

# **KEY STATISTICS**

## Peaks for August 2018



**13,902 MW** Renewables served peak August 6 10,565 MW Solar peak August 27



## **Energy Imbalance Market**



### **Historical stats**

Historical peak demand **50,270 MW** - July 24, 2006 at 2:44 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. Renewables served demand **73.9%** - May 26, 2018 at 2:12 p.m.

#### **PREVIOUS RECORDS**

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

California Independent System Operator

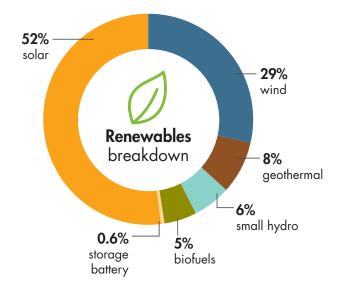


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## Demand & resources (as of 09/01/2018)

Resource adequacy net qualifying capacity (NQC) = **52,913** MW Does not include current outages

#### Installed renewable resources (as of 09/01/2018)



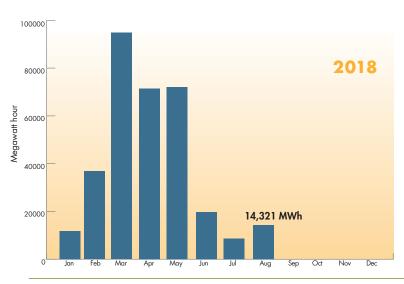
	0
🔆 Solar	11,597
⇒ Wind	6,467
ន Small hydro	1,238
👾 Geothermal	1,785
A Biofuels	1,001
Storage battery	136*
TOTAL	22,224

Megawatts

<u>Click here</u> 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 <u>OASIS</u> 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

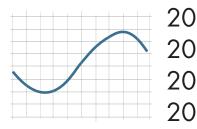
10,735 MW - June 8, 2018 at 12:33 p.m.

California Independent System Operator



# **KEY STATISTICS**

## Annual peak demand



17	50,116 MW
16	46,232 MW
15	47,358 MW
14	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.

<u>Click here</u> to see historical peak demand

### 2017 Energy use as percentage of total resources available

Natural gas = 28% Total hydro = 15%Wind increased 3% and accounted for 6% Up 11% from previous year Down 5% from previous year Net imports = 21% Down 3% from previous year Non-hydro renewables = 24% $O_{fr}$  Geothermal = 4%, about the Up 22% from previous year same from previous year △ Nuclear = 10% Slightly less from previous year Solar increased 22% and accounted for 11%  $\bigcirc$  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
- 205 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.

California Independent System Operator