Peaks for January 2020

Peak demand
- **29,421 MW**
  - January 16
  - Previous month: 31,230 MW

Solar peak
- **8,648 MW**
  - January 13
  - Previous month: 8,268 MW

Wind peak
- **3,886 MW**
  - January 8
  - Previous month: 4,173 MW

Peak demand served by renewables
- **5,215 MW**
  - January 8
  - Previous month: 4,908 MW

Peak net imports
- **11,513 MW**
  - January 31
  - Previous month: 11,138 MW

---

Historical statistics and records

Solar peak
- **11,473 MW**
  - July 2 at 12:53 p.m.
  - Previous record: 11,435 MW, July 1, 2019

Wind peak
- **5,309 MW**
  - May 8, 2019 at 3:21 a.m.
  - Previous record: 5,193 MW, June 8, 2018

Renewables serving demand
- **80.3%**
  - May 15, 2019 at 2:45 p.m.
  - Previous record: 78%, April 20, 2019

Peak net imports
- **11,894 MW**
  - Sep 21, 2019 at 6:53 p.m.

Peak demand
- **50,270 MW**
  - July 24, 2006 at 2:44 p.m.
  - Second highest: 50,116 MW, Sep 1, 2017

Steepest ramp over 3-hour period
- **15,639 MW**
  - Jan 1, 2019 at 2:25 p.m.

---

1 This indicates the highest amount of renewables serving peak electricity demand on any given day.
### Western EIM benefits: Q4 2019

<table>
<thead>
<tr>
<th>Benefits</th>
<th>ISO avoided curtailments</th>
<th>ISO GHG savings*</th>
</tr>
</thead>
<tbody>
<tr>
<td>$60.72 million</td>
<td>35,254 MWh</td>
<td>15,089 MTCO$_2$</td>
</tr>
<tr>
<td>Previous quarter: $64.81 million</td>
<td>33,843 MWh</td>
<td>Previous quarter: 14,485 MTCO$_2$</td>
</tr>
</tbody>
</table>

* The GHG emission reduction reported is associated with the avoided curtailment only.

### Gross benefits since 2014

<table>
<thead>
<tr>
<th>Benefits</th>
<th>ISO avoided curtailments</th>
<th>ISO GHG savings*</th>
</tr>
</thead>
<tbody>
<tr>
<td>$861.79 million</td>
<td>1,012,150 MWh</td>
<td>433,120 MTCO$_2$</td>
</tr>
</tbody>
</table>

* Resources (as of 2/01/2020)*

Resource adequacy net qualifying capacity (NQC) = 43,713 MW

Does not include current outages

### Wind and solar curtailment totals

For more on oversupply, visit [here](#).

![Bar chart showing Jan 2020 curtailment: 138,002 MWh](chart.png)
Installed renewable resources (as of 2/01/2020)

**Breakdown**

- 53.9% solar
- 29.4% wind
- 7.8% geothermal
- 5.3% small hydro
- 3.7% biofuels

**Megawatts**

<table>
<thead>
<tr>
<th>Resource</th>
<th>Megawatts</th>
</tr>
</thead>
<tbody>
<tr>
<td>Solar</td>
<td>12,697</td>
</tr>
<tr>
<td>Wind</td>
<td>6,927</td>
</tr>
<tr>
<td>Geothermal</td>
<td>1,838</td>
</tr>
<tr>
<td>Small hydro</td>
<td>1,244</td>
</tr>
<tr>
<td>Biofuels</td>
<td>862</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>23,568</strong></td>
</tr>
</tbody>
</table>

**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".

**Other facts**

- 32 million consumers
- Serve ~80% of California demand
- Serve ~33% of WECC demand within the ISO balancing authority
- Total estimated wholesale cost of serving demand in 2018 = $10.8 billion or about $50/MWh\(^2\)
- Total estimated wholesale cost of serving demand in 2017 = $9.4 billion or about $42/MWh\(^2\)
- 1 MW serves about 750-1,000 homes (1 MWh = 1 million watts used for one hour)
- 18 participating transmission owners
- 25,715 (or about 26,000) circuit miles of transmission
- 221 market participants
- 9,696 pricing nodes for ISO & all EIM entities as of Apr. 4, 2018. ISO has 4,119 pricing nodes
- Western EIM has nine active participants serving customers in eight states
- RC West is the reliability coordinator for 41 entities across 14 western states and northern Mexico

---

\(^2\) 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.