2021 Summer Readiness Update

Stakeholder Call
September 24, 2021
## Agenda

<table>
<thead>
<tr>
<th>Topic</th>
<th>Presenter</th>
</tr>
</thead>
<tbody>
<tr>
<td>Welcome and introductions</td>
<td>Kristina Osborne</td>
</tr>
<tr>
<td>Summer readiness effort</td>
<td>Mark Rothleder</td>
</tr>
<tr>
<td>Reliability must-run designation process clarifications</td>
<td>Neil Millar</td>
</tr>
<tr>
<td>Summer operations update</td>
<td>John Phipps</td>
</tr>
<tr>
<td>Summer enhancements performance update</td>
<td>Guillermo Bautista Alderete</td>
</tr>
<tr>
<td>Q&amp;A</td>
<td></td>
</tr>
</tbody>
</table>
Summer Readiness Effort

Mark Rothleder
Senior VP and Chief Operating Officer
Reliability Must-Run Designation Process Clarifications

Neil Millar
VP, Infrastructure and Operations Planning
Summer Operations Update

John Phipps
Executive Director, Grid Operations
### CAISO Alerts, Warning, and Emergencies and ELRP, RDRR, SPAP, CSEP, and Ports

<table>
<thead>
<tr>
<th>Day-ahead</th>
<th>Real-time</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Alert</strong></td>
<td><strong>Warning</strong></td>
</tr>
<tr>
<td>All available resources are online, and resource deficiencies are expected. Market participants encouraged to offer supplemental energy. Issued by 3 p.m. the day before projected shortfall. RC West issues EEA watch.</td>
<td>Market participants encouraged to offer supplemental energy and RC West issues EEA-1. CAISO may call for demand response, and when demand response is dispatched, RC West issues EEA-2.</td>
</tr>
</tbody>
</table>

**SPAP and emergency MW**
- mobilization

**ELRP**
- can be triggered; deployment by IOUs

**CSEP**
- mobilization

**Ports**
- alerts from CalOES for awareness

**SPAP and emergency MW**
- can be triggered in an EEA2-

**ELRP**
- can be triggered; deployment by IOUs

**RDRR**
- can be deployed by CAISO

**CSEP**
- can be triggered; deployment by IOUs/POUs

**Ports**
- can be triggered by CalOES

---

For all utility-triggered programs, CAISO expects the IOUs to provide an estimate of MWs available via daily spreadsheets sent to CAISO Operations per current practice.

* DOE 202(c) required to trigger SPAP and additional emergency MW from existing resources

** ** CAISO Emergency Response Coordinator communicates forecasted and actual Stage 1 to CalOES

---

California State Emergency Program (CSEP)
Emergency Load Reduction Program (ELRP)
State Power Augmentation Project (SPAP)
Reliability Demand Response Resource (RDRR)
Summer Operations Update

• Flex Alerts and Alert Warning Emergency Notifications, to date for 2021:
  • 18 - Restricted Maintenance Operation days declared
  • 8 - Flex Alerts
  • 4 - AWE Warnings
  • 1 - Stage 2 Emergency

• 2020 peak load of 47,121 MW on August 18, @15:57
• 2021 peak load of 43,982 MW on September 8, @ 17:50
• All-time peak load of 50,270 MW set on July 24, 2006 @ 14:44

• Headed into PSPS & fire season
Summer Enhancements Performance Update

Guillermo Bautista Alderete
Director, Market Analysis and Forecasting
The majority of Summer enhancements have been implemented by July

<table>
<thead>
<tr>
<th>Summer enhancement</th>
<th>Date Implemented</th>
<th>Trigger</th>
<th>Dates</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. EIM resource capacity sufficiency test</td>
<td>15-Jun</td>
<td>Permanent feature</td>
<td>All the time</td>
</tr>
<tr>
<td>2. Import market incentives during tight system conditions</td>
<td>15-Jun</td>
<td>Warning or Emergency</td>
<td>July 9 and 10, 5-9pm</td>
</tr>
<tr>
<td>3. Intertie schedules information on OASIS</td>
<td>26-Jul</td>
<td>Permanent feature</td>
<td>All the time</td>
</tr>
<tr>
<td>4. Enhanced real-time pricing signals during tight supply conditions</td>
<td>15-Jun</td>
<td>Warning or Emergency</td>
<td>July 9, 5-9pm</td>
</tr>
<tr>
<td>5. Management of storage resources during tight system conditions</td>
<td>30-Jun</td>
<td>RUC undersupply</td>
<td>July 9, 28 and 29</td>
</tr>
<tr>
<td>6. Reliability demand response dispatch and real-time price impacts</td>
<td>4-Aug</td>
<td>Activation of RDRR</td>
<td>Not active in July</td>
</tr>
<tr>
<td>Load, export and wheeling priorities*</td>
<td>4-Aug</td>
<td>Permanent feature</td>
<td>Not active in July</td>
</tr>
<tr>
<td>Interconnection process enhancements</td>
<td>25-May</td>
<td>Permanent feature</td>
<td>Not used yet</td>
</tr>
<tr>
<td>CAISO’s public communication protocols</td>
<td>29-May</td>
<td>System Event driven</td>
<td>July 9, 10, 12 and 28</td>
</tr>
<tr>
<td>Today’s Outlook displays</td>
<td>Aug 18</td>
<td>Permanent feature</td>
<td>Not active in July</td>
</tr>
</tbody>
</table>

* The wheeling through priorities the CAISO placed into effect are interim only and will sunset after May 31, 2022.
Questions?
The ISO is hosting the Extended Day-Ahead Market Forum where utility executives, policy makers & stakeholders from CA & across the West will discuss the challenges & opportunities in taking the next step in optimizing the functionality of the Western EIM and expanding on economic efficiencies for the west.

- Please join us for the Extended Day-Ahead Market Forum by registering here on the ISO website.

- Register by October 12, 2021.

- Questions? Send to ISOStakeholderAffairs@caiso.com
• *Energy Matters* blog provides timely insights into ISO grid and market operations as well as other industry-related news

http://www.caiso.com/about/Pages/Blog/default.aspx.

September 14, 2021

*Operations, Summer conditions*

**Storage: An intersection between reliability today and climate goals of tomorrow**

Summer months are particularly challenging for electrical grid operators in the West. Climate change ...

READ MORE

• Subscribe to [Energy Matters blog monthly summary](http://www.caiso.com/about/Pages/Blog/default.aspx)
Additional Resources

• 2021 Summer Readiness webpage
  http://www.caiso.com/about/Pages/News/SummerReadiness.aspx

• Sign up to receive Flex Alerts at www.flexalert.org

• News webpage
  http://www.caiso.com/about/Pages/News/default.aspx

• Submit questions through CIDI or Contact Us linked on ISO’s homepage; members of media should contact isomedia@caiso.com.