



Peaks for September 2018



38,752 MW

Peak demand
September 7



12,811 MW

Renewables served peak
September 11



10,325 MW

Solar peak
September 12



4,555 MW

Wind peak
September 11

Energy Imbalance Market



Q2 2018 BENEFITS
\$71.21M

TOTAL SAVINGS
\$401.73M
since Nov 2014 start



Q2 2018 AVOIDED CURTAILMENTS
129,128 MWh

TOTAL ISO GHG SAVINGS
306,112 mTCO₂
from avoided curtailment since Nov 2014

Historical stats



Historical peak demand
50,270 MW - July 24, 2006 at 2:44 p.m.



Renewables served demand
73.9% - May 26, 2018 at 2:12 p.m.

PREVIOUS RECORDS

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

PREVIOUS RECORDS

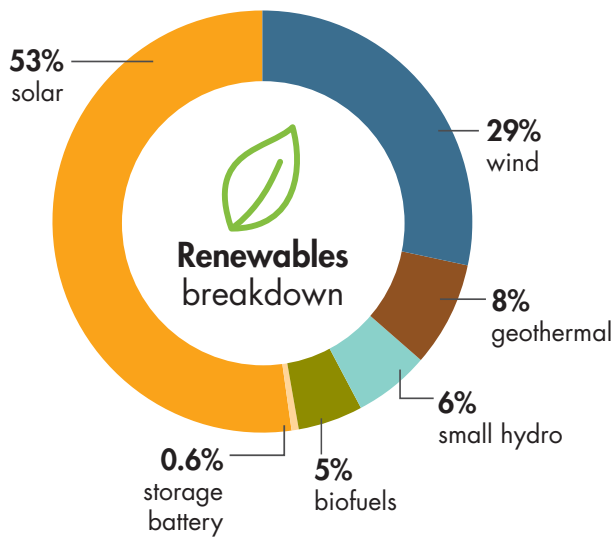
72.7% - April 28, 2018 at 1:25 p.m.
70.5% - February 18, 2017 at 2:09 p.m.

Demand & resources (as of 10/03/2018)







Resource adequacy net qualifying capacity (NQC) = **51,358 MW**

Does not include current outages

Installed renewable resources (as of 10/03/2018)



Megawatts

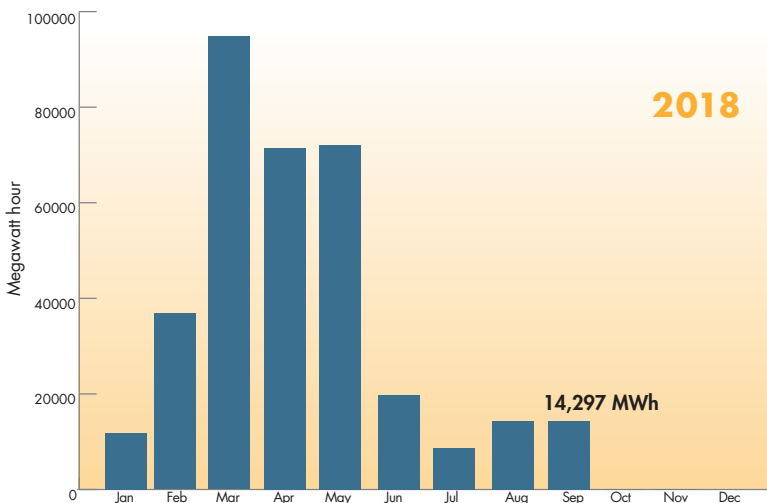
 Solar	11,863
 Wind	6,467
 Small hydro	1,238
 Geothermal	1,785
 Biofuels	1,002
 Storage battery	136*
TOTAL	22,491

[Click here](#) for Today's Outlook


NOTE — Reporting Net Dependable Capacity only (numbers are rounded). 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 20 MW of storage integrated with power plants

Key curtailment totals



Record peaks

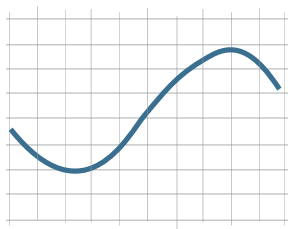
 **SOLAR**
10,739 MW - June 29, 2018, 12:33 p.m.

 **WIND**
5,193 MW - June 8, 2018, 9:04 p.m.

PREVIOUS SOLAR RECORD

10,735 MW - June 8, 2018 at 12:33 p.m.

Annual peak demand



2017	50,116 MW
2016	46,232 MW
2015	47,358 MW
2014	45,089 MW

SEPTEMBER 1, 2017, 3:58 P.M.










JULY 27, 2016, 4:51 P.M.

SEPTEMBER 10, 2015, 4:53 P.M.

SEPTEMBER 15, 2014, 4:53 P.M.

[Click here](#) to see historical peak demand

2017 Energy use as percentage of total resources available

 Natural gas = 28% Down 5% from previous year	 Total hydro = 15% Up 11% from previous year	 Wind increased 3% and accounted for 6%
 Net imports = 21% Down 3% from previous year	 Non-hydro renewables = 24% Up 22% from previous year	 Geothermal = 4% , about the same from previous year
 Nuclear = 10% Slightly less from previous year	 Solar increased 22% and accounted for 11%	 Biofuels = 2% , a slight increase from to previous year

Other mostly evergreen facts

- 30 million California consumers
- 1 MW serves about 750-1,000 homes
- 25,685 (or about 26,000) circuit miles of transmission
- 9,696 Pnodes (pricing nodes) (ISO & all EIM entities as of Apr. 4, 2018) ISO only Pnodes = 4,119
- Serve ~80% of California demand
- ISO serves ~33% of WECC demand
- 208 market participants
- 17 participating transmission owners
- Market transactions for 2017 = 31,208 (2016 = 29,651) daily average
- MWh of demand served for 2017 = 239M
- 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

*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.