

KEY STATISTICS

Peaks for August 2019



44,301 MW

Peak demand
August 15

Previous month:
43,198 MW



14,766 MW

Peak served by renewables
August 8

Previous month:
14,613 MW



11,193 MW

Solar peak
August 9

Previous month:
11,473 MW



4,739 MW

Wind peak
August 21

Previous month:
5,034 MW

Historical stats & records



11,473 MW

Solar peak
July 2, 2019 at 12:53 P.M.

Previous record:
11,435 MW on July 1, 2019



5,309 MW

Wind peak
May 8, 2019 at 3:21 P.M.

Previous record:
5,193 MW on June 8, 2018



78%

Demand served by renewables
April 20, 2019 at 12:40 P.M.

Previous record:
73.9% on May 26, 2018



50,270 MW

Peak demand
July 24, 2006 at 2:44 P.M.



Previous peak demands:
50,116 MW on September 1, 2017 at 3:58 p.m.
48,615 MW on August 31, 2007 at 3:27 p.m.

Western Energy Imbalance Market (EIM) benefits [Read ISO EIM Benefits Report Q2 here](#)

ECONOMIC

2019 Q2 benefits:
\$86 million

Total benefits:
\$736.26 million
since 2014 launch

ENVIRONMENTAL

Q2 avoided curtailments:
132,937 MWh

Q2 ISO GHG savings:
56,897 mTCO₂

Total ISO GHG savings:
403,546 mTCO₂
from avoided curtailment since 2014

Equivalent to removing emissions
from **84,844** passenger cars

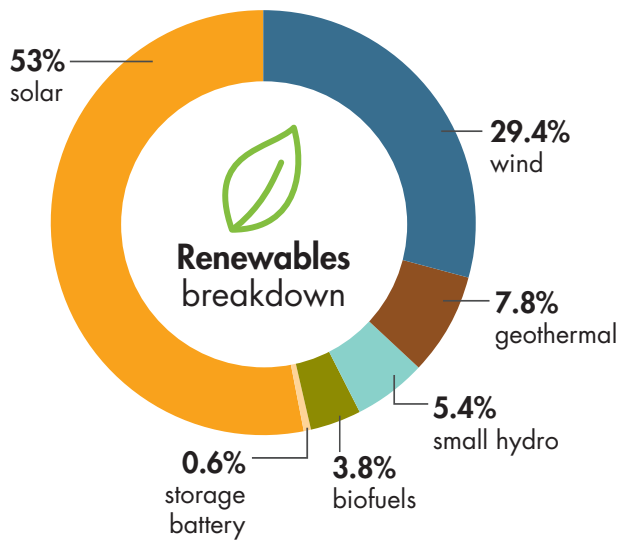


Demand & resources (as of 9/01/2019)

Resource adequacy net qualifying capacity (NQC) = **51,840 MW**

Does not include current outages

Renewable resources (as of 9/01/2019)



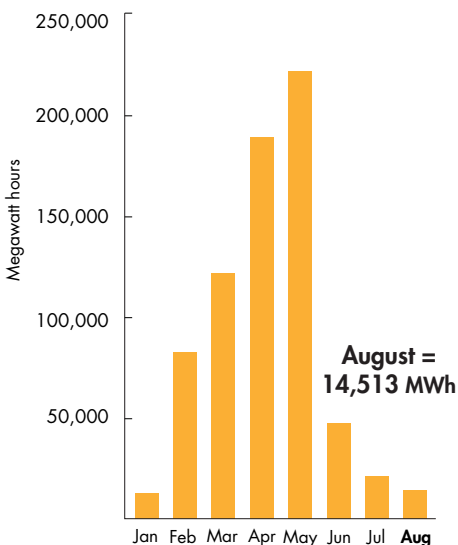
Megawatts

Solar	12,072
Wind	6,714
Small hydro	1,229
Geothermal	1,785
Biofuels	877
Storage battery*	136
TOTAL	22,813

[See Today's Outlook](#)

NOTE — Only fully commercial units are counted, not partials or test energy, as reported via the Master Generating File and captured in the Master Control Area Generating Capability List found on [OASIS](#) under "Atlas Reference". *Includes stand-alone and hybrid units.

Key curtailment totals



[See Managing Oversupply page](#)

Steepest ramp: 3-hour max

As daily demand for energy increases and solar generation decreases, grid operators must call on flexible resources to meet the upward ramp in demand. For more on ramping, [visit here](#).

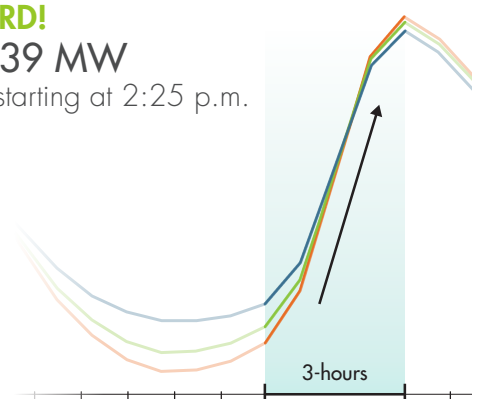
11,981 MW
Aug 18 starting at 4:09 p.m.

10,981 MW
Jul 8 starting at 4:37 p.m.

12,744 MW
Jun 9 starting at 4:11 p.m.

12,611 MW
May 5 starting at 4:27 p.m.

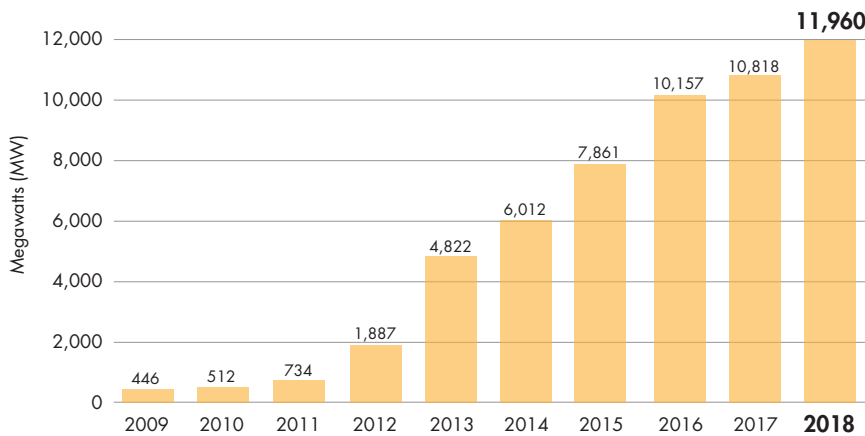
RECORD!
15,639 MW
Jan 1 starting at 2:25 p.m.





KEY STATISTICS

Installed solar growth



Annual peak demand

46,427 MW
Jul 25, 2018 at 5:33 p.m.

50,116 MW
Sep 1, 2017 at 3:58 p.m.

46,232 MW
Jul 27, 2016 at 4:51 p.m.

47,358 MW
Sep 10, 2015 at 3:38 p.m.

2018 Energy use (as percentage of total resources available)

Natural gas = 30%
Up 2% from previous year

Total hydro = 10%
Down 7% from previous year

Wind = 7%
Up 19% from previous year

Net imports = 22%
unchanged from previous year

Non-hydro renewables = 26%
Up 3% from previous year

Geothermal = 4%
Down 2% from previous year

Nuclear = 10%
unchanged from previous year

Solar = 12%
Up 9% from previous year

Biofuels = 2%, a slight increase from previous year

Other facts

- 30 million consumers
- Serve ~80% of California demand
- Serve ~33% of WECC demand
- MWh of load served for 2018 = 232.9 million
- Total estimated wholesale cost of serving demand in 2018 = \$10.8 billion or about \$50/MWh*
- Total estimated wholesale cost of serving demand in 2017 = \$9.4 billion or about \$42/MWh*
- 1 MW serves about 750-1,000 homes (1 MWh = 1 million watts used for one hour)
- 17 participating transmission owners
- 25,715 (or about 26,000) circuit miles of transmission
- 217 market participants
- MWh of market transactions for 2018 = 32,635 (2017 = 31,208)
 - Daily average electricity delivered for 2018 = 222.8M MWh
- 9,696 pricing nodes for ISO & all EIM entities as of Apr. 4, 2018. ISO has 4,119 pricing nodes
- Western EIM has 9 active participants serving customers in 8 states (as of April 2019)

*Note higher cost mostly due to higher natural gas prices. After normalizing for natural gas prices and greenhouse gas compliance costs, total wholesale energy costs increased by about 4 percent.