

Resource Tracking Data

Data current as of March 2023

Note: These data match the data used in the [second quarterly SB 846 Joint Agency Reliability Report](#), issued in May 2023



California Public
Utilities Commission



Notes: Data Considerations

- **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 – March 31, 2023**.
- 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 2020 and ~2026.
 - 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 the posting date 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 procurementstatusreports@cpuc.ca.gov

Part 1: New MW Online

- New Resources Online since January 2020 to 3/23/23
– by Nameplate, NQC, and # of Projects
- New Resources Online by Quarter (Nameplate) by Resource Type
- New Resource Online by Quarter (NQC) by Resource Type

Data includes projects online as of March 31, 2023

New MWs - Key Takeaways

Total New MW Online between 1/1/2020 thru 3/31/2023

	Nameplate Capacity (MW)	Estimated Sept. Net Qualifying Capacity (NQC) MW	Number of Projects by Resource IDs
New SB100 Resources, IN-CAISO	8,856	4,475	140
New Resources, IN-CAISO (includes Natural Gas)	10,333	5,949	152
Total New Reliability Resources, including Imports	12,022	6,660	165

Total Storage Online in CAISO (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 Stand along BESS & Hybrids)	4,870	4,176	68 (incl.17 hybrids)

Development Trend

- In the past 3 years, the State has brought online over ~3,500 MW of New Nameplate capacity each year, equivalent to an estimate ~2,000+ MW of NQC each year

New Energy Resources Online

Data includes projects online
as of March 31, 2023

New Resources Additions, Jan 1, 2020 – March 31, 2023, Cumulative

Technology Type	Nameplate Capacity (MW)	Estimated Sept. Net Qualifying Capacity (NQC) MW	Number of Projects
STORAGE	3,782	3,621	51
SOLAR	3,302	283	45
HYBRID (STORAGE/SOLAR)	998	456	16
WIND	700	83	19
GEOHERMAL	40	31	1
BIOGAS, BIOMAS, HYDRO	34	1	8 (2,2,4)
Subtotal Total New SB100 Resources, IN-CAISO	8,856	4,475	140
NATURAL GAS, incl. Alamitos & Huntington Beach	1,477	1,474	12
Total New Resources, IN-CAISO	10,333	5,949	152
New Imports, Pseudo-Tie or Dynamically Scheduled	1,689	711	13
Total New Resources, including Imports	12,022	6,660	165

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. "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.



New MWs Online - Nameplate

By Quarter and Resource Type, excluding imports

Data includes projects online as of March 31, 2023

MW Online By Quarter

Net Dependable Capacity (MW) new online since 1/1/2020
Excluding Imports

Energy Source	2020 Q1	2020 Q2	2020 Q3	2020 Q4	2021 Q1	2021 Q2	2021 Q3	2021 Q4	2022 Q1	2022 Q2	2022 Q3	2022 Q4	Total
BIOGAS		1							2				3
BIOMASS							2				3		5
GEOTHERMAL											40		40
HYBRID			83				26		250	243	166	231	998
LESR	1			100	212	641	338	583	440	259	946	262	3,782
NATURAL GAS	1,349	99					16	1	3	5	4		1,477
SUN		175	63	1,062	40	170	105	733	115	306	134	117	3,018
WATER	1	22		3									26
WIND				16	91	144	10	72	256	45	67		700
Grand Total	1,351	297	145	1,181	343	955	469	1,416	1,063	860	1,360	610	10,049

MW Online Cumulative

Cumulative NDC Energy Source	2020 Q1	2020 Q2	2020 Q3	2020 Q4	2021 Q1	2021 Q2	2021 Q3	2021 Q4	2022 Q1	2022 Q2	2022 Q3	2022 Q4
BIOGAS		1	1	1	1	1	1	1	1	3	3	3
BIOMASS		-	-	-	-	-	-	2	2	2	5	5
GEOTHERMAL		-	-	-	-	-	-	-	-	-	40	40
HYBRID		-	83	83	83	83	83	108	358	601	767	998
LESR	1	1	1	101	313	954	1,292	1,875	2,315	2,574	3,520	3,782
NATURAL GAS	1,349	1,448	1,448	1,448	1,448	1,448	1,464	1,465	1,468	1,473	1,477	1,477
SUN		175	238	1,300	1,340	1,510	1,615	2,347	2,462	2,767	2,901	3,018
WATER	1	23	23	26	26	26	26	26	26	26	26	26
WIND		-	-	16	107	251	261	333	589	634	700	700
Grand Total	1,351	1,648	1,793	2,974	3,317	4,272	4,741	6,156	7,219	8,079	9,439	10,049

Note: Hybrids include some storage, and some other (usually solar). Data shown here does not include imports.

New MWs Online - NQC

By Quarter and Resource Type, excluding imports

Data includes projects online as of March 31, 2023

Net Qualifying Capacity (MW) new online since 1/1/2020

Excluding Imports (TG)

MW Online By Quarter

Energy Source	2020 Q1	2020 Q2	2020 Q3	2020 Q4	2021 Q1	2021 Q2	2021 Q3	2021 Q4	2022 Q1	2022 Q2	2022 Q3	2022 Q4	Total
BIOGAS													
BIOMASS													
GEOHERMAL												31	31
HYBRID			9					8	159	121	81	78	456
LESR	-			100	211	641	338	426	440	258	946	262	3,621
NATURAL GAS	1,349	99					15	1	3	5	4		1,474
SUN		6	4	113	4	19	8	74	5	34	15	2	283
WATER	0	0											1
WIND				2	9	16	2	9	29	10	7		85
Grand Total	1,349	105	14	215	225	676	363	517	636	426	1,053	372	5,951

MW Online Cumulative

Cumulative NQC Energy Source	2020 Q1	2020 Q2	2020 Q3	2020 Q4	2021 Q1	2021 Q2	2021 Q3	2021 Q4	2022 Q1	2022 Q2	2022 Q3	2022 Q4
BIOGAS												
BIOMASS												
GEOHERMAL												31
HYBRID	-	-	9	9	9	9	9	18	177	297	378	456
LESR				100	311	952	1,290	1,716	2,156	2,413	3,359	3,621
NATURAL GAS	1,349	1,448	1,448	1,448	1,448	1,448	1,462	1,463	1,466	1,470	1,474	1,474
SUN		6	10	123	127	146	154	228	233	267	282	283
WATER	0	1	1	1	1	1	1	1	1	1	1	1
WIND				2	12	28	30	39	67	77	85	85
Grand Total	1,349	1,454	1,468	1,683	1,908	2,583	2,946	3,464	4,099	4,526	5,578	5,951

Note: Hybrids include some storage, and some other (usually solar). Data shown here does not include imports.

Part 2: Expected New MWs based on LSE Contracts to date

- Expected New MW by Quarter by Resource Type- Nameplate
- Expected New MW by Quarter by Resource Type - NQC

New MWs Expected - Nameplate

By Quarter and Resource Type, including imports

Data includes projects expected/under contract as of February 28, 2023

Resource Type	2023				2024				2025				2026			
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
solar	2	246	349	829	863	868	985	993	1,038	1,063	1,063	1,066	1,066	1,066	1,066	1,066
battery	171	1,206	2,250	2,333	2,982	5,506	5,835	5,845	6,120	6,488	6,488	6,488	6,503	6,624	6,624	6,624
paired/hybrid	258	650	927	2,017	2,367	3,207	3,210	3,878	4,214	4,421	4,421	4,421	4,526	4,526	4,526	4,601
wind	-	93	96	96	96	96	96	96	96	173	173	323	323	323	323	323
geothermal	26	26	26	26	26	88	88	108	109	132	170	171	171	230	230	234
biomass/biogas	-	8	13	16	22	22	22	25	25	25	25	25	25	25	25	25
total	457	2,230	3,662	5,317	6,357	9,786	10,236	10,945	11,604	12,302	12,340	12,491	12,613	12,794	12,794	12,873

New MWs Expected – Estimated Sept. NQC

By Quarter and Resource Type, including imports

Data includes projects expected/under contract as of February 28, 2023

Resource Type	2023				2024				2025				2026			
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
solar	-	88	98	168	182	184	216	216	222	247	247	247	249	249	249	249
battery	171	1,194	1,813	1,894	2,534	5,053	5,382	5,392	5,667	6,030	6,030	6,030	6,045	6,162	6,162	6,162
paired/hybrid	258	530	707	1,120	1,332	1,950	2,001	2,362	2,664	2,720	2,720	2,732	2,732	2,732	2,732	2,732
wind	-	14	14	14	14	14	14	14	14	31	31	31	31	31	31	31
geothermal	21	21	21	21	21	78	78	96	97	119	156	156	157	214	214	217
biomass/biogas	-	3	8	11	17	17	20	20	20	20	20	20	20	20	20	20
total	450	1,849	2,660	3,228	4,100	7,297	7,709	8,100	8,684	9,168	9,204	9,205	9,234	9,409	9,409	9,487

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 Report – pursuant to SB 846
 - [February 2023 Report](#)
 - [May 2023 Report](#)
- (3) California Energy Commission’s Energy Almanac - [Energy Almanac \(ca.gov\)](#)
- (4) Overview of CPUC IRP Procurement Orders – [IRP Procurement Track \(ca.gov\)](#)
- (5) Overview of CPUC Jurisdictional LSE Procurement in Compliance with IRP Procurement Orders
 - [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 procurementstatusreports@cpuc.ca.gov