



California ISO

2021 Summer Readiness Update

Stakeholder Call

May 26, 2021

Reminders

- Call is being recorded for informational and convenience purposes only. Any related transcriptions should not be reprinted without ISO's permission.
 - video file will be posted on the summer readiness webpage (within 3 – 5 business days)
- We'll take questions after the presentation.
 - Press #2 on your telephone keypad. Please state your name and affiliation first.
 - Or send question via chat to Kristina Osborne
- Calls are structured to stimulate an honest dialogue and engage different perspectives.
- Please keep comments friendly and respectful.

Agenda

Topic	Presenter
Welcome and introductions	Kristina Osborne
Communication protocols	Oscar Hidalgo
Policy update	Anna McKenna, Greg Cook
Weather outlook	Jessica Taheri
Summer assessment update	Neil Millar
Operations update	John Phipps
Q&A	

Communication Protocols

Oscar Hidalgo

Director, Communications and Public Relations

ISO's Communications for Summer Readiness

News Releases

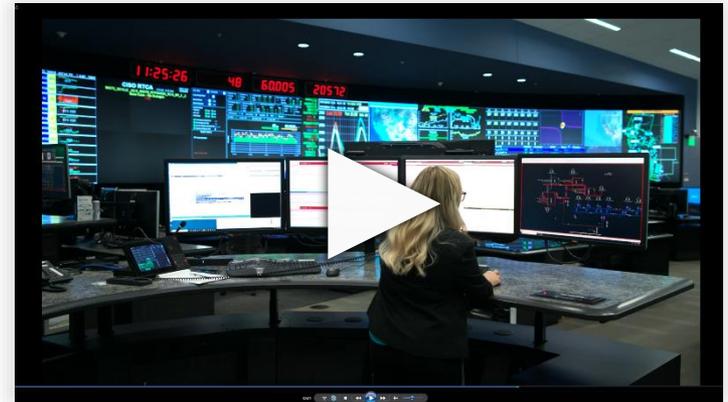
- Highlight summer readiness

Media Availability

- Energy principals/ISO CEO

Media Resources

- New B-roll
- Video interviews



ISO's Communications for Summer Readiness

Heat Wave Bulletin

- Publishes 3-7 days in advance of forecasted heat wave

Online Blog

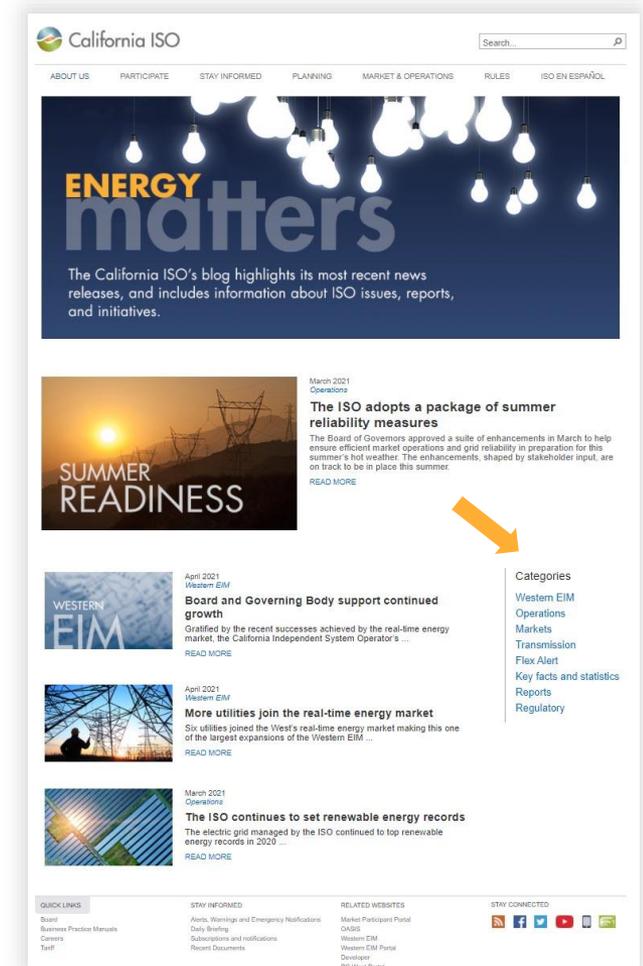
- Written content for external audiences, launching June

System Conditions Bulletin

- Provides real-time updates in one document to keep the public informed of changes in grid conditions

Educational Fact Sheets

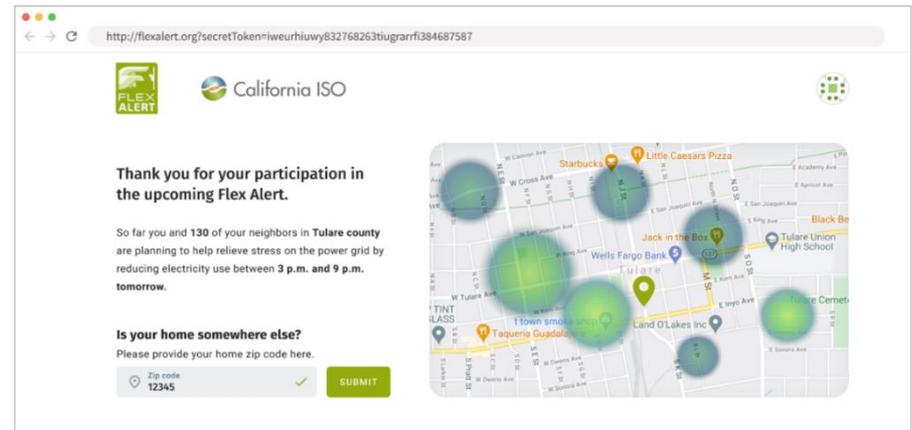
- Series of informative fact sheets
- Update Emergency Fact sheet with Energy Emergency Alert (EEA) levels



ISO's Communications for Summer Readiness

Flex Alert

- \$12 million annual advertising campaign
- “I plan to participate” link in all Flex Alert messaging so consumers can share their intent to conserve electricity during a alert and see how others in their area are responding (will require entering zip code)
- Messaging on what to do before and during a Flex Alert
- New 4 p.m. to 9 p.m. conservation times
- Flex Alert signal available to manufacturers of home automation systems/devices



ISO's Communications for Summer Readiness

Additions to Today's Outlook and ISO Today mobile app

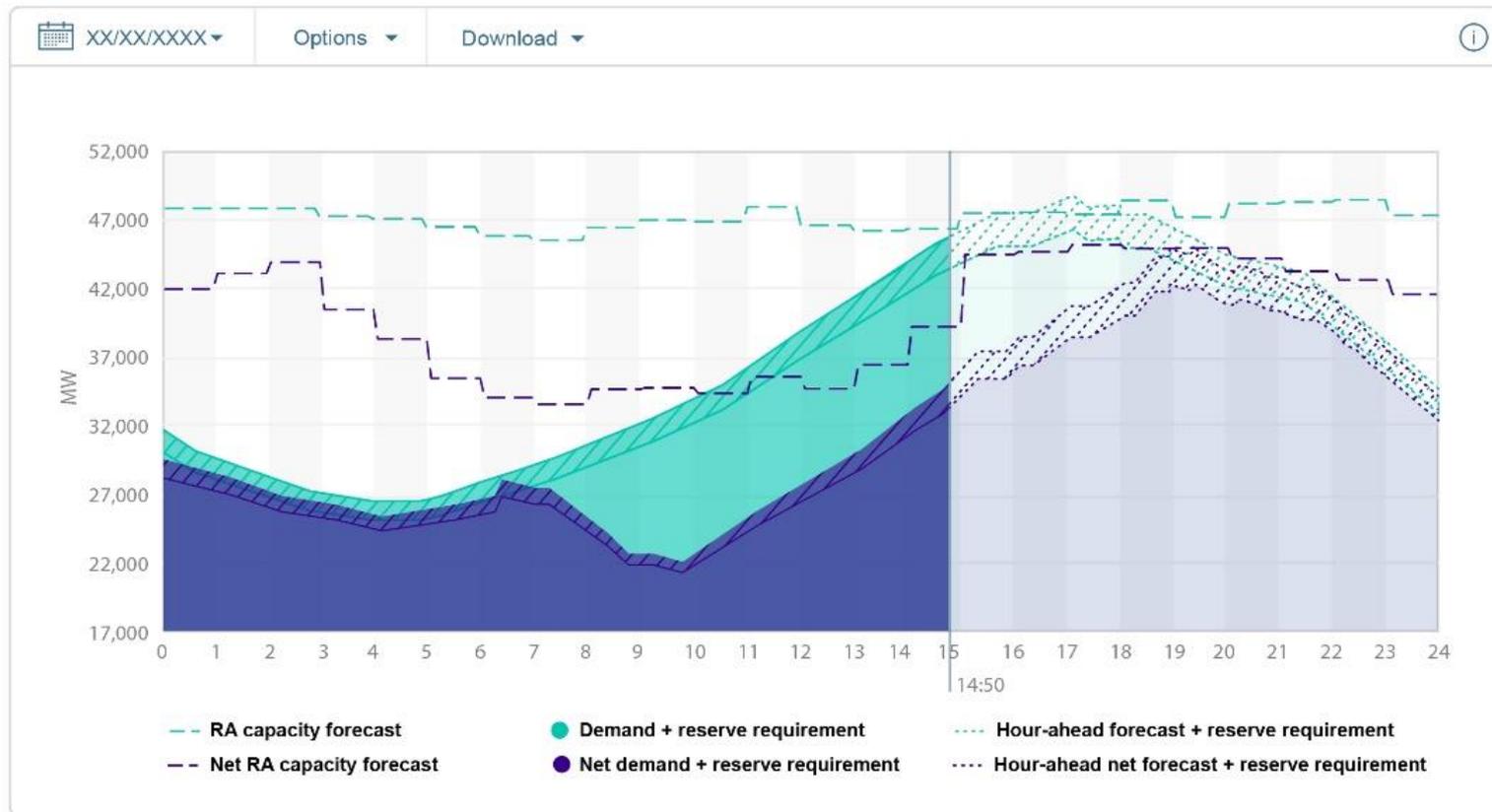
- Two new charts
 - Resource Adequacy Capacity Trend
 - Resource Adequacy Capacity 7 Day-Forecast trend
- New charts display:
 - Demand and net demand with hourly Resource Adequacy capacity forecast
 - Hourly RA capacity and hourly net RA capacity forecast
 - Reserve requirement

ISO's Communications for Summer Readiness

Resource adequacy capacity trend

DRAFT

Energy needed over resource adequacy capacity must be procured in the real-time market to meet the demand and reserve requirements.

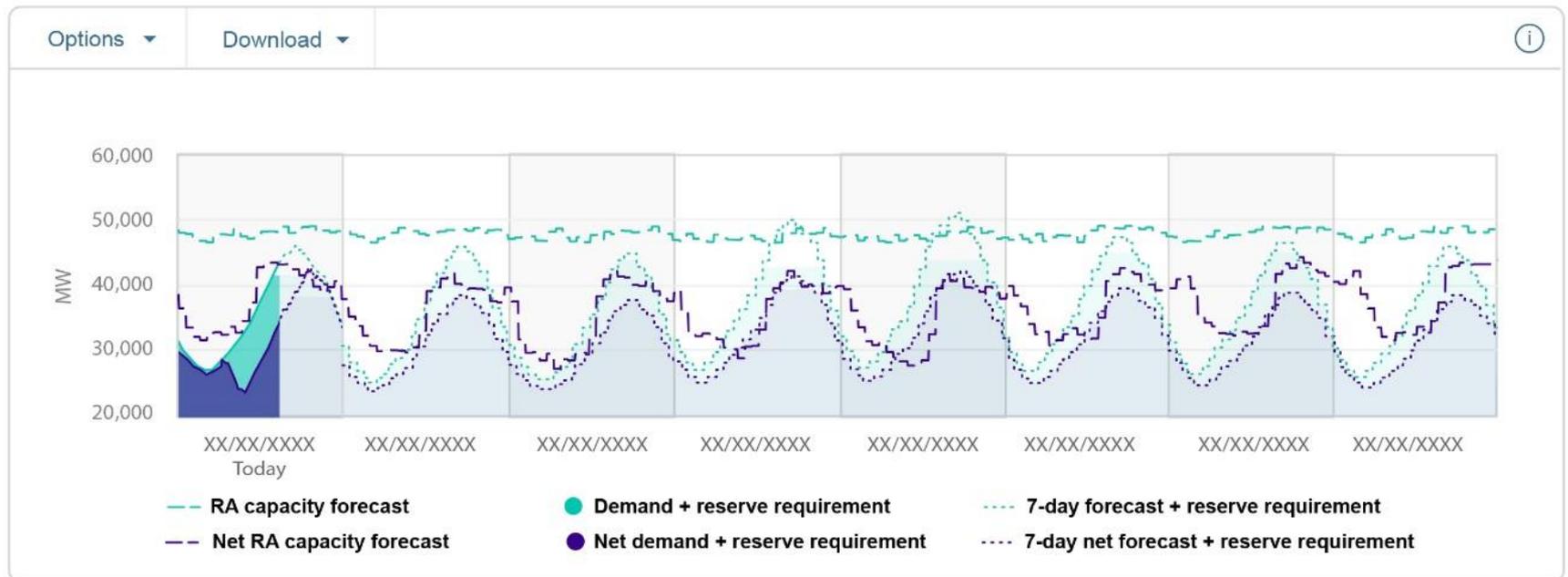


ISO's Communications for Summer Readiness

Resource adequacy capacity 7-day forecast trend

DRAFT

Resource adequacy capacity forecast for the next 7 days, in megawatts, compared to demand forecast plus reserve requirements.



Policy Update

Anna McKenna

Vice President, Market Policy and Performance

Greg Cook

Executive Director, Market and Infrastructure Policy

Summer readiness policy enhancements filed with FERC in March and April

- Summer readiness enhancements filed with FERC on March 26
 - FERC Order requested by May 25
- Resource Adequacy Enhancements Phase 1 filed with FERC on March 29
 - FERC Order requested by May 28
- Load, exports, and wheeling enhancements proposal filed with FERC on April 28
 - FERC Order requested by June 27

Summer readiness policy enhancements on track for implementation in June/July (pending FERC approval)

- Resource adequacy enhancements phase 1
 - Planned outage substitution enhancements: June 3
 - Minimum state of charge requirement for storage resources: June 30
- Summer readiness market enhancements: June 15
 - EIM coordination and resource sufficiency test review
 - Import market incentives during tight system conditions
 - Real-time scarcity price enhancements
 - OASIS report showing gross exports and imports by intertie
 - Including reliability demand response resources in real-time pre-dispatch
- Load, export, and wheeling scheduling priorities: July 15

2021 Summer Meteorological Outlook

Jessica Taheri
Energy Meteorologist
Short-Term Forecasting

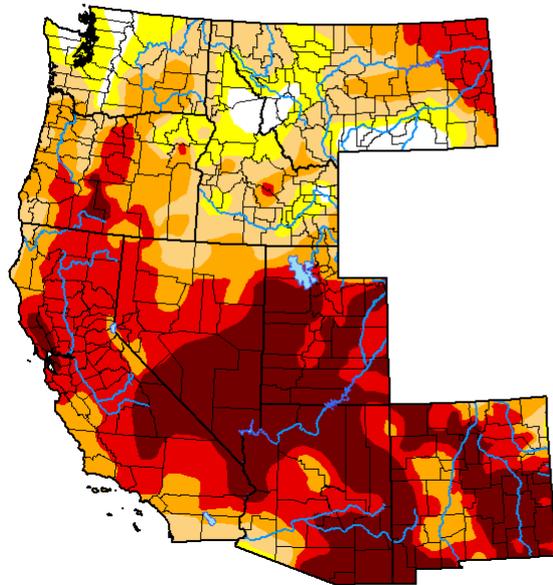


Lake Folsom on April 9, 2021

Hydro Conditions

Drought present across nearly all of the western US leading to low reservoirs

U.S. Drought Monitor West



May 18, 2021
(Released Thursday, May, 20, 2021)
Valid 8 a.m. EDT

Intensity:

- None
- D0 Abnormally Dry
- D1 Moderate Drought
- D2 Severe Drought
- D3 Extreme Drought
- D4 Exceptional Drought

The Drought Monitor focuses on broad-scale conditions. Local conditions may vary. For more information on the Drought Monitor, go to <https://droughtmonitor.unl.edu/About.aspx>

Author:

Adam Hartman
NOAA/NWS/NCEP/CPC



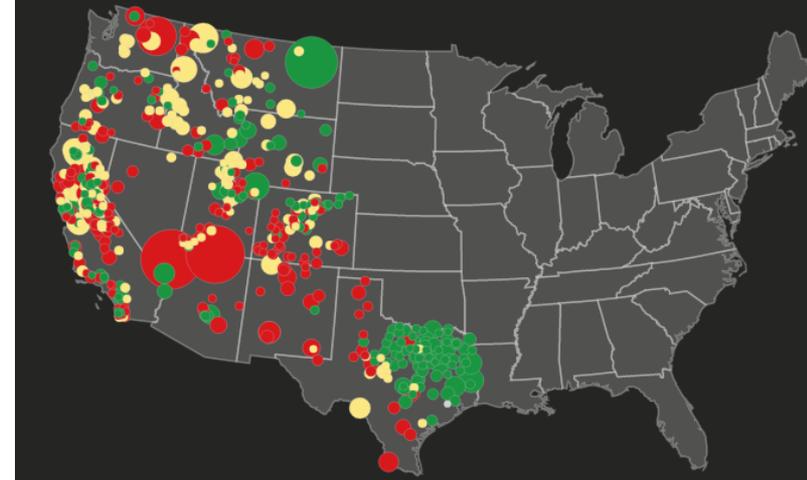
droughtmonitor.unl.edu

Reservoirs

Percent Full for Month Ending (April 2021), or Most Recently Available Month

- 75%+
- 50%+
- Less than 50%

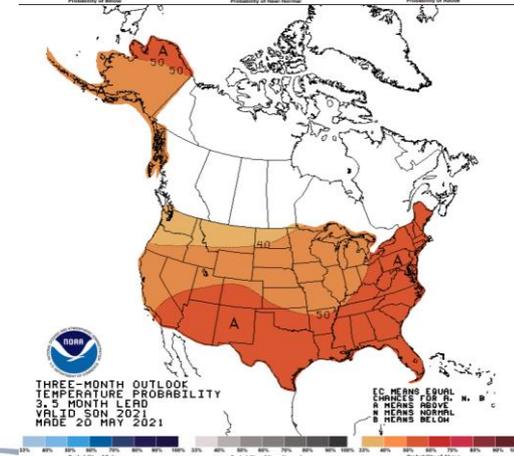
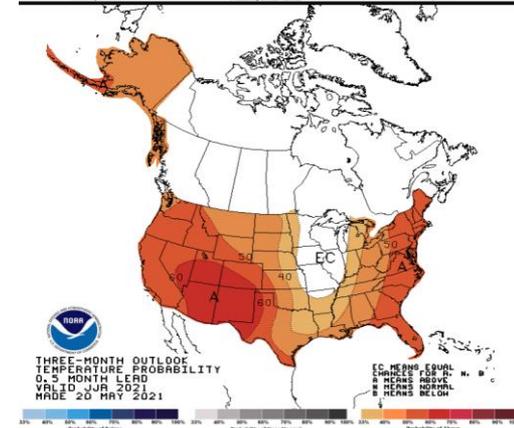
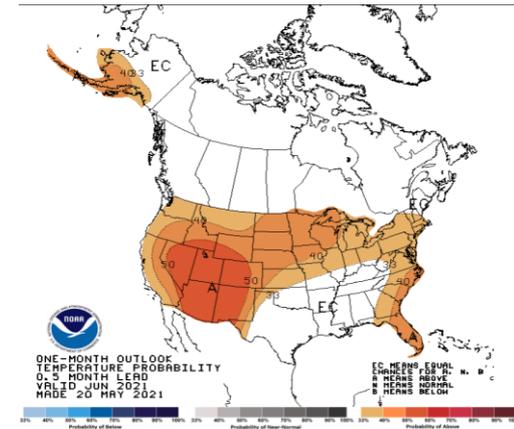
Reservoir Capacity (acre feet)



Near-record low levels of soil moisture affecting ability for snow pack to feed reservoirs

Western Weather Outlook

- **June 2021:** Overall western US temperature above normal
 - The probability that average temperature will be warmer than normal is 20% for the coast and 50% the Interior
- **June-August 2021:** Overall western US temperature above normal
 - The probability that average temperature will be warmer than normal is 40% for the coast & Pacific Northwest and 70% the Interior
- **September-October 2021:** Less risk to be as far above normal
 - Increased risk for offshore flow events leading to hot temperatures and fire risk for SoCal



2021 Summer Assessment – Verbal Update

Neil Millar

Vice President, Infrastructure and Operations Planning



2021 SUMMER ASSESSMENT UPDATE

Operations Readiness Update

John Phipps, Executive Director, Grid Operations

Summer 2021 operations readiness

Operational Items

- Update to Contingency Reserve management
- Storage management tools
- Load & export management based on approved policy
- Validate generation readiness and capacity
- Review UDC/MSS emergency plans

Outage Management

- Planned Outage Substitution Obligation (POSO) – provide replacement RA

Communications

- Clarify CAISO AWE messages and add equivalent NERC EEA level
- Implement earlier communications and collaboration with neighboring BAs, California water agencies, load serving entities, etc.
- CPUC ELRP triggered by CAISO Alert
- Established ELRP Operations Board

Operations Workshop April 21

- Summer 2021 Outlook
- Summer 2021 Readiness walkthrough
- Update procedures and communications based on feedback

Comparison of CAISO AWE levels & NERC EEA levels

AWE Levels	NERC EEA Levels	Comments
Restricted Maintenance Operations		Issued in real time or in advance
Transmission Emergency		Issued in real time
Notifications of forecasted reserve deficiencies		
Alert	EEA-1	Issued in advance – day ahead by 1500
Warning	EEA-1	Issued in real time
Warning – triggering DR programs	EEA-2	Issued in real time
Stage 1	EEA-2	Issued in real time
Stage 2	EEA-3	Issued in real time
Stage 3	EEA-3	Issued in real time

- No change to Flex Alert, RMO, or Transmission Emergency

Q/A

- **Verbal questions/comments:** Press #2 to raise your hand. Please state your name and affiliation first.
- **Chat question/comments:** Send chat to Kristina Osborne and include the name of your organization in the chat message. Note: Chat questions will be shared with all participants.

Resources

- 2021 Summer Readiness webpage:
<http://www.caiso.com/about/Pages/News/SummerReadiness.aspx>
- Sign up to receive Flex Alerts at www.flexalert.org
- Summer 2021 Reliability Monthly Reports:
<http://www.caiso.com/Pages/documentsbygroup.aspx?GroupID=F16A2A95-7775-47D5-B2A0-3CC6CE54BAF0>
- Submit questions through CIDI or [Contact Us](#) linked on ISO's homepage; members of media should contact isomedia@caiso.com.