## **Resource Tracking Data**

Data current as of June 2025





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## Notes on Resource Tracking Data

#### Notes on Online MWs data

- All data are derived from CAISO <u>Master Generating Capability List</u>, and CPUC <u>NQC Lists</u> with online dates between Jan 1, 2020 – July 2, 2025
- Nameplate Capacity is shown as "Net Dependable Capacity" in the CAISO Master Generating List file.
- Data shown excludes imports, except where specified.
- NQC values are "Estimated September NQC" and subject to change based on counting rules or changes to resource configurations.
- Data showing "Number of Projects" is derived by counting each unique CAISO resource ID as a project.
- "Natural Gas" includes Alamitos Unit 7 (675 MW) and Huntington Beach (674 MW), online in Feb 2020.

#### Notes on Expected New MWs

- All data are from LSE self-reported contracting for projects expected to come online between 2025 and 2028.
- Data are subject to change as the CPUC gets updated information from LSEs, IOU interconnection departments, developers and others.
- CPUC staff continue to refine the data included herein. Data in this presentation are current up until March 2025 and any subsequent postings will supersede prior postings.
- Data included here are only the projects under contract to CPUC jurisdictional LSEs, and do not include all resources being developed in the state nor the CAISO footprint.
- Notes on Differences between Resource Tracking Data and IRP Compliance
  - Due to numerous differences, such as varied baselines and resource eligibility for compliance, data on New MW Online plus New MW Expected do not exactly match progress towards IRP compliance orders. For information on compliance with IRP Procurement orders, see compliance updates at <u>IRP Procurement Track</u> (ca.gov).
- Notes on Updates and Questions
  - For the most up-to-date data publicly available, please visit the CPUC's Summer Reliability page.
  - For any questions about the data, please contact irpdatarequest@cpuc.ca.gov

## Part 1: New MW Online

- New Resources Online from 1/1/2020 to 7/2/2025
  - By Nameplate, NQC, and Number of Projects
- New Resources Online by Year and Resource Type
  - By Nameplate and NQC
- New IRP Procurement Resources Online by Year and Resource Type
  - By Nameplate and NQC

## New MWs - Key Takeaways

#### Total New MW Online between 1/1/2020 - 7/2/2025

	Nameplate Capacity (MW)	Estimated Sept. Net Qualifying Capacity (NQC) MW	Number of Projects by Resource IDs
New SB100 Resources, IN-CAISO	23,396	15,296	357
New Resources, IN-CAISO (includes Natural Gas)	24,935	16,783	374
Total New Reliability Resources, including Imports	26,968	17,902	390

**Note**: SB100 resources include all eligible renewable energy resources and zero-carbon resources for compliance with California's SB 100 clean energy targets.

#### Total Storage Online (all time)

	Nameplate Capacity (MW)	Estimated Sept. Net Qualifying Capacity (NQC) MW	Number of Projects by Resource IDs
Battery Energy Storage Systems (BESS) Projects (Including Standalone BESS & Hybrids)	13,234	12,251	202 (incl. 30 hybrids)

Note: MW only include storage portion of hybrids. Includes CAISO imports.

## **New Energy Resources Online**

New Resources Additions, January 1, 2020 – July 2, 2025, Cumulative

Technology Type	Nameplate Capacity MW	Estimated Sept. Net Qualifying Capacity (NQC) MW	Number of Projects
STORAGE	11,836	10,922	161
SOLAR	8,167	2,486	132
HYBRID (STORAGE/SOLAR)	2,165	1,596	28
WIND	1,145	260	23
GEOTHERMAL	41	31	1
BIOGAS, BIOMAS, HYDRO	42	0	12
Subtotal Total New SB100 Resources, IN-CAISO	23,396	15,296	357
NATURAL GAS, incl. Alamitos & Huntington Beach	1,539	1,487	17
Total New Resources, IN-CAISO	24,935	16,783	374
New Imports, Pseudo-Tie or Dynamically Scheduled	2,033	1,120	16
Total New Resources, including Imports	26,968	17,902	390

#### Notes:

All data shown derived from CAISO Master Generating Capability List, and CPUC NQC Lists.

Nameplate Capacity is shown as "Net Dependable Capacity" in the CAISO Master Generating List file. Data shown excludes imports, except where specified. All NQC values are "September NQC" and subject to change based on counting rules and additions to monthly CPUC NQC Lists. "Project" is defined as a unique CAISO resource ID. "Natural Gas" includes Alamitos Unit 7 (675 MW) and Huntington Beach (674 MW) added in Feb 2020. SB 100 resources include all eligible renewable energy resources and zero-carbon resources for compliance with California's SB 100 clean energy targets.

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### New MWs Online - Nameplate By Year and Resource Type

Data includes projects online as of July 2, 2025

#### # 2020 2021 2022 2023 2024 2025 **Total MW Technology Type** Projects SOLAR 1,300 1.048 913 2,482 2,227 198 8.167 132 STORAGE 1.703 2,528 101 1.907 3,553 2,043 11,836 161 HYBRID (SOLAR + STORAGE) 26 890 354 503 392 2.165 28 0 27 WIND 16 304 367 171 260 1,145 23 **GEOTHERMAL** 0 0 0 0 41 0 41 1 HYDRO 26 0 0 0 0 0 26 4 BIOMASS 0 2 3 3 0.5 3 11 5 BIOGAS 0 2 3 0 0 3 6 Subtotal Total New SB100 Resources, IN-1.444 3.083 4.082 5.542 6.584 2.662 23.396 357 CAISO 12 63 NATURAL GAS, incl. Alamitos & Huntington 1,448 17 0 1,539 17 Beach 4.094 5.542 24,935 Total New Resources, IN-CAISO 2.892 3,100 6.647 2.663 374 New Imports, Pseudo-Tie or Dynamically 807 49 50 282 150 2,033 16 695 Scheduled Total New Resources, including Imports 3,587 3,907 4,143 5,592 6,929 2,813 26.968 390

## New MWs Online - Sept NQC

### By Year and Resource Type

Data includes projects online as of July 2, 2025

Technology Type	2020	2021	2022	2023	2024	2025*	Total MW	# Projects
SOLAR	490	436	327	655	561	17	2,486	132
STORAGE	100	1,612	1,906	2,448	3,474	1,383	10,922	161
HYBRID (SOLAR + STORAGE)	0	15	681	253	331	316	1,596	28
WIND	3	65	80	38	63	12	260	23
GEOTHERMAL	0	0	0	0	31	0	31	1
HYDRO	0	0	0	0	0	0	0	4
BIOMASS	0	0	0	0	0	0	0	5
BIOGAS	0	0	0	0	0	0	0	3
Subtotal Total New SB100 Resources, IN-CAISO	593	2,128	2,994	3,394	4,460	1,727	15,296	357
NATURAL GAS, incl. Alamitos & Huntington Beach	1,448	15	11	0	13	1	1,487	17
Total New Resources, IN-CAISO	2,038	2,143	3,005	3,394	4,473	1,728	16,783	374
New Imports, Pseudo-Tie or Dynamically Scheduled	390	387	33	50	201	58	1,120	16
Total New Resources, including Imports	2,431	2,530	3,038	3,444	4,673	1,786	17,902	390

\*Note: Some new projects have not yet made it onto the CPUC's monthly NQC list and have not yet been assigned NQC. Future reports will include updated NQC amounts for these resources.

### New MWs Online June 2025 Additions

Data includes projects online as of July 2, 2025

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Technology Type	Nameplate Capacity MW	Estimated Sept. Net Qualifying Capacity (NQC) MW	# Projects
STORAGE	280	60*	6
SOLAR	128	0*	2
BIOMASS	3	0*	1
Total New Resources, IN-CAISO	411	60*	9
New Imports, Pseudo-Tie or Dynamically Scheduled	0	0	0
Total New Resources, including Imports	411	60*	9

#### **IRP** Procurement

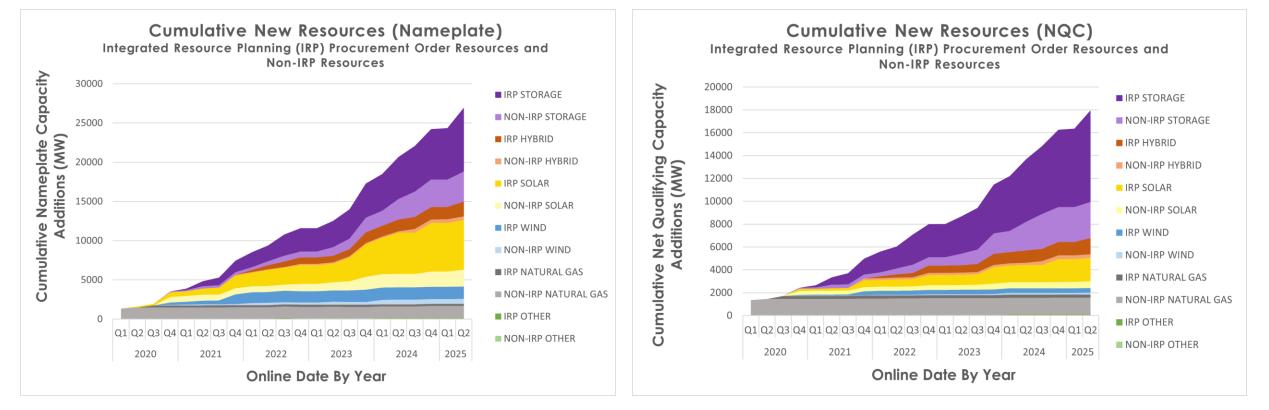
Technology Type	Nameplate Capacity MW	Estimated Sept. Net Qualifying Capacity (NQC) MW	# Projects
STORAGE	280	60*	6
SOLAR	128	0*	2
Total New IRP Procurement	408	60*	8

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\*Note: New projects have not yet made it onto the CPUC's monthly NQC list and have not yet been assigned NQC. Future reports will include updated NQC amounts for these resources.

Data includes projects online as of July 2, 2025

### **Total New Procurement** By Year and Resource Type

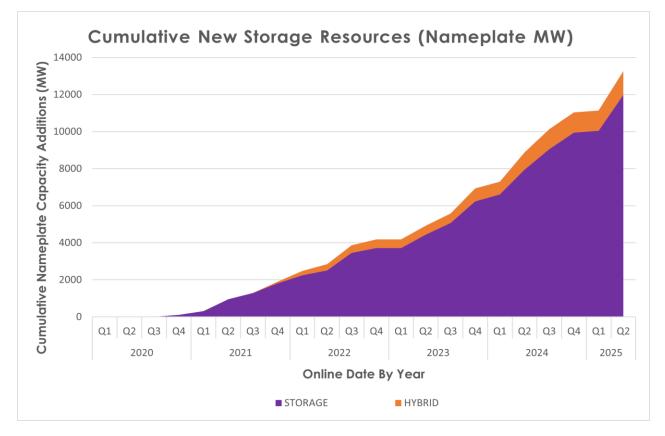


**Note**: Data shown here shows a snapshot of new resources added to the CAISO grid Q12020 – Q2 2025, including specified CAISO imports. "Other" resources include geothermal, biomass, biogas, and hydropower. Hybrids include some storage, and some other (usually solar) technology. "IRP Procurement Order Resources" refer to resources claimed for compliance with IRP Procurement Orders; "Non-IRP Resources" include resources that are not counting towards IRP Procurement order compliance, which occurs for a variety of reasons such as the resource was in development prior to IRP orders, the resource is energy-only, the resource is not under contract to a CPUC jurisdictional entity, etc.

**NQC** = Net qualifying capacity (NQC) and represents the amount the resource contributes to reliability; NQC can vary over time, and for each month of the year; the values shown are indicative of September NQC values for the resources.

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### Total Storage Online By Year



**Note**: Data shown here shows a snapshot of new resources added to the CAISO grid Q1 2020 – Q2 2025, including specified CAISO imports. Hybrids include some storage, and some other (usually solar) technology. MW shown here only include the storage portion of hybrids.

Data includes projects online as of July 2, 2025

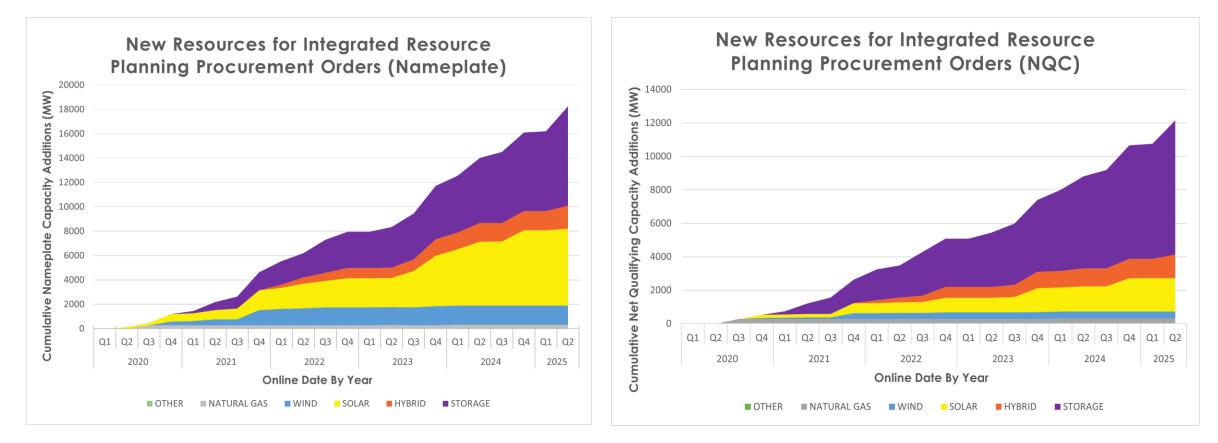
- Installed to date: Over 13,000 MW of storage nameplate capacity is online serving the grid as of June 2025, including imports.
  - Includes ~150 MW of storage added prior to 2020
  - Includes standalone battery storage and the storage component of hybrid resources
- Expected future installs: Roughly 14,000 MW nameplate capacity of additional storage resources are under contract and expected to come online by 2028.

## Part 2: Integrated Resource Planning Compliance

- New IRP Procurement MW by Year and Resource Type- Nameplate
- New IRP Procurement MW by Year and Resource Type NQC

### New IRP Procurement By Year and Resource Type

Data includes projects online as of July 2, 2025



Note: Data shown here shows a snapshot of new resources added to the CAISO grid Q1 2020 – Q2 2025 for compliance with Integrated Resource Planning (IRP) procurement orders, including specified CAISO imports. "Other" resources includes geothermal, biomass, biogas, and hydropower. Hybrids include some storage, and some other (usually solar). Additional resources have come online for other reasons in this time period but are not included in these figures. See: IRP Procurement Track (ca.gov) for more information about IRP Procurement Order Compliance.

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## Part 3: Expected New MWs based on LSE Contracts to date

- Expected New MW by Year and Resource Type- Nameplate
- Expected New MW by Year and Resource Type NQC
- Total New Energy Resources Online and Under Contract Nameplate

### New MWs Expected - Nameplate By Year and Resource Type, including imports

Resource Type	2025	2026	2027	2028	Total
Solar	784	1,823	1,080	150	3,838
Battery Storage	2,559	3,303	3,453	1,209	10,523
Paired/Hybrid	564	1,457	1,288	120	3,429
Wind	51	1,990	-	18	2,059
Geothermal	1	144	175	496	816
Biomass/Biogas	10	-	-	-	10
Totals	3,968	8,717	5,997	1,992	20,674

Data includes projects expected/under contract as of June 12, 2025

- Over 20,000 MW nameplate of future contracts are executed to meet CPUC's procurement order obligations.
- Majority of new resource MWs are expected to be battery storage.
- Other types of resources are eligible to meet orders and may be contracted in the future.

#### 3,102 5,645 **Totals**

2,247 3,342 1,158 9,891 3,144 33 1.118 856 2.403 579 4 600 \_

2027

905

172

5.276

2028

483

1.678

Total

2.001

796

10

15,701

# By Year and Resource Type, including imports

2026

664

139

2025

431

397

16

10

**New MWs Expected - NQC** 

Data includes projects expected/under contract as of June 12, 2025

- Over 15,000 MW NQC of • future contracts are executed to meet CPUC's procurement order obligations.
- Majority of new resource MWs are expected to be battery storage.
- Other types of resources are eligible to meet orders and may be contracted in the future.

**Resource Type** 

Solar

**Battery Storage** 

Paired/Hybrid

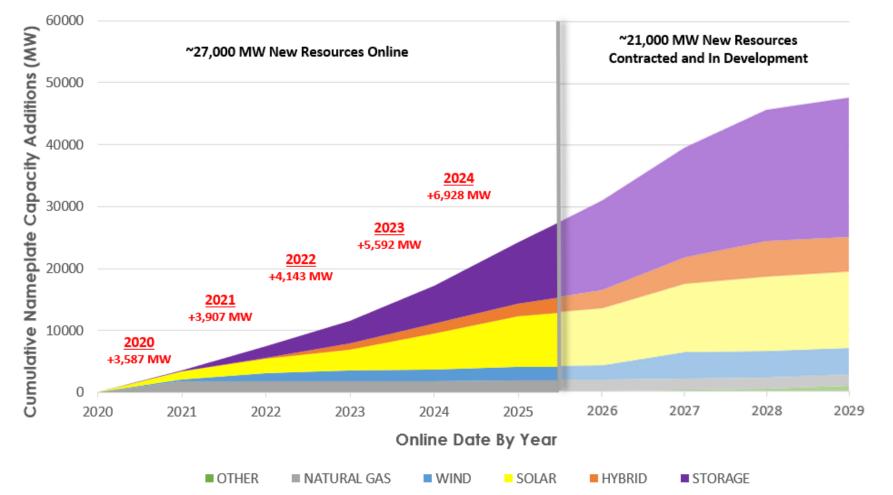
Wind

Geothermal

**Biomass/Biogas** 

### **Total New Energy Resources Online and Under Contract**

Cumulative New Resources (Nameplate MW)



**Note:** Data shown here shows a snapshot of new resources added to CAISO grid Q12020 – Q2 2025, including specified CAISO imports. Also shown is a projection of future new resources based on contracts in place by June 2025. "Other" resources includes geothermal, biomass, biogas, and hydropower.

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## Links to Other Key References on New Resource Development

## **References to Related Information**

- (1) Tracking Energy Development Task Force <u>– Tracking Energy Development (ca.gov)</u>
- (2) Joint Agency Reliability Planning Assessments pursuant to SB 846
  - May 2024 Report
  - <u>August 2024 Report</u>
  - March 2025 Report
  - May 2025 Report
- (3) California Energy Commission's Energy Almanac Energy Almanac (ca.gov)
- (4) CAISO Key Energy Statistics: Media resources | California ISO (caiso.com)
- (5) Overview of CPUC IRP Procurement Orders <u>IRP Procurement Track (ca.gov)</u>
- (6) Overview of CPUC Jurisdictional LSE Procurement in Compliance with IRP Procurement Orders
  - <u>California Public Utilities Commission (CPUC) Staff Review of Load-Serving Entities' (LSEs') Compliance with the Mid-Term Reliability (MTR, D.21-06-035) and Supplemental MTR (SMTR, D.23-02-040) Decisions</u>, 7/10/2025
  - Procurement in Compliance with D.19-11-016 and Mid Term Reliability (D.21-06-035) per December 1, 2023, 10/9/2024
  - Procurement in Compliance with D.19-11-016 and Mid Term Reliability (D.21-06-035) per August 1, 2023, 4/22/2024
  - Procurement in Compliance with D.19-11-016 and Mid Term Reliability (D.21-06-035) per February 1, 2023, 11/2/2023
  - Procurement in Compliance with D.19-11-016 per August 1, 2022 Fillings, 2/13/2023
  - Procurement in Compliance with D.19-11-016 per February 1, 2022 Filings, 7/22/2022
  - Procurement in Compliance with D.19-11-016 per February 1, 2021 Filings, 8/23/2021

For any questions about the data, please contact <u>irpdatarequest@cpuc.ca.gov</u>