

Peaks for April 2019



31,195 MW

Peak demand
April 24

Previous month:
28,372 MW



6,510 MW

Renewables served peak
April 21

Previous month:
5,771 MW



11,275 MW

Solar peak
April 17

Previous month:
10,852 MW



5,174 MW

Wind peak
April 20

Previous month:
4,469 MW

Historical stats & record peaks



11,275 MW

Solar peak **NEW!**
April 17, 2019 at 1:26 P.M.

Previous record:
11,033 MW on April 13, 2019



5,193 MW

Wind peak
June 8, 2018 at 9:04 P.M.

Previous record:
4,985 MW on May 16, 2017



78%

Renewables served demand **NEW!**
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.

Energy Imbalance Market



Q1 2019 BENEFITS
\$85.38M

TOTAL SAVINGS
\$650.26M
since Nov 2014 start



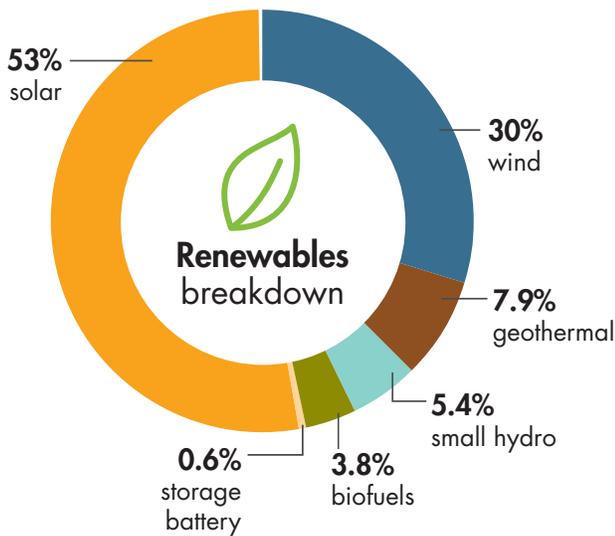
Q1 2019 AVOIDED CURTAILMENTS
52,254 MWh

TOTAL ISO GHG SAVINGS
346,649 mTCO₂
from avoided curtailment since Nov 2014

Demand & resources (as of 5/01/2019)

Resource adequacy net qualifying capacity (NQC) = **49,544 MW**
Does not include current outages

Renewable resources (as of 5/01/2019)



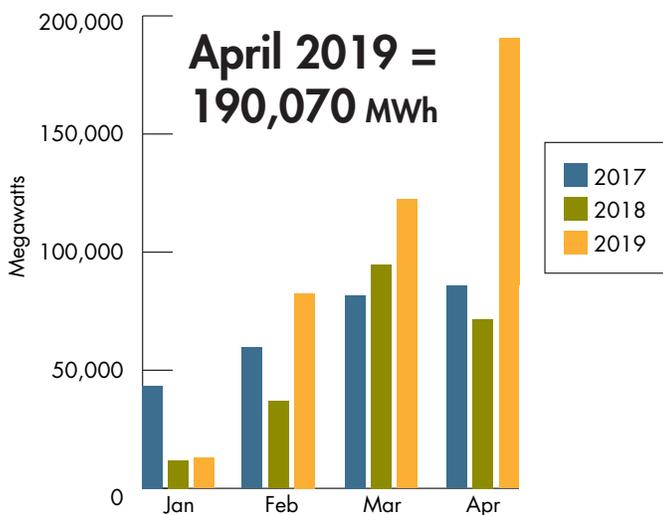
	Megawatts
Solar	11,949
Wind	6,705
Small hydro	1,234
Geothermal	1,785
Biofuels	877
Storage battery*	136
TOTAL	22,686

[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

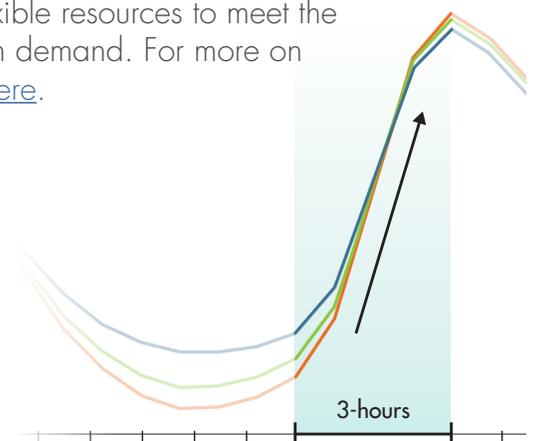


[See Managing Oversupply page](#)

Steepest ramp: 3-hour Max **NEW!**

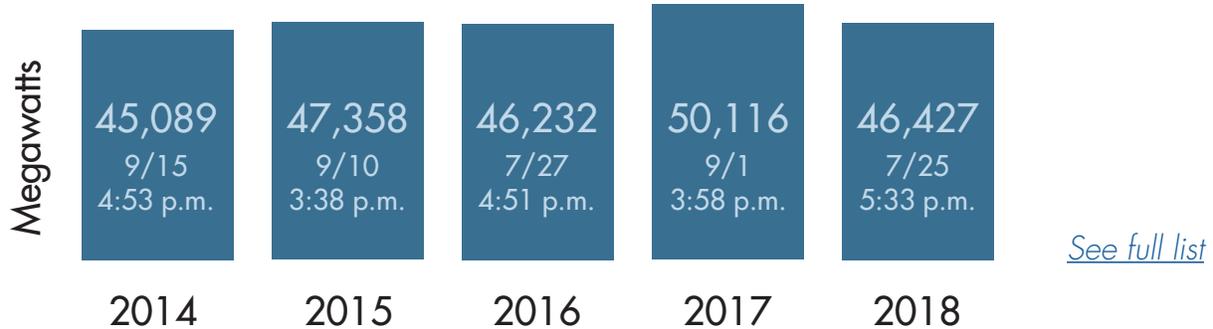
As daily demand for energy increases and solar generation decreases, grid operators must call on flexible resources to meet the upward ramp in demand. For more on ramping, [visit here](#).

Jan
15,639 MW
Feb
14,630 MW
Mar
15,070 MW

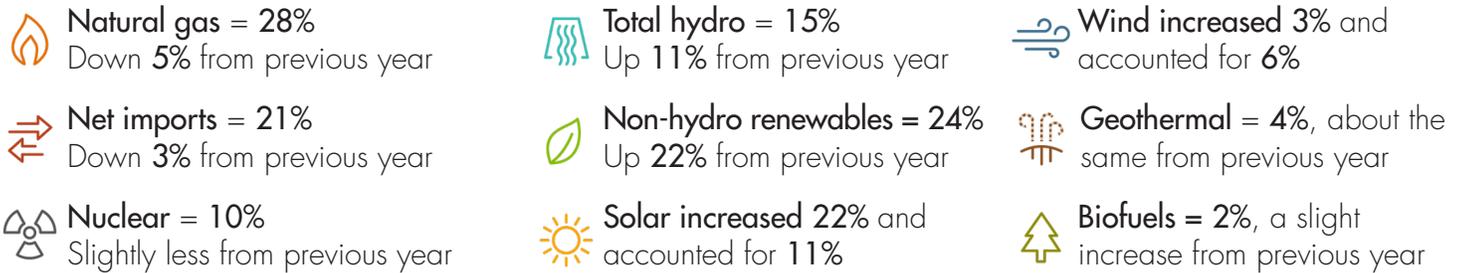




Annual peak demand



2017 Energy use as percentage of total resources available



Other facts

- 30 million consumers
- Serve ~80% of California demand
- Serve ~33% of WECC demand
- MWh of demand served for 2017 = 239 million
- Total estimated wholesale cost of serving demand in 2017 = \$9.4 billion or about \$42/MWh*
- Total estimated wholesale cost of serving demand in 2016 = \$7.4 billion or about \$34/MWh
- 1 MW serves about 750-1,000 homes (1 MWh = 1 million watts used for one hour)
- 17 participating transmission owners
- 25,685 (or about 26,000) circuit miles of transmission
- 214 market participants
- Market transactions for 2017 = 31,208 (2016 = 29,651) daily average
- 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.