

# Resource Tracking Data

Data current as of March 2024



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, 2024**
- 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 Q1 2024 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](mailto:procurementstatusreports@cpuc.ca.gov)

# Part 1: New MW Online

- New Resources Online from 1/1/2020 to 3/31/24
  - 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 March 31, 2024

# New MWs - Key Takeaways

## Total New MW Online between 1/1/2020 thru 3/31/2024

	Nameplate Capacity (MW)	Estimated Sept. Net Qualifying Capacity (NQC) MW	Number of Projects by Resource IDs
New SB100 Resources, IN-CAISO	15,459	7,449	237
New Resources, IN-CAISO (includes Natural Gas)	16,936	8,923	249
<b>Total New Reliability Resources, including Imports</b>	<b>18,537</b>	<b>9,700</b>	<b>262</b>

## Total Storage Online in CAISO (all time)

	Nameplate Capacity (MW)	Estimated Sept. Net Qualifying Capacity (NQC) MW	Number of Projects by Resource IDs
<b>Battery Energy Storage Systems (BESS) Projects (Including Standalone BESS &amp; Hybrids)</b>	7,423	6,787	<b>124 (incl. 22 hybrids)</b>

**Note:** MW only include storage portion of hybrids

## Development Trend

- In the past 4 years, the State has brought online an average of over 4,000 MW of New Nameplate capacity each year.

# New Energy Resources Online

Data includes projects online as of March 31, 2024

## New Resources Additions, Jan 1, 2020 – March 31, 2024, Cumulative

Technology Type	Nameplate Capacity (MW)	Estimated Sept. Net Qualifying Capacity (NQC) MW	Number of Projects
STORAGE	6,605	6,134	92
SOLAR	6,291	493	91
HYBRID (STORAGE/SOLAR)	1,389	666	22
WIND	1,095	125	21
GEOHERMAL	41	31	1
BIOGAS, BIOMAS, HYDRO	39	0	10
<b>Subtotal Total New SB100 Resources, IN-CAISO</b>	<b>15,459</b>	<b>7,449</b>	<b>237</b>
NATURAL GAS, incl. Alamitos & Huntington Beach	1,477	1,474	12
<b>Total New Resources, IN-CAISO</b>	<b>16,936</b>	<b>8,923</b>	<b>249</b>
New Imports, Pseudo-Tie or Dynamically Scheduled	1,601	777	13
<b>Total New Resources, including Imports</b>	<b>18,537</b>	<b>9,700</b>	<b>262</b>

### 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 Year and Resource Type

Data includes projects online as of March 31, 2024

Technology Type	2020	2021	2022	2023	Q1 2024	Total MW	# Projects
SOLAR	1,300	1,048	913	2,482	548	<b>6,291</b>	91
STORAGE	101	1,703	1,907	2,528	366	<b>6,605</b>	92
HYBRID (SOLAR + STORAGE)	0	26	890	470	3	<b>1,389</b>	22
WIND	16	304	367	178	230	<b>1,095</b>	21
GEOHERMAL	0	0	0	0	41	<b>41</b>	1
HYDRO	26	0	0	0	0	<b>26</b>	4
BIOMASS	0	2	3	3	0	<b>8</b>	3
BIOGAS	1	0	2	3	0	<b>6</b>	3
<b>Subtotal Total New SB100 Resources, IN-CAISO</b>	<b>1,444</b>	<b>3,083</b>	<b>4,082</b>	<b>5,664</b>	<b>1,188</b>	<b>15,459</b>	<b>237</b>
NATURAL GAS, incl. Alamitos & Huntington Beach	1,448	17	12	0	0	<b>1,477</b>	12
<b>Total New Resources, IN-CAISO</b>	<b>2,892</b>	<b>3,100</b>	<b>4,094</b>	<b>5,664</b>	<b>1,188</b>	<b>16,936</b>	<b>249</b>
New Imports, Pseudo-Tie or Dynamically Scheduled	695	807	49	51	0	<b>1,601</b>	13
<b>Total New Resources, including Imports</b>	<b>3,587</b>	<b>3,907</b>	<b>4,143</b>	<b>5,715</b>	<b>1,188</b>	<b>18,537</b>	<b>262</b>

# New MWs Online – Sept NQC

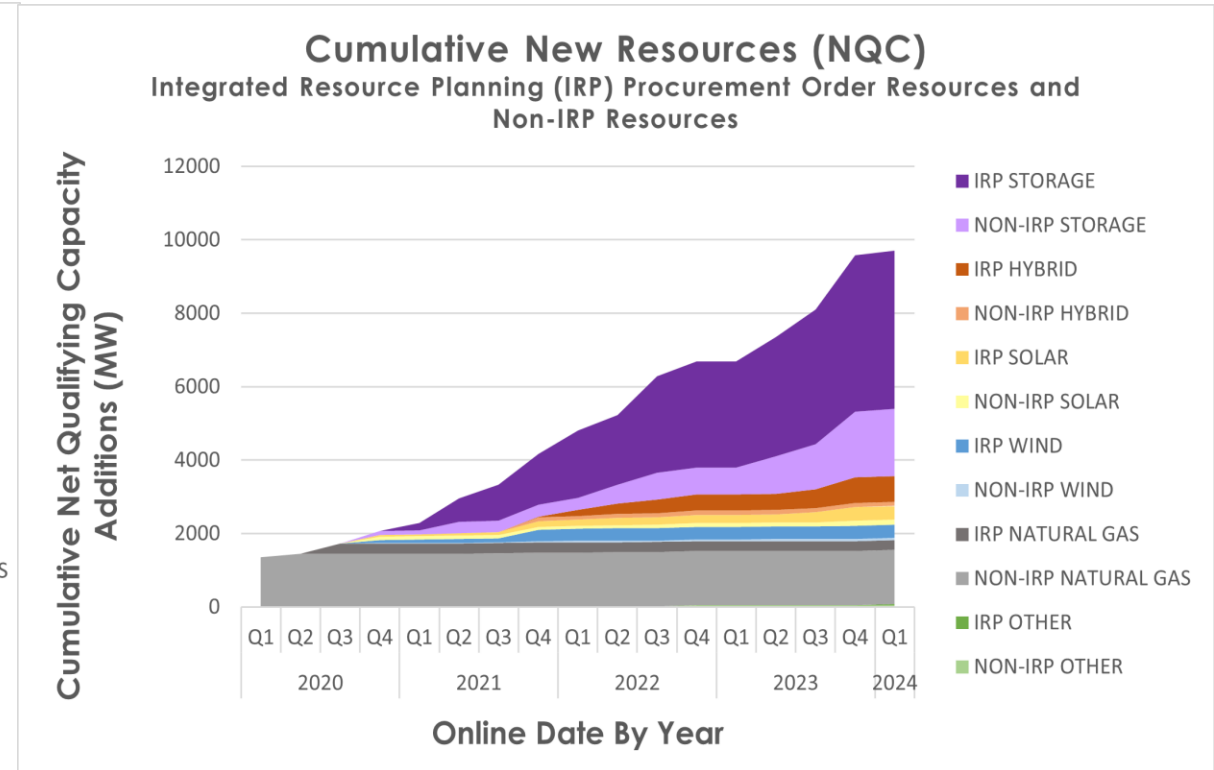
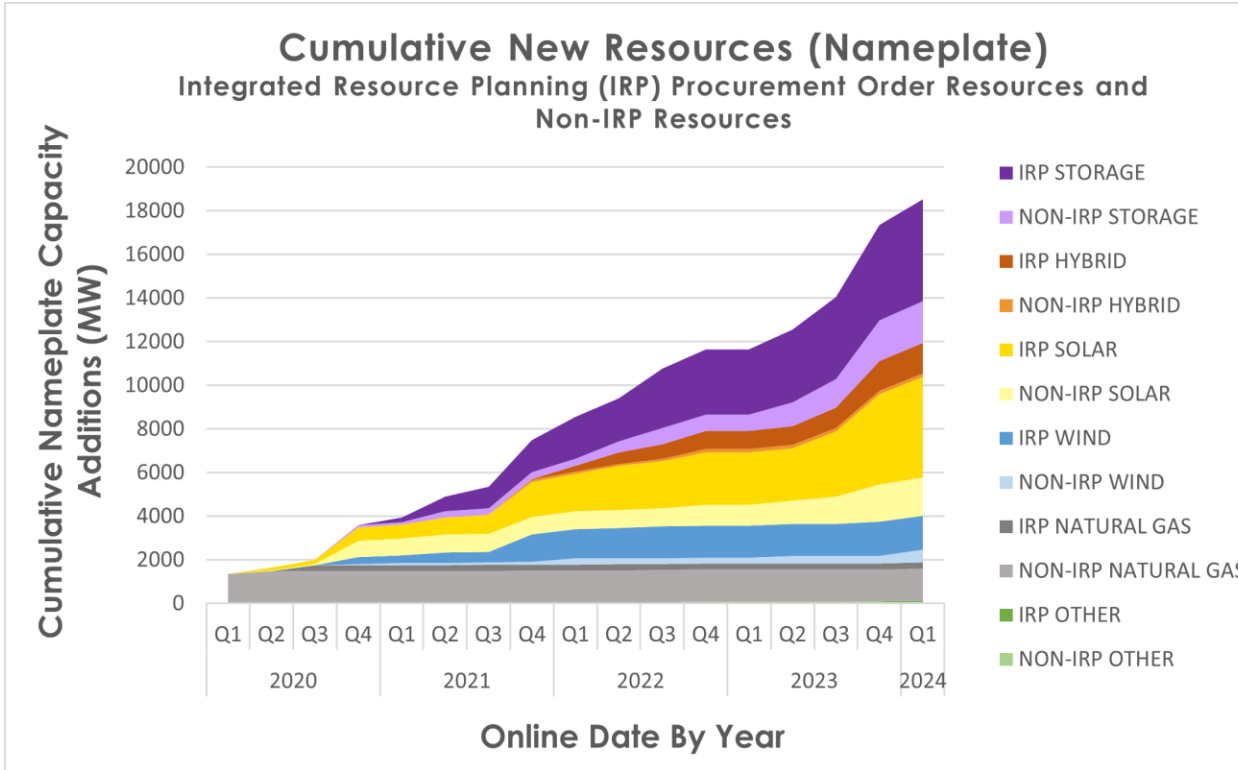
## By Year and Resource Type

Data includes projects online as of March 31, 2024

Technology Type	2020	2021	2022	2023	Q1 2024	Total MW	# Projects
SOLAR	126	110	78	181	0	<b>493</b>	91
STORAGE	100	1,616	1,906	2,423	90	<b>6,134</b>	92
HYBRID (SOLAR + STORAGE)	0	8	440	214	3	<b>666</b>	22
WIND	7	41	46	30	0	<b>125</b>	21
GEOHERMAL	0	0	31	0	31	<b>62</b>	1
HYDRO	0	0	0	0	0	<b>0</b>	4
BIOMASS	0	0	0	0	0	<b>0</b>	3
BIOGAS	0	0	0	0	0	<b>0</b>	3
<b>Subtotal Total New SB100 Resources, IN-CAISO</b>	<b>233</b>	<b>1,775</b>	<b>2,500</b>	<b>2,848</b>	<b>124</b>	<b>7,449</b>	<b>237</b>
NATURAL GAS, incl. Alamitos & Huntington Beach	1,448	16	12	0	0	<b>1,474</b>	12
<b>Total New Resources, IN-CAISO</b>	<b>1,681</b>	<b>1,791</b>	<b>2,511</b>	<b>2,848</b>	<b>124</b>	<b>8,923</b>	<b>249</b>
New Imports, Pseudo-Tie or Dynamically Scheduled	380	317	0	48	0	<b>777</b>	13
<b>Total New Resources, including Imports</b>	<b>2,061</b>	<b>2,108</b>	<b>2,511</b>	<b>2,896</b>	<b>124</b>	<b>9,700</b>	<b>262</b>

Data includes projects online as of March 31, 2024

# Total New Procurement By Year and Resource Type



**Note:** Data shown here shows a snapshot of new resources added to the CAISO grid Q12020 – Q12024, 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.

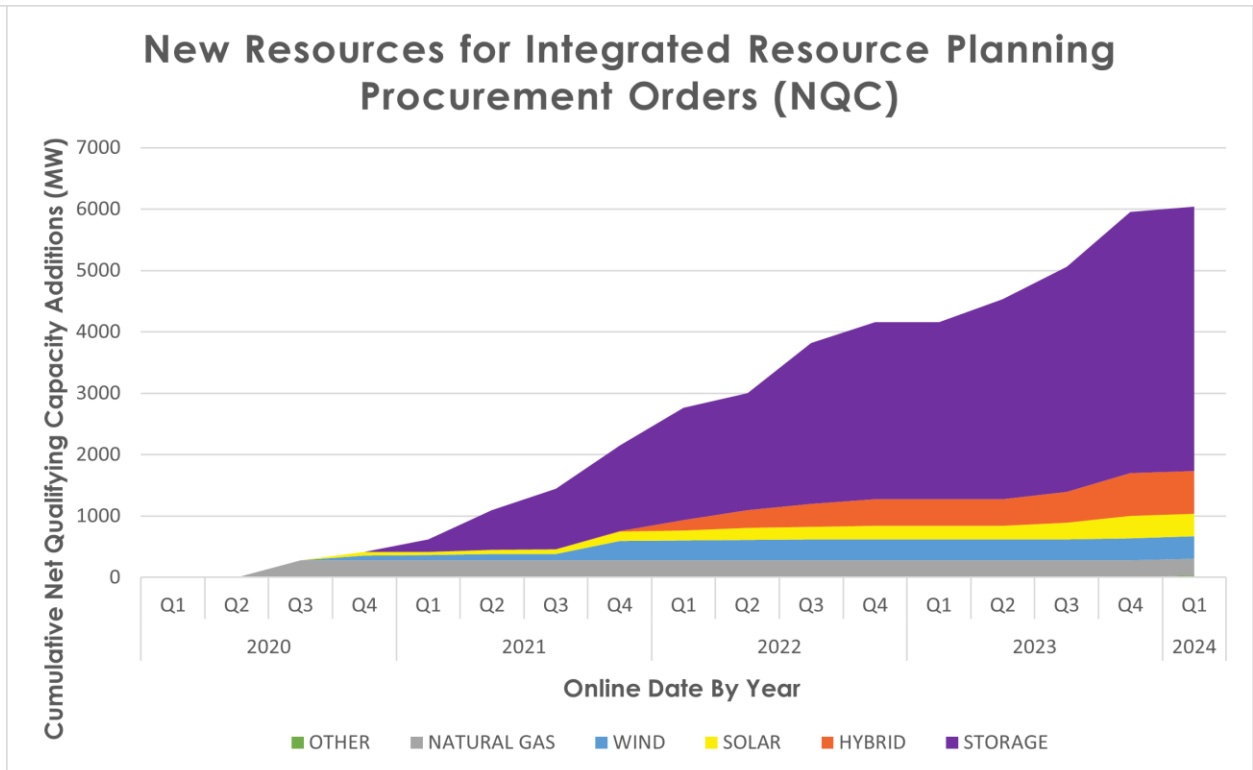
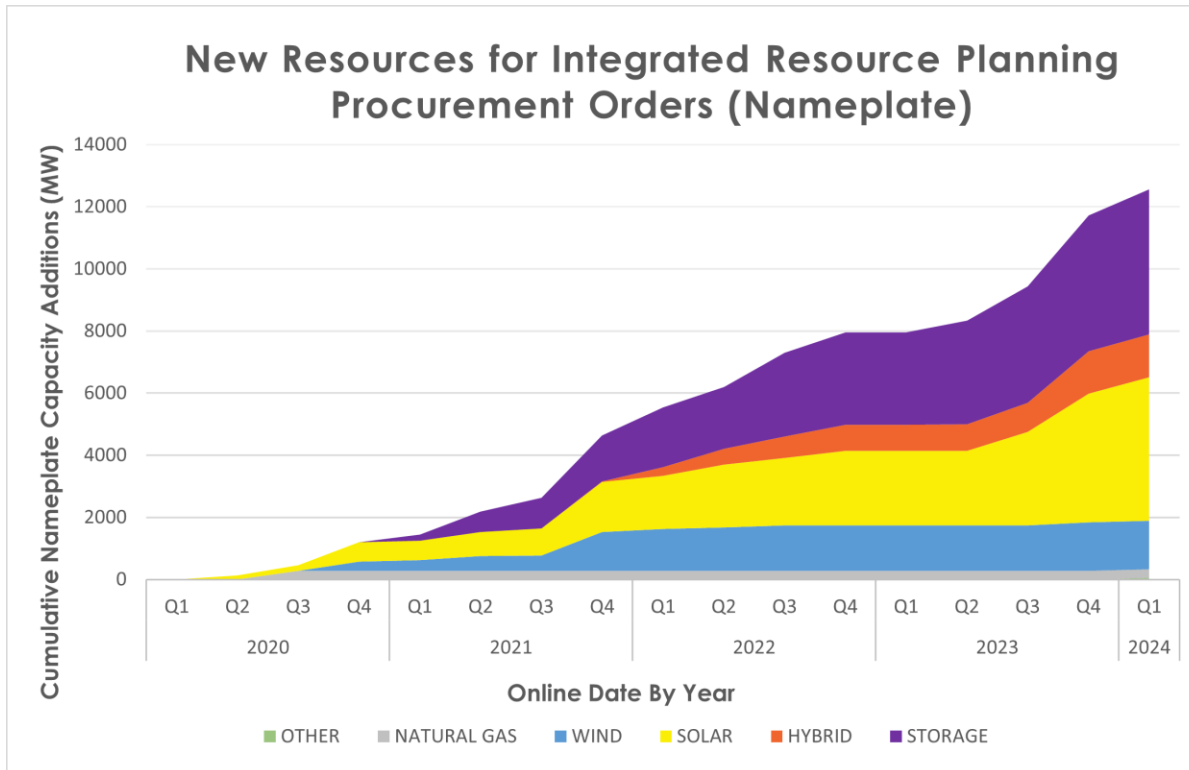


# Part 2: Integrated Resource Planning Compliance

- 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 March 31, 2024



**Note:** Data shown here shows a snapshot of new resources added to the CAISO grid Q1 2020 – Q1 2024 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 October 2023

Resource Type	2024	2025	2026	Total
Solar	334	132	2	468
Battery Storage	3,853	2,037	431	6,321
Paired/Hybrid	1,917	1,080	180	3,177
Wind	0	226	305	531
Geothermal	177	118	105	400
Biomass/Biogas	26	3	0	29
<b>Totals</b>	<b>6,307</b>	<b>3,596</b>	<b>1,023</b>	<b>10,926</b>

- ~11,000 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 and hybrid solar+storage.
- Other types of resources are eligible to meet orders and may be contracted in the future.
- **2024 New Resource Projection**  
~6,300+ MW Nameplate

# New MWs Expected - NQC

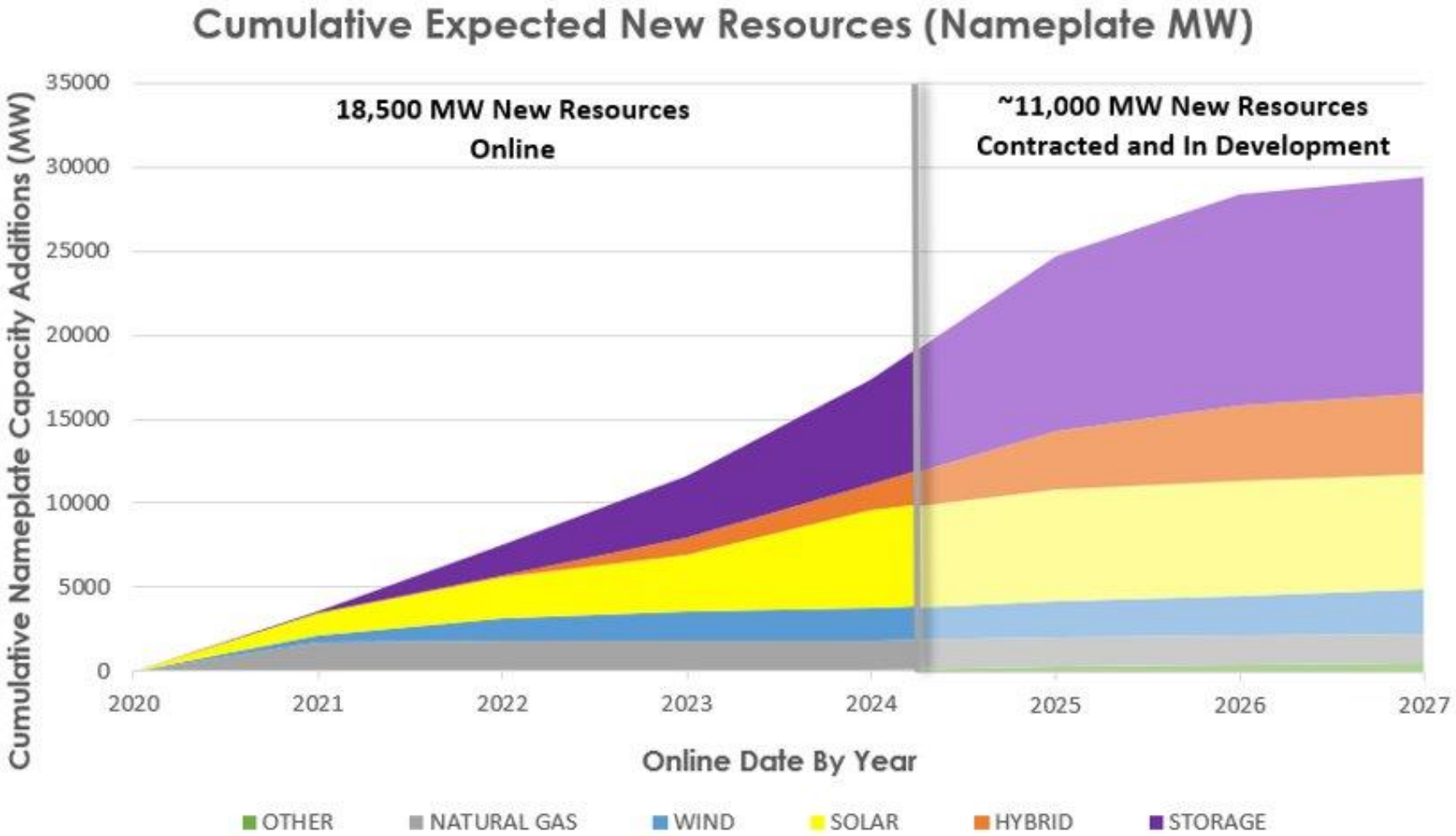
## By Year and Resource Type, including imports

Data includes projects expected/under contract as of October 2023

Resource Type	2024	2025	2026	Total
Solar	93	28	3	124
Battery Storage	3,386	1,939	416	5,741
Paired/Hybrid	992	844	82	1,918
Wind	0	17	91	108
Geothermal	169	74	97	340
Biomass/Biogas	23	3	0	26
<b>Totals</b>	<b>4,663</b>	<b>2,905</b>	<b>689</b>	<b>8,257</b>

- Over 8,000 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 and hybrid solar+storage.
- Other types of resources are eligible to meet orders and may be contracted in the future.
- **2024 New Resource Projection**  
~4,600+ MW NQC

# Total New Energy Resources Online and Under Contract



**Note:** Data shown here shows a snapshot of new resources added to CAISO grid Q12020 - Q12024, including specified CAISO imports. Also shown is a projection of future new resources based on contracts in place by October 2023. "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 SB 846 Reliability Report – pursuant to SB 846
  - [February 2023 Report](#)
  - [May 2023 Report](#)
  - [August 2023 Report](#)
  - [December 2023 Report](#)
  - [May 2024 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 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 [procurementstatusreports@cpuc.ca.gov](mailto:procurementstatusreports@cpuc.ca.gov)