**Peaks for December 2022**

- **Peak demand**
  - 30,283 MW (Dec. 12, 5:51 p.m.)
  - Previous month: 28,556 MW

- **Solar peak**
  - 10,469 MW (Dec. 9, 9:52 a.m.)
  - Previous month: 11,890 MW

- **Wind peak**
  - 5,344 MW (Dec. 5, 12:50 p.m.)
  - Previous month: 6,180 MW

- **Peak demand served by renewables**
  - 10,008 MW (Dec. 2, 8:41 a.m.)
  - Previous month: 6,859 MW

- **Peak net imports**
  - 9,207 MW (Dec. 27, 1:05 a.m.)
  - Previous month: 8,419 MW

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**Annual peak demand**

Peak load history

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**Historical statistics and records (as of 12/31/2022)**

- **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.)

- **Peak demand**
  - 52,061 MW (Sept. 6, 4:57 p.m.)
  - Second highest: 50,270 MW, July 24, 2006

- **Steepest ramp over 3-hour period**
  - 17,660 MW (March 11, 2022 starting at 2:59 p.m.)
  - Second highest: 17,298 MW, April 24, 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: Q3 2022 [Read report]

Benefits
$526.5 million

Previous quarter:
$287.44 million

ISO avoided curtailments
42,468 MWh

Previous quarter:
118,352 MWh

ISO GHG savings\(^3\)
18,176 MTCO\(_2\)

Previous quarter:
50,655 MTCO\(_2\)

WEIM benefits since 2014 [Visit WEIM website]

Benefits
$2.91 billion

ISO avoided curtailments
1,825,188 MWh

ISO GHG savings\(^3\)
781,101 MTCO\(_2\)

Active participants
19

Future participants
3

Number of states
10

Resources

Resource adequacy net qualifying capacity (NQC) = 44,892 MW

As of 12/31/22. Does not include current outages.

Installed battery capacity\(^4\)
4,614 MW

As of 12/31/22; subject to change.

Wind and solar curtailment totals

For more on oversupply, visit here.

Wind and solar curtailment totals

Dec. 2022 curtailment: 16,588 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.
Installed renewable resources (as of 12/31/2022)

**Breakdown**
- 58% solar
- 28.9% wind
- 5.8% geothermal
- 4.4% small hydro
- 2.9% biofuels

**Megawatts**

<table>
<thead>
<tr>
<th>Resource</th>
<th>Megawatts</th>
</tr>
</thead>
<tbody>
<tr>
<td>Solar</td>
<td>15,967</td>
</tr>
<tr>
<td>Wind</td>
<td>7,950</td>
</tr>
<tr>
<td>Geothermal</td>
<td>1,597</td>
</tr>
<tr>
<td>Small hydro</td>
<td>1,198</td>
</tr>
<tr>
<td>Biofuels</td>
<td>798</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
- 268 market participants
- RC West is the reliability coordinator for 42 entities across 10 western states and northern Mexico

*See previous Key Statistics*