Peaks for February 2019

30,073 MW  
Peak demand  
February 20

5,061 MW  
Renewables served peak  
February 18

10,073 MW  
Solar peak  
February 23

4,608 MW  
Wind peak  
February 16

Energy Imbalance Market

Q4 2018 BENEFITS  
$62.57M

Q4 2018 AVOIDED CURTAILMENTS  
23,425 MWh

TOTAL SAVINGS  
$564.88M  
since Nov 2014 start

TOTAL ISO GHG SAVINGS  
324,284 mT{CO}_2  
from avoided curtailment since Nov 2014

Historical stats

PEAK DEMAND RECORD  
50,270 MW - July 24, 2006 at 2:44 p.m.

OTHER PEAK DEMANDS  
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.
Demand & resources (as of 3/01/2019)

Resource adequacy net qualifying capacity (NQC) = 45,288 MW
Does not include current outages

Installed renewable resources (as of 3/04/2019)

- Solar: 53%
- Wind: 29%
- Small hydro: 8%
- Geothermal: 6%
- Small hydro: 4%
- Storage battery: 0.6%
- Biofuels: 4%
- Geothermal: 6%
- Storage battery: 136*

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

- 82,611 MWh

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 ISO

Annual peak demand

<table>
<thead>
<tr>
<th>Year</th>
<th>MW</th>
<th>Date and Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>2018</td>
<td>46,424</td>
<td>July 25, 5:27 p.m.</td>
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<tr>
<td>2017</td>
<td>50,116</td>
<td>September 1, 3:58 p.m.</td>
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<td>2016</td>
<td>46,232</td>
<td>July 27, 4:51 p.m.</td>
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<tr>
<td>2015</td>
<td>47,358</td>
<td>September 10, 4:53 p.m.</td>
</tr>
<tr>
<td>2014</td>
<td>45,089</td>
<td>September 15, 4:53 p.m.</td>
</tr>
</tbody>
</table>

Click here to see historical peak demand

2017 Energy use as percentage of total resources available

- Natural gas = 28%
  Down 5% from previous year
- Net imports = 21%
  Down 3% from previous year
- Nuclear = 10%
  Slightly less from previous year
- Total hydro = 15%
  Up 11% from previous year
- Wind increased 3% and accounted for 6%
- Non-hydro renewables = 24%
  Up 22% from previous year
- Geothermal = 4%, about the same from previous year
- Solar increased 22% and accounted for 11%
- Biofuels = 2%, a slight increase from 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
- 211 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.