

Resource Tracking Data

Data current as of February 2025



California Public
Utilities Commission



Notes on Resource Tracking Data

- **Notes on Online MWs data**

- All data are derived from CAISO [Master Generating Capability List](#), and CPUC [NQC Lists](#) with online dates between **Jan 1, 2020 – February 25, 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 January 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 [IRP Procurement Track \(ca.gov\)](#).

- **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 2/25/2025
 - 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

Data includes projects online as of February 25, 2025

New MWs - Key Takeaways

Total New MW Online between 1/1/2020 - 2/25/2025

	Nameplate Capacity (MW)	Estimated Sept. Net Qualifying Capacity (NQC) MW	Number of Projects by Resource IDs
New SB100 Resources, IN-CAISO	21,583	13,795	327
New Resources, IN-CAISO (includes Natural Gas)	23,122	15,281	344
Total New Reliability Resources, including Imports	25,003	16,343	359

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)	11,475	10,919	179 (incl. 27 hybrids)

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

New Energy Resources Online

Data includes projects online as of February 25, 2025

New Resources Additions, January 1, 2020 – February 25, 2025, Cumulative

Technology Type	Nameplate Capacity MW	Estimated Sept. Net Qualifying Capacity (NQC) MW	Number of Projects
STORAGE	10,257	9,764	141
SOLAR	8,287	2,454	127
HYBRID (STORAGE/SOLAR)	1,841	1,297	25
WIND	1,118	248	22
GEOHERMAL	41	31	1
BIOGAS, BIOMAS, HYDRO	39	0	11
Subtotal Total New SB100 Resources, IN-CAISO	21,583	13,795	327
NATURAL GAS, incl. Alamitos & Huntington Beach	1,539	1,487	17
Total New Resources, IN-CAISO	23,122	15,281	344
New Imports, Pseudo-Tie or Dynamically Scheduled	1,881	1,061	15
Total New Resources, including Imports	25,003	16,343	359

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



New MWs Online - Nameplate

By Year and Resource Type

Data includes projects online as of February 25, 2025

Technology Type	2020	2021	2022	2023	2024	2025	Total MW	# Projects
SOLAR	1,300	1,048	913	2,482	2,227	317	8,287	127
STORAGE	101	1,703	1,907	2,528	3,678	340	10,257	141
HYBRID (SOLAR + STORAGE)	0	26	890	470	503	0	1,841	25
WIND	16	304	367	171	260	0	1,118	22
GEOHERMAL	0	0	0	0	41	0	41	1
HYDRO	26	0	0	0	0	0	26	4
BIOMASS	0	2	3	3	0.5	0	8	4
BIOGAS	1	0	2	3	0	0	6	3
Subtotal Total New SB100 Resources, IN-CAISO	1,444	3,083	4,082	5,607	6,709	657	21,583	327
NATURAL GAS, incl. Alamitos & Huntington Beach	1,448	17	12	0	63	0	1,539	17
Total New Resources, IN-CAISO	2,892	3,100	4,094	5,607	6,772	657	23,122	344
New Imports, Pseudo-Tie or Dynamically Scheduled	695	807	49	50	280	0	1,881	15
Total New Resources, including Imports	3,587	3,907	4,143	5,657	7,052	657	25,003	359

New MWs Online – Sept NQC

By Year and Resource Type

Data includes projects online as of February 25, 2025

Technology Type	2020	2021	2022	2023	2024	2025*	Total MW	# Projects
SOLAR	490	435	327	655	546	0	2,454	127
STORAGE	100	1,612	1,906	2,448	3,599	100	9,764	141
HYBRID (SOLAR + STORAGE)	0	15	668	283	331	0	1,297	25
WIND	3	65	80	38	63	0	248	22
GEOHERMAL	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	4
BIOGAS	0	0	0	0	0	0	0	3
Subtotal Total New SB100 Resources, IN-CAISO	593	2,128	2,981	3,424	4,570	100	13,795	327
NATURAL GAS, incl. Alamitos & Huntington Beach	1,448	15	11	0	13	0	1,487	17
Total New Resources, IN-CAISO	2,041	2,143	2,992	3,424	4,583	100	15,281	344
New Imports, Pseudo-Tie or Dynamically Scheduled	390	387	33	50	201	0	1,061	15
Total New Resources, including Imports	2,431	2,530	3,025	3,474	4,783	100	16,343	359

New MWs Online

February 2025 Additions

Data includes projects online as of February 25, 2025

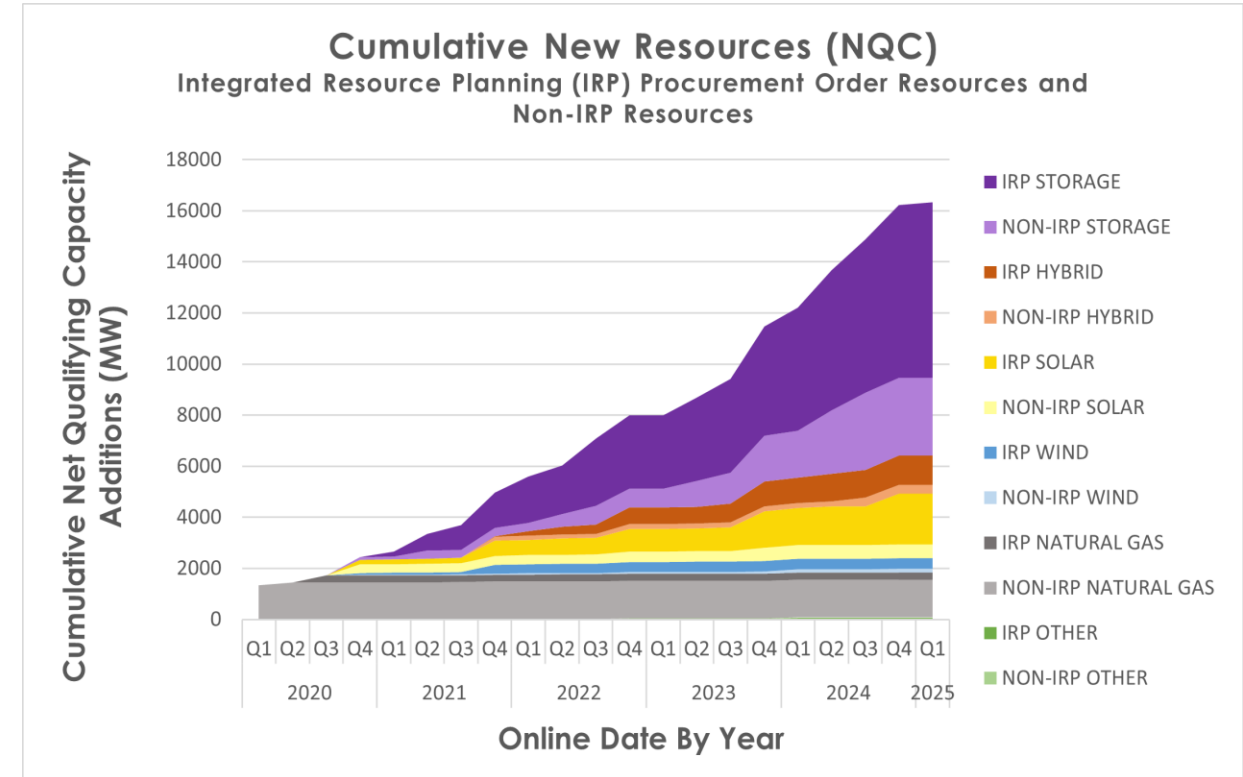
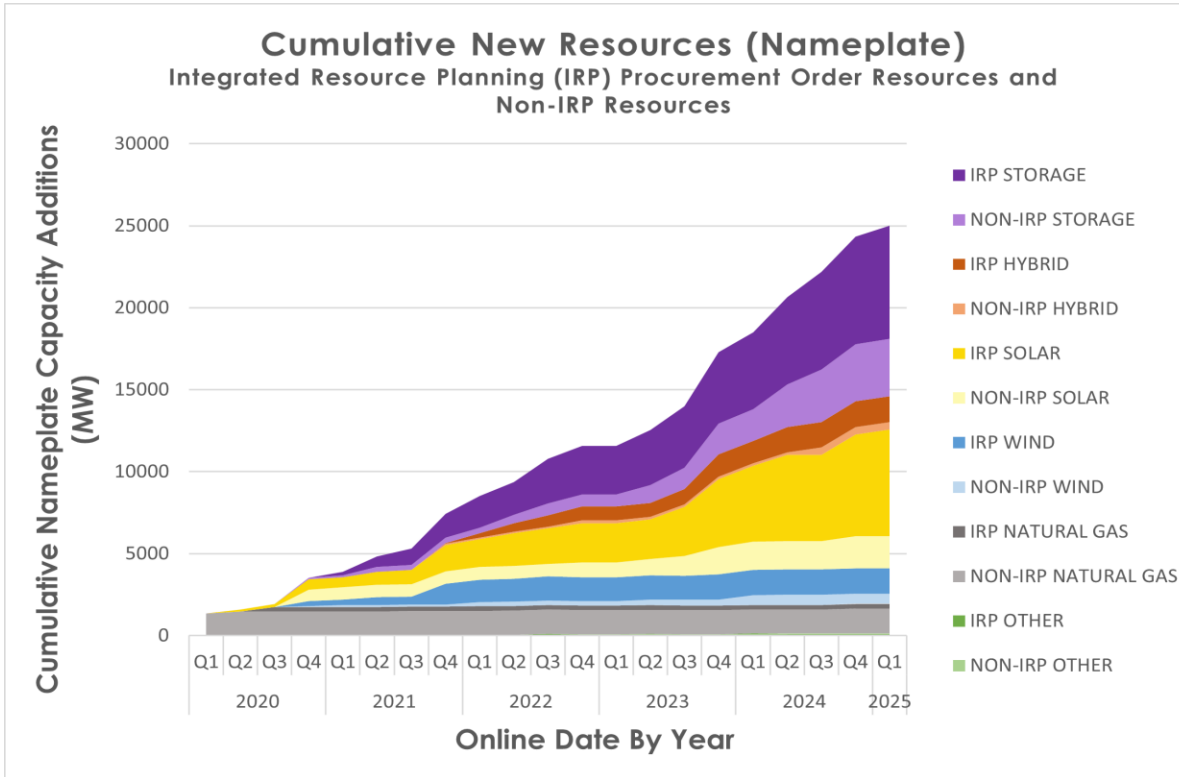
Technology Type	Nameplate Capacity MW	Estimated Sept. Net Qualifying Capacity (NQC) MW	# Projects
STORAGE	240	0*	1
SOLAR	303	0*	2
Total New Resources, IN-CAISO	543	0*	3
New Imports, Pseudo-Tie or Dynamically Scheduled	0	0	0
Total New Resources, including Imports	543	0*	3

IRP Procurement

Technology Type	Nameplate Capacity MW	Estimated Sept. Net Qualifying Capacity (NQC) MW	# Projects
STORAGE	240	0*	1
SOLAR	300	0*	1
Total New IRP Procurement	540	0*	2

Data includes projects online as of February 25, 2025

Total New Procurement By Year and Resource Type

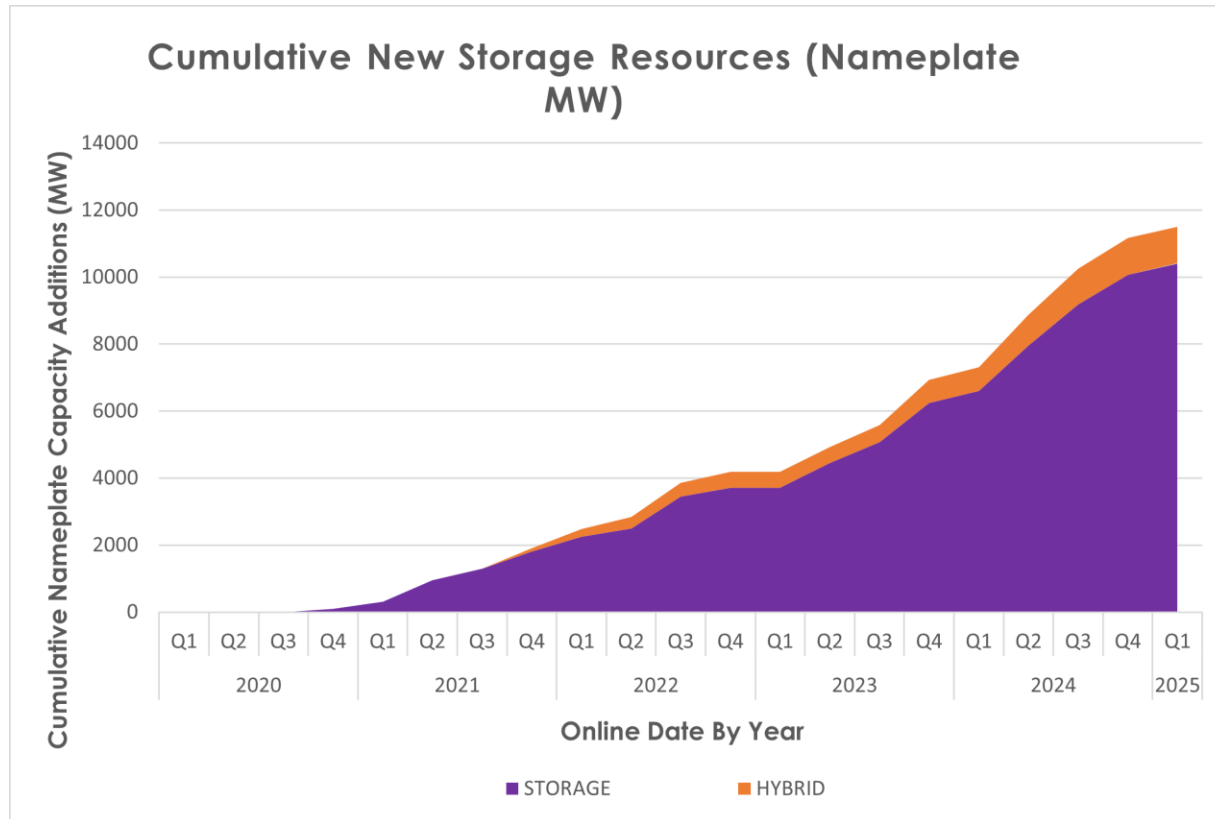


Note: Data shown here shows a snapshot of new resources added to the CAISO grid Q12020 – Q1 2025, including specified CAISO imports. "Other" resources include geothermal, biomass, biogas, and hydropower. Hybrids include some storage, and some other (usually solar) technology. "IRP Procurement Order Resources" 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.

Data includes projects online as of February 25, 2025

Total Storage Online By Year



Note: Data shown here shows a snapshot of new resources added to the CAISO grid Q12020 – Q12025, including specified CAISO imports. Hybrids include some storage, and some other (usually solar) technology. MW shown here only include the storage portion of hybrids.

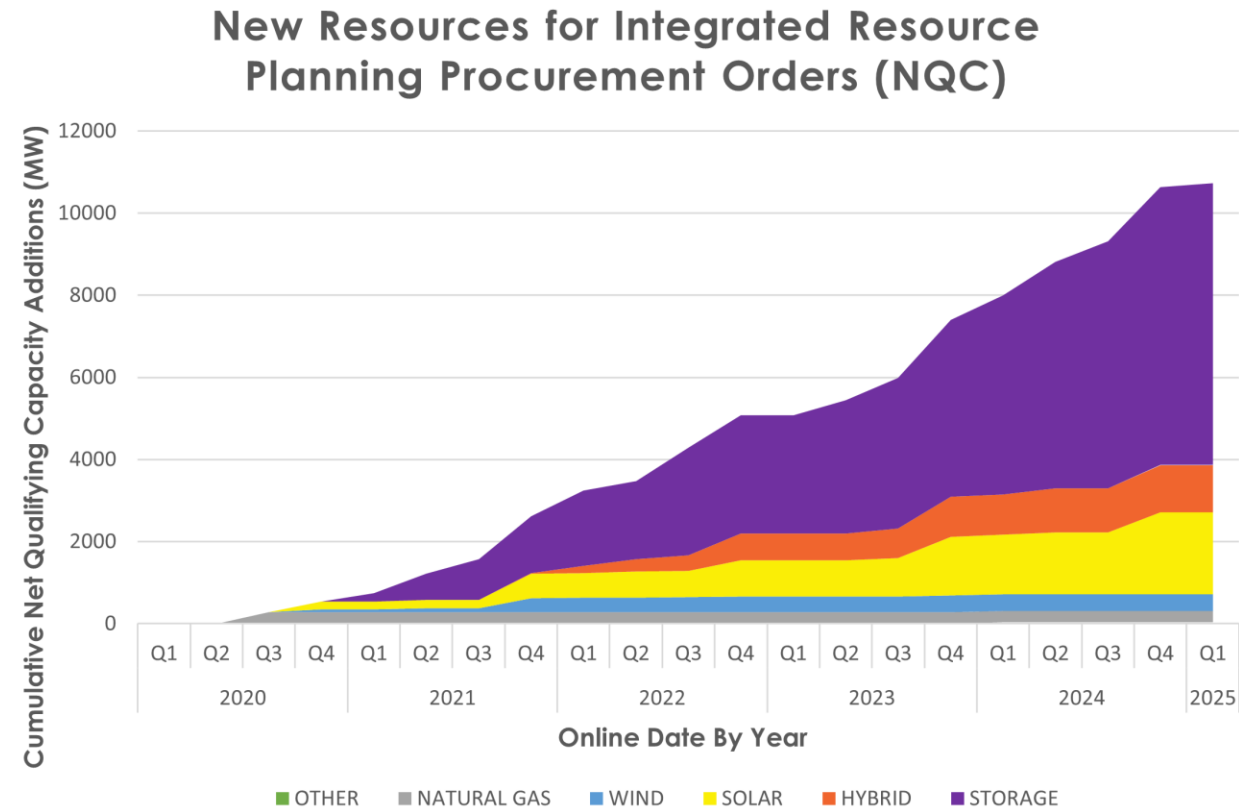
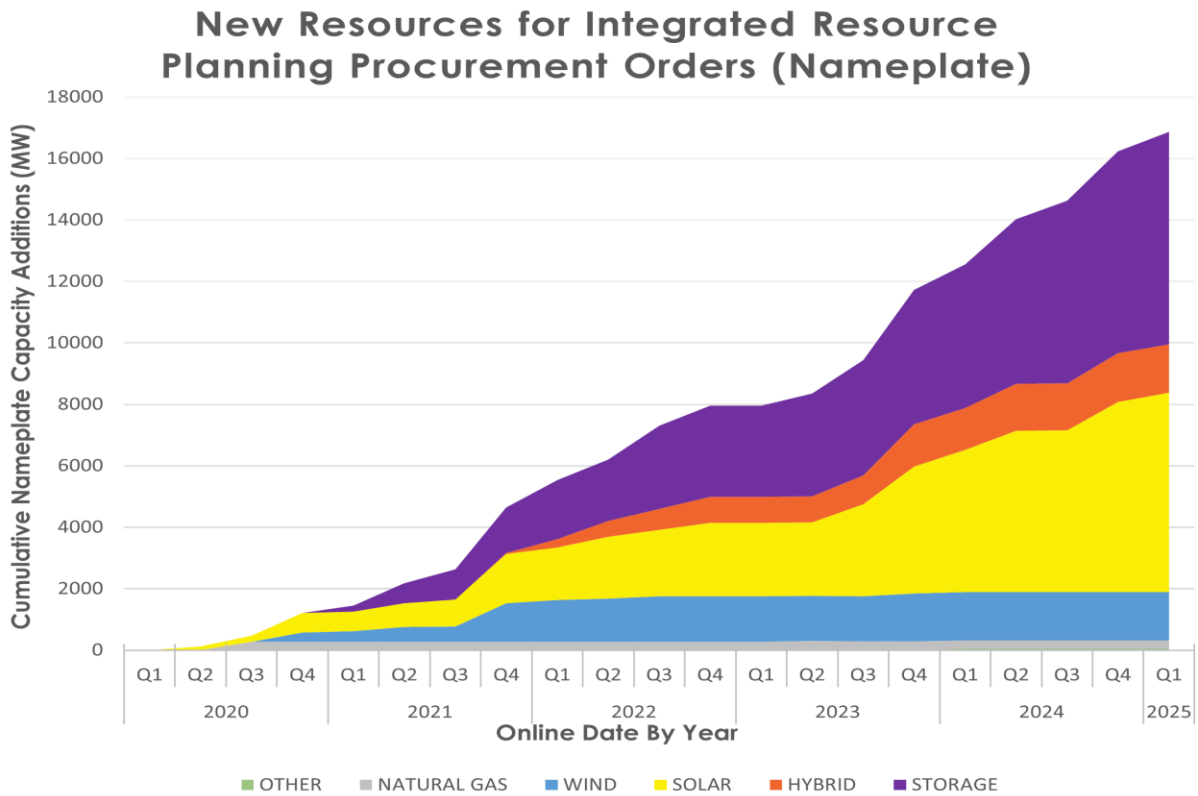
- **Installed to date:** Over 11,000 MW of storage nameplate capacity is online serving the grid as of January 2025, including imports.
 - Includes ~150 MW of storage added prior to 2020
 - Includes standalone battery storage and the storage component of hybrid resources
- **Expected future installs:** ~15,000 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 February 25, 2025



Note: Data shown here shows a snapshot of new resources added to the CAISO grid Q12020 – Q12025 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 \(ca.gov\)](https://www.cpuc.ca.gov/IRP-Procurement-Track) for more information about IRP Procurement Order Compliance.

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

Data includes projects expected/under contract as of February 13, 2025

Resource Type	2025	2026	2027	2028	Total
Solar	1,057	1,345	322	150	2,874
Battery Storage	3,468	3,399	3,789	890	11,546
Paired/Hybrid	765	1,085	1,209	70	3,129
Wind	71	1,435	250	0	1,756
Geothermal	10	126	163	435	734
Biomass/Biogas	10	0	0	0	10
Totals	5,381	7,389	5,732	1,545	20,048

- 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.

New MWs Expected - NQC

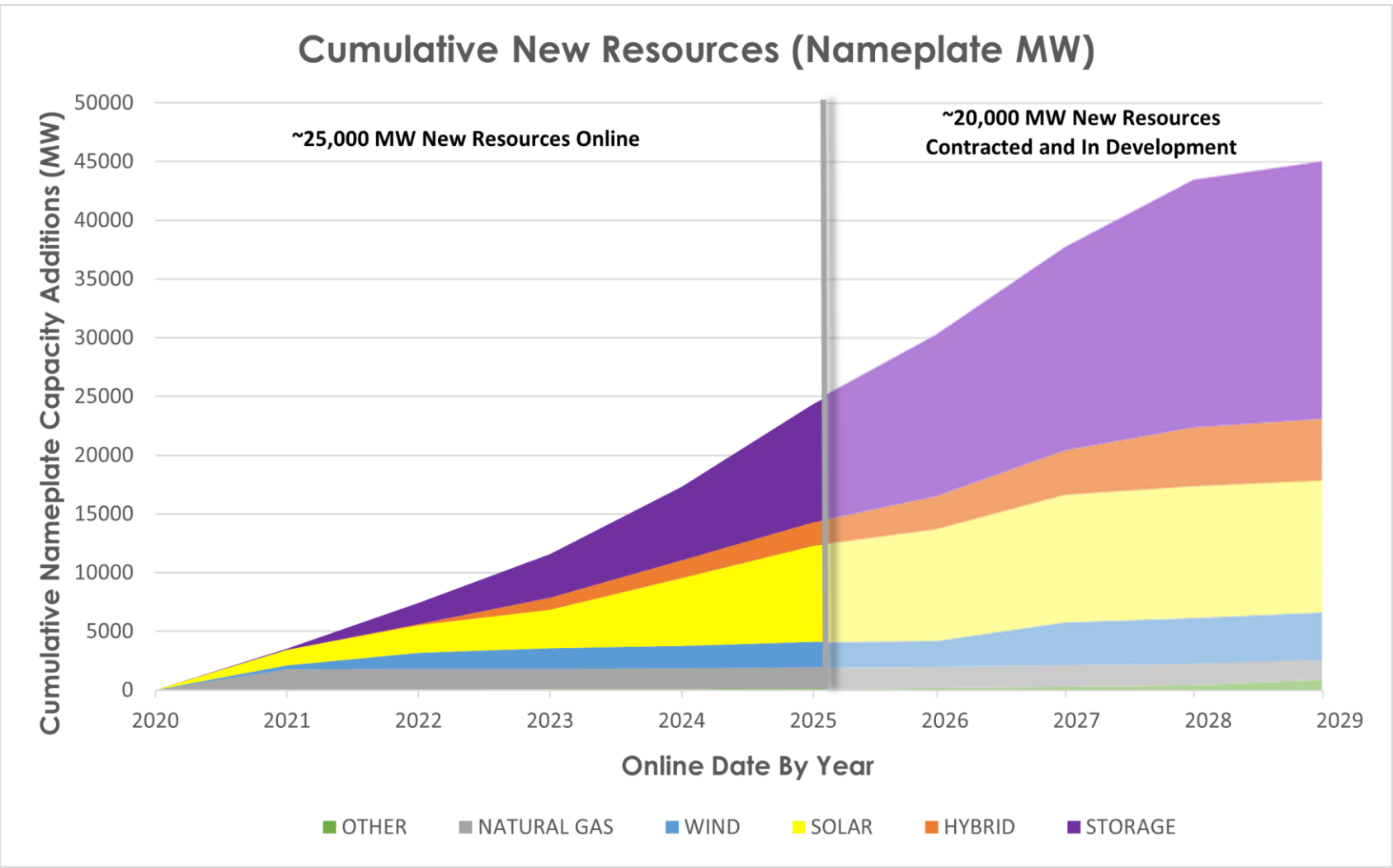
By Year and Resource Type, including imports

Data includes projects expected/under contract as of February 13, 2025

Resource Type	2025	2026	2027	2028	Total
Solar	586	217	152	0	954
Battery Storage	3,100	3,227	3,386	843	10,555
Paired/Hybrid	522	804	744	33	2,102
Wind	16	398	84	0	498
Geothermal	9	120	158	430	718
Biomass/Biogas	10	0	0	0	10
Totals	4,242	4,765	4,524	1,306	14,837

- Nearly 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.

Total New Energy Resources Online and Under Contract



Note: Data shown here shows a snapshot of new resources added to CAISO grid Q12020 – Q12025, including specified CAISO imports. Also shown is a projection of future new resources based on contracts in place by February 2025. "Other" resources includes geothermal, biomass, biogas, and hydropower.

Links to Other Key References on New Resource Development

References to Related Information

- (1) Tracking Energy Development Task Force – [Tracking Energy Development \(ca.gov\)](#)
- (2) Joint Agency Reliability Planning Assessments – pursuant to SB 846
 - [May 2023 Report](#)
 - [August 2023 Report](#)
 - [December 2023 Report](#)
 - [May 2024 Report](#)
 - [August 2024 Report](#)
 - [March 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 – [IRP Procurement Track \(ca.gov\)](#)
- (6) Overview of CPUC Jurisdictional LSE Procurement in Compliance with IRP Procurement Orders
 - [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 Filings, 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 irpdatarequest@cpuc.ca.gov