Peaks for December 2023

**Peak demand**
- **29,261 MW**
  - Dec. 13, 5:50 p.m.
  - Previous month: 28,808 MW

**Solar peak**
- **13,624 MW**
  - Dec. 13, 9:52 a.m.
  - Previous month: 14,527 MW

**Wind peak**
- **4,887 MW**
  - Dec. 6, 8:25 p.m.
  - Previous month: 5,380 MW

**Peak demand served by renewables**
- **14,352 MW**
  - Dec. 8, 8:45 a.m.
  - Previous month: 6,125 MW

**Peak net imports**
- **6,654 MW**
  - Dec. 12, 8:49 p.m.
  - Previous month: 7,587 MW

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**Annual peak demand**

Peak load history

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**Historical statistics and records (as of 01/11/2024)**

**Solar peak**
- **16,056 MW**
  - Sept. 26, 2023 at 11:32 a.m.
  - Previous record: 16,044 MW, Sept. 6, 2023

**Wind peak**
- **6,465 MW**
  - May 28, 2022 at 5:39 p.m.
  - Previous record: 6,265 MW, March 4, 2022

**Peak percentage of renewables compared to demand**
- **103.5%**
  - May 8, 2022 at 3:39 p.m.
  - Previous record: 99.87%, April 30, 2022

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

**Steepest 3-hour average ramp**
- **21,153 MWh**
  - Jan 7, 2024 starting at 2:30 p.m.
  - Second highest: 20,935 MWh, Sept. 24, 2023

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1. Based on 1-minute averages, and includes dynamic transfers. Values are subject to revision as data is refined.
2. Indicates the highest amount of renewables serving peak electricity demand on any given day.
Western Energy Imbalance Market (WEIM) benefits: Q3 2023  

**Benefits**  
$462.05 million  
Previous quarter:  
$379.91 million

**ISO avoided curtailments**  
60,133 MWh  
Previous quarter:  
148,938 MWh

**ISO GHG savings**  
25,728 MTCO₂  
Previous quarter:  
63,745 MTCO₂

**WEIM benefits since 2014**  

**Benefits**  
$4.66 billion

**ISO avoided curtailments**  
2,112,850 MWh

**ISO GHG savings**  
904,219 MTCO₂

<table>
<thead>
<tr>
<th>Active participants</th>
<th>Future participants</th>
<th>Number of states</th>
</tr>
</thead>
<tbody>
<tr>
<td>22</td>
<td>1</td>
<td>11</td>
</tr>
</tbody>
</table>

**Resources**

- **Resource adequacy net qualifying capacity (NQC) = 48,481 MW**  
  As of 01/01/24. Does not include current outages.

- **Installed battery capacity = 7,188 MW**  
  As of 01/01/24; subject to change.

**Wind and solar curtailment totals**

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

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

4 Includes storage resources that have achieved commercial operation date, and does not include pumped storage.
**Installed renewable resources (as of 01/01/2024)**

- **61.2%** solar
- **27%** wind
- **5.3%** geothermal
- **3.9%** small hydro
- **2.6%** biofuels

<table>
<thead>
<tr>
<th>Renewable Resource</th>
<th>Megawatts</th>
</tr>
</thead>
<tbody>
<tr>
<td>Solar</td>
<td>18,463</td>
</tr>
<tr>
<td>Wind</td>
<td>8,128</td>
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<tr>
<td>Geothermal</td>
<td>1,609</td>
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<tr>
<td>Small hydro</td>
<td>1,180</td>
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<tr>
<td>Biofuels</td>
<td>778</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>30,158</strong></td>
</tr>
</tbody>
</table>

**NOTE** — The ISO is using updated methodology to generate data. Only fully commercial units are now counted; units that are in test mode or partially online are excluded. For that data, view the Master Control Area Generating Capability List in the Master Generating File 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
- 1 MW serves about 750-1,000 homes (1 MWh = 1 million watts used for one hour)
- 239.1 million megawatt-hours of load served (2022)
- 243.1 million megawatts of total electricity delivered (2022)
- 36,689 average market transactions per day (2022)
- 21 participating transmission owners
- ~26,000 circuit miles of transmission
- 306 market participants
- RC West is the reliability coordinator for 42 entities across 10 western states and northern Mexico

[See previous Key Statistics](#)

[Watch for the 2023 Annual Statistics coming soon.](#)