Peaks for January 2023

- **Peak demand**: 29,254 MW
  - Jan. 11, 5:51 p.m.
  - Previous month: 30,283 MW

- **Solar peak**: 11,662 MW
  - Jan. 27, 10:14 a.m.
  - Previous month: 10,469 MW

- **Wind peak**: 5,508 MW
  - Jan. 10, 10:10 a.m.
  - Previous month: 5,344 MW

- **Peak demand served by renewables**: 6,454 MW
  - Jan. 1, 7:12 p.m.
  - Previous month: 6,454 MW

- **Peak net imports**: 8,801 MW
  - Jan. 13, 6:48 p.m.
  - Previous month: 9,207 MW

Historical statistics and records (as of 1/31/2023)

- **Solar peak**: 14,352 MW
  - June 7, 2022 at 12:16 p.m.
  - Previous record: 14,136 MW, May 16, 2022

- **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 ramp over 3-hour period**: 19,699* MW
  - Jan. 23, 2023 starting at 2:45 p.m.
  - Second highest: 19,237* MW, Nov. 13, 2022

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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: Q4 2022

**Benefits**
- **$485.3 million**
  - Previous quarter: $526.5 million

**ISO avoided curtailments**
- **25,609 MWh**
  - Previous quarter: 42,468 MWh

**ISO GHG savings\(^3\)**
- **10,960 MTCO\(_2\)**
  - Previous quarter: 18,176 MTCO\(_2\)**

### WEIM benefits since 2014

**Benefits**
- **$3.4 billion**

**ISO avoided curtailments**
- **1,850,797 MWh**

**ISO GHG savings\(^3\)**
- **792,061 MTCO\(_2\)**

**Active participants**
- 19

**Future participants**
- 3

**Number of states**
- 10

### Resources

- Resource adequacy net qualifying capacity (NQC) = **44,431 MW**
  - As of 1/31/23. Does not include current outages.

- Installed battery capacity\(^4\) = **4,515 MW**
  - As of 1/31/23; subject to change.

### Wind and solar curtailment totals

- **Jan. 2023 curtailment:** 53,198 MWh

\(^3\) 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.

For more on oversupply, visit [here](#).
Installed renewable resources (as of 1/31/2023)

**Breakdown**

- **59.7%** solar
- **28.9%** wind
- **5.8%** geothermal
- **4.3%** small hydro
- **3%** biofuels

<table>
<thead>
<tr>
<th>Source</th>
<th>Megawatts</th>
</tr>
</thead>
<tbody>
<tr>
<td>Solar</td>
<td>16,417</td>
</tr>
<tr>
<td>Wind</td>
<td>7,950</td>
</tr>
<tr>
<td>Geothermal</td>
<td>1,599</td>
</tr>
<tr>
<td>Small hydro</td>
<td>1,196</td>
</tr>
<tr>
<td>Biofuels</td>
<td>801</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>27,510</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.”

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**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)
- 224.8 million megawatt-hours of load served (2020)
- 70,037 average market transactions per day (2021)
- 20 participating transmission owners
- ~26,000 circuit miles of transmission
- 272 market participants
- RC West is the reliability coordinator for 42 entities across 10 western states and northern Mexico

See 2022 Annual Statistics

See previous Key Statistics