controlled by and is accountable to the communities OCPA serves. OCPA began serving load in April 2022.

OCPA currently provides retail electric generation services and complementary energy programs to customers in Southern California Edison (SCE) service territory within the municipal boundaries of the following communities:

a. City of Buena Park
b. City of Fullerton
c. City of Irvine

Starting in April 2027, OCPA will begin serving the City of Fountain Valley.

OCPA currently serves approximately 158,000 residential accounts and 24,000 commercial and industrial accounts. OCPA is the default power provider for the communities it serves.

OCPA procures electricity for its customers from a variety of resources guided by policies adopted by OCPA's Board of Directors, and by regulatory requirements established by the California Legislature and State regulatory agencies. Procurement activities are structured to achieve internal energy and financial goals, as directed by the Board, including meeting all compliance obligations to achieve a safe, affordable, reliable, and clean power supply.

Introduction to OCPA's Integrated Resource Plan

This Integrated Resource Plan was formally submitted to OCPA's Board of Directors for approval based on the IRP's compliance with Public Utilities Code Sections 454.51 and 454.52. On July 13, 2026, OCPA's Board adopted Resolution 2026-07, which formally approves this IRP and adopts OCPA's Preferred Conforming Portfolio (PCP). In Resolution 2026-07, OCPA's Board also makes the following determinations regarding OCPA's Portfolio:

- OCPA's PCP is expected to achieve economic, reliability, environmental, security, and other benefits and performance characteristics that are consistent with the goals set forth in Section 454.52(a)(1)(A-I).
- OCPA's PCP includes a diversified procurement portfolio consisting of both short-term and long-term electricity and electricity-related and demand reduction products.

- OCPA's PCP achieves the resource adequacy requirements established pursuant to Public Utilities Code Section 380.
- OCPA's PCP is consistent with the procurement timing, resource mix, and operational attributes of the Commission's 2026 Preferred System Portfolio (PSP).
- OCPA's PCP is fully compliant with all OCPA procurement directives.

A copy of this IRP and Resolution is available on OCPA's website.[1]

OCPA respectfully requests that the Commission certify this IRP. As both the Legislature and the Commission have recognized, the Legislature has granted Community Choice Aggregators broad authority to procure resources on behalf of their respective customers, an authority limited only where *"other generation procurement arrangements have been expressly authorized by statute."*[2] OCPA understands that the Commission has three primary interests in the CCA IRP process:

- ✓ Ensuring that CCA IRPs provide requisite procurement information needed by the Commission to develop its statewide plan.[3]
- ✓ Ensuring that CCA current and planned procurement is consistent with the resource adequacy requirements established pursuant to Public Utilities Code Section 380.5.[4]
- ✓ Ensuring that CCA current and planned procurement satisfies the CCA's share of renewable integration resources identified in the Commission's Preferred System Plan, and that the CCA either self-provides or pays for investor-owned utility procurement to support its share of any renewable integration shortfall.[5]

OCPA has prepared its IRP with these interests in mind and recognizes the benefits of a collaborative planning approach between the State and CCAs.

A comprehensive description of the development and content of OCPA's Preferred Conforming Portfolio, the Portfolio's compliance with applicable requirements, and an action plan detailing OCPA's next steps to promote conformance with such requirements are detailed in this individual Integrated Resource Plan.

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1 Resolution and OCPA's IRP available at https://www.ocpower.org/resources/key-documents/.

2 Cal. Pub. Util. § 366.2(a)(5).

3 D.24-02-047 *Decision Adopting 2023 Preferred System Plan and Related Matters, and Addressing Two Petitions for Modification* (February 15, 2024).

4 Cal. Pub. Util. Code § 454.52(b)(3)(C).

5 Cal. Pub. Util. Code § 454.51.

Process

To develop its IRP, OCPA:

- Compiled data from existing energy contracts, RA capacity contracts, and its share of capacity for allocated Cost Allocation Mechanism (CAM) resources using the guidance provided by the CPUC Energy Division.
- Identified short positions relative to known planning targets and its assigned load forecast for each IRP planning year.
- Populated the Resource Data Template with all current contracts.
- Compiled detailed information on projects for which it is currently negotiating power purchase agreements, including information regarding project status and timing.
- Added generic future contracts with existing resources, including renewable and large hydroelectric generators, to help fill its remaining open positions.
- Used the Commission's Clean System Power Calculator Tool to check the greenhouse gas emissions associated with the resulting portfolio to ensure that these emissions are less than or equal to OCPA's assigned share of the 8 MMT statewide benchmark.
- Identified the resulting portfolio as its Preferred Conforming Portfolio.
- Verified the PCP for reliability by comparing the total portfolio net qualifying capacity (NQC) against OCPA's resource adequacy requirements as shown in the Reliability tab of the 8 MMT RDT and added sufficient RA capacity to ensure reliability.

Findings

OCPA reached the following findings regarding its PCP:

- OCPA's PCP includes the procurement of the following new resources throughout the planning period:
    - New solar resources totaling 788 MW
    - New battery storage resources totaling 757 MW
    - New wind resources totaling 260 MW
    - New geothermal resources totaling 13 MW
- OCPA's PCP provides for the following overall resource mix in 2045:
    - 100 GWh of Large Hydro
    - 300 GWh of Geothermal
    - 729 GWh of Wind
    - 2,133 GWh of Solar
    - 5,295 MWh of Battery Storage Discharge Capability
    - 248 MW of Combined-Cycle (Capacity-Only from Existing California Fleet)
    - 113 MW of utility capacity resources allocated under the Cost Allocation Mechanism

- OCPA's PCP is consistent with procurement timing, resource quantities, and general resource attributes identified in the System Reference Plan.
- OCPA's PCP shows GHG emissions of 0.24 MMT, 0.16 MMT, 0.13 MMT, and 0.08 MMT in 2030, 2035, 2040, and 2045, respectively, which is equivalent to or less than OCPA's assigned GHG benchmarks for those years.
- OCPA's PCP meets all relevant reliability metrics.
- OCPA's PCP is consistent with the Commission's System Reference Plan and can be used in a 8 MMT (2045) consolidated statewide portfolio.

Action Plan

To implement its Preferred Conforming Portfolio, OCPA is adopting the action plan described in Section IV, below. Under the action plan, OCPA will periodically solicit offers for new renewable generation and storage projects. These resources are typically secured through long-term power purchase agreements. OCPA expects to secure power purchase agreements for new and existing projects in multiple solicitations conducted over the next several years. Periodically throughout the year, OCPA will solicit offers for short-term renewable energy, resource adequacy, system energy, and other products needed to balance the portfolio and adhere to position limits established through OCPA's risk management policy and practices. These solicitations may take the form of formal request for offers processes, bilateral discussions, and/or transactions arranged through broker markets.

II. Study Design

a. Objectives

OCPA employs the following objectives in performing the analytical work to develop its IRP:

1. Identify a portfolio that meets OCPA's goals for renewable energy utilization and that has GHG emissions equal to or less than OCPA's proportional share of the 8 MMT statewide GHG reduction benchmark, as determined using the Commission's emissions calculator.
2. Identify a portfolio that achieves economic, reliability, environmental, security, and other benefits and performance characteristics that are consistent with the goals set forth in Public Utilities Code Section 454.52(a)(1)(A-I).
3. Identify a diverse and balanced portfolio that includes both short-term and long-term electricity products as well as electricity-related demand reduction products.
4. Identify a portfolio that achieves the resource adequacy requirements established pursuant to Public Utilities Code Section 380 and provides OCPA's share of system reliability and renewable integration resources.
5. Identify a portfolio that complies with all procurement directives.

6. Identify a portfolio that is compliant with OCPA's obligations under the Renewables Portfolio Standard program.
7. Identify a portfolio that is compliant with OCPA's incremental MTR reliability procurement obligations for years 2030 to 2032 based on the Commission's IRP procurement order, or D.26-02-057.
8. Identify a portfolio that is cost-effective and minimizes rate impacts on OCPA's customers.

b. Methodology

i. Modeling Tool(s)

In developing its planned portfolios, OCPA leveraged the modeling done by the Energy Division using RESOLVE and SERVM and incorporated that into the RDTv3 and CSP templates as a starting point. After studying this modeling and its conclusions, OCPA used its own experience and expertise in procurement to construct models to quantify portfolio targets for renewable energy content, capacity, and portfolio GHG emissions, as well as physical and financial positions to ensure adherence to OCPA's currently effective risk management policies and business practices.

OCPA starts by utilizing a commercially available energy trading and risk management system to monitor positions, market exposure, credit exposure, value-at-risk, and other risk management metrics.

OCPA uses the outputs of the energy trading system to develop reports and models which are then analyzed to assess annual, monthly, and hourly open positions, taking account of forecasted hourly electric loads and expected deliveries from OCPA's resource portfolio. OCPA uses a proprietary financial model to project power supply costs and incorporates existing and planned procurement into an overall financial assessment of revenues, costs, and cash flows.

For new resource selection, OCPA relied upon the modeling and assumptions in the PSP, and on OCPA's ongoing and recent procurement experience, which provided insight into resource availability and cost. In addition, OCPA's new resource selection reflects the goals adopted by its Board that account for the unique geographic location and local resource availability.

GHG emissions were assessed using the Commission's Clean System Power tool for the 8 MMT benchmark.

ii. Modeling Approach

Load Forecast

OCPA developed this IRP using its assigned load forecast shown in the Table 3 from the file 2026 LSE GHG Emission Benchmarks(3).xlsx (also contained in the CSP templates), as specified

in *Administrative Law Judge's Ruling Setting Requirements for Individual Integrated Resource Plans Due June 1, 2026,* issued January 16, 2026, in R.25-06-019.

Table 1

OCPA's 2026-2045 Load Forecast	
Year	**GWh**
2026	2,334
2027	2,401
2028	2,502
2029	2,604
2030	2,710
2031	2,807
2032	2,905
2033	3,006
2034	3,114
2035	3,224
2036	3,303
2037	3,376
2038	3,440
2039	3,497
2040	3,548
2041	3,592
2042	3,634
2043	3,669
2044	3,692
2045	3,711

OCPA notes that the load forecast underpinning the Commission's Preferred System Plan derives from the CEC's 2024 IEPR, which revised statewide load projections substantially upward. OCPA appreciates the value of a consistent, transparent forecast applied across all Load Serving Entities (LSEs). However, the IEPR-derived allocation for OCPA's service area exceeds OCPA's internally developed forecast, which is updated annually against actual load. Because long-term procurement obligations scale with the forecast, a persistently high assumption risks procurement beyond OCPA's actual need, with those costs ultimately borne by OCPA's ratepayers. OCPA encourages the Commission to incorporate periodic true-up of assigned obligations against realized load.

Load Shape

In developing its portfolio, OCPA used the default load shape from the Clean System Power Calculator. As such, OCPA's total annual energy volumes remain consistent with OCPA's assigned load forecast.

Load-Proportional GHG Emissions Benchmark

OCPA's modeling was assessed against its 2045 load-proportional share of the respective 8 MMT statewide benchmark, as assigned in Table 1 of the Load Forecast Ruling. This assessment yielded the following results:

Table 2

OCPA's Assigned Shares of GHG Reduction Benchmark	
2045 Load (GWh)	**2045 GHG Benchmark 8 MMT Scenario**
3,711	0.082

Compiling Existing Resources

To populate its baseline resource templates, OCPA added existing resources from the following procurement categories:

- Energy Contracts
- Capacity (Resource Adequacy) Contracts
- Assigned share of capacity for CAM resources
- Voluntary Allocation and Market Opportunities (VAMO) allocation of RPS resources from SCE
- Allocation of GHG-free resources from SCE and Pacific Gas & Electric

Selecting New Resources

To identify its new resource procurement opportunities, OCPA first determined the new resource capacity it intends to add each year by considering resource needs (open positions), long-term renewable contracting requirements, RPS requirements, resource adequacy requirements, the need for incremental resource adequacy capacity to contribute to system reliability and renewable integration needs, the potential for technological improvements, and financial considerations. OCPA selected resource types based on experience with competitive solicitations for new renewable and storage resources, experience in procuring resource adequacy resources, as well as consideration of the studies and modeling underlying the adopted PSP.

Confirming Reliability

OCPA's portfolios were evaluated to ensure that sufficient dependable capacity (net qualifying capacity) is available to meet peak load requirements, as shown in the RDTv3. This includes an

18% Perfect Capacity (PCAP) Planning Reserve Margin.[6] OCPA used technology-specific Effective Load Carrying Capacity (ELCC) factors provided by the Commission to assess the contribution of each resource to system reliability. To ensure that its portfolio met the reliability requirements, OCPA added sufficient short-term RA capacity in each year. OCPA's portfolio was also designed to ensure that current incremental resource capacity obligations from D.26-02-057 are met.[7]

Calculating GHG Emissions

OCPA calculated the emissions associated with its PCP using the Commission's Clean System Power calculator. The assigned load forecast, default load shapes, and behind the meter adjustments were used for this assessment, along with the planned supply portfolios. The results were checked against the assigned GHG benchmarks included in the Clean System Power tools.

iii. Alternative Assumptions

OCPA did not use any alternative assumptions in developing its PCP.

III. Study Results

a. Conforming and Alternative Portfolios

Pursuant to Commission direction, OCPA is submitting a preferred conforming portfolio that achieves OCPA's share of GHG emission targets in 2030, 2035, 2040, and 2045. OCPA is not submitting alternative portfolios.

b. Preferred Conforming Portfolio

In accordance with Public Utilities Code Section 454.52(b)(3), OCPA's governing board has determined that the resource mix in its PCP achieves *"economic, reliability, environmental, security, and other benefits and performance characteristics that are consistent with the goals set forth [in Section 454.51(a)(1)]."* These benefits and characteristics are discussed in the subsections below.

OCPA's PCP consists of a combination of:

- Solar, planned existing: 3 GWh
- Solar, planned new: 2,364 GWh

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[6] *See* Workshop Presentation: Reliability Filing Requirements for Load Serving Entities' 2022 Integrated Resource Plans – Results of PRM and ELCC Studies, Slide 31 (July 29, 2022).

[7] OCPA is required to procure 25 MW NQC annually for 2030–2032 (75 MW NQC total), including 19 MW NQC of long-duration energy storage and/or clean firm capacity by 2032.

- Wind, planned existing: 35 GWh
- Wind, CA, planned new: 224 GWh
- Wind, New Mexico, new: 263 GWh
- Wind, Wyoming, new: 241 GWh
- Large Hydro, existing: 100 GWh
- Geothermal, new: 300 GWh
- Battery storage, new: 5.5 GWh dispatch capability

Additionally, OCPA's PCP includes capacity-only resources composed primarily of the following resources:

- Cost Allocation Mechanism (CAM) capacity resources: 113 MW
- Capacity-only of existing combined-cycle, baseload, and others (planned procurement): 248 MW

The table below provides a summary of OCPA's PCP, identifying resources by type and distinguishing between the following procurement categories:

- ✓ Existing resources (energy and capacity) that OCPA owns or contracts with, consistent with definitions provided in the Resource Data Template.
- ✓ Existing resources (energy and capacity) that OCPA plans to contract with in the future.
- ✓ Existing resources (capacity) that OCPA partially pays for through CAM.
- ✓ New resources (energy and capacity) that are under development that OCPA is planning to procure.
- ✓ Future new resources (energy and capacity) that OCPA is planning to procure.

In summary, to meet OCPA's projected 2045 energy demand of 3,711 GWh, OCPA has selected a PCP composed primarily of the resource types and energy volumes detailed below.

Table 3

Comparison of OCPA's PCP New Build Resources to the 2025-2026 TPP Portfolio

Resource Category	TPP Portfolio (MW)	OCPA's Proportional Share of TPP New Resources (MW)	OCPA's PCP (MW)
Geothermal	3,230	33	13
Geothermal (Enhanced)	674	7	0
Biomass	12	0	0
In-State Wind	10,949	113	98
Out-of-State Wind	19,036	196	162
Offshore Wind	-	0	0
Solar	82,732	853	788
Li-ion Battery (4-hr)	6,758	70	324
Li-ion Battery (8-hr)	21,102	217	433
Location Constrained Storage (12-hr)	8,499	88	0

Overall, Table 3 shows that OCPA's PCP is broadly consistent with OCPA's proportional share of the Transmission Planning Process (TPP) new-resource build, with the same core technology set (solar, wind, storage, and geothermal) providing the bulk of new supply. The primary differences are in the composition of that build: (1) the PCP is more solar-heavy than the proportional TPP share, (2) the PCP relies materially more on battery storage — particularly longer-duration (8-hour) storage — than the proportional share, and (3) the PCP includes less in-state wind than the proportional share, while remaining close to proportional levels for out-of-state wind. The PCP also does not assume Enhanced Geothermal (0 MW versus a small proportional share) and does not include the location-constrained 12-hour storage category included in the TPP due to uncertain cost and availability considerations. Taken together, these differences reflect OCPA's emphasis on resources that best match its expected net-load profile and reliability needs as well as resource availability, while maintaining overall alignment with the statewide planning direction reflected in the TPP.

OCPA further notes that the 2025-2026 TPP portfolio does not incorporate continued operation of Diablo Canyon beyond 2030. The proportional new-build benchmark discussed above therefore rests on a baseline in which approximately 2,240 MW of existing carbon-free capacity retires. If Diablo Canyon stays online, less new capacity would need to be built to meet that benchmark. Analyses relying on the Commission's own IRP modeling indicate that continued operation would lower statewide portfolio costs and displace gas generation. OCPA encourages the Commission to evaluate continued operation as an explicit sensitivity in this cycle, with cost allocation that tracks benefit allocation: customers bearing Diablo Canyon costs should receive the corresponding resource adequacy and GHG-free attributes.

c. GHG Emissions Results

OCPA's PCP achieves results and performance characteristics consistent with the Section 454.52(a)(1)(A) goal of meeting the Commission's GHG reduction benchmarks. The 2030, 2035, 2040 and 2045 emissions from OCPA's PCP in addition to OCPA's assigned emissions targets are shown in the table below:

Table 4

GHG Emissions Benchmark (MMT)				
	2030	**2035**	**2040**	**2045**
Assigned Emissions Target	0.246	0.198	0.161	0.082
PCP Emissions	0.246	0.151	0.152	0.071

d. Local Air Pollutant Minimization and Disadvantaged Communities

i. Local Air Pollutants

OCPA's PCP relies primarily on renewable generation, and this portfolio is expected to exhibit relatively low GHG emissions and localized air pollution. The PCP minimizes reliance on unspecified system power, instead incorporating renewable generation procurement/ development whenever feasible.

Results from the 8 MMT CSP tool indicate the following localized air pollutants associated with OCPA's PCP in 2045:

- ✓ NOx: 7 tonnes/year
- ✓ PM 2.5: 6 tonnes/year
- ✓ SO2: 1 tonnes/year

These emissions are expected to result from the planned use of system energy in the 8 MMT PCP, as well as emissions from Combined Heat and Power resources and system energy assigned to the OCPA portfolio by the CSP tool.

ii. Focus on Disadvantaged Communities

OCPA intends to provide and manage its energy portfolio and products in a manner that promotes public health, clean energy procurement, as well as tenets of social, economic and environmental justice in areas impacted by energy production, including Disadvantaged Communities (DAC). OCPA offers several service options that benefit the disadvantaged and low-income communities it serves. In the future, OCPA intends to contract exclusively with renewable or GHG-free generation resources, pursuant to its program objectives and SB 100 mandate. To promote cost savings and risk management for our ratepayers, OCPA will continue to rely on some unspecified CAISO system power for short-term energy needs beyond its long-term contracts; however, OCPA's long-term energy procurement policy is not expected to negatively impact local air quality. To the extent practicable, OCPA is committed to identifying opportunities to support the replacement of retired facilities with renewable resources to reduce the pollution burden in these communities through its procurement activities.

OCPA's IRP is consistent with the goal of minimizing local air pollutants, with early priority on DACs. As defined by CalEPA's designation, a Disadvantaged Community includes four categories:

1) Census tracts receiving the highest 25% of overall scores in CalEnviroScreen 4.0 (1,984 tracts).
2) Census tracts lacking overall scores in CalEnviroScreen 4.0 due to data gaps but receiving the highest 5% of CalEnviroScreen 4.0 cumulative pollution burden scores (19 tracts).

3) Census tracts identified in the 2017 DAC designation as disadvantaged, regardless of their scores in CalEnviroScreen 4.0 (307 tracts).
4) Lands under the control of federally recognized Tribes.

As identified by CalEPA's designation, OCPA serves the following DACs:

Table 5

Orange County Power Authority DACs		
Census Tract	**City**	**Category**
6059052410	Irvine	CalEnviroScreen 4.0 Top 25%
6059052404	Irvine	CalEnviroScreen 3.0 Disadvantaged Communities Only
6059110500	Buena Park	CalEnviroScreen 4.0 Top 25%
6059110302	Buena Park	CalEnviroScreen 3.0 Disadvantaged Communities Only
6059110402	Buena Park	CalEnviroScreen 4.0 Top 25%
6059110603	Buena Park	CalEnviroScreen 4.0 Top 25%
6059001801	Fullerton	CalEnviroScreen 4.0 Top 25%
6059001802	Fullerton	CalEnviroScreen 4.0 Top 25%
6059110606	Buena Park	CalEnviroScreen 4.0 Top 25%
6059011403	Fullerton	CalEnviroScreen 4.0 Top 25%
6059011502	Fullerton	CalEnviroScreen 4.0 Top 25%
6059011602	Fullerton	CalEnviroScreen 4.0 Top 25%
6059011601	Fullerton	CalEnviroScreen 4.0 Top 25%

OCPA does not currently procure electricity directly from any natural gas or other fossil fuel power plants. However, OCPA recognizes the need to help mitigate the impacts of air pollution in regions of the State where communities have been disproportionately impacted by the existing generating fleet and the need for economic development in areas with high unemployment and poverty. OCPA evaluated its indirect impacts on disadvantaged communities throughout the State. OCPA relies on 13% system power, and while such energy cannot be traced to its specific source, some of it may be generated within DAC areas. OCPA strives to reduce its dependence on resources that emit GHGs and other local pollutants through a clean electric supply portfolio, the vast majority of which is renewable and GHG-free. In evaluating use of biomass resources, OCPA will prioritize procurement from those located outside of DACs to the greatest practical extent. OCPA's 8 MMT portfolio achieves results and performance characteristics consistent with Section 454.52(a)(1)(l) goal of minimizing localized air pollutants and other GHG emissions with early priority on disadvantaged communities.

OCPA has taken steps to expand access to clean energy benefits for customers located in disadvantaged communities through participation in the Disadvantaged Communities Green Tariff program, or OCPA's Clean Energy Access program. OCPA filed Advice Letter 13-E seeking approval to implement its DAC-GT program, which will provide eligible CARE and FERA customers located in qualifying disadvantaged communities with access to renewable energy

and a 20% total bill discount. Advice Letter 13-E was approved in February 2026 via Resolution E-5435.

Following approval of Advice Letter 13-E, OCPA submitted Advice Letter 17-E seeking approval of its DAC-GT RFP materials. OCPA is continuing to advance the program through the CPUC approval process and intends to proceed with the DAC-GT solicitation consistent with applicable CPUC requirements.

Although OCPA's programs were not initially designed with explicit DAC geographic targeting criteria, OCPA's five-year strategic plan for programs, called the Community Power Plan (CPP), identified priority customer segments — such as renters and low-income households — that significantly overlap with disadvantaged communities. As a result, OCPA's programs deliver meaningful air quality benefits in DACs by reducing fossil fuel use and grid-related emissions.

Key customer programs include:

- **Energy Efficiency Kit Program:**
  This program distributed prepackaged energy-efficiency devices to customers at no cost, including LED lightbulbs, advanced power strips, and weather stripping. Approximately 60% of participants were enrolled in either the California Alternate Rates for Energy (CARE) or Family Electric Rate Assistance (FERA) programs, indicating strong participation from income-qualified households that overlap with DAC populations. By reducing overall electricity consumption, the program contributes to a decreased reliance on fossil-fueled generation and associated emissions.
- **Renter Energy Efficiency and Battery Storage Program (REEP):**
  Identified as a high-priority program in OCPA's CPP, REEP provides portable heat pump HVAC units and battery storage systems to renters, delivering energy savings without requiring landlord approval. The program enables electrification of space conditioning and supports load shifting away from peak periods, reducing reliance on high-emission generation. By focusing on renters — a population that is disproportionately represented in DACs — the program delivers targeted air quality and energy burden reduction benefits.
- **Equitable Building Decarbonization Direct Install (EBD-DI) Program (Outreach Role):**
  OCPA supports this statewide initiative by conducting outreach and community engagement to increase participation among eligible households. The EBD-DI program provides no-cost electrification upgrades to income-qualified customers, directly improving indoor air quality. OCPA's outreach efforts expand access to these benefits within its service territory, complementing local program offerings and further advancing emissions reductions in disadvantaged communities.

e. Cost and Rate Analysis

In building its PCP, OCPA sought to meet its reliability and renewable requirements at the lowest reasonable cost to its customers. Among the portfolio options that satisfied those requirements, OCPA selected the most economic mix of resources and procurement timing. This analysis was informed by OCPA's procurement experience and the standard assumptions and results of the Commission's RESOLVE/SERVM modeling. The resulting portfolio meets OCPA's obligations — including its assigned GHG emissions benchmark — at the lowest reasonable cost.

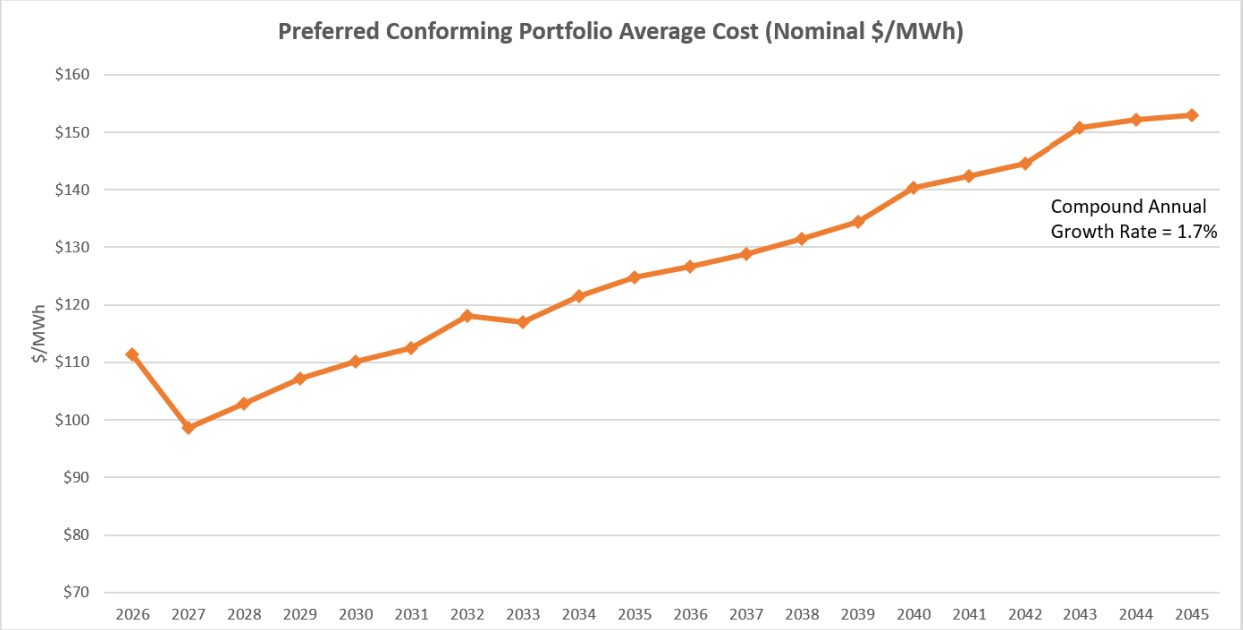
OCPA strives to keep customer costs as low as possible, while meeting customer choice for a highly renewable power supply. This is reflected both in the resources procured and in the timing of those procurements. OCPA considers risk associated with under-procurement, as well as risks of potential over-procurement which could occur from unforeseen changes in load going forward. Risk management also involves assessing the currently available technologies, expected technological developments, and potential for different technologies in the future. The assessment of potential resources is not strictly done based on contract price but includes consideration of how well the resources match the specific needs of OCPA customers' load. For example, solar resources are often the least expensive on a simple cost per MWh basis, but other resources may provide additional benefits in terms of RA capacity, better matching with OCPA's load profile, or otherwise meeting the needs of the communities that OCPA serves.

In general, OCPA sought to balance the need to procure resources with enough lead time to meet OCPA's LSE-specific procurement shortfalls and the Commission-identified overall system new resource needs with the benefits of waiting to procure renewable and storage resources with downward sloping cost projections. OCPA also recognizes that future resource costs are highly uncertain, and technological advancement can occur unexpectedly. OCPA's procurement cycle is designed to take advantage of technological and cost improvements by incrementally adding new resource commitments over time.

OCPA's portfolio cost analysis quantifies the expected power supply costs associated with the PCP through 2045. The cost analysis incorporates expected generation costs, resource value (energy, resource adequacy, and renewable energy, as applicable), and the costs associated with resource curtailments. Marginal ELCC values from RESOLVE were used to quantify expected net qualifying capacity values from the portfolio. As these ELCC factors decline significantly for battery storage resources over the planning period and remain low for solar resources, relatively little RA value is obtained from the solar and battery portfolio elements of the portfolio, despite large increases in nameplate capacity. Resource cost assumptions by technology type used in this analysis are also drawn from the Commission's RESOLVE model inputs and assumptions adopted for the 2024-2026 IRP cycle. The average nominal portfolio cost increases by a compound average growth rate of 1.7% annually from 2026 through 2045. The yearly average portfolio cost is shown in the following figure. Portfolio costs decline modestly in 2027 relative to 2026, while projected retail sales continue to grow. This results in a

lower average cost per unit in 2027-2029 before costs resume their gradual increase through 2045.

Figure 1



f. System Reliability Analysis

OCPA's PCP meets applicable reliability standards and will contribute OCPA's fair share to system reliability needs. The following graphics from the Reliability – Planning sheet of the RDT show load and resources by contract status for the PCP that includes total reliability need (effective MW), total supply (effective MW), and net capacity position (effective MW) for all study years.

Figure 2

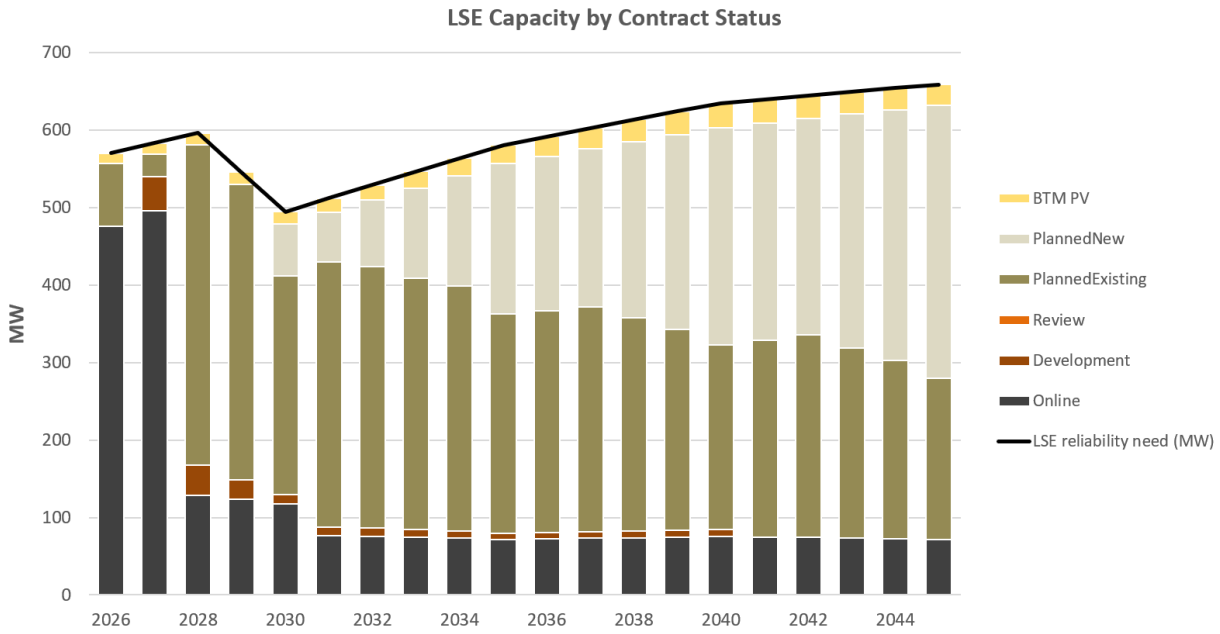


Figure 3

Load and Resource Table by Contract Status

	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045
LSE reliability need (MW)	**570**	**583**	**596**	**545**	**494**	**512**	**529**	**546**	**563**	**580**	**591**	**602**	**613**	**624**	**634**	**639**	**644**	**649**	**654**	**659**
ELCC by contract status (effective MW)																				
Online	476	496	129	123	118	77	76	75	74	71	72	73	74	75	76	75	74	73	72	72
Development	-	43	39	25	12	11	10	10	9	9	9	9	9	9	9	-	-	-	-	-
Review	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
PlannedExisting	81	30	413	381	282	342	338	324	315	283	286	290	275	259	238	254	261	245	230	208
PlannedNew	-	-	-	-	67	64	86	116	142	194	199	204	227	251	280	280	279	301	324	352
BTM PV	13	14	15	16	16	18	19	21	22	24	25	27	29	30	32	31	30	29	28	27
LSE total supply (effective MW)	**570**	**583**	**596**	**545**	**494**	**512**	**529**	**546**	**563**	**580**	**591**	**602**	**613**	**624**	**634**	**639**	**644**	**649**	**654**	**659**
Net capacity position (+ve = excess, -ve = shortfall) (effective MW)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

g. Existing Resource Planning

As demonstrated in OCPA's PCP, OCPA will drive significant new resource development, which will yield a corresponding decrease in OCPA's planned use of existing resources. The majority of OCPA's planned renewable energy purchases for this IRP planning horizon are from yet-to-be built projects. Existing resources that OCPA plans to utilize are generally resources that have been available and with which OCPA has successfully contracted in the past. Some of these contracts are for multi-year terms, which provides assurance that such resources will remain available. OCPA has chosen these resources in part due to their lower delivery risks compared to new resources. However, OCPA recognizes that there is a risk that some existing resources planned for use may ultimately not be available to meet OCPA's plans. OCPA's portfolios

attempt to balance these competing risks, and OCPA will adapt its plans should energy market conditions change.

h. Hydro Generation Risk Management

In developing its portfolio, OCPA took several steps to manage the risk of reduced hydro availability that may result from future in-state drought. First, OCPA has developed a network of Pacific Northwest-based hydroelectric power suppliers, including entities that have substantial ACS (Asset Controlling Supplier) supply. As such, they are able to sell firm low-carbon supply to OCPA. OCPA's PCP includes hydroelectric resources located within California as well as imported hydroelectric power from the Pacific Northwest. The amount of in-state large hydro includes both the amount from the GHG-free allocation provided by SCE, as well as planned hydro procurement in OCPA's portfolio. Second, OCPA will prioritize hydroelectric contracts with marketers that provide firm delivery volumes, helping to reduce the planning uncertainty associated with drought and variable hydroelectric conditions within California. Third, OCPA's planned use of hydroelectric supply within its PCP is relatively low, making up only 3% of its 2045 supply portfolio. Due to OCPA's small hydroelectric needs, OCPA will have a greater probability of filling its annual positions than other LSEs that may be more dependent on hydroelectricity. Under a drought scenario, or in the event that other factors restrict the availability of hydroelectricity, where OCPA is unsuccessful in filling related shortfalls through short-term contracting opportunities, OCPA would plan to substitute with renewable energy resources to ensure it meets its assigned GHG benchmark.

i. Long-Duration Storage Planning

OCPA is planning for significant new battery storage capacity to help balance load and supply as it integrates a greater percentage of renewable energy into its supply mix and continues to reduce reliance on natural gas generation capacity. OCPA sees a greater need and role for long-duration storage as the grid continues to evolve. To address this need, OCPA anticipates procuring up to 433 MW of long-duration storage resources in the 2030 to 2045 timeframe. In OCPA's view, battery storage technology is currently the most commercially viable technology to qualify for this long-duration attribute. However, OCPA is also evaluating other technologies that have long-duration storage capability, as well. Technology performance risk is the greatest unknown at present because, except for pumped hydro storage, there is minimal track record for utility scale, long-duration storage. OCPA expects rapid technological improvement in battery storage as the industry continues to scale-up and anticipates declining costs in the longer-term. In the short-term, however, costs are increasing, and project opportunities are limited, particularly when the procurement is on an accelerated timeline. These factors may impact the pace at which OCPA adds storage to its resource portfolio.

j. Clean Firm Power Planning

OCPA views clean firm generation as a valuable element of its resource mix as it provides reliable and predictable generation with low emissions. Unfortunately, the supply of geothermal, and clean firm resources generally, is very limited in California, and the cost of new-build resources is high. Clean firm energy imported from other balancing areas is complicated by transmission availability and the need to obtain equivalent Maximum Import Capability (MIC) through the CAISO in order to utilize the capacity under the Resource Adequacy program. Despite these challenges to their expanded use, clean firm resources are important contributors to reliability and offer operational attributes that cannot be replicated by current-technology storage or other resource types. Illustrating the importance of clean firm resources is the United States Nuclear Regulatory Commission's (NRC) April 2, 2026 extension of the operating licenses for Units 1 and 2 of the Diablo Canyon Power Plant (DCPP) to 2044 and 2045, respectively.[8] Diablo Canyon provides California with over 2,200 MW of clean firm capacity, or 17% of California's zero-carbon electricity. Further action by the California legislature is required for DCPP to operate beyond 2030, but the NRC license extension is a critical step to ensure DCPP can continue providing California with clean, firm energy. To develop these resources cost-effectively and efficiently, California LSEs will need the commitment of regulatory agencies and CAISO to ensure regulatory procedures and requirements align with market realities and that the physical infrastructure necessary for this development is available and accessible to California LSEs.

k. Non-CAISO, including Out-of-State, Wind Planning

OCPA's planned contracting for new out-of-state wind energy projects generally follows the timeline and relative size for selected builds of this resource type from the CPUC's RESOLVE modeling results.

l. Offshore Wind Planning

OCPA did not include plans for off-shore wind in its PCP, but future plans could include this resource type should market conditions change.

m. Transmission Planning

In identifying resource locations for all portfolios, OCPA was guided by the following considerations:

- OCPA has a general preference for resources located within its service area and the communities it serves, and more generally, within Southern California.

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8 See https://www.nrc.gov/docs/ML2602/ML26022A078.pdf.

- OCPA prefers projects located in areas that can utilize existing transmission infrastructure with minimal upgrade/modification costs.
- OCPA prefers low-impact renewable energy projects that provide economic benefit to DACs, subject to community interest in siting projects within such locations.

Unlike the IOUs, OCPA is not a transmission and distribution (T&D) system operator. OCPA does not enjoy the benefits of a granular knowledge of SCE'S T&D system, or the CAISO grid, OCPA is not in the best position to identify optimal resource locations, and OCPA does not have the expertise in-house to determine the best locations for new resources. In practice, OCPA relies on project developers to conduct the research and technical studies necessary for siting potential generation projects. OCPA evaluates projects offered by developers based on a variety of criteria, including transmission availability, nodal prices and potential for congestion, project viability, environmental, workforce, and other factors. As such, OCPA generally utilized the PSP-selected candidate resources as a guide for likely resource locations in its Preferred Conforming Portfolio. These should be treated as general expectations based on the aforementioned considerations, not definitive selections – actual project locations will be selected during OCPA's future solicitation processes.

OCPA believes that the best way to keep costs down during resource solicitations is to not limit the potential locations of the resources. Competition among the responders to resource solicitations ensures that OCPA can avail itself of the best possible resources, including allowing developers to explore different locations and select what they feel is the best location for their resource by taking into account numerous factors, including the costs of any potential transmission upgrades or curtailment issues. Like most LSEs, OCPA doesn't have the necessary resources to examine all possible resource locations to find an optimal one from a transmission perspective, and instead relies on the developers of projects to do just that.

OCPA will remain flexible to adapt to market conditions as they evolve. If OCPA's expected resource locations become infeasible due to various constraints, or if the Commission's modeling efforts happen to indicate that certain resource locations are no longer feasible/ desirable, then OCPA would ultimately locate and contract for alternative resources that fall in other locations.

Most of the resources in OCPA's PCP are not expected to require transmission upgrades beyond the standard interconnection process. Those resources in OCPA's PCP that might require substantial transmission upgrades or new transmission lines are generally expected to arise later in the planning cycle, and OCPA expects that the developers will have determined that the transmission will be available before OCPA enters into agreements with them. These resources include Wyoming Wind. It is clear that significant new out-of-state wind will require additional transmission infrastructure, and this is a part of any consideration of these resources. In addition, in selecting these future resources for its portfolio, OCPA has considered transmission and chosen projects for which any transmission concerns should be minimized or already addressed. For example, OCPA's choice of Wyoming Wind was made because of the existing plans for transmission to bring that energy to California.

IV. Action Plan

a. Proposed Procurement Activities and Potential Barriers

OCPA's procurement process for implementing its PCP over the coming years (*i.e.*, by 2045) will include the following key activities:

- ✓ Identification of planned resources by type, desired online date, and capacity.
- ✓ Planning for procurement activities in consideration of OCPA's risk management policy, resource acquisition lead times including, where applicable, development timelines, staff capacity, and financial considerations.
- ✓ Design and administration of resource solicitations. For new resources, these typically take the form of periodic requests for offer processes, while for existing resources, procurement activity is more frequent and routinized.
- ✓ Careful negotiation of contract terms to ensure positive outcomes for OCPA customers with appropriate levels of risk mitigation.
- ✓ Ongoing contract management, including where applicable, careful monitoring of development milestones.
- ✓ Ongoing contract management, including where applicable, careful monitoring of generator performance after a resource has achieved commercial operation date (COD).
- ✓ Participation in joint CCA solicitation processes in order to expand procurement opportunities available to OCPA.

i. Resources to meet IRP mandated procurement requirements, including D.21-06-035 and D.23-02-040

OCPA does not have any procurement requirements under D.21-06-035, but has made significant progress in contracting with resources to meet its D.23-02-040 requirement. The recent D.26-02-057 procurement order obligates additional incremental procurement totaling 75 MW by 2032, of which 19 MW must be long-duration storage and/or clean firm generation. OCPA plans to issue a solicitation in Summer 2026, where it expects to yield contracts to help contribute to the new obligations.

ii. Plans for resources that are currently non-candidate in CPUC's IRPs not described above

Not applicable.

iii. Other renewable and/or zero carbon resources not described above

OCPA is actively procuring all forms of RPS-qualifying renewable energy to meet the very high renewable portfolio content dictated by OCPA's product offerings. In its operational history, OCPA has administered several competitive solicitations for renewable energy and plans to continue actively engaging the market for additional renewable energy supply. Over the next

few years, OCPA anticipates conducting multiple renewable energy solicitations each year for both short-term and long-term renewable energy supply.

iv. Other energy storage not described above

OCPA expects that except for the long-duration storage required under D.23-02-040, D.26-02-057 and future procurement orders, the storage it will acquire will mostly be paired solar and storage resources and/or standalone storage resources that help balance OCPA's very high behind-the-meter solar penetration. OCPA remains open to considering other possibilities, especially if new technologies arise that reduce the costs of storage or in situations where storage can help fulfill other needs, such as reducing the need for new transmission or distribution. OCPA will continue to monitor developments in the energy storage markets and adjust its portfolio if advantageous opportunities arise.

v. Other demand response not described above

OCPA has conducted its CPP and is currently working on program implementation that may include demand response program in the future. Due to its pending design and implementation, OCPA has not incorporated any potential demand response impacts into its PCP.

vi. Other energy efficiency not described above

OCPA provided its energy efficiency programs in Section III.d.ii with details under "Key customer programs." OCPA has also conducted its CPP and is currently working on program implementation for additional energy efficiency programs that provide measurable benefits for OCPA's customers.

vii. Other distributed generation not described above

OCPA has conducted its CPP and is currently working on program implementation that may include partnering with its customers on distributed generation opportunities.

viii. Transportation electrification, including any investments that correspond to different levels than what is included in the Integrated Energy Policy Report (IEPR)

OCPA does not have any transportation electrification investment plans at this time.

ix. Building electrification, including any investments that correspond to different levels than what is included in the Integrated Energy Policy Report (IEPR)

OCPA does not have any building electrification investment plans at this time.

x. Potential Centralized Procurement, pursuant to AB-1373

As the Centralized Procurement program is in its early stages, OCPA is evaluating how it will factor into OCPA's procurement strategies given the CPUC's request to the Department of

Water Resources to exercise its central procurement authority for Long Lead-Time resources. OCPA intends to comply with all CPUC decisions and will adhere to cost sharing pending final procurement decisions by DWR.

xi. Other

OCPA continuously explores new methods of lowering electricity demand and increasing clean energy supply.

b. Disadvantaged Communities (DACs)

OCPA integrates an equity-focused approach into its customer program design, guided in part by its CPP. The CPP establishes a structured framework to align unique community needs with prioritized customer programs. Through the CPP process, OCPA conducted a comprehensive needs assessment that incorporated community feedback, stakeholder engagement, and analysis of customer demographics. This process identified DACs, low-income households, and renters as priority populations facing structural barriers to participation in clean energy programs for OCPA's customers. These findings directly inform OCPA's program design, outreach strategies, and resource planning decisions. The CPP emphasizes demand-side programs as a key mechanism for delivering localized benefits to DACs. For example, high-priority direct-to-renter electrification programs provide portable, non-permanent technologies that do not require landlord approval, enabling broader participation among renters — a population significantly represented within DACs.

In addition to its locally administered programs, OCPA supports statewide equity-focused initiatives such as the Equitable Building Decarbonization Direct Install (EBD-DI) program through targeted outreach and community engagement. In this role, OCPA partners with program implementers and community-based organizations to increase awareness and participation among eligible households within its service territory. The EBD-DI program provides no-cost electrification upgrades to income-qualified customers in DACs, and OCPA's outreach efforts help expand access to these benefits in disadvantaged communities, complementing its CPP-prioritized local program offerings.

c. LSEs' Tribal Customers

OCPA does not have tribal customers.

d. Procurement Products

The following table illustrates the various procurement products that OCPA considers.

Table 6

Procurement Products	
Product	**Description**
Physical energy, RPS qualifying	Renewable energy qualified to meet California RPS
Physical energy, other carbon free	Non-carbon emitting energy that does not meet California RPS, e.g., large hydro
Physical energy, CAISO energy	Energy delivered to the CAISO grid from unspecified sources
Capacity, Net Qualifying Capacity	Capacity qualified to meet California Resource Adequacy program standards

e. Commission Direction of Actions

OCPA encourages the Commission to adopt consistent rules and processes to bring greater stability to the regulatory framework within which OCPA and suppliers must plan and operate. Frequent rule changes disrupt OCPA's ability to execute long-term planning activities and adopt planning elements aimed at minimizing customer costs. Such regulatory changes can also result in disproportionately high costs and administrative burdens, which would prompt related customer rate increases – certain regulatory changes may necessitate duplicative procurement efforts and/or stranded investments that are expected to impact a larger portion of OCPA's portfolio.

For example, the Commission is currently considering a programmatic approach to the IRP, a Slice-of-Day Resource Adequacy Program, and recently implemented the Central Procurement Entity structure. Each of these changes on their own represents significant regulatory uncertainty, which leads to market uncertainty. These uncertainties together represent a complex, wholesale change to the regulatory landscape, which LSEs cannot reasonably account for in planning. The Commission should be cognizant that the scope of these reforms and how they interact may have broad, and somewhat unpredictable, impacts to the market. These market changes will likely alter planned procurement over the long term and may reduce the accuracy of LSEs' IRPs.

Additionally, there is inherent uncertainty associated with load forecasting activities since these require the use of inputs and assumptions about the future. Utilizing the latest available data to inform assumptions that consider the major uncertainties associated with future load growth and continually enhancing modeling methodologies based on inter-agency collaboration with the California Energy Commission (CEC) and CAISO will help mitigate the risk of over or under procurement from the IRP procurement and planning process. It is also important for the Commission to consider the timing for the IRP filing update and adopt the most reasonable or updated assumptions for each IRP plan to avoid unexpected procurement changes. Lastly, large load growth, driven in part by data center deployment, has the potential to drastically impact procurement requirements. As an example, in its Track 1 proposals in the current RA proceeding, CalCCA recommends the Commission coordinate with the CEC to separate data center load from the RA forecast and instead base RA requirements on actual data center load

interconnection information.[9] Strategies like this provide appropriate risk mitigation against over-procurement, which drives cost increases for California's LSEs at the expense of ratepayers.

V. Lessons Learned

OCPA's experience in this IRP cycle has reinforced several important considerations regarding the scale and urgency of clean energy procurement required for California to achieve its long-term emissions reduction goals. As a CCA committed to delivering clean, affordable, and reliable energy to its customers, OCPA recognizes that the path to meeting the electric sector's 8 MMT by 2045 GHG benchmark demands sustained, large-scale procurement activity across the entire IRP planning horizon — not merely in the near term.

A central lesson from this planning cycle is the recognition that achieving compliance with state GHG emissions reduction requirements will necessitate substantial and continuous procurement of renewable energy, long-duration storage, clean firm power, and other zero-carbon resources through 2045. The scale of resource additions required — informed by the 2025-2026 Transmission Planning Process Portfolio— underscores that no single procurement wave will be sufficient. Rather, LSEs such as OCPA must maintain active, ongoing procurement pipelines over the coming two decades to ensure that new clean resources come online in cadence with load growth, contract expirations, and the retirement of fossil-fueled generation. OCPA encourages the Commission to structure future IRP cycles, procurement tracks, and associated guidance in a manner that supports and anticipates this long-term procurement obligation.

OCPA intends to be an active and engaged participant in procurement necessary to achieve these objectives. OCPA's governing board has affirmed procurement as a strategic priority, and OCPA plans to pursue solicitations for renewable energy, energy storage, and other qualifying resources on a rolling basis consistent with its Preferred Conforming Portfolio and Action Plan. OCPA recognizes that successful procurement at the scale required through 2045 will depend not only on its own diligence, but also on the Commission's continued efforts to streamline procurement authorization processes, reduce regulatory barriers to contract execution, and provide adequate lead time for LSEs to compete effectively in competitive resource markets.

[9] R.25-10-003 *California Community Choice Association's Track 1 Proposals*, (January 23, 2026), available at https://docs.cpuc.ca.gov/PublishedDocs/Efile/G000/M596/K418/596418487.PDF.

Glossary of Terms

Alternative Portfolio: *LSEs are permitted to submit "Alternative Portfolios" developed from scenarios using different assumptions from those used in the Preferred System Plan with updates. Any deviations from the "Conforming Portfolio" must be explained and justified.*

Approve (Plan)*: the CPUC's obligation to approve an LSE's integrated resource plan derives from Public Utilities Code Section 454.52(b)(2) and the procurement planning process described in Public Utilities Code Section 454.5, in addition to the CPUC obligation to ensure safe and reliable service at just and reasonable rates under Public Utilities Code Section 451.*

Balancing Authority Area (CAISO): *the collection of generation, transmission, and loads within the metered boundaries of the Balancing Authority. The Balancing Authority maintains load-resource balance within this area.*

Baseline resources: *Those resources assumed to be fixed as a capacity expansion model input, as opposed to Candidate resources, which are selected by the model and are incremental to the Baseline. Baseline resources are existing (already online) or owned or contracted to come online within the planning horizon. Existing resources with announced retirements are excluded from the Baseline for the applicable years. Being "contracted" refers to a resource holding signed contract/s with an LSE/s for much of its energy and capacity, as applicable, for a significant portion of its useful life. The contracts refer to those approved by the CPUC and/or the LSE's governing board, as applicable. These criteria indicate the resource is relatively certain to come online. Baseline resources that are not online at the time of modeling may have a failure rate applied to their nameplate capacity to allow for the risk of them failing to come online.*

Candidate resource: *those resources, such as renewables, energy storage, natural gas generation, and demand response, available for selection in IRP capacity expansion modeling, incremental to the Baseline resources.*

Capacity Expansion Model: *a capacity expansion model is a computer model that simulates generation and transmission investment to meet forecasted electric load over many years, usually with the objective of minimizing the total cost of owning and operating the electrical system. Capacity expansion models can also be configured to only allow solutions that meet specific requirements, such as providing a minimum amount of capacity to ensure the reliability of the system or maintaining greenhouse gas emissions below an established level.*

Certify (a Community Choice Aggregator Plan)*: Public Utilities Code 454.52(b)(3) requires the CPUC to certify the integrated resource plans of CCAs. "Certify" requires a formal act of the Commission to determine that the CCA's Plan complies with the requirements of the statute and the process established via Public Utilities Code 454.51(a). In addition, the Commission must review the CCA Plans to determine any potential impacts on public utility bundled customers under Public Utilities Code Sections 451 and 454, among others.*

***Clean System Power (CSP) methodology**: the methodology used to estimate GHG and criteria pollutant emissions associated with an LSE's Portfolio based on how the LSE will expect to rely on system power on an hourly basis.*

***Community Choice Aggregator**: a governmental entity formed by a city or county to procure electricity for its residents, businesses, and municipal facilities.*

***Conforming Portfolio**: the LSE portfolio that conforms to IRP Planning Standards, the 2045 LSE-specific GHG Emissions Benchmark, use of the LSE's assigned load forecast, use of inputs and assumptions matching those used in developing the Reference System Portfolio, as well as other IRP requirements including the filing of a complete Narrative Template, a Resource Data Template and Clean System Power Calculator*.

***Effective Load Carrying Capacity**: a percentage that expresses how well a resource is able avoid loss-of-load events (considering availability and use limitations). The percentage is relative to a reference resource, for example a resource that is always available with no use limitations. It is calculated via probabilistic reliability modeling, and yields a single percentage value for a given resource or grouping of resources.*

***Effective Megawatts (MW):** perfect capacity equivalent MW, such as the MW calculated by applying an ELCC % multiplier to nameplate MW.*

***Electric Service Provider**: an entity that offers electric service to a retail or end-use customer, but which does not fall within the definition of an electrical corporation under Public Utilities Code Section 218.*

***Filing Entity**: an entity required by statute to file an integrated resource plan with CPUC.*

***Future**: a set of assumptions about future conditions, such as load or gas prices.*

***GHG Benchmark (or LSE-specific 2045 GHG Benchmark)**: the mass-based GHG emission planning targets calculated by staff for each LSE based on the methodology established by the California Air Resources Board and required for use in LSE Portfolio development in IRP.*

***GHG Planning Price:** the system-wide marginal GHG abatement cost associated with achieving a specific electric sector GHG planning target.*

***Integrated Resources Planning Standards (Planning Standards)**: the set of CPUC IRP rules, guidelines, formulas and metrics that LSEs must include in their LSE Plans.*

***Integrated Resource Planning (IRP) process**: integrated resource planning process; the repeating cycle through which integrated resource plans are prepared, submitted, and reviewed by the CPUC*

***Long term**: more than 5 years unless otherwise specified.*

***Load Serving Entity**: an electrical corporation, electric service provider, community choice aggregator, or electric cooperative.*

Load Serving Entity (LSE) Plan*: an LSE's integrated resource plan; the full set of documents and information submitted by an LSE to the CPUC as part of the IRP process.*

Load Serving Entity (LSE) Portfolio*: a set of supply- and/or demand-side resources with certain attributes that together serve the LSE's assigned load over the IRP planning horizon.*

Loss of Load Expectation (LOLE): *a metric that quantifies the expected frequency of loss-of-load events per year. Loss-of-load is any instance where available generating capacity is insufficient to serve electric demand. If one or more instances of loss-of-load occurring within the same day regardless of duration are counted as one loss-of-load event, then the LOLE metric can be compared to a reference point such as the industry probabilistic reliability standard of "one expected day in 10 years," i.e. an LOLE of 0.1.*

Maximum Import Capability: a California ISO metric that represents a quantity in MWs of imports determined by the CAISO to be simultaneously deliverable to the aggregate of load in the ISO's Balancing Authority (BAA) Area and thus eligible for use in the Resource Adequacy process. The California ISO assess a MIC MW value for each intertie into the ISO's BAA and allocated yearly to the LSEs. A LSE's RA import showings are limited to its share of the MIC at each intertie.

Net Qualifying Capacity (NQC): *Qualifying Capacity reduced, as applicable, based on: (1) testing and verification; (2) application of performance criteria; and (3) deliverability restrictions. The Net Qualifying Capacity determination shall be made by the California ISO pursuant to the provisions of this California ISO Tariff and the applicable Business Practice Manual.*

Non-modeled costs*: embedded fixed costs in today's energy system (e.g., existing distribution revenue requirement, existing transmission revenue requirement, and energy efficiency program cost).*

Nonstandard LSE Plan*: type of integrated resource plan that an LSE may be eligible to file if it serves load outside the CAISO balancing authority area.*

Optimization*: an exercise undertaken in the CPUC's Integrated Resource Planning (IRP) process using a capacity expansion model to identify a least-cost portfolio of electricity resources for meeting specific policy constraints, such as GHG reduction or RPS targets, while maintaining reliability given a set of assumptions about the future. Optimization in IRP considers resources assumed to be online over the planning horizon (baseline resources), some of which the model may choose not to retain, and additional resources (candidate resources) that the model is able to select to meet future grid needs.*

Planned resource: *any resource included in an LSE portfolio, whether already online or not, that is yet to be procured. Relating this to capacity expansion modeling terms, planned resources can be baseline resources (needing contract renewal, or currently owned/contracted by another LSE), candidate resources, or possibly resources that were not considered by the modeling, e.g., due to the passage of time between the modeling taking place and LSEs developing their plans.*

Planned resources can be specific (e.g., with a CAISO ID) or generic, with only the type, size and some geographic information identified.

***Qualifying capacity**: the maximum amount of Resource Adequacy Benefits a generating facility could provide before an assessment of its net qualifying capacity.*

***Preferred Conforming Portfolio**: the conforming portfolio preferred by an LSE as the most suitable to its own needs; submitted to CPUC for review as one element of the LSE's overall IRP plan.*

***Preferred System Plan:** the Commission's integrated resource plan composed of both the aggregation of LSE portfolios (i.e., Preferred System Portfolio) and the set of actions necessary to implement that portfolio (i.e., Preferred System Action Plan).*

***Preferred System Portfolio:** the combined portfolios of individual LSEs within the CAISO, aggregated, reviewed and possibly modified by Commission staff as a proposal to the Commission, and adopted by the Commission as most responsive to statutory requirements per Pub. Util. Code 454.51; part of the Preferred System Plan.*

***Short term**: 1 to 3 years (unless otherwise specified).*

***Staff**: CPUC Energy Division staff (unless otherwise specified).*

***Standard LSE Plan**: type of integrated resource plan that an LSE is required to file if it serves load within the CAISO balancing authority area (unless the LSE demonstrates exemption from the IRP process).*

***Transmission Planning Process (TPP)**: process conducted by the California Independent System Operator (CAISO) to identify potential transmission system limitations and areas that need reinforcements over 10-year and 15-year horizons.*

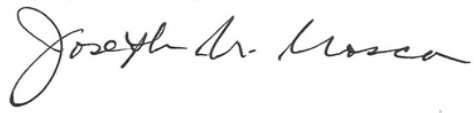
RDT Certification Form – Verification Declaration

Load Serving Entity Full Name:	Orange County Power Authority
Load Serving Entity Abbreviation:	OCPA
Submission Type:	IRP Biennial Planning
Date of Filing:	8/10/2026

Note: Consistent with Rules 1.1 & 1.11 of the CPUC's Rules of Practice and Procedure, this Procurement Showing has been verified by an officer of the corporation or organization, who expressly certifies, under penalty of perjury, the following:

1. I have responsibility for the activities reflected in this showing;
2. I have reviewed, or have caused to be reviewed, this showing;
3. Based on my knowledge, information, or belief, this filing does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made;
4. Based on my knowledge, information, or belief, this filing contains all of the information required to be provided by CPUC orders, rules, and regulations.

LSE Officer

Title:	Chief Executive Officer
Name:	Joe Mosca
Email:	jmosca@ocpower.org
Phone:	(949) 767-8706
Signature:	

Backup Contact Information

Title:	Consultant
Name:	James Parker
Email:	james@pacificea.com
Phone:	9167422067
Signature:	

Load Serving Entity Information

LSE Address Line 1:	Orange County Power Authority
LSE Address Line 2:	PO Box 54283
LSE City:	Irvine
LSE State:	CA
LSE Zip:	92619

lse_unique_contract_id	resource	alternative_resource_name	contract_status	project_interconnection_position	interconnection_substation	marginal_addition	marginal_addition_to	total_nameplate_capacity	contracted_nameplate_capacity	sep_contracted_nw_nqc	contract_gwh_annual	is_hybrid_paired	can_charge_from_grid
Grace Orchard_PCC1_1_LT_OCPA	_NEW_GENERIC_SOLAR_FIXED		Development		Colorado River 230 kV substation	NA						NotHybrid	
SENA_PCC1_LT_3_OCPA	_EXISTING_GENERIC_SOLAR_FIXED		Online		NA	NA						NotHybrid	
SENA_PCC1_LT_5_OCPA	_EXISTING_GENERIC_SOLAR_FIXED		Online		NA	NA						NotHybrid	
PCE_PCC1_2_OCPA	_EXISTING_GENERIC_WIND		Online		NA	NA						NotHybrid	
PCE_PCC1_3_OCPA	_EXISTING_GENERIC_WIND		Online		NA	NA						NotHybrid	
SCE LT Bundled PCC0 VAMO 1	_EXISTING_GENERIC_GEOTHERMAL		Online		NA	NA						NotHybrid	
SCE LT Bundled PCC0 VAMO 2	_EXISTING_GENERIC_SOLAR_FIXED		Online		NA	NA						NotHybrid	
SCE LT Bundled PCC0 VAMO 3	_NEW_GENERIC_WIND_CA		Online		NA	NA						NotHybrid	
SCE LT Bundled PCC0 VAMO 4	ISTING_GENERIC_INSTATE_SMALL_HYDRO		Online		NA	NA						NotHybrid	
SCE LT PCC1 VAMO 1	ISTING_GENERIC_INSTATE_SMALL_HYDRO		Online		NA	NA						NotHybrid	
SCE LT PCC1 VAMO 2	_EXISTING_GENERIC_SOLAR_FIXED		Online		NA	NA						NotHybrid	
SCE LT PCC1 VAMO 3	_NEW_GENERIC_WIND_CA		Online		NA	NA						NotHybrid	
SCE LT PCC1 VAMO 4	_EXISTING_GENERIC_GEOTHERMAL		Online		NA	NA						NotHybrid	
CEA_PCC1_LT_VAMO_1_OCPA Buy	_EXISTING_GENERIC_SOLAR_FIXED		Online		NA	NA						NotHybrid	
CEA_PCC1_LT_VAMO_2_OCPA Sell	_EXISTING_GENERIC_SOLAR_FIXED		Online		NA	NA						NotHybrid	
LOCKENERGY_RA_1_NSF_OCPA	_NEW_GENERIC_BATTERY_STORAGE		Development		PG&E Gates 500 kV substation	NA		52				NotHybrid	YES
ATHOS_RA_1_SSF_OCPA	_NEW_GENERIC_BATTERY_STORAGE		Development		SCE 230 kV Red Bluff	NA		102.3				NotHybrid	YES
CALPINE_RA_4_NSF_OCPA	LEBECS_2_UNITS		Online			NA		799.47				NotHybrid	
CALPINE_RA_5_NS_OCPA	SUTTER_2_CISO	SUTTER_2_CISO	Online			NA		29.5				NotHybrid	
DYNEGY_RA_1_NS_OCPA	MOSSLD_2_PSP1		Online			NA		510				NotHybrid	
HIGHDESERT_RA_1_SSF_OCPA	HIDSRT_2_UNITS		Online		Victor substation	NA		850				NotHybrid	
Marsh Landing LLC_RA_1_NSF_OCPA	COCOPP_2_CTG4		Online		PG&E's Contra Costa Powerplant Switchya	NA		204.29				NotHybrid	
SCE_RA_4_SSF_MCAM	BLKCRK_2_GMCBT1		Online			NA		230				NotHybrid	
SCE_RA_6_SSF_MCAM	CRIMSN_2_CRMBT1	BLKCRK_2_GMCBT1	Online			NA		200				NotHybrid	
SENA_RA_5_SS_OCPA	MOSSLD_2_PSP2	COLVIL_7_PL1X2, INDIGO_1_UNIT 2, COLGAT_7_UNIT 1, DI	Online			NA		510				NotHybrid	
SENA_RA_5_SSF_OCPA	MOSSLD_2_PSP2	KERNFT_1_UNITS, INDIGO_1_UNIT 1, FIFTHS_2_FSSBT, KEL	Online			NA		510				NotHybrid	
SENA_RA_LT_WIND 1	ALTWD_2_COAWD1		Online			NA		50.4				NotHybrid	
SENA_RA_LT_WIND 2	VENWD_1_WIND3		Online			NA		44.53				NotHybrid	
SENA_RA_LT_SOLAR	ALMASL_2_G57SR7		Online			NA		132				NotHybrid	
Sunrise Power_RA_1	SUNRIS_2_PL1X3		Online			NA		586.02				NotHybrid	
Watson_RA_1_SS_OCPA	ARCOGN_2_UNIT5		Online			NA		305				NotHybrid	
CAM - DR Allocation	_EXISTING_GENERIC_DR		Online			NA		20.49				NotHybrid	
CAM - Peaker Allocation	_EXISTING_GENERIC_PEAKER		Online			NA		4.76				NotHybrid	
CAM - Storage	_EXISTING_GENERIC_BATTERY_STORAGE		Online			NA		7.71				NotHybrid	
Other CAM	_EXISTING_GENERIC_COMBINED_CYCLE		Online			NA		79.29				NotHybrid	
PG&E Diablo Canyon Allocation	_EXISTING_GENERIC_NUCLEAR		Online									NotHybrid	
SCE Large Hydro Allocation	KISTING_GENERIC_INSTATE_LARGE_HYDRO		Online									NotHybrid	
SCE Nuke Allocation	_EXISTING_GENERIC_NUCLEAR		Online									NotHybrid	
LT Geothermal 1	_NEW_GENERIC_GEOTHERMAL		PlannedNew									NotHybrid	
LT Solar 1	_NEW_GENERIC_SOLAR_1AXIS		PlannedNew					40				NotHybrid	
LT Storage 1	_NEW_GENERIC_BATTERY_STORAGE		PlannedNew					20				NotHybrid	YES
LT Wind CA 1	_NEW_GENERIC_WIND_CA		PlannedNew									NotHybrid	
LT Wind Out of State 1	_NEW_GENERIC_WIND_OOS_AZNM		PlannedNew					7				NotHybrid	
LT Geothermal 2	_NEW_GENERIC_GEOTHERMAL		PlannedNew					13				NotHybrid	
LT Solar 2a	_NEW_GENERIC_SOLAR_1AXIS		PlannedNew					148				NotHybrid	
LT Storage 2a	_NEW_GENERIC_BATTERY_STORAGE		PlannedNew					74				NotHybrid	YES
LT Solar 2b	_NEW_GENERIC_SOLAR_1AXIS		PlannedNew					148				NotHybrid	
LT Storage 2b	_NEW_GENERIC_BATTERY_STORAGE		PlannedNew					74				NotHybrid	YES
LT Solar 2c	_NEW_GENERIC_SOLAR_1AXIS		PlannedNew					148				NotHybrid	
LT Storage 2c	_NEW_GENERIC_BATTERY_STORAGE		PlannedNew					74				NotHybrid	YES
LT Wind CA 2	_NEW_GENERIC_WIND_CA		PlannedNew					98				NotHybrid	
LT Wind Out of State 2	_NEW_GENERIC_WIND_OOS_WY		PlannedNew									NotHybrid	
LT Geothermal 3	_NEW_GENERIC_GEOTHERMAL		PlannedNew									NotHybrid	
LT Solar 3a	_NEW_GENERIC_SOLAR_1AXIS		PlannedNew					68				NotHybrid	
LT Storage 3a	_NEW_GENERIC_BATTERY_STORAGE		PlannedNew					34				NotHybrid	YES
LT Solar 3b	_NEW_GENERIC_SOLAR_1AXIS		PlannedNew					68				NotHybrid	
LT Storage 3b	_NEW_GENERIC_BATTERY_STORAGE		PlannedNew					34				NotHybrid	YES
LT Wind CA 3	_NEW_GENERIC_WIND_CA		PlannedNew									NotHybrid	
LT Wind Out of State 3	_NEW_GENERIC_WIND_OOS_AZNM		PlannedNew					77.4				NotHybrid	
LT Geothermal 4	_NEW_GENERIC_GEOTHERMAL		PlannedNew									NotHybrid	
LT Solar 4a	_NEW_GENERIC_SOLAR_1AXIS		PlannedNew					84				NotHybrid	
LT Storage 4a	_NEW_GENERIC_BATTERY_STORAGE		PlannedNew					42				NotHybrid	YES
LT Solar 4b	_NEW_GENERIC_SOLAR_1AXIS		PlannedNew					84				NotHybrid	
LT Storage 4b	_NEW_GENERIC_BATTERY_STORAGE		PlannedNew					42				NotHybrid	YES
LT Wind CA 4	_NEW_GENERIC_WIND_CA		PlannedNew									NotHybrid	
LT Wind Out of State 4	_NEW_GENERIC_WIND_OOS_WY		PlannedNew					77.5				NotHybrid	
ST Geothermal	_EXISTING_GENERIC_GEOTHERMAL		PlannedExisting					0				NotHybrid	
ST Solar	_EXISTING_GENERIC_SOLAR_1AXIS		PlannedExisting					0				NotHybrid	
ST Wind	_EXISTING_GENERIC_WIND		PlannedExisting					0				NotHybrid	
ST Large Hydro	KISTING_GENERIC_INSTATE_LARGE_HYDRO		PlannedExisting					0				NotHybrid	
Generic CCGT RA_2026	_EXISTING_GENERIC_COMBINED_CYCLE		PlannedExisting					95					
Generic CCGT RA_2027	_EXISTING_GENERIC_COMBINED_CYCLE		PlannedExisting					35					
Generic CCGT RA_2028	_EXISTING_GENERIC_COMBINED_CYCLE		PlannedExisting					489					
Generic CCGT RA_2029	_EXISTING_GENERIC_COMBINED_CYCLE		PlannedExisting					458					
Generic CCGT RA_2030	_EXISTING_GENERIC_COMBINED_CYCLE		PlannedExisting					344					
Generic CCGT RA_2031	_EXISTING_GENERIC_COMBINED_CYCLE		PlannedExisting					417					
Generic CCGT RA_2032	_EXISTING_GENERIC_COMBINED_CYCLE		PlannedExisting					410					
Generic CCGT RA_2033	_EXISTING_GENERIC_COMBINED_CYCLE		PlannedExisting					393					
Generic CCGT RA_2034	_EXISTING_GENERIC_COMBINED_CYCLE		PlannedExisting					381					
Generic CCGT RA_2035	_EXISTING_GENERIC_COMBINED_CYCLE		PlannedExisting					341					
Generic CCGT RA_2036	_EXISTING_GENERIC_COMBINED_CYCLE		PlannedExisting					340					
Generic CCGT RA_2037	_EXISTING_GENERIC_COMBINED_CYCLE		PlannedExisting					340					
Generic CCGT RA_2038	_EXISTING_GENERIC_COMBINED_CYCLE		PlannedExisting					319					
Generic CCGT RA_2039	_EXISTING_GENERIC_COMBINED_CYCLE		PlannedExisting					297					
Generic CCGT RA_2040	_EXISTING_GENERIC_COMBINED_CYCLE		PlannedExisting					270					
Generic CCGT RA_2041	_EXISTING_GENERIC_COMBINED_CYCLE		PlannedExisting					291					
Generic CCGT RA_2042	_EXISTING_GENERIC_COMBINED_CYCLE		PlannedExisting					302					
Generic CCGT RA_2043	_EXISTING_GENERIC_COMBINED_CYCLE		PlannedExisting					286					
Generic CCGT RA_2044	_EXISTING_GENERIC_COMBINED_CYCLE		PlannedExisting					271					
Generic CCGT RA_2045	_EXISTING_GENERIC_COMBINED_CYCLE		PlannedExisting					248					
LT Storage_D.26_4	_NEW_GENERIC_BATTERY_STORAGE		PlannedNew					252				NotHybrid	YES
LT LD Storage_D.26_8	_NEW_GENERIC_BATTERY_STORAGE		PlannedNew					59				NotHybrid	YES

total_generator_mw	contracted_generator_mw	total_storage_mw	contracted_storage_mw	solar_technology_sub_type	storage_technology_sub_type	total_storage_depth_mwh	contracted_storage_depth_mwh	viability_cod_reasonableness	viability_technical_feasibility	viability_financing_sitecontrol	resource_mix	d1911016_vamo_ghgfree	buy_sell_own	counterparty
				Fixed				4	3	5				
												VAMO	Buy	Southern California Edison
												VAMO	Buy	Southern California Edison
												VAMO	Buy	Southern California Edison
												VAMO	Buy	Southern California Edison
												VAMO	Buy	Southern California Edison
												VAMO	Buy	Southern California Edison
												VAMO	Buy	Southern California Edison
												VAMO	Buy	Southern California Edison
												VAMO	Buy	Clean Energy Alliance
												VAMO	Sell	Clean Energy Alliance
		52	52		Li	208	208	4	3	5				
		102.3	52		Li	409.2	208	3	3	5				
														Southern California Edison
														Southern California Edison
														Shell Energy North America
														Shell Energy North America
														Shell Energy North America
														Shell Energy North America
														Shell Energy North America
														Southern California Edison
														Southern California Edison
														Southern California Edison
														Southern California Edison
														Pacific Gas & Electric
														Southern California Edison
														Southern California Edison
								1	2	1				
								1	2	1				
		20	20		Li	80	80	1	2	1				
								1	2	1				
								1	2	1				
								1	2	1				
								1	2	1				
		74	74		Li	592	592	1	2	1				
								1	2	1				
		74	74		Li	592	592	1	2	1				
								1	2	1				
		74	74		Li	592	592	1	2	1				
								1	2	1				
								1	2	1				
								1	2	1				
								1	2	1				
		33.90628686	33.90628686		Li	271	271	1	2	1				
								1	2	1				
		33.90628686	33.90628686		Li	271	271	1	2	1				
								1	2	1				
								1	2	1				
								1	2	1				
								1	2	1				
		42.08781102	42.08781102		Li	337	337	1	2	1				
								1	2	1				
		42.08781102	42.08781102		Li	337	337	1	2	1				
								1	2	1				
								1	2	1				
		252	252		Li	1009	1009	1	2	1				
		59	59		Li	1216	1216	1	2	1				

generator_supplier	developer_name	capacity_area	capacity_sub_area	cpuc_approval_ref	county	COD_year	COD_month	COD_day	contract_start_date_year	contract_start_date_month	contract_start_date_day	contract_end_date_year	contract_end_date_month	contract_end_date_day	contract_execution_date_year	contract_execution_date_month	contract_execution_date_day
	NEXTERA	SCE			RiversideCounty	2027	6	1	2027	6	1	2047	5	31	2023	4	19
	SHELL	SCE			RiversideCounty	2026	1	1	2026	1	1	2034	12	31	2022	9	7
	SHELL	SCE			RiversideCounty	2027	1	1	2027	1	1	2040	12	31	2024	11	25
	PENINSULA CLEAN ENERGY	PacGE			KernCounty	2026	1	1	2026	1	1	2026	12	31	2025	5	21
	PENINSULA CLEAN ENERGY	SCE			RiversideCounty	2026	1	1	2026	1	1	2026	12	31	2025	11	12
	NA	SCE			California	2023	1	1	2023	1	1	2038	12	31	2022	7	28
	NA	SCE			California	2023	1	1	2023	1	1	2038	12	31	2022	7	28
	NA	SCE			California	2023	1	1	2023	1	1	2038	12	31	2022	7	28
	NA	SCE			California	2023	1	1	2023	1	1	2038	12	31	2022	7	28
	NA	SCE			California	2023	1	1	2023	1	1	2045	12	31	2022	7	28
	NA	SCE			California	2023	1	1	2023	1	1	2045	12	31	2022	7	28
	NA	SCE			California	2023	1	1	2023	1	1	2045	12	31	2022	7	28
	NA	SCE			California	2023	1	1	2023	1	1	2045	12	31	2022	7	28
		SCE			California	2026	6	1	2026	6	1	2035	12	31	2026	2	10
		SCE			California	2026	6	1	2026	6	1	2035	12	31	2026	2	10
	NEXTERA	PacGE	No_sub_area		FresnoCounty	2028	6	1	2028	6	1	2048	5	31	2025	8	26
	SB ENERGY	SCE	No_sub_area		RiversideCounty	2027	5	1	2027	5	1	2041	4	30	2025	10	31
	CALPINE	BigCreekVentura	No_sub_area		KernCounty	2023	1	1	2023	1	1	2030	12	31	2022	2	8
	CALPINE	BANC	No_sub_area		SutterCounty	2022	7	1	2022	7	1	2030	12	31	2022	2	8
	VISTRA	PacGE	Greater Bay South Bay Moss		MontereyCounty	2027	1	1	2027	1	1	2027	12	31	2024	7	3
	MIDDLE RIVER POWER	SCE	No_sub_area		SanBernardinoCount	2024	1	1	2024	1	1	2027	12	31	2022	2	18
	CLEARWAY	PacGE			ContraCostaCounty	2023	5	1	2023	5	1	2026	9	30	2022	7	26
	SCE	SCE			RiversideCounty	2023	1	1	2023	1	1	2041	9	30	2022	9	28
	SCE	SCE			RiversideCounty	2025	1	1	2025	1	1	2041	9	30	2024	3	20
	SHELL	PacGE	Greater Bay South Bay Moss		ContraCostaCounty	2023	1	1	2023	1	1	2026	12	31	2022	2	16
	SHELL	PacGE	Greater Bay South Bay Moss		ContraCostaCounty	2023	1	1	2023	1	1	2026	12	31	2022	2	16
	SHELL	SCE			RiversideCounty	2026	1	1	2026	1	1	2034	12	31	2022	9	7
	SHELL	SCE			RiversideCounty	2026	1	1	2026	1	1	2034	12	31	2022	9	7
	SHELL	SCE			RiversideCounty	2026	1	1	2026	1	1	2034	12	31	2022	9	7
	CAMSTEX	PacGE			KernCounty	2023	1	1	2023	1	1	2027	12	31	2022	5	23
	MARATHON PETROLEUM	SCE			LosAngelesCounty	2027	1	1	2027	1	1	2027	12	31	2025	2	27
									2023	1	1	2045	12	31			
									2023	1	1	2045	12	31			
									2023	1	1	2045	12	31			
									2023	1	1	2045	12	31			
		PacGE			SanLuisObispoCounty				2025	1	1	2030	12	31			
		SCE							2024	1	1	2045	12	31			
		SCE							2024	1	1	2045	12	31			
									2030	1	1	2050	12	31			
									2030	1	1	2050	12	31			
									2030	1	1	2050	12	31			
									2030	1	1	2050	12	31			
									2030	1	1	2050	12	31			
									2035	1	1	2055	12	31			
									2033	1	1	2053	12	31			
									2033	1	1	2053	12	31			
									2034	1	1	2054	12	31			
									2034	1	1	2054	12	31			
									2035	1	1	2055	12	31			
									2035	1	1	2055	12	31			
									2035	1	1	2055	12	31			
									2035	1	1	2055	12	31			
									2040	1	1	2060	12	31			
									2038	1	1	2058	12	31			
									2038	1	1	2058	12	31			
									2039	1	1	2059	12	31			
									2039	1	1	2059	12	31			
									2040	1	1	2060	12	31			
									2040	1	1	2060	12	31			
									2045	1	1	2060	12	31			
									2043	1	1	2058	12	31			
									2043	1	1	2058	12	31			
									2044	1	1	2059	12	31			
									2044	1	1	2059	12	31			
									2045	1	1	2060	12	31			
									2045	1	1	2060	12	31			
									2028	1	1	2045	12	31			
									2028	1	1	2045	12	31			
									2028	1	1	2045	12	31			
									2030	1	1	2045	12	31			
									2026	1	1	2026	12	31			
									2027	1	1	2027	12	31			
									2028	1	1	2028	12	31			
									2029	1	1	2029	12	31			
									2030	1	1	2030	12	31			
									2031	1	1	2031	12	31			
									2032	1	1	2032	12	31			
									2033	1	1	2033	12	31			
									2034	1	1	2034	12	31			
									2035	1	1	2035	12	31			
									2036	1	1	2036	12	31			
									2037	1	1	2037	12	31			
									2038	1	1	2038	12	31			
									2039	1	1	2039	12	31			
									2040	1	1	2040	12	31			
									2041	1	1	2041	12	31			
									2042	1	1	2042	12	31			
									2043	1	1	2043	12	31			
									2044	1	1	2044	12	31			
									2045	1	1	2045	12	31			
									2030	1	1	2052	12	31			
									2032	1	1	2052	12	31			

tx_upgrades	tx_upgrade_date_year	tx_upgrade_date_month	tx_upgrade_date_day	tx_upgrade_description	d2106035_procurement_cat	mtr_tranche1_NQC	mtr_tranche2_NQC	mtr_tranche3_NQC	mtr_tranche4_NQC	mtr_tranche5_NQC	mtr_tranche6_NQC	mtr_NQC_ZE_gen_paired_dr	mtr_bridge_to	contract_changed	previous_COD_year	previous_COD_month	previous_COD_day
NA					NA									YES	2026	6	1
NA					NA												
NA					NA												
NA					NA												
NA					NA												
NA					NA												
NA					NA												
NA					NA												
NA					NA												
NA					NA												
NA					NA												
NA					NA												
NA					NA												
NA					NA												
NA					NA												
NA					general				39.78					YES			
NA					general					38.48				NO			
NA					NA									NO			
NA					NA									NO			
NA					NA				

remediation_plan	signed_contract	notice_to_proceed	public_contract	buying_energy_capacity	NQC_reporting_source	procurement_origin	planned_project_retention_priority	csp_resource_category	csp_annual_2028	csp_annual_2030	csp_annual_2035	csp_annual_2040	csp_annual_2045	macro_supertype	notes
	YES		NO	EnergyOnly	Calculated	RPS		Solar Baseline California (GWh)	262.72	259.70	252.09	244.07	234.31	newgeneric	
	YES		NO	EnergyOnly	In Contract	RPS		Solar Baseline California (GWh)	250.66	250.17	-	-	-	existinggeneric	
	YES		NO	EnergyOnly	In Contract	RPS		Solar Baseline California (GWh)	292.80	292.00	292.00	292.80	-	existinggeneric	
	YES		NO	EnergyOnly	In Contract	RPS		Wind Baseline California (GWh)	-	-	-	-	-	existinggeneric	
	YES		NO	EnergyOnly	In Contract	RPS		Wind Baseline California (GWh)	-	-	-	-	-	existinggeneric	
	YES		NO	EnergyOnly	Calculated	RPS		Geothermal (GWh)	16.08	22.47	21.78	-	-	existinggeneric	
	YES		NO	EnergyOnly	Calculated	RPS		Solar Baseline California (GWh)	112.77	107.50	76.40	-	-	existinggeneric	
	YES		NO	EnergyOnly	Calculated	RPS		Wind Baseline California (GWh)	54.28	52.10	34.63	-	-	newgeneric	
	YES		NO	EnergyOnly	Calculated	RPS		Small Hydro (GWh)	2.10	2.02	2.06	-	-	existinggeneric	
	YES		NO	EnergyOnly	Calculated	RPS		Small Hydro (GWh)	5.38	5.19	4.85	1.55	7.09	existinggeneric	
	YES		NO	EnergyOnly	Calculated	RPS		Solar Baseline California (GWh)	288.55	275.65	180.43	21.02	2.91	existinggeneric	
	YES		NO	EnergyOnly	Calculated	RPS		Wind Baseline California (GWh)	138.89	133.59	81.79	-	-	newgeneric	
	YES		NO	EnergyOnly	Calculated	RPS		Geothermal (GWh)	41.15	57.61	51.43	13.29	-	existinggeneric	
	YES		NO	EnergyOnly	Calculated	RPS		Solar Baseline California (GWh)	550.00	550.00	400.00	-	-	existinggeneric	
	YES		NO	EnergyOnly	Calculated	RPS		Solar Baseline California (GWh)	550.00	550.00	400.00	-	-	existinggeneric	
	YES		NO	EnergyOnly	Calculated	D2106035		Battery Storage (MWh Energy Capacity)	208.00	208.00	208.00	208.00	208.00	newgeneric	
	YES		NO	CapacityOnly	Calculated	D2106035		NA						newgeneric	
	YES		NO	CapacityOnly	In the contract	RA		NA						physical	
	YES		NO	CapacityOnly	In the contract	RA		NA						specifiedimport	
	YES		NO	CapacityOnly	In the contract	RA		NA						physical	
	YES		NO	CapacityOnly	In the contract	RA		NA						physical	
	YES		NO	CapacityOnly	Calculated	RA		NA						physical	
	YES		NO	CapacityOnly	In the contract	RA		NA						physical	
	YES		NO	CapacityOnly	In the contract	RA		NA						physical	
	YES		NO	CapacityOnly	In the contract	RA		NA						physical	
	YES		NO	CapacityOnly	In the contract	RA		NA						physical	
	YES		NO	CapacityOnly	In the contract	RA		NA						physical	
	YES		NO	CapacityOnly	In the contract	RA		NA						physical	
	YES		NO	CapacityOnly	In the contract	RA		NA						physical	
	YES		NO	CapacityOnly	In the contract	RA		NA						physical	
				CapacityOnly				NA						existinggeneric	
				CapacityOnly				NA						existinggeneric	
				CapacityOnly				NA						existinggeneric	
				CapacityOnly				NA						existinggeneric	
				EnergyOnly		Carbon Free		Nuclear (GWh)	207.00	207.00	-	-	-	existinggeneric	
				EnergyOnly		Carbon Free		Large Hydro (GWh)	100.00	100.00	100.00	100.00	100.00	existinggeneric	
				EnergyOnly		Carbon Free		Nuclear (GWh)	100.00	100.00	100.00	100.00	100.00	existinggeneric	
				EnergyCapacity				Geothermal (GWh)			-	-	-	newgeneric	
				EnergyCapacity				Solar New SCE SDG&E (GWh)		108.57	108.57	108.57	108.57	newgeneric	
				EnergyCapacity				Battery Storage (MWh Energy Capacity)		80.00	80.00	80.00	80.00	newgeneric	
				EnergyCapacity				Wind Baseline California (GWh)			-	-	-	newgeneric	
				EnergyCapacity				Wind New Mexico (GWh)		22.86	22.86	22.86	22.86	newgeneric	
				EnergyCapacity				Geothermal (GWh)			299.92	299.92	299.92	newgeneric	
				EnergyCapacity				Solar New SCE SDG&E (GWh)			399.89	399.89	399.89	newgeneric	
				EnergyCapacity				Battery Storage (MWh Energy Capacity)			591.57	591.57	591.57	newgeneric	
				EnergyCapacity				Solar New SCE SDG&E (GWh)			399.89	399.89	399.89	newgeneric	
				EnergyCapacity				Battery Storage (MWh Energy Capacity)			591.57	591.57	591.57	newgeneric	
				EnergyCapacity				Solar New SCE SDG&E (GWh)			399.89	399.89	399.89	newgeneric	
				EnergyCapacity				Battery Storage (MWh Energy Capacity)			591.57	591.57	591.57	newgeneric	
				EnergyCapacity				Wind New SCE SDG&E (GWh)			224.94	224.94	224.94	newgeneric	
				EnergyCapacity				Wind New Mexico (GWh)			-	-	-	newgeneric	
				EnergyCapacity				Geothermal (GWh)			-	-	-	newgeneric	
				EnergyCapacity				Solar New SCE SDG&E (GWh)			-	183.36	183.36	newgeneric	
				EnergyCapacity				Battery Storage (MWh Energy Capacity)			-	271.25	271.25	newgeneric	
				EnergyCapacity				Solar New SCE SDG&E (GWh)			-	183.36	183.36	newgeneric	
				EnergyCapacity				Battery Storage (MWh Energy Capacity)			-	271.25	271.25	newgeneric	
				EnergyCapacity				Wind Baseline California (GWh)			-	-	-	newgeneric	
				EnergyCapacity				Wind New Mexico (GWh)			-	240.66	240.66	newgeneric	
				EnergyCapacity				Geothermal (GWh)			-	-	-	newgeneric	
				EnergyCapacity				Solar New SCE SDG&E (GWh)			-	-	227.60	newgeneric	
				EnergyCapacity				Battery Storage (MWh Energy Capacity)			-	-	336.70	newgeneric	
				EnergyCapacity				Solar New SCE SDG&E (GWh)			-	-	227.60	newgeneric	
				EnergyCapacity				Battery Storage (MWh Energy Capacity)			-	-	336.70	newgeneric	
				EnergyCapacity				Wind Baseline California (GWh)			-	-	-	newgeneric	
				EnergyCapacity				Wind Wyoming (GWh)			-	-	240.99	newgeneric	
				EnergyOnly				Geothermal (GWh)			-	-	-	existinggeneric	
				EnergyOnly				Solar Baseline California (GWh)	250.00	500.00				existinggeneric	
				EnergyOnly				Wind Baseline California (GWh)	250.00	220.00				existinggeneric	
				EnergyOnly				Large Hydro (GWh)		100.00				existinggeneric	
				CapacityOnly				NA						existinggeneric	
				CapacityOnly				NA						existinggeneric	
				CapacityOnly				NA						existinggeneric	
				CapacityOnly				NA						existinggeneric	
				CapacityOnly				NA						existinggeneric	
				CapacityOnly				NA						existinggeneric	
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				CapacityOnly				NA						existinggeneric	
				CapacityOnly				NA						existinggeneric	
				CapacityOnly				NA						existinggeneric	
				CapacityOnly				NA						existinggeneric	
				CapacityOnly				NA						existinggeneric	
				EnergyCapacity				Battery Storage (MWh Energy Capacity)		1,009.01	1,009.01	1,009.01	1,009.01	newgeneric	
				EnergyCapacity				Battery Storage (MWh Energy Capacity)			1,216.00	1,216.00	1,216.00	newgeneric	

BTM PV Capacity Forecast (MW) - updated with 2025 Filing Requirements release

Service	A Type	LSE CPU	LSE Name	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045
PGE	IOU	PGE	Pacific Gas & Electric Company (Bundled)	2,670	2,775	2,827	3,128	3,413	3,626	3,760	3,962	4,026	4,060	4,100	4,148	4,200	4,254	4,310	4,370	4,429	4,491	4,555	4,619
PGE	ESP		Pacific Gas & Electric Company (Direct Access	1,158	1,182	1,127	1,095	1,072	1,054	1,049	1,035	1,005	979	961	947	938	930	926	925	924	925	928	933
PGE	CCA	MBCPA	Central Coast Community Energy	522	536	525	534	552	572	599	626	643	662	678	694	710	725	742	758	774	790	806	821
PGE	CCA	CPSF	CleanPowerSF	353	364	380	387	400	412	430	445	454	462	470	478	486	494	502	510	519	527	535	543
PGE	CCA	EBCE	Ava Community Energy	994	1,032	1,198	1,221	1,291	1,378	1,458	1,491	1,508	1,524	1,542	1,555	1,568	1,581	1,598	1,616	1,634	1,653	1,672	1,692
PGE	CCA	KCCP	King City Community Power (KCCP)	4	4	4	4	4	4	4	4	4	4	4	4	5	5	5	5	5	5	5	5
PGE	CCA	MCE	Marin Clean Energy	611	617	593	591	599	608	625	641	647	653	660	667	675	683	692	701	709	718	727	736
PGE	CCA	PCEA	Peninsula Clean Energy Authority	384	394	386	394	419	443	465	485	500	515	529	543	557	570	584	598	612	626	639	652
PGE	CCA	PIONEER	Pioneer Community Energy	185	232	361	395	406	416	432	445	452	458	464	471	478	484	492	500	509	518	526	534
PGE	CCA	RCEA	Redwood Coast Energy Authority	57	58	57	59	61	63	67	70	72	74	76	79	81	82	85	87	89	91	93	95
PGE	CCA	SJCE	San José Clean Energy (SJCE)	490	548	750	794	809	832	826	827	812	823	834	845	856	866	876	887	898	909	921	934
PGE	CCA	SVCEA	Silicon Valley Clean Energy Authority	441	470	469	492	516	533	551	567	574	583	591	599	608	616	625	635	644	653	662	672
PGE	CCA	SOMA	Sonoma Clean Power	228	235	231	236	245	255	269	281	290	299	308	316	325	332	341	349	358	366	374	382
PGE	CCA	VCEA	Valley Clean Energy Alliance	74	76	73	74	76	77	80	82	84	85	86	87	88	90	91	92	94	95	97	98
SCE	IOU	SCE	Southern California Edison Company (Bundlec	3,848	4,035	4,266	4,519	4,796	5,073	5,333	5,594	5,739	5,880	6,017	6,153	6,280	6,406	6,534	6,658	6,782	6,907	7,032	7,157
SCE	ESP		Southern California Edison Company (Direct A	879	927	947	963	979	995	1,006	1,014	998	982	976	972	969	968	969	972	975	981	990	1,000
SCE	CCA	AVCE	Apple Valley Choice Energy	17	18	19	20	22	23	24	25	25	26	26	27	27	28	28	29	29	30	30	31
SCE	CCA	MBCPA	Central Coast Community Energy	38	41	44	46	49	52	54	57	58	59	61	62	63	64	65	66	67	68	70	71
SCE	CCA	CPASC	Clean Power Alliance	833	887	954	1,020	1,094	1,164	1,231	1,297	1,337	1,374	1,401	1,428	1,453	1,477	1,503	1,528	1,554	1,580	1,606	1,633
SCE	CCA	DCE	Desert Community Energy	27	29	31	33	35	37	39	41	42	43	44	45	46	46	47	48	49	50	51	52
SCE	CCA	PALMDALE	Energy for Palmdale's Independent Choice (EF	36	38	41	44	47	50	53	55	57	58	59	60	62	63	64	65	66	68	69	70
SCE	CCA	LCE	Lancaster Choice	44	47	50	54	58	61	64	67	69	71	72	74	75	76	78	79	81	82	83	85
SCE	CCA	OCPA	Orange County Power Authority	173	182	194	205	217	228	239	249	254	259	264	268	273	277	281	285	290	294	299	303
SCE	CCA	PRIME	Pico Rivera Innovative Municipal Energy	15	16	17	18	19	21	21	22	23	23	24	24	25	25	26	26	26	27	27	28
SCE	CCA	POMONA	Pomona Choice Energy	31	33	35	38	40	43	45	47	48	49	50	51	52	53	54	55	56	57	58	59
SCE	CCA	RMEA	Rancho Mirage Energy Authority	21	22	24	25	27	28	30	31	32	33	33	34	35	35	36	37	37	38	39	40
SCE	CCA	SJP	San Jacinto Power	13	14	15	16	17	18	19	20	20	21	21	21	22	22	23	23	24	24	25	25
SCE	CCA	SBCE	Santa Barbara Clean Energy	25	26	29	31	33	35	38	40	42	43	45	46	48	49	50	52	53	55	56	57
SDGE	IOU	SDGE	San Diego Gas & Electric Company (Bundled)	433	407	437	458	480	504	526	549	565	591	607	621	633	647	666	677	687	696	705	713
SDGE	ESP		San Diego Gas & Electric Company (Direct Ac	543	550	544	539	533	529	521	513	498	481	469	461	454	449	443	440	437	436	436	436
SDGE	CCA	CEA	Clean Energy Alliance	328	343	358	373	389	404	416	428	435	440	446	451	457	462	467	473	478	484	489	495
SDGE	CCA	SDCP	San Diego Community Power	1,123	1,219	1,275	1,341	1,408	1,471	1,526	1,580	1,612	1,635	1,663	1,690	1,716	1,741	1,758	1,782	1,806	1,830	1,853	1,877

*Source : CEDU 2024 Demand Side Modelling and LSE Load Forecast

Reliability Need - updated with 2025 Filing Requirements release

	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045
CAISO gross peak (MW)	55,445	56,568	58,624	60,556	62,505	64,292	66,076	68,093	69,939	71,976	73,218	74,668	76,057	77,338	78,968	79,726	80,523	81,423	82,089	82,936
PRM (%)	16%	15%	15%	15%	15%	15%	15%	15%	15%	15%	15%	15%	14%	14%	14%	14%	14%	14%	14%	14%
CAISO Total Reliability Need (TRN) (MW)	64,088	65,238	67,457	69,522	71,597	73,685	75,771	78,127	80,290	82,674	83,983	85,527	86,996	88,337	90,073	90,937	91,846	92,873	93,633	94,599
CAISO Reliability Procurement Need (RPN) (MW)	53,361	54,394	55,427	50,516	45,606	47,269	48,932	50,595	52,259	53,922	55,180	56,437	57,695	58,953	60,210	60,949	61,688	62,427	63,167	63,906
LSE share of load during critical hours (%)	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%
LSE reliability procurement requirement (RPR) (MW)	570	583	596	545	494	512	529	546	563	580	591	602	613	624	634	639	644	649	654	659

BTM PV Forecast - updated with 2025 Filing Requirements release

	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045
Capacity (MW)	173	182	194	205	217	228	239	249	254	259	264	268	273	277	281	285	290	294	299	303

ELCC (%) - updated with 2025 Filing Requirements release

Resource Type	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045
in_state_wind_south	20%	18%	15%	15%	15%	16%	17%	18%	19%	19%	18%	16%	14%	12%	11%	11%	11%	11%	12%	12%
in_state_wind_north	30%	28%	26%	31%	35%	35%	35%	35%	35%	35%	33%	31%	28%	26%	24%	24%	24%	25%	25%	26%
out_of_state_wind_WY	44%	44%	44%	41%	37%	38%	39%	40%	41%	41%	39%	37%	35%	33%	30%	32%	33%	35%	36%	38%
out_of_state_wind_IDWAOR	27%	22%	17%	21%	25%	26%	27%	27%	28%	29%	27%	25%	23%	22%	20%	20%	20%	19%	19%	19%
out_of_state_wind_AZNM	43%	43%	43%	39%	36%	37%	38%	40%	41%	42%	39%	37%	34%	32%	29%	30%	31%	32%	33%	34%
offshore_wind_north	62%	65%	69%	63%	57%	55%	53%	51%	48%	46%	44%	42%	40%	38%	36%	36%	36%	36%	36%	36%
offshore_wind_south	42%	45%	47%	39%	30%	29%	28%	26%	25%	23%	22%	20%	19%	18%	16%	17%	19%	20%	21%	22%
utility_pv	8%	9%	10%	10%	10%	11%	11%	11%	11%	11%	11%	12%	12%	13%	13%	13%	12%	12%	11%	11%
btm_pv	7%	8%	8%	8%	7%	8%	8%	8%	9%	9%	10%	10%	10%	11%	11%	11%	10%	10%	9%	9%
4hr_batteries	92%	84%	75%	49%	22%	21%	20%	19%	18%	17%	17%	17%	17%	17%	17%	17%	17%	16%	16%	16%
8hr_batteries	97%	92%	87%	63%	39%	36%	32%	29%	25%	22%	24%	25%	27%	28%	30%	30%	31%	31%	32%	32%
12hr_batteries	94%	92%	91%	69%	47%	42%	37%	32%	27%	22%	24%	25%	27%	28%	30%	30%	31%	31%	32%	32%
24hr_batteries	96%	94%	92%	74%	56%	50%	44%	37%	31%	25%	27%	29%	30%	32%	34%	34%	34%	34%	34%	35%
100hr_batteries	99%	99%	98%	86%	74%	69%	64%	58%	53%	48%	49%	50%	51%	52%	53%	53%	52%	52%	51%	51%
pumped_storage	90%	87%	85%	66%	48%	43%	37%	32%	27%	22%	24%	25%	27%	28%	30%	30%	31%	31%	32%	32%
demand_response	94%	85%	76%	59%	42%	36%	30%	24%	18%	12%	12%	11%	11%	11%	11%	10%	10%	10%	9%	9%
hydro	69%	66%	63%	57%	50%	48%	46%	44%	43%	41%	40%	39%	39%	38%	37%	36%	36%	35%	35%	34%
small_hydro	42%	39%	36%	33%	30%	28%	26%	24%	22%	21%	21%	21%	21%	21%	21%	20%	20%	20%	19%	19%
geothermal	91%	91%	92%	89%	87%	87%	87%	87%	87%	87%	87%	88%	88%	88%	88%	89%	89%	89%	89%	90%
biomass_wood	100%	99%	99%	99%	99%	99%	99%	98%	98%	98%	98%	98%	99%	99%	99%	99%	98%	98%	98%	98%
biogas	99%	99%	99%	99%	99%	99%	99%	99%	99%	99%	99%	99%	99%	99%	99%	99%	99%	99%	99%	99%
nuclear	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
gas_cc	86%	85%	85%	83%	82%	82%	82%	83%	83%	83%	84%	85%	86%	87%	88%	87%	87%	86%	85%	84%
gas_ct	69%	69%	69%	65%	62%	62%	62%	62%	61%	61%	64%	66%	69%	71%	74%	72%	71%	70%	68%	67%
cogen	92%	91%	91%	91%	90%	90%	90%	90%	90%	90%	91%	92%	92%	93%	N/A	N/A	N/A	N/A	N/A	N/A
ice	94%	94%	94%	94%	93%	93%	93%	93%	93%	93%	94%	94%	95%	95%	96%	95%	95%	95%	94%	94%

Contract ELCC (effective MW)

Resource Type	Conrtact Status	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045
hybrid	Online	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
in_state_wind_south	Online	2	1	1	1	1	1	1	1	1	-	-	-	-	-	-	-	-	-	-	-
in_state_wind_north	Online	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
out_of_state_wind_WY	Online	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
out_of_state_wind_IDWAOR	Online	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
out_of_state_wind_AZNM	Online	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
offshore_wind_north	Online	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
offshore_wind_south	Online	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
utility_pv	Online	0	0	0	0	0	0	0	0	0	-	-	-	-	-	-	-	-	-	-	-
btm_pv	Online	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4hr_batteries	Online	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
8hr_batteries	Online	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
12hr_batteries	Online	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
24hr_batteries	Online	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
100hr_batteries	Online	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
pumped_storage	Online	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
demand_response	Online	19	17	16	12	9	7	6	5	4	2	2	2	2	2	2	2	2	2	2	2
hydro	Online	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
small_hydro	Online	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
geothermal	Online	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
biomass_wood	Online	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
biogas	Online	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
nuclear	Online	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
gas_cc	Online	452	428	108	107	105	65	65	65	66	66	67	68	68	69	70	69	69	68	67	67
gas_ct	Online	3	3	3	3	3	3	3	3	3	3	3	3	3	3	4	3	3	3	3	3
cogen	Online	-	46	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ice	Online	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
hybrid	Development	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
in_state_wind_south	Development	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
in_state_wind_north	Development	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
out_of_state_wind_WY	Development	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
out_of_state_wind_IDWAOR	Development	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
out_of_state_wind_AZNM	Development	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
offshore_wind_north	Development	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
offshore_wind_south	Development	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
utility_pv	Development	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
btm_pv	Development	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4hr_batteries	Development	-	43	39	25	12	11	10	10	9	9	9	9	9	9	9	-	-	-	-	-
8hr_batteries	Development	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
12hr_batteries	Development	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
24hr_batteries	Development	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
100hr_batteries	Development	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
pumped_storage	Development	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
demand_response	Development	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
hydro	Development	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
small_hydro	Development	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
geothermal	Development	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
biomass_wood	Development	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
biogas	Development	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
nuclear	Development	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
gas_cc	Development	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
gas_ct	Development	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
cogen	Development	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ice	Development	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
hybrid	Review	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
in_state_wind_south	Review	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
in_state_wind_north	Review	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
out_of_state_wind_WY	Review	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
out_of_state_wind_IDWAOR	Review	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
out_of_state_wind_AZNM	Review	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
offshore_wind_north	Review	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
offshore_wind_south	Review	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
utility_pv	Review	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
btm_pv	Review	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4hr_batteries	Review	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
8hr_batteries	Review	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
12hr_batteries	Review	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
24hr_batteries	Review	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
100hr_batteries	Review	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
pumped_storage	Review	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
demand_response	Review	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
hydro	Review	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
small_hydro	Review	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
geothermal	Review	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
biomass_wood	Review	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
biogas	Review	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
nuclear	Review	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
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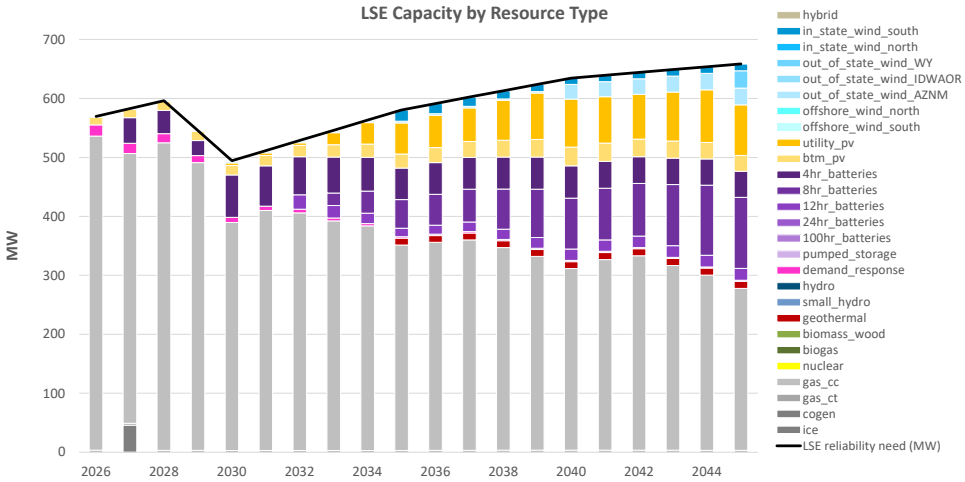
gas_ct	Review	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
cogen	Review	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ice	Review	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
hybrid	PlannedExisting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
in_state_wind_south	PlannedExisting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
in_state_wind_north	PlannedExisting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
out_of_state_wind_WY	PlannedExisting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
out_of_state_wind_IDWAOR	PlannedExisting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
out_of_state_wind_AZNM	PlannedExisting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
offshore_wind_north	PlannedExisting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
offshore_wind_south	PlannedExisting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
utility_pv	PlannedExisting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
btm_pv	PlannedExisting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4hr_batteries	PlannedExisting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
8hr_batteries	PlannedExisting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
12hr_batteries	PlannedExisting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
24hr_batteries	PlannedExisting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
100hr_batteries	PlannedExisting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
pumped_storage	PlannedExisting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
demand_response	PlannedExisting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
hydro	PlannedExisting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
small_hydro	PlannedExisting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
geothermal	PlannedExisting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
biomass_wood	PlannedExisting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
biogas	PlannedExisting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
nuclear	PlannedExisting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
gas_cc	PlannedExisting	81	30	413	381	282	342	338	324	315	283	286	290	275	259	238	254	261	245	230	208	
gas_ct	PlannedExisting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
cogen	PlannedExisting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ice	PlannedExisting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
hybrid	PlannedNew	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
in_state_wind_south	PlannedNew	-	-	-	-	-	-	-	-	-	19	17	16	14	12	11	11	11	11	11	11	
in_state_wind_north	PlannedNew	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
out_of_state_wind_WY	PlannedNew	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	29	
out_of_state_wind_IDWAOR	PlannedNew	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
out_of_state_wind_AZNM	PlannedNew	-	-	-	-	3	3	3	3	3	3	3	3	3	2	25	26	26	27	28	29	
offshore_wind_north	PlannedNew	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
offshore_wind_south	PlannedNew	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
utility_pv	PlannedNew	-	-	-	-	4	4	4	20	36	53	55	57	68	79	82	79	76	83	89	86	
btm_pv	PlannedNew	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4hr_batteries	PlannedNew	-	-	-	-	60	57	54	51	48	45	45	45	46	46	46	46	45	45	44	44	
8hr_batteries	PlannedNew	-	-	-	-	-	-	-	21	38	49	52	56	68	82	86	88	89	104	119	121	
12hr_batteries	PlannedNew	-	-	-	-	-	-	24	21	18	14	15	16	17	18	19	19	20	20	20	20	
24hr_batteries	PlannedNew	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
100hr_batteries	PlannedNew	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
pumped_storage	PlannedNew	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
demand_response	PlannedNew	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
hydro	PlannedNew	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
small_hydro	PlannedNew	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
geothermal	PlannedNew	-	-	-	-	-	-	-	-	-	12	12	12	12	12	12	12	12	12	12	12	
biomass_wood	PlannedNew	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
biogas	PlannedNew	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
nuclear	PlannedNew	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
gas_cc	PlannedNew	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
gas_ct	PlannedNew	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
cogen	PlannedNew	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ice	PlannedNew	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
LSE total supply (effective MW)		**557**	**569**	**581**	**530**	**478**	**494**	**510**	**525**	**541**	**557**	**566**	**575**	**585**	**594**	**603**	**609**	**614**	**620**	**626**	**632**	

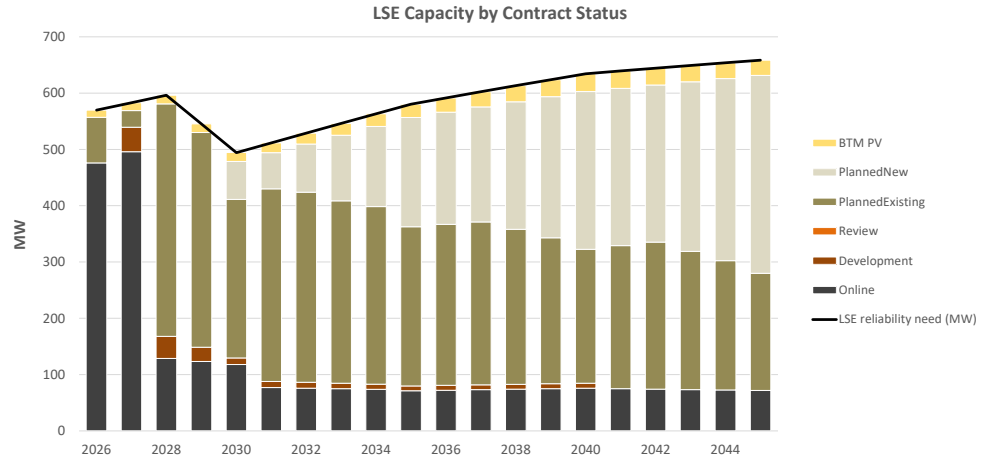
Load and Resource Table by Resource Type

	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045
LSE reliability need (MW)	**570**	**583**	**596**	**545**	**494**	**512**	**529**	**546**	**563**	**580**	**591**	**602**	**613**	**624**	**634**	**639**	**644**	**649**	**654**	**659**
ELCC by resource type (effective MW)																				
hybrid	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
in_state_wind_south	2	1	1	1	1	1	1	1	1	19	17	16	14	12	11	11	11	11	11	11
in_state_wind_north	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
out_of_state_wind_WY	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	29
out_of_state_wind_IDWAOR	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
out_of_state_wind_AZNM	-	-	-	-	3	3	3	3	3	3	3	3	3	2	25	26	26	27	28	29
offshore_wind_north	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
offshore_wind_south	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
utility_pv	0	0	0	0	4	4	4	20	36	53	55	57	68	79	82	79	76	83	89	86
btm_pv	13	14	15	16	16	18	19	21	22	24	25	27	29	30	32	31	30	29	28	27
4hr_batteries	-	43	39	25	72	68	65	61	57	54	54	54	54	55	55	46	45	45	44	44
8hr_batteries	-	-	-	-	-	-	-	21	38	49	52	56	68	82	86	88	89	104	119	121
12hr_batteries	-	-	-	-	-	-	24	21	18	14	15	16	17	18	19	19	20	20	20	20
24hr_batteries	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
100hr_batteries	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
pumped_storage	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
demand_response	19	17	16	12	9	7	6	5	4	2	2	2	2	2	2	2	2	2	2	2
hydro	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
small_hydro	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
geothermal	-	-	-	-	-	-	-	-	-	12	12	12	12	12	12	12	12	12	12	12
biomass_wood	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
biogas	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
nuclear	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
gas_cc	533	458	522	488	387	407	403	389	381	349	353	357	344	329	308	323	330	313	297	275
gas_ct	3	3	3	3	3	3	3	3	3	3	3	3	3	3	4	3	3	3	3	3
cogen	-	46	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ice	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
LSE total supply (effective MW)	**570**	**583**	**596**	**545**	**494**	**512**	**529**	**546**	**563**	**580**	**591**	**602**	**613**	**624**	**634**	**639**	**644**	**649**	**654**	**659**
Net capacity position (+ve = excess, -ve = shortfall) (effective MW)	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**
	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Load and Resource Table by Contract Status

	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045
LSE reliability need (MW)	**570**	**583**	**596**	**545**	**494**	**512**	**529**	**546**	**563**	**580**	**591**	**602**	**613**	**624**	**634**	**639**	**644**	**649**	**654**	**659**
ELCC by contract status (effective MW)																				
Online	476	496	129	123	118	77	76	75	74	71	72	73	74	75	76	75	74	73	72	72
Development	-	43	39	25	12	11	10	10	9	9	9	9	9	9	9	-	-	-	-	-
Review	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
PlannedExisting	81	30	413	381	282	342	338	324	315	283	286	290	275	259	238	254	261	245	230	208
PlannedNew	-	-	-	-	67	64	86	116	142	194	199	204	227	251	280	280	279	301	324	352
BTM PV	13	14	15	16	16	18	19	21	22	24	25	27	29	30	32	31	30	29	28	27
LSE total supply (effective MW)	**570**	**583**	**596**	**545**	**494**	**512**	**529**	**546**	**563**	**580**	**591**	**602**	**613**	**624**	**634**	**639**	**644**	**649**	**654**	**659**
Net capacity position (+ve = excess, -ve = shortfall) (effective MW)	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**


LSE Capacity by Resource Type
MW
700
600
500
400
300
200
100
0
2026
2028
2030
2032
2034
2036
2038
2040
2042
2044
hybrid
in_state_wind_south
in_state_wind_north
out_of_state_wind_WY
out_of_state_wind_IDWAOR
out_of_state_wind_AZNM
offshore_wind_north
offshore_wind_south
utility_pv
btm_pv
4hr_batteries
8hr_batteries
12hr_batteries
24hr_batteries
100hr_batteries
pumped_storage
demand_response
hydro
small_hydro
geothermal
biomass_wood
biogas
nuclear
gas_cc
gas_ct
cogen
ice
LSE reliability need (MW)


LSE Capacity by Contract Status
MW
700
600
500
400
300
200
100
0
2026
2028
2030
2032
2034
2036
2038
2040
2042
2044
BTM PV
PlannedNew
PlannedExisting
Review
Development
Online
LSE reliability need (MW)

lse_unique_contract_id	resource	contract_status	contracted_nameplate_capacity	sep_contracted_mw_nqc	is_hybrid_paired	can_charge_from_grid	contracted_generator_mw	contracted_storage_mw	contracted_storage_depth_mwh	buy_sell_own	contract_start_date_year	contract_start_date_month
Grace Orchard_PCC1_1_LT_OCPA	_NEW_GENERIC_SOLAR_FIXED	Development	0	0	NotHybrid		0	0	0	0	2027	6
SENA_PCC1_LT_3_OCPA	_EXISTING_GENERIC_SOLAR_FIXED	Online	0	0	NotHybrid		0	0	0	0	2026	1
SENA_PCC1_LT_5_OCPA	_EXISTING_GENERIC_SOLAR_FIXED	Online	0	0	NotHybrid		0	0	0	0	2027	1
PCE_PCC1_2_OCPA	_EXISTING_GENERIC_WIND	Online	0	0	NotHybrid		0	0	0	0	2026	1
PCE_PCC1_3_OCPA	_EXISTING_GENERIC_WIND	Online	0	0	NotHybrid		0	0	0	0	2026	1
SCE LT Bundled PCC0 VAMO 1	_EXISTING_GENERIC_GEOTHERMAL	Online	0	0	NotHybrid		0	0	0	Buy	2023	1
SCE LT Bundled PCC0 VAMO 2	_EXISTING_GENERIC_SOLAR_FIXED	Online	0	0	NotHybrid		0	0	0	Buy	2023	1
SCE LT Bundled PCC0 VAMO 3	_NEW_GENERIC_WIND_CA	Online	0	0	NotHybrid		0	0	0	Buy	2023	1
SCE LT Bundled PCC0 VAMO 4	_EXISTING_GENERIC_INSTATE_SMALL_	Online	0	0	NotHybrid		0	0	0	Buy	2023	1
SCE LT PCC1 VAMO 1	_EXISTING_GENERIC_INSTATE_SMALL_	Online	0	0	NotHybrid		0	0	0	Buy	2023	1
SCE LT PCC1 VAMO 2	_EXISTING_GENERIC_SOLAR_FIXED	Online	0	0	NotHybrid		0	0	0	Buy	2023	1
SCE LT PCC1 VAMO 3	_NEW_GENERIC_WIND_CA	Online	0	0	NotHybrid		0	0	0	Buy	2023	1
SCE LT PCC1 VAMO 4	_EXISTING_GENERIC_GEOTHERMAL	Online	0	0	NotHybrid		0	0	0	Buy	2023	1
CEA_PCC1_LT_VAMO_1_OCPA Buy	_EXISTING_GENERIC_SOLAR_FIXED	Online	0	0	NotHybrid		0	0	0	Buy	2026	6
CEA_PCC1_LT_VAMO_2_OCPA Sell	_EXISTING_GENERIC_SOLAR_FIXED	Online	0	0	NotHybrid		0	0	0	Sell	2026	6
LOCKENERGY_RA_1_NSF_OCPA	_NEW_GENERIC_BATTERY_STORAGE	Development	52	52	NotHybrid	YES		0	52	208	0	2028	6
ATHOS_RA_1_SSF_OCPA	_NEW_GENERIC_BATTERY_STORAGE	Development	51.99909	51.99909	NotHybrid	YES		0	52	208	0	2027	5
CALPINE_RA_4_NSF_OCPA	LEBECS_2_UNITS	Online	29.5	19.5	NotHybrid		0	0	0	0	2023	1
CALPINE_RA_5_NS_OCPA	SUTTER_2_CISO	Online	29.5	29.5	NotHybrid		0	0	0	0	2022	7
DYNEGY_RA_1_NS_OCPA	MOSSLD_2_PSP1	Online	50	50	NotHybrid		0	0	0	0	2027	1
HIGHDESERT_RA_1_SSF_OCPA	HIDSRT_2_UNITS	Online	100	100	NotHybrid		0	0	0	0	2024	1
Marsh Landing LLC_RA_1_NSF_OCPA	COCOPP_2_CTG4	Online	78.33	76.78	NotHybrid		0	0	0	0	2023	5
SCE_RA_4_SSF_MCAM	BLKCRK_2_GMCBT1	Online	35.6	33.79	NotHybrid		0	0	0	0	2023	1
SCE_RA_6_SSF_MCAM	CRIMSN_2_CRMBT1	Online	6.09	6.09	NotHybrid		0	0	0	0	2025	1
SENA_RA_5_SS_OCPA	MOSSLD_2_PSP2	Online	25	25	NotHybrid		0	0	0	0	2023	1
SENA_RA_5_SSF_OCPA	MOSSLD_2_PSP2	Online	50	50	NotHybrid		0	0	0	0	2023	1
SENA_RA_LT_WIND 1	ALTWD_2_COAWD1	Online	3.98	3.98	NotHybrid		0	0	0	0	2026	1
SENA_RA_LT_WIND 2	VENWD_1_WIND3	Online	3.52	3.52	NotHybrid		0	0	0	0	2026	1
SENA_RA_LT_SOLAR	ALMASL_2_GS7SR7	Online	1.42	1.42	NotHybrid		0	0	0	0	2026	1
Sunrise Power_RA_1	SUNRIS_2_PL1X3	Online	275	225	NotHybrid		0	0	0	0	2023	1
Watson_RA_1_SS_OCPA	ARCOGN_2_UNITS	Online	50	50	NotHybrid		0	0	0	0	2027	1
CAM - DR Allocation	_EXISTING_GENERIC_DR	Online	20.49	20.49	NotHybrid		0	0	0	0	2023	1
CAM - Peaker Allocation	_EXISTING_GENERIC_PEAKER	Online	4.76	4.76	NotHybrid		0	0	0	0	2023	1
CAM - Storage	_EXISTING_GENERIC_BATTERY_STORAG	Online	7.71	7.71	NotHybrid		0	0	0	0	2023	1
Other CAM	_EXISTING_GENERIC_COMBINED_CYCL	Online	79.29	79.29	NotHybrid		0	0	0	0	2023	1
PG&E Diablo Canyon Allocation	_EXISTING_GENERIC_NUCLEAR	Online	0	0	NotHybrid		0	0	0	0	2025	1
SCE Large Hydro Allocation	_EXISTING_GENERIC_INSTATE_LARGE_	Online	0	0	NotHybrid		0	0	0	0	2024	1
SCE Nuke Allocation	_EXISTING_GENERIC_NUCLEAR	Online	0	0	NotHybrid		0	0	0	0	2024	1
LT Geothermal 1	_NEW_GENERIC_GEOTHERMAL	PlannedNew	0	0	NotHybrid		0	0	0	0	2030	1
LT Solar 1	_NEW_GENERIC_SOLAR_1AXIS	PlannedNew	40.15342428	0	NotHybrid		0	0	0	0	2030	1
LT Storage 1	_NEW_GENERIC_BATTERY_STORAGE	PlannedNew	20	0	NotHybrid	YES		0	20	80	0	2030	1
LT Wind CA 1	_NEW_GENERIC_WIND_CA	PlannedNew	0	0	NotHybrid		0	0	0	0	2030	1
LT Wind Out of State 1	_NEW_GENERIC_WIND_OOS_AZNM	PlannedNew	7.34919501	0	NotHybrid		0	0	0	0	2030	1
LT Geothermal 2	_NEW_GENERIC_GEOTHERMAL	PlannedNew	13.26915504	0	NotHybrid		0	0	0	0	2035	1
LT Solar 2a	_NEW_GENERIC_SOLAR_1AXIS	PlannedNew	147.8923149	0	NotHybrid		0	0	0	0	2033	1
LT Storage 2a	_NEW_GENERIC_BATTERY_STORAGE	PlannedNew	73.94615744	0	NotHybrid	YES		0	73.94615744	591.5692595	0	2033	1
LT Solar 2b	_NEW_GENERIC_SOLAR_1AXIS	PlannedNew	147.8923149	0	NotHybrid		0	0	0	0	0	2034	1
LT Storage 2b	_NEW_GENERIC_BATTERY_STORAGE	PlannedNew	73.94615744	0	NotHybrid	YES		0	73.94615744	591.5692595	0	2034	1
LT Solar 2c	_NEW_GENERIC_SOLAR_1AXIS	PlannedNew	147.8923149	0	NotHybrid		0	0	0	0	0	2035	1
LT Storage 2c	_NEW_GENERIC_BATTERY_STORAGE	PlannedNew	73.94615744	0	NotHybrid	YES		0	73.94615744	591.5692595	0	2035	1
LT Wind CA 2	_NEW_GENERIC_WIND_CA	PlannedNew	97.59112367	0	NotHybrid		0	0	0	0	0	2035	1
LT Wind Out of State 2	_NEW_GENERIC_WIND_OOS_WY	PlannedNew	0	0	NotHybrid		0	0	0	0	0	2035	1
LT Geothermal 3	_NEW_GENERIC_GEOTHERMAL	PlannedNew	0	0	NotHybrid		0	0	0	0	0	2040	1
LT Solar 3a	_NEW_GENERIC_SOLAR_1AXIS	PlannedNew	67.81257372	0	NotHybrid		0	0	0	0	0	2038	1
LT Storage 3a	_NEW_GENERIC_BATTERY_STORAGE	PlannedNew	33.90628686	0	NotHybrid	YES		0	33.90628686	271.2502949	0	2038	1
LT Solar 3b	_NEW_GENERIC_SOLAR_1AXIS	PlannedNew	67.81257372	0	NotHybrid		0	0	0	0	0	2039	1
LT Storage 3b	_NEW_GENERIC_BATTERY_STORAGE	PlannedNew	33.90628686	0	NotHybrid	YES		0	33.90628686	271.2502949	0	2039	1
LT Wind CA 3	_NEW_GENERIC_WIND_CA	PlannedNew	0	0	NotHybrid		0	0	0	0	0	2040	1
LT Wind Out of State 3	_NEW_GENERIC_WIND_OOS_AZNM	PlannedNew	77.3785047	0	NotHybrid		0	0	0	0	0	2040	1
LT Geothermal 4	_NEW_GENERIC_GEOTHERMAL	PlannedNew	0	0	NotHybrid		0	0	0	0	0	2045	1
LT Solar 4a	_NEW_GENERIC_SOLAR_1AXIS	PlannedNew	84.17562203	0	NotHybrid		0	0	0	0	0	2043	1
LT Storage 4a	_NEW_GENERIC_BATTERY_STORAGE	PlannedNew	42.08781102	0	NotHybrid	YES		0	42.08781102	336.7024881	0	2043	1
LT Solar 4b	_NEW_GENERIC_SOLAR_1AXIS	PlannedNew	84.17562203	0	NotHybrid		0	0	0	0	0	2044	1
LT Storage 4b	_NEW_GENERIC_BATTERY_STORAGE	PlannedNew	42.08781102	0	NotHybrid	YES		0	42.08781102	336.7024881	0	2044	1
LT Wind CA 4	_NEW_GENERIC_WIND_CA	PlannedNew	0	0	NotHybrid		0	0	0	0	0	2045	1
LT Wind Out of State 4	_NEW_GENERIC_WIND_OOS_WY	PlannedNew	77.48554845	0	NotHybrid		0	0	0	0	0	2045	1
ST Geothermal	_EXISTING_GENERIC_GEOTHERMAL	PlannedExisting	0	0	NotHybrid		0	0	0	0	0	2028	1
ST Solar	_EXISTING_GENERIC_SOLAR_1AXIS	PlannedExisting	0	0	NotHybrid		0	0	0	0	0	2028	1
ST Wind	_EXISTING_GENERIC_WIND	PlannedExisting	0	0	NotHybrid		0	0	0	0	0	2028	1
ST Large Hydro	_EXISTING_GENERIC_INSTATE_LARGE_	PlannedExisting	0	0	NotHybrid		0	0	0	0	0	2030	1
Generic CCGT RA_2026	_EXISTING_GENERIC_COMBINED_CYCL	PlannedExisting	94.83565056	94.83565056		0	0	0	0	0	0	2026	1
Generic CCGT RA_2027	_EXISTING_GENERIC_COMBINED_CYCL	PlannedExisting	34.98146801	34.98146801		0	0	0	0	0	0	2027	1
Generic CCGT RA_2028	_EXISTING_GENERIC_COMBINED_CYCL	PlannedExisting	488.629455	488.629455		0	0	0	0	0	0	2028	1
Generic CCGT RA_2029	_EXISTING_GENERIC_COMBINED_CYCL	PlannedExisting	458.3703716	458.3703716		0	0	0	0	0	0	2029	1
Generic CCGT RA_2030	_EXISTING_GENERIC_COMBINED_CYCL	PlannedExisting	344.2471687	344.2471687		0	0	0	0	0	0	2030	1
Generic CCGT RA_2031	_EXISTING_GENERIC_COMBINED_CYCL	PlannedExisting	416.7424677	416.7424677		0	0	0	0	0	0	2031	1
Generic CCGT RA_2032	_EXISTING_GENERIC_COMBINED_CYCL	PlannedExisting	410.3039803	410.3039803		0	0	0	0	0	0	2032	1
Generic CCGT RA_2033	_EXISTING_GENERIC_COMBINED_CYCL	PlannedExisting	392.6203537	392.6203537		0	0	0	0	0	0	2033	1
Generic CCGT RA_2034	_EXISTING_GENERIC_COMBINED_CYCL	PlannedExisting	381.1939248	381.1939248		0	0	0	0	0	0	2034	1
Generic CCGT RA_2035	_EXISTING_GENERIC_COMBINED_CYCL	PlannedExisting	340.7519413	340.7519413		0	0	0	0	0	0	2035	1
Generic CCGT RA_2036	_EXISTING_GENERIC_COMBINED_CYCL	PlannedExisting	340.3431498	340.3431498		0	0	0	0	0	0	2036	1
Generic CCGT RA_2037	_EXISTING_GENERIC_COMBINED_CYCL	PlannedExisting	339.9430897	339.9430897		0	0	0	0	0	0	2037	1
Generic CCGT RA_2038	_EXISTING_GENERIC_COMBINED_CYCL	PlannedExisting	319.4505094	319.4505094		0	0	0	0	0	0	2038	1
Generic CCGT RA_2039	_EXISTING_GENERIC_COMBINED_CYCL	PlannedExisting	297.4835079	297.4835079		0	0	0	0	0	0	2039	1
Generic CCGT RA_2040	_EXISTING_GENERIC_COMBINED_CYCL	PlannedExisting	269.8386598	269.8386598		0	0	0	0	0	0	2040	1
Generic CCGT RA_2041	_EXISTING_GENERIC_COMBINED_CYCL	PlannedExisting	290.6853781	290.6853781		0	0	0	0	0	0	2041	1
Generic CCGT RA_2042	_EXISTING_GENERIC_COMBINED_CYCL	PlannedExisting	301.8144692	301.8144692		0	0	0	0	0	0	2042	1
Generic CCGT RA_2043	_EXISTING_GENERIC_COMBINED_CYCL	PlannedExisting	286.2541173	286.2541173		0	0	0	0	0	0	2043	1
Generic CCGT RA_2044	_EXISTING_GENERIC_COMBINED_CYCL	PlannedExisting	270.8393804	270.8393804		0	0	0	0	0	0	2044	1
Generic CCGT RA_2045	_EXISTING_GENERIC_COMBINED_CYCL	PlannedExisting	247.8023227	247.8023227		0	0	0	0	0	0	2045	1
LT Storage_D.26_4	_NEW_GENERIC_BATTERY_STORAGE	PlannedNew	252.2522523	0	NotHybrid	YES		0	252.2522523	1009.009009	0	2030	1
LT LD Storage_D.26_8	_NEW_GENERIC_BATTERY_STORAGE	PlannedNew	59.1163659	0	NotHybrid	YES		0	59.1163659	1216	0	2032	1

contract_start_date_day	contract_end_date_year	contract_end_date_month	contract_end_date_day	buying_energy_capacity	is generator pumped storage	is this hybrid gen portion?	is this hybrid storage portion	is there more than one row w	interconnection limit	hybrid storage contracted_st	hybrid storage contracted_st	battery dur	ELCC batter	resource elcc type	hybrid/pair	elcc type (/c
1	2047	5	31	EnergyOnly	FALSE	FALSE	FALSE	FALSE	0	0	0	n/a	n/a	utility_pv	n/a	utility_pv
1	2034	12	31	EnergyOnly	FALSE	FALSE	FALSE	FALSE	0	0	0	n/a	n/a	utility_pv	n/a	utility_pv
1	2040	12	31	EnergyOnly	FALSE	FALSE	FALSE	FALSE	0	0	0	n/a	n/a	utility_pv	n/a	utility_pv
1	2026	12	31	EnergyOnly	FALSE	FALSE	FALSE	FALSE	0	0	0	n/a	n/a	in_state_wind_sou	n/a	in_state_wi
1	2026	12	31	EnergyOnly	FALSE	FALSE	FALSE	FALSE	0	0	0	n/a	n/a	in_state_wind_sou	n/a	in_state_wi
1	2038	12	31	EnergyOnly	FALSE	FALSE	FALSE	FALSE	0	0	0	n/a	n/a	geothermal	n/a	geothermal
1	2038	12	31	EnergyOnly	FALSE	FALSE	FALSE	FALSE	0	0	0	n/a	n/a	utility_pv	n/a	utility_pv
1	2038	12	31	EnergyOnly	FALSE	FALSE	FALSE	FALSE	0	0	0	n/a	n/a	in_state_wind_sou	n/a	in_state_wi
1	2038	12	31	EnergyOnly	FALSE	FALSE	FALSE	FALSE	0	0	0	n/a	n/a	hydro	n/a	hydro
1	2045	12	31	EnergyOnly	FALSE	FALSE	FALSE	FALSE	0	0	0	n/a	n/a	hydro	n/a	hydro
1	2045	12	31	EnergyOnly	FALSE	FALSE	FALSE	FALSE	0	0	0	n/a	n/a	utility_pv	n/a	utility_pv
1	2045	12	31	EnergyOnly	FALSE	FALSE	FALSE	FALSE	0	0	0	n/a	n/a	in_state_wind_sou	n/a	in_state_wi
1	2045	12	31	EnergyOnly	FALSE	FALSE	FALSE	FALSE	0	0	0	n/a	n/a	geothermal	n/a	geothermal
1	2035	12	31	EnergyOnly	FALSE	FALSE	FALSE	FALSE	0	0	0	n/a	n/a	utility_pv	n/a	utility_pv
1	2035	12	31	EnergyOnly	FALSE	FALSE	FALSE	FALSE	0	0	0	n/a	n/a	utility_pv	n/a	utility_pv
1	2048	5	31	EnergyOnly	FALSE	FALSE	FALSE	FALSE	52	0	0	4	4	4hr_batteries	n/a	4hr_batteri
1	2041	4	30	CapacityOnly	FALSE	FALSE	FALSE	FALSE	51.99909	0	0	4	4	4hr_batteries	n/a	4hr_batteri
1	2030	12	31	CapacityOnly	FALSE	FALSE	FALSE	FALSE	29.5	0	0	n/a	n/a	gas_cc	n/a	gas_cc
1	2030	12	31	CapacityOnly	FALSE	FALSE	FALSE	FALSE	29.5	0	0	n/a	n/a	gas_cc	n/a	gas_cc
1	2027	12	31	CapacityOnly	FALSE	FALSE	FALSE	FALSE	50	0	0	n/a	n/a	gas_cc	n/a	gas_cc
1	2027	12	31	CapacityOnly	FALSE	FALSE	FALSE	FALSE	100	0	0	n/a	n/a	gas_cc	n/a	gas_cc
1	2026	9	30	CapacityOnly	FALSE	FALSE	FALSE	FALSE	78.33	0	0	n/a	n/a	gas_ct	n/a	gas_ct
1	2041	9	30	CapacityOnly	FALSE	FALSE	FALSE	FALSE	35.6	0	0	n/a	n/a	hr_batteries	n/a	hr_batteries
1	2041	9	30	CapacityOnly	FALSE	FALSE	FALSE	FALSE	6.09	0	0	n/a	n/a	hr_batteries	n/a	hr_batteries
1	2026	12	31	CapacityOnly	FALSE	FALSE	FALSE	FALSE	25	0	0	n/a	n/a	gas_cc	n/a	gas_cc
1	2026	12	31	CapacityOnly	FALSE	FALSE	FALSE	FALSE	50	0	0	n/a	n/a	gas_cc	n/a	gas_cc
1	2034	12	31	CapacityOnly	FALSE	FALSE	FALSE	FALSE	3.98	0	0	n/a	n/a	in_state_wind_sou	n/a	in_state_wi
1	2034	12	31	CapacityOnly	FALSE	FALSE	FALSE	FALSE	3.52	0	0	n/a	n/a	in_state_wind_sou	n/a	in_state_wi
1	2034	12	31	CapacityOnly	FALSE	FALSE	FALSE	FALSE	1.42	0	0	n/a	n/a	utility_pv	n/a	utility_pv
1	2027	12	31	CapacityOnly	FALSE	FALSE	FALSE	FALSE	275	0	0	n/a	n/a	gas_cc	n/a	gas_cc
1	2027	12	31	CapacityOnly	FALSE	FALSE	FALSE	FALSE	50	0	0	n/a	n/a	cogen	n/a	cogen
1	2045	12	31	CapacityOnly	FALSE	FALSE	FALSE	FALSE	20.49	0	0	n/a	n/a	demand_response	n/a	demand_re
1	2045	12	31	CapacityOnly	FALSE	FALSE	FALSE	FALSE	4.76	0	0	n/a	n/a	gas_ct	n/a	gas_ct
1	2045	12	31	CapacityOnly	FALSE	FALSE	FALSE	FALSE	7.71	0	0	n/a	n/a	hr_batteries	n/a	hr_batteries
1	2045	12	31	CapacityOnly	FALSE	FALSE	FALSE	FALSE	79.29	0	0	n/a	n/a	gas_cc	n/a	gas_cc
1	2030	12	31	EnergyOnly	FALSE	FALSE	FALSE	FALSE	0	0	0	n/a	n/a	nuclear	n/a	nuclear
1	2045	12	31	EnergyOnly	FALSE	FALSE	FALSE	FALSE	0	0	0	n/a	n/a	hydro	n/a	hydro
1	2045	12	31	EnergyOnly	FALSE	FALSE	FALSE	FALSE	0	0	0	n/a	n/a	nuclear	n/a	nuclear
1	2050	12	31	EnergyCapacity	FALSE	FALSE	FALSE	FALSE	0	0	0	n/a	n/a	geothermal	n/a	geothermal
1	2050	12	31	EnergyCapacity	FALSE	FALSE	FALSE	FALSE	40.15342428	0	0	n/a	n/a	utility_pv	n/a	utility_pv
1	2050	12	31	EnergyCapacity	FALSE	FALSE	FALSE	FALSE	20	0	0	4	4	4hr_batteries	n/a	4hr_batteri
1	2050	12	31	EnergyCapacity	FALSE	FALSE	FALSE	FALSE	0	0	0	n/a	n/a	in_state_wind_sou	n/a	in_state_wi
1	2050	12	31	EnergyCapacity	FALSE	FALSE	FALSE	FALSE	7.34919501	0	0	n/a	n/a	out_of_state_wind	n/a	out_of_stat
1	2055	12	31	EnergyCapacity	FALSE	FALSE	FALSE	FALSE	13.26915504	0	0	n/a	n/a	geothermal	n/a	geothermal
1	2053	12	31	EnergyCapacity	FALSE	FALSE	FALSE	FALSE	147.8923149	0	0	n/a	n/a	utility_pv	n/a	utility_pv
1	2053	12	31	EnergyCapacity	FALSE	FALSE	FALSE	FALSE	73.94615744	0	0	8	8	8hr_batteries	n/a	8hr_batteri
1	2054	12	31	EnergyCapacity	FALSE	FALSE	FALSE	FALSE	147.8923149	0	0	n/a	n/a	utility_pv	n/a	utility_pv
1	2054	12	31	EnergyCapacity	FALSE	FALSE	FALSE	FALSE	73.94615744	0	0	8	8	8hr_batteries	n/a	8hr_batteri
1	2055	12	31	EnergyCapacity	FALSE	FALSE	FALSE	FALSE	147.8923149	0	0	n/a	n/a	utility_pv	n/a	utility_pv
1	2055	12	31	EnergyCapacity	FALSE	FALSE	FALSE	FALSE	73.94615744	0	0	8	8	8hr_batteries	n/a	8hr_batteri
1	2055	12	31	EnergyCapacity	FALSE	FALSE	FALSE	FALSE	97.59112367	0	0	n/a	n/a	in_state_wind_sou	n/a	in_state_wi
1	2055	12	31	EnergyCapacity	FALSE	FALSE	FALSE	FALSE	0	0	0	n/a	n/a	out_of_state_wind	n/a	out_of_stat
1	2060	12	31	EnergyCapacity	FALSE	FALSE	FALSE	FALSE	0	0	0	n/a	n/a	geothermal	n/a	geothermal
1	2058	12	31	EnergyCapacity	FALSE	FALSE	FALSE	FALSE	67.81257372	0	0	n/a	n/a	utility_pv	n/a	utility_pv
1	2058	12	31	EnergyCapacity	FALSE	FALSE	FALSE	FALSE	33.90628686	0	0	8	8	8hr_batteries	n/a	8hr_batteri
1	2059	12	31	EnergyCapacity	FALSE	FALSE	FALSE	FALSE	67.81257372	0	0	n/a	n/a	utility_pv	n/a	utility_pv
1	2059	12	31	EnergyCapacity	FALSE	FALSE	FALSE	FALSE	33.90628686	0	0	8	8	8hr_batteries	n/a	8hr_batteri
1	2060	12	31	EnergyCapacity	FALSE	FALSE	FALSE	FALSE	0	0	0	n/a	n/a	in_state_wind_sou	n/a	in_state_wi
1	2060	12	31	EnergyCapacity	FALSE	FALSE	FALSE	FALSE	77.3785047	0	0	n/a	n/a	out_of_state_wind	n/a	out_of_stat
1	2060	12	31	EnergyCapacity	FALSE	FALSE	FALSE	FALSE	0	0	0	n/a	n/a	geothermal	n/a	geothermal
1	2058	12	31	EnergyCapacity	FALSE	FALSE	FALSE	FALSE	84.17562203	0	0	n/a	n/a	utility_pv	n/a	utility_pv
1	2058	12	31	EnergyCapacity	FALSE	FALSE	FALSE	FALSE	42.08781102	0	0	8	8	8hr_batteries	n/a	8hr_batteri
1	2059	12	31	EnergyCapacity	FALSE	FALSE	FALSE	FALSE	84.17562203	0	0	n/a	n/a	utility_pv	n/a	utility_pv
1	2059	12	31	EnergyCapacity	FALSE	FALSE	FALSE	FALSE	42.08781102	0	0	8	8	8hr_batteries	n/a	8hr_batteri
1	2060	12	31	EnergyCapacity	FALSE	FALSE	FALSE	FALSE	0	0	0	n/a	n/a	in_state_wind_sou	n/a	in_state_wi
1	2060	12	31	EnergyCapacity	FALSE	FALSE	FALSE	FALSE	77.48554845	0	0	n/a	n/a	out_of_state_wind	n/a	out_of_stat
1	2045	12	31	EnergyOnly	FALSE	FALSE	FALSE	FALSE	0	0	0	n/a	n/a	geothermal	n/a	geothermal
1	2045	12	31	EnergyOnly	FALSE	FALSE	FALSE	FALSE	0	0	0	n/a	n/a	utility_pv	n/a	utility_pv
1	2045	12	31	EnergyOnly	FALSE	FALSE	FALSE	FALSE	0	0	0	n/a	n/a	in_state_wind_sou	n/a	in_state_wi
1	2045	12	31	EnergyOnly	FALSE	FALSE	FALSE	FALSE	0	0	0	n/a	n/a	hydro	n/a	hydro
1	2026	12	31	CapacityOnly	FALSE	FALSE	FALSE	FALSE	94.83565056	0	0	n/a	n/a	gas_cc	n/a	gas_cc
1	2027	12	31	CapacityOnly	FALSE	FALSE	FALSE	FALSE	34.98146801	0	0	n/a	n/a	gas_cc	n/a	gas_cc
1	2028	12	31	CapacityOnly	FALSE	FALSE	FALSE	FALSE	488.629455	0	0	n/a	n/a	gas_cc	n/a	gas_cc
1	2029	12	31	CapacityOnly	FALSE	FALSE	FALSE	FALSE	458.3703716	0	0	n/a	n/a	gas_cc	n/a	gas_cc
1	2030	12	31	CapacityOnly	FALSE	FALSE	FALSE	FALSE	344.2471687	0	0	n/a	n/a	gas_cc	n/a	gas_cc
1	2031	12	31	CapacityOnly	FALSE	FALSE	FALSE	FALSE	416.7424677	0	0	n/a	n/a	gas_cc	n/a	gas_cc
1	2032	12	31	CapacityOnly	FALSE	FALSE	FALSE	FALSE	410.3039803	0	0	n/a	n/a	gas_cc	n/a	gas_cc
1	2033	12	31	CapacityOnly	FALSE	FALSE	FALSE	FALSE	392.6203537	0	0	n/a	n/a	gas_cc	n/a	gas_cc
1	2034	12	31	CapacityOnly	FALSE	FALSE	FALSE	FALSE	381.1939248	0	0	n/a	n/a	gas_cc	n/a	gas_cc
1	2035	12	31	CapacityOnly	FALSE	FALSE	FALSE	FALSE	340.7519413	0	0	n/a	n/a	gas_cc	n/a	gas_cc
1	2036	12	31	CapacityOnly	FALSE	FALSE	FALSE	FALSE	340.3431498	0	0	n/a	n/a	gas_cc	n/a	gas_cc
1	2037	12	31	CapacityOnly	FALSE	FALSE	FALSE	FALSE	339.9430897	0	0	n/a	n/a	gas_cc	n/a	gas_cc
1	2038	12	31	CapacityOnly	FALSE	FALSE	FALSE	FALSE	319.4505094	0	0	n/a	n/a	gas_cc	n/a	gas_cc
1	2039	12	31	CapacityOnly	FALSE	FALSE	FALSE	FALSE	297.4835079	0	0	n/a	n/a	gas_cc	n/a	gas_cc
1	2040	12	31	CapacityOnly	FALSE	FALSE	FALSE	FALSE	269.8386598	0	0	n/a	n/a	gas_cc	n/a	gas_cc
1	2041	12	31	CapacityOnly	FALSE	FALSE	FALSE	FALSE	290.6853781	0	0	n/a	n/a	gas_cc	n/a	gas_cc
1	2042	12	31	CapacityOnly	FALSE	FALSE	FALSE	FALSE	301.8144692	0	0	n/a	n/a	gas_cc	n/a	gas_cc
1	2043	12	31	CapacityOnly	FALSE	FALSE	FALSE	FALSE	286.2541173	0	0	n/a	n/a	gas_cc	n/a	gas_cc
1	2044	12	31	CapacityOnly	FALSE	FALSE	FALSE	FALSE	270.8393804	0	0	n/a	n/a	gas_cc	n/a	gas_cc
1	2045	12	31	CapacityOnly	FALSE	FALSE	FALSE	FALSE	247.8023227	0	0	n/a	n/a	gas_cc	n/a	gas_cc
1	2052	12	31	EnergyCapacity	FALSE	FALSE	FALSE	FALSE	252.2522523	0	0	4	4	4hr_batteries	n/a	4hr_batteri
1	2052	12	31	EnergyCapacity	FALSE	FALSE	FALSE	FALSE	59.1163659	0	0	20	12	12hr_batteries	n/a	12hr_batte

start year	end year	hybrid stora	short durati	resource cap	multiplier	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045
2027	2046	100%	100%	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2026	2034	100%	100%	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2027	2040	100%	100%	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2026	2026	100%	100%	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2026	2026	100%	100%	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2023	2038	100%	100%	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2023	2038	100%	100%	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2023	2038	100%	100%	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2023	2038	100%	100%	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2023	2045	100%	100%	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2023	2045	100%	100%	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2023	2045	100%	100%	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2023	2045	100%	100%	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2026	2035	100%	100%	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2026	2035	100%	100%	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2028	2047	100%	100%	52	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2027	2040	100%	100%	51.99909	1	0	43.44784	39.17091	25.35736	11.5438	10.95101	10.35822	9.765429	9.172639	8.57985	8.621449	8.663048	8.704648	8.746247	8.787846	0	0	0	0	0
2023	2030	100%	100%	19.5	1	16.67558	16.58226	16.48859	16.2217	15.95851	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2023	2030	100%	100%	29.5	1	25.22715	25.08598	24.94427	24.54052	24.14237	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2027	2027	100%	100%	50	1	0	42.5186	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2024	2027	100%	100%	100	1	85.51578	85.03721	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2023	2025	100%	100%	76.78	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2023	2040	100%	0%	33.79	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2025	2040	100%	0%	6.09	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2023	2026	100%	100%	25	1	21.37894	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2023	2026	100%	100%	50	1	42.75789	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2026	2034	100%	100%	3.98	1	0.805154	0.707843	0.610532	0.611726	0.61292	0.644362	0.675804	0.707246	0.738688	0	0	0	0	0	0	0	0	0	0	0
2026	2034	100%	100%	3.52	1	0.712096	0.626032	0.539968	0.541024	0.54208	0.569888	0.597696	0.625504	0.653312	0	0	0	0	0	0	0	0	0	0	0
2026	2034	100%	100%	1.42	1	0.118854	0.133551	0.148248	0.14839	0.148532	0.149668	0.150804	0.15194	0.153076	0	0	0	0	0	0	0	0	0	0	0
2023	2027	100%	100%	225	1	192.4105	191.3337	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2027	2027	100%	100%	50	1	0	45.74734	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2023	2045	100%	100%	20.49	1	19.20357	17.37594	15.54831	12.11141	8.674504	7.427484	6.180464	4.933444	3.686424	2.439404	2.395925	2.352447	2.308969	2.26549	2.222012	2.148137	2.074263	2.000388	1.926513	1.852639
2023	2045	100%	100%	4.76	1	3.307778	3.284824	3.262063	3.110961	2.960547	2.951527	2.942748	2.934208	2.925907	2.917845	3.04277	3.163264	3.279614	3.392082	3.500905	3.438658	3.377306	3.316873	3.257383	3.198862
2023	2045	100%	0%	7.71	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2023	2045	100%	100%	79.29	1	67.80546	67.426	67.04513	65.95992	64.88977	65.07511	65.25912	65.44178	65.62312	65.80312	66.67872	67.52776	68.35198	69.15292	69.93203	69.29471	68.64253	67.97511	67.29202	66.59285
2025	2030	100%	100%	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2024	2045	100%	100%	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2024	2045	100%	100%	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2030	2050	100%	100%	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2030	2050	100%	100%	40.15342	1	0	0	0	0	4.200048	4.232171	4.264294	4.296416	4.328539	4.360662	4.545368	4.730073	4.914779	5.099485	5.284191	5.101091	4.917991	4.734892	4.551792	4.368693
2030	2050	100%	100%	20	1	0	0	0	0	4.44	4.212	3.984	3.756	3.528	3.3	3.316	3.332	3.348	3.364	3.38	3.352	3.324	3.296	3.268	3.24
2030	2050	100%	100%	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2030	2050	100%	100%	7.349195	1	0	0	0	0	2.64571	2.732578	2.819445	2.906313	2.99318	3.080048	2.895877	2.711706	2.527535	2.343364	2.159193	2.224895	2.290597	2.356299	2.422001	2.487703
2035	2055	100%	100%	13.26916	1	0	0	0	0	0	0	0	0	0	11.55478	11.58928	11.62378	11.65828	11.69278	11.72728	11.76417	11.80106	11.83794	11.87483	11.91172
2033	2053	100%	100%	147.8923	1	0	0	0	0	0	0	0	15.82448	15.94279	16.06111	16.74141	17.42171	18.10202	18.78232	19.46263	18.78824	18.11385	17.43946	16.76507	16.09068
2033	2053	100%	100%	73.94616	1	0	0	0	0	0	0	0	21.26691	18.76753	16.26815	17.42171	18.57527	19.72883	20.88239	22.03595	22.40569	22.77542	23.14515	23.51488	23.88461
2034	2054	100%	100%	147.8923	1	0	0	0	0	0	0	0	0	15.94279	16.06111	16.74141	17.42171	18.10202	18.78232	19.46263	18.78824	18.11385	17.43946	16.76507	16.09068
2034	2054	100%	100%	73.94616	1	0	0	0	0	0	0	0	0	18.76753	16.26815	17.42171	18.57527	19.72883	20.88239	22.03595	22.40569	22.77542	23.14515	23.51488	23.88461
2035	2055	100%	100%	147.8923	1	0	0	0	0	0	0	0	0	0	16.06111	16.74141	17.42171	18.10202	18.78232	19.46263	18.78824	18.11385	17.43946	16.76507	16.09068
2035	2055	100%	100%	73.94616	1	0	0	0	0	0	0	0	0	0	16.26815	17.42171	18.57527	19.72883	20.88239	22.03595	22.40569	22.77542	23.14515	23.51488	23.88461
2035	2055	100%	100%	97.59112	1	0	0	0	0	0	0	0	0	0	18.88388	17.21117	15.53846	13.86575	12.19303	10.52032	10.7116	10.90288	11.09416	11.28544	11.47672
2035	2055	100%	100%	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2040	2060	100%	100%	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2038	2058	100%	100%	67.81257	1	0	0	0	0	0	0	0	0	0	0	0	0	8.300259	8.612197	8.924135	8.614909	8.305684	7.996459	7.687233	7.378008
2038	2058	100%	100%	33.90629	1	0	0	0	0	0	0	0	0	0	0	0	0	9.046197	9.575135	10.10407	10.2736	10.44314	10.61267	10.7822	10.95173
2039	2059	100%	100%	67.81257	1	0	0	0	0	0	0	0	0	0	0	0	0	0	8.612197	8.924135	8.614909	8.305684	7.996459	7.687233	7.378008
2039	2059	100%	100%	33.90629	1	0	0	0	0	0	0	0	0	0	0	0	0	0	9.575135	10.10407	10.2736	10.44314	10.61267	10.7822	10.95173
2040	2060	100%	100%	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2040	2060	100%	100%	77.3785	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	22.7338	23.42557	24.11733	24.8091	25.50086	26.19262
2045	2060	100%	100%	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2043	2058	100%	100%	84.17562	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	9.925989	9.542149	9.158308
2043	2058	100%	100%	42.08781	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	13.17348	13.38392	13.59436
2044	2059	100%	100%	84.17562	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	9.542149	9.158308
2044	2059	100%	100%	42.08781	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	13.38392	13.59436
2045	2060	100%	100%	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2045	2060	100%	100%	77.48555	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	29.26629
2028	2045	100%	100%	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2028	2045	100%	100%	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2028	2045	100%	100%	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2030	2045	100%	100%	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2026	2026	100%	100%	94.83565	1	81.09945	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2027	2027	100%	100%	34.98147	1	0	29.74726	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2028	2028	100%	100%	488.6295	1	0	0	413.1697	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2029	2029	100%	100%	458.3704	1	0	0	0	381.31	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2030	2030	100%	100%	344.2472	1	0	0	0	0	281.7268	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2031	2031	100%	100%	416.7425	1	0	0	0	0	0	342.03	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2032	2032	100%	100%	410.304	1	0	0	0	0	0	0	337.698	0	0	0	0	0	0	0	0	0	0	0	0	0
2033	2033	100%	100%	392.6204	1	0	0	0	0	0	0	0	324.0481	0	0	0	0	0	0	0	0	0	0	0	0
2034	2034	100%	100%	381.1939	1	0	0	0	0	0	0	0	0	315.4891	0	0	0	0	0	0	0	0	0	0	0
2035	2035	100%	100%	340.7519	1	0	0	0	0	0	0	0	0	0	282.7916	0	0	0	0	0	0	0	0	0	0
2036	2036	100%	100%	340.3431	1	0	0	0	0	0	0	0	0	0	0	286.2107	0	0	0	0	0	0	0	0	0
2037	2037	100%	100%	339.9431	1	0	0	0	0	0	0	0	0	0	0	0	289.5144	0	0	0	0	0	0	0	0
2038	2038	100%	100%	319.4505	1	0	0	0	0	0	0	0	0	0	0	0	0	275.3824	0	0	0	0	0	0	0
2039	2039	100%	100%	297.4835	1	0	0	0	0	0	0	0	0	0	0	0	0	0	259.4508	0	0	0	0	0	0
2040	2040	100%	100%	269.8387	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	237.9918	0	0	0	0	0
2041	2041	100%	100%	290.6854	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	254.0416	0	0	0	0
2042	2042	100%	100%	301.8145	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	261.2853	0	0	0
2043	2043	100%	100%	286.2541	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	245.4049	0	0
2044	2044	100%	100%	270.8394	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	229.8566	0
2045	2045	100%	100%	247.8023	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	208.1203
2030	2052	100%	100%	252.2523	1	0	0	0	0	56	53.12432	50.24865	47.37297	44.4973	41.62162	41.82342	42.02523	42.22703	42.42883	42.63063	42.27748	41.92432	41.57117	41.21802	40.86486
2032	2052	100%	100%	59.11637	1	0	0	0	0	0	0	24.47023	21.06907	17.66791	14.26675	15.26779	16.26882	17.26986	18.2709	19.27194	19.40987	19.54781	19.68575	19.82369	19.96163

Full Portfolio Supply Inputs: Values should be pasted directly from the Resource Data Template using Excel's "Paste Values" option

Full Portfolio (Online + In-Development + Review + Planned)

Resource	2028	2030	2035	2040	2045	Units	*Type*
Large Hydro	100	200	100	100	100	GWh	GHG-Free
Imported Hydro	-	-	-	-	-	GWh	GHG-Free
Asset Controlling Supplier	-	-	-	-	-	GWh	GHG-Free (Partial)
Nuclear	307	307	100	100	100	GWh	GHG-Free
Biogas	-	-	-	-	-	GWh	RPS Eligible
Biomass	-	-	-	-	-	GWh	RPS Eligible
Geothermal	57	80	373	313	300	GWh	RPS Eligible
Small Hydro	7	7	7	2	7	GWh	RPS Eligible
Wind Resources							
Wind Baseline California	443	406	116	-	-	GWh	RPS Eligible
Wind New PG&E	-	-	-	-	-	GWh	RPS Eligible
Wind New SCE SDG&E	-	-	225	225	225	GWh	RPS Eligible
Wind Pacific Northwest	-	-	-	-	-	GWh	RPS Eligible
Wind Wyoming	-	-	-	-	241	GWh	RPS Eligible
Wind New Mexico	-	23	23	264	264	GWh	RPS Eligible
Wind Offshore Morro Bay	-	-	-	-	-	GWh	RPS Eligible
Wind Offshore Humboldt	-	-	-	-	-	GWh	RPS Eligible
Solar Resources							
Solar Baseline California	1,458	1,685	801	558	237	GWh	RPS Eligible
Solar New PG&E	-	-	-	-	-	GWh	RPS Eligible
Solar New SCE SDG&E	-	109	1,308	1,675	2,130	GWh	RPS Eligible
Solar Distributed	-	-	-	-	-	GWh	RPS Eligible
Hybrid							
Hybrid_or_Paired_Solar_and_Battery	-	-	-	-	-	GWh	RPS Eligible
Storage & DR							
Shed DR	-	-	-	-	-	MW	GHG-Free
Pumped Storage	-	-	-	-	-	MW	n/a
Battery Storage	208	1,297	4,288	4,830	5,504	MWh Energy Capacity	n/a
User-Specified Profies							
Storage Resource Custom Profile	-	-	-	-	-	MW	n/a
RPS Resource Custom Profile	-	-	-	-	-	GWh	RPS Eligible
GHG-free non-RPS Resource	-	-	-	-	-	GWh	GHG-Free
Coal							
Coal	-	-	-	-	-	GWh	n/a

Online and In-Development Portfolio Supply Inputs: Values should be pasted directly from the Resource Data Template using Excel's "Paste Valu

Online + In-Development Only

Resource	2028	2030	2035	2040	2045	Units	*RPS or GHG-Free*
Large Hydro	100	100	100	100	100	GWh	GHG-Free
Imported Hydro	-	-	-	-	-	GWh	GHG-Free
Asset Controlling Supplier	-	-	-	-	-	GWh	GHG-Free (Partial)
Nuclear	307	307	100	100	100	GWh	GHG-Free
Biogas	-	-	-	-	-	GWh	RPS
Biomass	-	-	-	-	-	GWh	RPS
Geothermal	57	80	73	13	-	GWh	RPS
Small Hydro	7	7	7	2	7	GWh	RPS
Wind Resources							
Wind Baseline California	193	186	116	-	-	GWh	RPS
Wind New PG&E	-	-	-	-	-	GWh	RPS
Wind New SCE SDG&E	-	-	-	-	-	GWh	RPS
Wind Pacific Northwest	-	-	-	-	-	GWh	RPS
Wind Wyoming	-	-	-	-	-	GWh	RPS
Wind New Mexico	-	-	-	-	-	GWh	RPS
Wind Offshore Morro Bay	-	-	-	-	-	GWh	RPS
Wind Offshore Humboldt	-	-	-	-	-	GWh	RPS
Solar Resources							
Solar Baseline California	1,758	1,735	1,201	558	237	GWh	RPS
Solar New PG&E	-	-	-	-	-	GWh	RPS
Solar New SCE SDG&E	-	-	-	-	-	GWh	RPS
Solar Distributed	-	-	-	-	-	GWh	RPS
Hybrid/Paired							
Hybrid or Paired Solar and Battery	-	-	-	-	-	GWh	RPS
Storage & DR							
Shed DR	-	-	-	-	-	MW	GHG-Free
Pumped Storage	-	-	-	-	-	MW	n/a
Battery Storage	208	208	208	208	208	MWh Energy Capacity	n/a
User-Specified Profiles							
Storage Resource Custom Profile	-	-	-	-	-	MW	n/a
RPS Resource Custom Profile	-	-	-	-	-	GWh	RPS
GHG-free non-RPS Resource Custom Profile	-	-	-	-	-	GWh	GHG-Free
Coal							
Coal	-	-	-	-	-	GWh	n/a

Duplicated Contract IDs: Entry with non-positive values: Invalid resource error rows: Rows missing required project viability associated data: Rows missing required hybrid associated data: Supertype Contract Status Error or Null Rows: Transaction counterparty error rows: Rows missing CSP GWh: Rows with invalid buying_energy_capacity and csp_resource_category: Rows missing MTR NQC: Warning-total capacity is equal to or greater than generator plus storage MWs for rows: Warning-contract with NQC equal to or greater than contracted capacity MWs:

Step 1: Enter portfolio inputs for both portfolios from the Resource Data Template

Full Portfolio Supply Inputs: Values should be pasted directly from the Resource Data Template using Excel's "Paste Values" option

Full Portfolio (Online + In-Development + Review + Planned)

Resource	2028	2030	2035	2040	2045	Units	Type
Large Hydro	100	200	100	100	100	GWh	GHG-Free
Imported Hydro	-	-	-	-	-	GWh	GHG-Free
Asset Controlling Supplier	0	0	0	0	0	GWh	GHG-Free (Partial)
Nuclear	307	307	100	100	100	GWh	GHG-Free
Biogas	-	0	0	-	-	GWh	RPS Eligible
Biomass	-	-	-	-	-	GWh	RPS Eligible
Geothermal	57	80	373	313	300	GWh	RPS Eligible
Small Hydro	7	7	7	2	7	GWh	RPS Eligible
Wind Resources							
Wind Baseline California	443	406	116	-	-	GWh	RPS Eligible
Wind New PG&E	-	-	-	-	-	GWh	RPS Eligible
Wind New SCE SDG&E	-	-	225	225	225	GWh	RPS Eligible
Wind Pacific Northwest	-	-	-	-	-	GWh	RPS Eligible
Wind Wyoming	-	-	-	-	241	GWh	RPS Eligible
Wind New Mexico	-	23	23	264	264	GWh	RPS Eligible
Wind Offshore Morro Bay	-	-	-	-	-	GWh	RPS Eligible
Wind Offshore Humboldt	-	-	-	-	-	GWh	RPS Eligible
Solar Resources							
Solar Baseline California	1,458	1,685	801	558	237	GWh	RPS Eligible
Solar New PG&E	-	-	-	-	-	GWh	RPS Eligible
Solar New SCE SDG&E	-	109	1,308	1,675	2,130	GWh	RPS Eligible
Solar Distributed	-	-	-	-	-	GWh	RPS Eligible
Hybrid							
Hybrid_or_Paired_Solar_and_Battery	-	-	-	-	-	GWh	RPS Eligible
Storage & DR							
Shed DR	-	-	-	-	-	MW	GHG-Free
Pumped Storage	-	-	-	-	-	MW	n/a
Battery Storage	208	1,297	4,288	4,830	5,504	MWh Energy Capacity	n/a
User-Specified Profies							
Storage Resource Custom Profile	-	-	-	-	-	MW	n/a
RPS Resource Custom Profile	-	-	-	-	-	GWh	RPS Eligible
GHG-free non-RPS Resource	-	-	-	-	-	GWh	GHG-Free
Coal							
Coal	-	-	-	-	-	GWh	n/a

Online and In-Development Portfolio Supply Inputs: Values should be pasted directly from the Resource Data Template using Excel's "Paste Valu

Online + In-Development Only

Resource	2028	2030	2035	2040	2045	Units	RPS or GHG-Free
Large Hydro	100	100	100	100	100	GWh	GHG-Free
Imported Hydro	-	-	-	-	-	GWh	GHG-Free
Asset Controlling Supplier	0	0	0	0	0	GWh	GHG-Free (Partial)
Nuclear	307	307	100	100	100	GWh	GHG-Free
Biogas	-	-	-	-	-	GWh	RPS
Biomass	-	-	-	-	-	GWh	RPS
Geothermal	57	80	73	13	-	GWh	RPS
Small Hydro	7	7	7	2	7	GWh	RPS
Wind Resources							
Wind Baseline California	193	186	116	-	-	GWh	RPS
Wind New PG&E	-	-	-	-	-	GWh	RPS
Wind New SCE SDG&E	-	-	-	-	-	GWh	RPS
Wind Pacific Northwest	-	-	-	-	-	GWh	RPS
Wind Wyoming	-	-	-	-	-	GWh	RPS
Wind New Mexico	-	-	-	-	-	GWh	RPS
Wind Offshore Morro Bay	-	-	-	-	-	GWh	RPS
Wind Offshore Humboldt	-	-	-	-	-	GWh	RPS
Solar Resources							
Solar Baseline California	1,758	1,735	1,201	558	237	GWh	RPS
Solar New PG&E	-	-	-	-	-	GWh	RPS
Solar New SCE SDG&E	-	-	-	-	-	GWh	RPS
Solar Distributed	-	-	-	-	-	GWh	RPS
Hybrid/Paired							
Hybrid or Paired Solar and Battery	-	-	-	-	-	GWh	RPS
Storage & DR							
Shed DR	-	-	-	-	-	MW	GHG-Free
Pumped Storage	-	-	-	-	-	MW	n/a
Battery Storage	208	208	208	208	208	MWh Energy Capacity	n/a
User-Specified Profiles							
Storage Resource Custom Profile	-	-	-	-	-	MW	n/a
RPS Resource Custom Profile	-	-	-	-	-	GWh	RPS
GHG-free non-RPS Resource Custom Profile	-	-	-	-	-	GWh	GHG-Free
Coal							
Coal	-	-	-	-	-	GWh	n/a

Step 2: Select a portfolio to run view the results

Select a portfolio to run:	Full Portfolio (Online + In-Development + Review + Planned)

Supply Inputs: Values should be pasted directly from the Resource Data Template using Excel's "Paste Values" option

Resource	2028	2030	2035	2040	2045	Units	RPS or GHG-Free
Large Hydro	100	200	100	100	100	GWh	GHG-Free
Imported Hydro	-	-	-	-	-	GWh	GHG-Free
Asset Controlling Supplier	-	-	-	-	-	GWh	GHG-Free (Partial)
Nuclear	307	307	100	100	100	GWh	GHG-Free
Biogas	-	-	-	-	-	GWh	RPS
Biomass	-	-	-	-	-	GWh	RPS
Geothermal	57	80	373	313	300	GWh	RPS
Small Hydro	7	7	7	2	7	GWh	RPS
Wind Resources							
Wind Baseline California	443	406	116	-	-	GWh	RPS
Wind New PG&E	-	-	-	-	-	GWh	RPS
Wind New SCE SDG&E	-	-	225	225	225	GWh	RPS
Wind Pacific Northwest	-	-	-	-	-	GWh	RPS
Wind Wyoming	-	-	-	-	241	GWh	RPS
Wind New Mexico	-	23	23	264	264	GWh	RPS
Wind Offshore Morro Bay	-	-	-	-	-	GWh	RPS
Wind Offshore Humboldt	-	-	-	-	-	GWh	RPS
Solar Resources							
Solar Baseline California	1,458	1,685	801	558	237	GWh	RPS
Solar New PG&E	-	-	-	-	-	GWh	RPS
Solar New SCE SDG&E	-	109	1,308	1,675	2,130	GWh	RPS
Solar Distributed	-	-	-	-	-	GWh	RPS
Hybrid/Paired							
Hybrid or Paired Solar and Battery	-	-	-	-	-	GWh	RPS
Storage & DR							
Shed DR	-	-	-	-	-	MW	GHG-Free
Pumped Storage	-	-	-	-	-	MW	n/a
Battery Storage	208	1,297	4,288	4,830	5,504	MWh Energy Capacity	n/a
User-Specified Profiles							
Storage Resource Custom Profile	-	-	-	-	-	MW Power Capacity	n/a
RPS Resource Custom Profile	-	-	-	-	-	GWh	RPS
GHG-free non-RPS Resource Custom Profile	-	-	-	-	-	GWh	GHG-Free
Coal							
Coal	-	-	-	-	-	GWh	n/a

Calculated Share of IFM CHP - do not edit

IFM CHP	92	83	81	-	-	GWh	n/a

Checks	2028	2030	2035	2040	2045
No negative supply inputs	TRUE	TRUE	TRUE	TRUE	TRUE
Storage Resource Custom Profile does not produce power on a net basis	TRUE	TRUE	TRUE	TRUE	TRUE
Storage Resource Custom Profile has values between -1 and 1	TRUE	TRUE	TRUE	TRUE	TRUE
Sum of hourly RPS Resource Custom Profile equals annual input	TRUE	TRUE	TRUE	TRUE	TRUE
Sum of hourly GHG-free non-RPS Resource Custom Profile equals annual input	TRUE	TRUE	TRUE	TRUE	TRUE

Demand Inputs

	Units	2028	2030	2035	2040	2045	Notes
Managed Retail Sales Forecast (assigned to LSE)	GWh	2,502	2,710	3,224	3,548	3,711	Must be entered regardless of demand modifiers selected. Includes impact of BTM PV, Energy Effic
Behind-The-Meter Photovoltaics (BTM PV) Forecast (assigned to LSE)	GWh	194	217	259	281	303	Measured at customer, not grossed up for T&D losses
Retail Sales without BTM PV reduction	GWh	2,696	2,927	3,483	3,829	4,014	Used to allocate demand modifiers
Behind-The-Meter Photovoltaics (BTM PV) grossed up for T&D losses	GWh	209	234	280	303	327	At generator bus-bar
Calculated share of CAISO system demand (% of Retail Sales)	%	1%	1%	1%	1%	1%	Do not edit

Commercial & Industrial Fraction of Baseline Demand	Use Custom?	Units	2028	2030	2035	2040	2045	Notes
Default C&I Percentage of Total	No	%	51%	52%	55%	55%	55%	Default, do not change. Does not include demand from Light Duty EVs.
Custom C&I Percentage of Total (OPTIONAL)		%						Will be used instead of default if "Use Custom?" = Yes

Calculated Demand, based on sales-weighted share of total from IEPR	Units	2028	2030	2035	2040	2045	Notes
Baseline net energy for load	GWh	2,622	2,624	2,689	2,751	2,752	Grossed up for T&D losses; demand met by BTM CHP excluded
Electric Vehicle Load	GWh	167	284	606	841	993	Grossed up for T&D losses
Building Electrification	GWh	77	143	300	357	398	Grossed up for T&D losses
Energy Efficiency	GWh	(69)	(84)	(108)	(104)	(106)	Grossed up for T&D losses
Data Center Load	GWh	126	203	280	292	293	Grossed up for T&D losses
Climate Change Impact Load Increases	GWh	7	11	18	26	35	Grossed up for T&D losses
Climate Change Impact Load Decreases	GWh	(2)	(3)	(4)	(6)	(8)	Grossed up for T&D losses
Behind-The-Meter Photovoltaics (BTM PV)	GWh	(209)	(234)	(280)	(303)	(327)	Grossed up for T&D losses
Behind-The-Meter Storage Losses (BTM Storage)	GWh	4	5	7	8	8	Grossed up for T&D losses
Behind-The-Meter Storage Capacity (BTM Storage)	Nameplate MW	44	53	69	73	81	For information only

Custom Demand Inputs (OPTIONAL; overwrites sales-weighted IEPR values from Calculated Demand sec	Use Custom?	Units	2028	2030	2035	2040	2045	Notes
Baseline net energy for load	No	GWh						To overwrite, set "Use Custom" to "Yes" and input forecast. For use in Alternative Plans only.
Electric Vehicle Load	No	GWh						Custom demand values should be grossed up for T&D losses.
Building Electrification	No	GWh						User-specified demand profiles should be input in the "Custom Profiles" tab.
Energy Efficiency	No	GWh						Energy efficiency and BTM PV subtract from demand and therefore should be entered as
Data Center Load	No	GWh						negative values.
Climate Change Impact Load Increases	No	GWh						Demand categories should be non-overlapping (e.g., baseline net energy for load does not inclue
Climate Change Impact Load Decreases	No	GWh						EV load, climage change impacts, etc.)
Behind-The-Meter Photovoltaics (BTM PV)	No	GWh						
Behind-The-Meter Storage Capacity (BTM Storage)	No	Nameplate MW						Custom BTM storage should be entered in terms of Nameplate MW
Behind-The-Meter Storage Losses (BTM Storage)		GWh						

Active Demand Inputs	Source	Units	2028	2030	2035	2040	2045	Notes
Baseline net energy for load	IEPR	GWh	2,622	2,624	2,689	2,751	2,752	Grossed up for T&D losses; demand met by BTM CHP excluded
Non-commercial/industrial portion of baseline (included in baseline total)	IEPR	GWh	1,286	1,248	1,222	1,245	1,246	Grossed up for T&D losses; demand met by BTM CHP excluded
Commercial/industrial portion of baseline (included in baseline total)	IEPR	GWh	1,336	1,376	1,467	1,506	1,506	Grossed up for T&D losses; demand met by BTM CHP excluded
Electric Vehicle Load	IEPR	GWh	167	284	606	841	993	Grossed up for T&D losses
Building Electrification	IEPR	GWh	77	143	300	357	398	Grossed up for T&D losses
Energy Efficiency	IEPR	GWh	(69)	(84)	(108)	(104)	(106)	Grossed up for T&D losses
Data Center Load	IEPR	GWh	126	203	280	292	293	Grossed up for T&D losses
Climate Change Impact Load Increases	IEPR	GWh	7	11	18	26	35	Grossed up for T&D losses
Climate Change Impact Load Decreases	IEPR	GWh	(2)	(3)	(4)	(6)	(8)	Grossed up for T&D losses
Behind-The-Meter Photovoltaics (BTM PV)	IEPR	GWh	(209)	(234)	(280)	(303)	(327)	Grossed up for T&D losses
Behind-The-Meter Storage Losses (BTM Storage)	IEPR	GWh	4	5	7	8	8	Grossed up for T&D losses

	Units	2028	2030	2035	2040	2045	Notes
Calculated demand at utility-scale generator bus-bar	GWh	2,721	2,948	3,508	3,861	4,038	Total of "Active Demand Inputs"
Total Load (demand at utility-scale generator bus-bar + BTM PV)	GWh	2,931	3,183	3,787	4,164	4,365	For reference

IFM CHP Calculation		2028	2030	2035	2040	2045	
CASIO-wide In front of the meter (IFM) Combined Heat and Power (CHP) generation	GWh	8347	7644	7705	0	0	Input data - do not change. Values are from SERVM disparch
LSE share of IFM CHP	GWh	92	83	81	-	-	Calculation - do not change

Checks	2028	2030	2035	2040	2045
Correct sign (positive/negative) on demand inputs	TRUE	TRUE	TRUE	TRUE	TRUE
If custom C&I percentage is used, positive percentage is used	TRUE	TRUE	TRUE	TRUE	TRUE

Custom Demand Shapes (OPTIONAL; overwrites default demand shapes)	Custom Hourly Demand Profiles							
Use Custom Shape?	No	No	No	No	No	No	No	No

	2030	2035	2040	2045	2030	2035	2040	2045	2030	2035	2040	2045	2030	2035	2040	2045
LSEs within Utility Territory	**2030 GHG Emissions Benchmark (MMT)**	**2035 GHG Emissions Benchmark (MMT)**	**2040 GHG Emissions Benchmark (MMT)**	**2045 GHG Emissions Benchmark (MMT)**	**2030 DA Sales (GWh)**	**2035 DA Sales (GWh)**	**2040 DA Sales (GWh)**	**2045 DA Sales (GWh)**	**ESP 2030 sales within each IOU territory (GWh)**	**ESP 2035 sales within each IOU territory (GWh)**	**ESP 2040 sales within each IOU territory (GWh)**	**ESP 2045 sales within each IOU territory (GWh)**	**ESP 2030 benchmark for each IOU territory (MMT)**	**ESP 2035 benchmark for each IOU territory (MMT)**	**ESP 2040 benchmark for each IOU territory (MMT)**	**ESP 2045 benchmark for each IOU territory (MMT)**
Pacific Gas & Electric Company (Direct Access)	*0.9185*	*0.5888*	*0.4447*	*0.2156*	*11,393*	*11,393*	*11,393*	*11,393*					*0.000*	*0.000*	*0.000*	*0.000*
Southern California Edison Company (Direct Access)	*1.1123*	*1.1123*	*1.1123*	*1.1123*	*12,230*	*12,230*	*12,230*	*12,230*					*0.000*	*0.000*	*0.000*	*0.000*
San Diego Gas & Electric Company (Direct Access)	*0.4392*	*0.4392*	*0.4392*	*0.4392*	*3,942*	*3,942*	*3,942*	*3,942*					*0.000*	*0.000*	*0.000*	*0.000*
TOTAL									*0*	*0*	*0*	*0*	*0.000*	*0.000*	*0.000*	*0.000*

Each ESP is required to calculate its own confidential GHG Emissions Benchmark based on its 2030, 2035, 2040, and 2045 load share within the host IOU's territory. For any ESP that serves load in more than one IOU service territory, that ESP should add up the separate GHG Emissions Benchmarks calculated based on its share of direct access load for each IOU service territory to result in a single benchmark.When filling out Columns F through 2045 -- "ESP 20## load within each IOU territory" -- each ESP should utilize the confidential load forecast communicated to it by Energy Division staff.

Emissions Summary

			0.25	0.20	0.16	0.0823	

Emissions Total	***Unit***	**2028**	**2030**	**2035**	**2040**	**2045**	***Notes***
CO_2	*MMt/yr*	*0.28*	*0.25*	*0.15*	*0.15*	*0.0708*	*Includes both in-CAISO and import emissions*
PM2.5	*tonnes/yr*	*17*	*15*	*10*	*10*	*6*	*Only In-CAISO emissions*
SO_2	*tonnes/yr*	*2*	*1*	*1*	*1*	*1*	*Only In-CAISO emissions*
NOx	*tonnes/yr*	*24*	*21*	*19*	*23*	*7*	*Only In-CAISO emissions*

Emissions by resource type

CO_2	***Unit***	**2028**	**2030**	**2035**	**2040**	**2045**	***Notes***
Coal	*MMt/yr*	-	-	-	-	-	*Included in GHG emissions total*
IFM CHP	*MMt/yr*	*0.05*	*0.05*	*0.05*	-	-	
Biogas	*MMt/yr*	-	-	-	-	-	
Biomass	*MMt/yr*	-	-	-	-	-	
System Power Unadjusted	*MMt/yr*	*0.26*	*0.23*	*0.14*	*0.18*	*0.10*	*Includes emissions from in-CAISO dispatchable gas and unspecified imports*
System Power	*MMt/yr*	*0.23*	*0.20*	*0.10*	*0.15*	*0.07*	*Includes emissions from in-CAISO dispatchable gas and unspecified imports. After CSP - RESOLVE adjustment.*
Asset Controlling Supplier	*MMt/yr*	-	-	-	-	-	
Total	***MMt/yr***	*0.28*	*0.25*	*0.15*	*0.15*	*0.07*	*Includes both in-CAISO and import emissions*
Average emissions intensity	*tCO2/MWh*	*0.113*	*0.091*	*0.047*	*0.043*	*0.019*	*Emissions per MWh of sales*
Oversupply Emissions Credits	*MMt/yr*	*0.09*	*0.02*	*0.07*	*0.07*	*0.07*	*When hourly supply exceeds hourly load and system power is on the margin, LSE recieves credit at the system power emissions rate. Impact included in Total.*

PM2.5	***Unit***	**2028**	**2030**	**2035**	**2040**	**2045**	***Notes***
Coal	*tonnes/yr*	-	-	-	-	-	*Information only, not included in total*
IFM CHP	*tonnes/yr*	*3*	*3*	*3*	-	-	
Biogas	*tonnes/yr*	-	-	-	-	-	
Biomass	*tonnes/yr*	-	-	-	-	-	
System Power	*tonnes/yr*	*15*	*13*	*8*	*10*	*6*	*In-CAISO emissions only - unspecified import emissions excluded*
Total	***tonnes/yr***	*17*	*15*	*10*	*10*	*6*	*Only In-CAISO emissions*
Average emissions intensity	*kg/MWh*	*0.0070*	*0.0056*	*0.0032*	*0.0029*	*0.0016*	*Emissions per MWh of sales*

SO_2	***Unit***	**2028**	**2030**	**2035**	**2040**	**2045**	***Notes***
Coal	*tonnes/yr*	-	-	-	-	-	*Information only, not included in total*
IFM CHP	*tonnes/yr*	*0*	*0*	*0*	-	-	
Biogas	*tonnes/yr*	-	-	-	-	-	
Biomass	*tonnes/yr*	-	-	-	-	-	
System Power	*tonnes/yr*	*1*	*1*	*1*	*1*	*1*	*In-CAISO emissions only - unspecified import emissions excluded*
Total	***tonnes/yr***	*2*	*1*	*1*	*1*	*1*	*Only In-CAISO emissions*
Average emissions intensity	*kg/MWh*	*0.0007*	*0.0005*	*0.0003*	*0.0003*	*0.0002*	*Emissions per MWh of sales*

NOx	***Unit***	**2028**	**2030**	**2035**	**2040**	**2045**	***Notes***
Coal	*tonnes/yr*	-	-	-	-	-	*Information only, not included in total*
IFM CHP	*tonnes/yr*	*9*	*8*	*8*	-	-	
Biogas	*tonnes/yr*	-	-	-	-	-	
Biomass	*tonnes/yr*	-	-	-	-	-	
System Power	*tonnes/yr*	*16*	*14*	*11*	*23*	*7*	*In-CAISO emissions only - unspecified import emissions excluded*
Total	***tonnes/yr***	*24*	*21*	*19*	*23*	*7*	*Only In-CAISO emissions*
Average emissions intensity	*kg/MWh*	*0.0097*	*0.0079*	*0.0058*	*0.0064*	*0.0019*	*Emissions per MWh of sales*

Supply and Demand Balance

Demand Summary	***Unit***	**2028**	**2030**	**2035**	**2040**	**2045**	
Managed Retail Sales Forecast (assigned to LSE)	*GWh*	*2,502*	*2,710*	*3,224*	*3,548*	*3,711*	*Sales forecast (before T&D losses increase demand at generator bus-bar)*
Baseline Demand, non-C&I	*GWh*	*1,286*	*1,248*	*1,222*	*1,245*	*1,246*	
Baseline Demand, C&I	*GWh*	*1,336*	*1,376*	*1,467*	*1,506*	*1,506*	
Electric Vehicle Load	*GWh*	*167*	*284*	*606*	*841*	*993*	
Building Electrification	*GWh*	*77*	*143*	*300*	*357*	*398*	
Energy Efficiency	*GWh*	*(69)*	*(84)*	*(108)*	*(104)*	*(106)*	*Summary of active inputs from Demand Inputs tab*
Data Center Load	*GWh*	*126*	*203*	*280*	*292*	*293*	
Climate Change Impact	*GWh*	*7*	*11*	*18*	*26*	*35*	
BTM PV	*GWh*	*(209)*	*(234)*	*(280)*	*(303)*	*(327)*	
Demand (at generator bus-bar)	*GWh*	*2,721*	*2,948*	*3,508*	*3,861*	*4,038*	

Supply Summary	***Unit***	**2028**	**2030**	**2035**	**2040**	**2045**	***Notes***
Large Hydro	*GWh*	*100*	*200*	*100*	*100*	*100*	
Imported Hydro	*GWh*	-	-	-	-	-	
Asset Controlling Supplier	*GWh*	-	-	-	-	-	
Nuclear	*GWh*	*307*	*307*	*100*	*100*	*100*	
Biogas	*GWh*	-	-	-	-	-	
Biomass	*GWh*	-	-	-	-	-	
Geothermal	*GWh*	*57*	*80*	*373*	*313*	*300*	
Small Hydro	*GWh*	*7*	*7*	*7*	*2*	*7*	
Wind CAISO	*GWh*	*443*	*406*	*341*	*225*	*225*	
Wind Out Of State	*GWh*	-	*23*	*23*	*264*	*505*	*Wind and solar values represent production potential (pre-curtailment).*
Wind Offshore	*GWh*	-	-	-	-	-	*Curtailment is calculated at the portfolio level (as opposed to the resource level), and is included as a line item below*
Solar Utility Scale	*GWh*	*1,458*	*1,794*	*2,109*	*2,233*	*2,367*	
Solar Distributed	*GWh*	-	-	-	-	-	*Distributed solar generation that is in front of the meter*
Hybrid or Paired Solar and Battery	*GWh*	-	-	-	-	-	
Shed DR	*GWh*	-	-	-	-	-	
Pumped Storage	*GWh*	-	-	-	-	-	*Negative because storage losses represent net negative energy production*
Battery Storage	*GWh*	*(10)*	*(66)*	*(222)*	*(251)*	*(278)*	*Negative because storage losses represent net negative energy production*
Storage Resource Custom Profile	*GWh*	-	-	-	-	-	*Negative because storage losses represent net negative energy production*
RPS Resource Custom Profile	*GWh*	-	-	-	-	-	
GHG-free non-RPS Resource Custom Profile	*GWh*	-	-	-	-	-	
Coal	*GWh*	-	-	-	-	-	
IFM CHP	*GWh*	*92*	*83*	*81*	-	-	

Supply Demand Balance Summary	***Unit***	**2028**	**2030**	**2035**	**2040**	**2045**	***Notes***
LSE Supply, before curtailment and exports	*GWh*	*2,454*	*2,833*	*2,913*	*2,985*	*3,325*	*Represents LSE's net power production, before curtailment and exports reduce the power available to dispace CAISO dispatchable gas/unspecified imports*
Net Purchases, before curtailment and exports	*GWh*	*267*	*116*	*595*	*876*	*713*	*The net system power that the LSE would consume (positive = consume from system, negative = supply to system) if dispatchable gas/unspecified imports were on the margin at the system level in all hours. For information only - not directly used t*
Curtailment	*GWh*	*(317)*	*(384)*	*(110)*	*(96)*	*(126)*	*Power that, if supplied to the system, would not displace CAISO dispatchable gas and/or unspecified import emissions and would instead be curtailed*
Exports	*GWh*	*(57)*	*(59)*	*(19)*	*(16)*	*(16)*	*Power that, if supplied to the system, would not displace CAISO dispatchable gas and/or unspecified import emissions and would instead be exported*
Zero Emissions Power From System	*GWh*	*0*	*0*	*371*	*544*	*633*	*Power supplied to meet LSE demand that does not incur emissions. Oversupply conditions at the system level result in surplus zero emissions power in some hours.*
Net System Power (incurs emissions)	***GWh***	*641*	*558*	*353*	*443*	*222*	*Power supplied by the system (or sent back to the system from if negative) in hours when CAISO dispatchable gas and/or unspecified imports are on the margin. The net system power produced or consumed is multiplied by the system power emis*
Check: Supply equals demand		*TRUE*	*TRUE*	*TRUE*	*TRUE*	*TRUE*	

Renewable and GHG-Free %	***Unit***	**2028**	**2030**	**2035**	**2040**	**2045**	***Notes***
Retail Sales	GWh	*2,502*	*2,710*	*3,224*	*3,548*	*3,711*	
RPS-Eligible Delivered Renewable	GWh	*1,649*	*1,925*	*2,744*	*2,941*	*3,278*	Represents delivered renewable energy. Not directly comparable to production from an LSE's RPS-eligible resources.
GHG free	GWh	*2,056*	*2,433*	*3,314*	*3,684*	*4,111*	A small fraction of Asset Controlling Supplier imports are not counted as GHG-free
RPS-Eligible Delivered Renewable Percentage	*% of retail sales*	*66%*	*71%*	*85%*	*83%*	*88%*	Represents delivered renewable energy. Not directly comparable to production from an LSE's RPS-eligible resources.
GHG-free Percentage	*% of retail sales*	*82%*	*90%*	*103%*	*104%*	*111%*	