



California ISO

Summer Readiness

June 2023 Performance


California ISO

August 3, 2023

Housekeeping reminders

- This call is being recorded for informational and convenience purposes only. Any related transcriptions should not be reprinted without ISO's permission.
- These collaborative working groups are intended to stimulate open dialogue and engage different perspectives.
- Please keep comments professional and respectful.
- Note: The ISO encourages any verbal or written agreements to comments made during this working group session.

Instructions for raising your hand to ask a question

- If you are connected to audio through your computer or used the “call me” option, select the raise hand icon  located on the top right above the chat window.

Note: #2 only works if you dialed into the meeting.

- Please remember to state your name and affiliation before making your comment.
- Do not mute yourself until you have completed your question or comment. WebEx platform will **LOCK** and mute you if you mute yourself once you have finished your question.
- You may also send your question via chat to either **Brenda Corona** or to all panelists.

Summary of summer enhancements in place for summer 2023

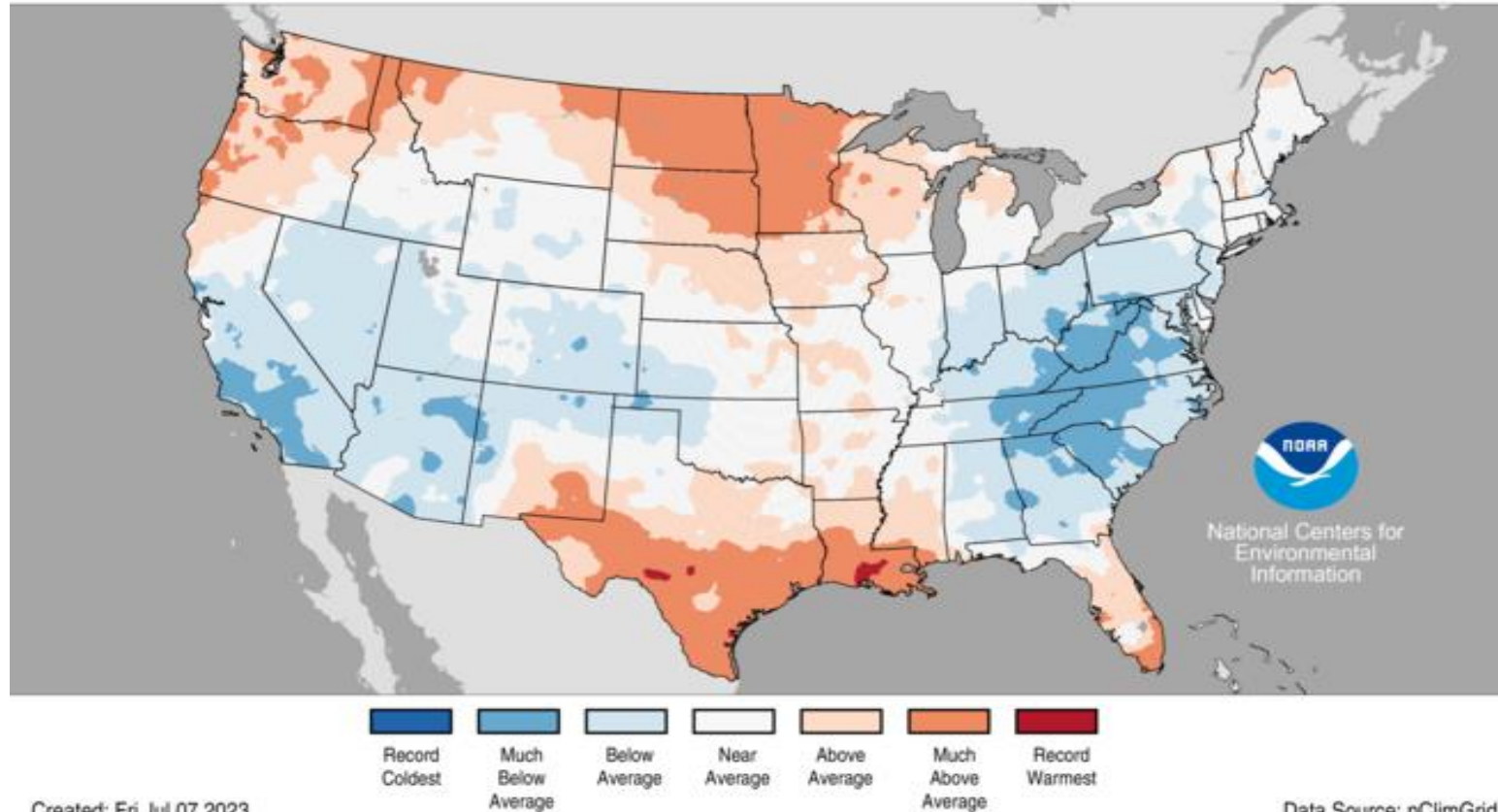
- Summer readiness enhancements implemented in 2021 and 2022 remain in place, including:
 - Load, export and wheeling priorities
 - Real-time scarcity pricing enhancements
 - Management of storage resources under tight supply conditions
 - Improved protocols for communications and coordination
- CAISO has also implemented further enhancements for summer 2023
 - Changes to the resource sufficiency evaluation to consider low priority exports
 - Energy storage enhancements

June's conditions were mild and did not require use of further actions to handle stressed supply

- There were no energy emergencies
- There were no undersupply conditions in the day-ahead market
- Scarcity pricing was not triggered
- The minimum state of charge constraint was not enforced
- Reliability demand response was not triggered
- There were no exports or wheel-through transactions reduced in the day-ahead or real-time market due to tight supply conditions

Much below average and below average mean temperatures were observed across most of California and the Southwest in June 2023

Mean Temperature Percentiles
June 2023
Ranking Period: 1895–2023



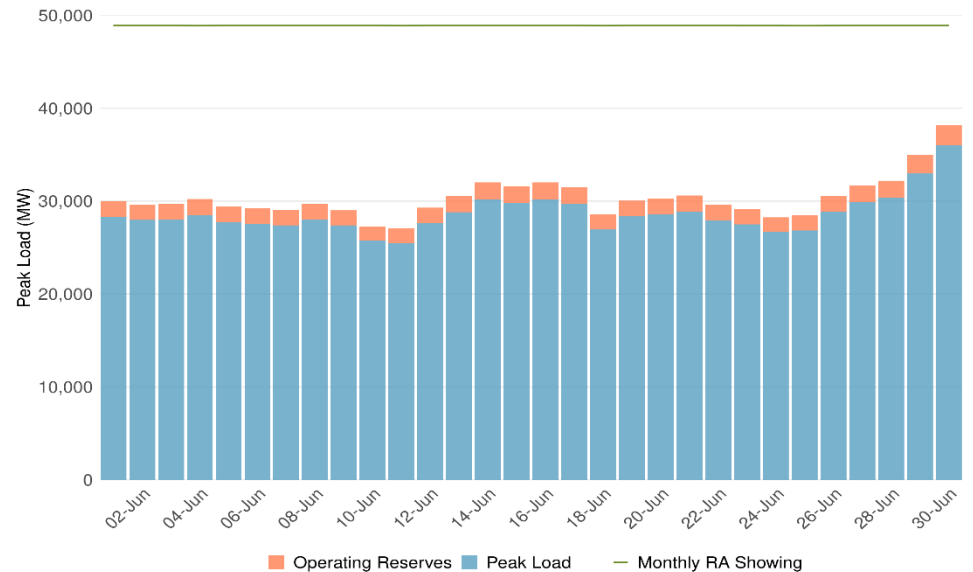
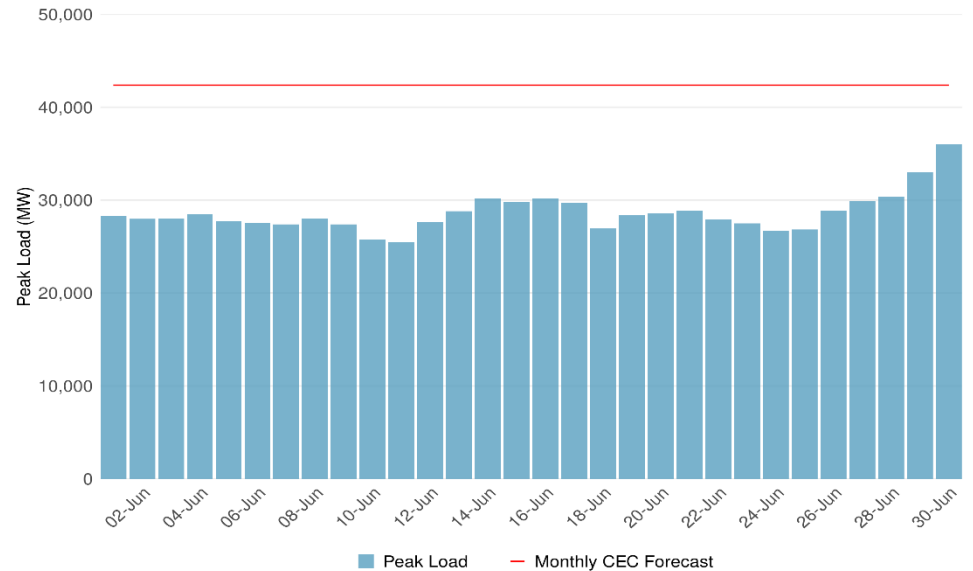
Created: Fri Jul 07 2023

Data Source: nClimGrid

CAISO's loads in June were relative mild

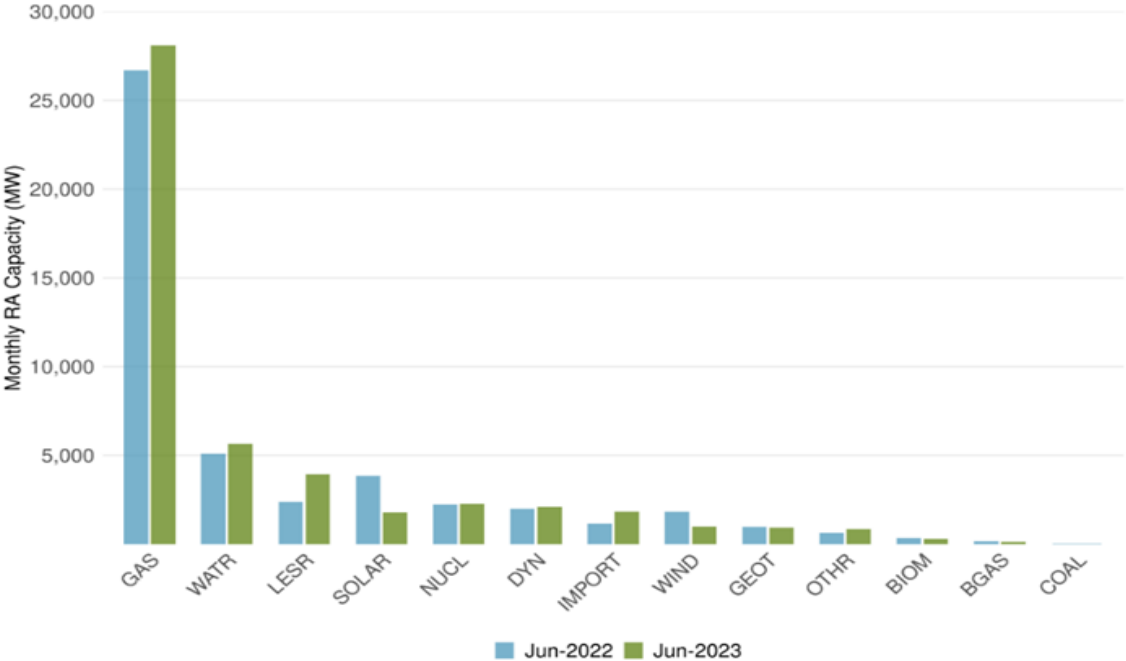
The CAISO's load peak for the month happened on June 30 at about 36,029 MW, below the CEC forecast of 42,372 MW

CAISO's load did not exceed the monthly CEC forecast, and monthly RA showings were above CAISO's load plus operating reserves



Monthly RA showings for June 2023 RA is comparable to June's 2022 values

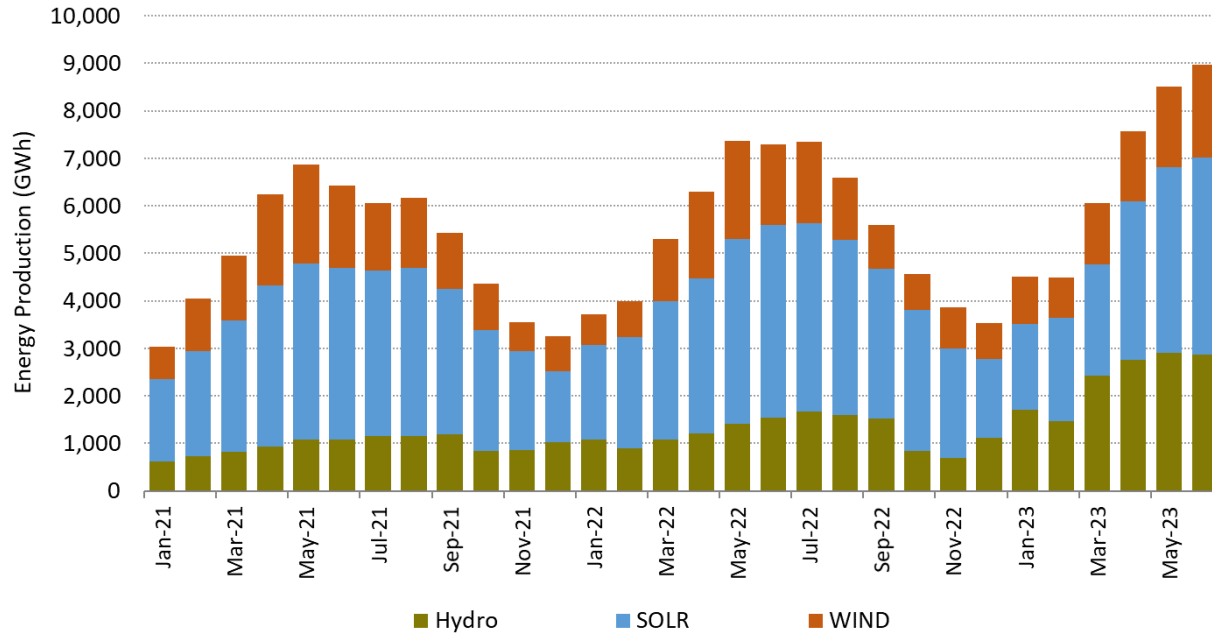
Gas: +1415 MW
Hydro: +564 MW
Storage: +1555 MW
Imports: +1144 MW



RA June 2022: 47,266 MW

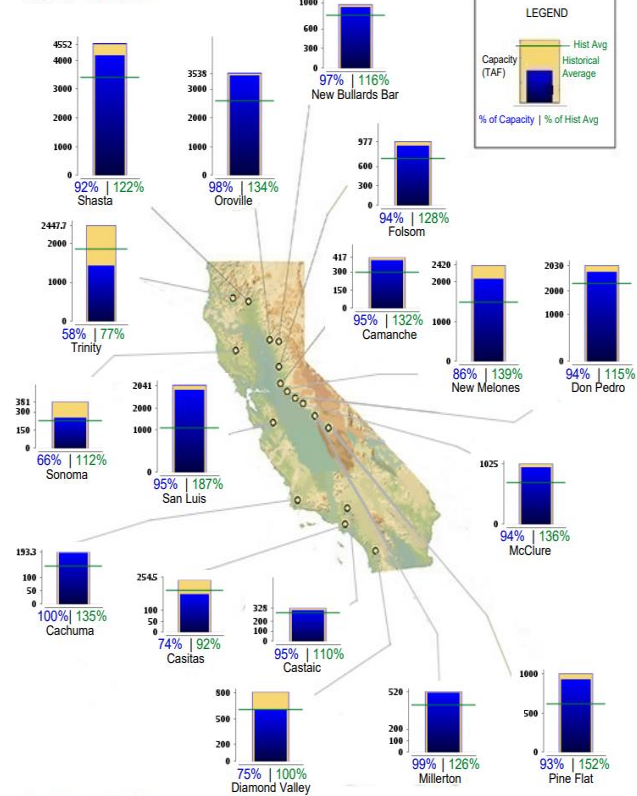
RA June 2023: 48,909 MW

Hydro production has improved significantly in June 2023



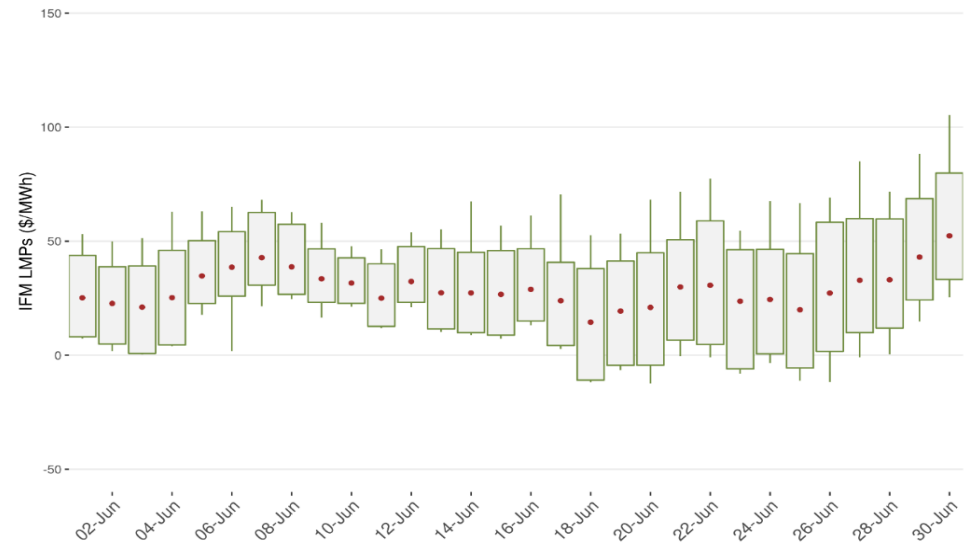
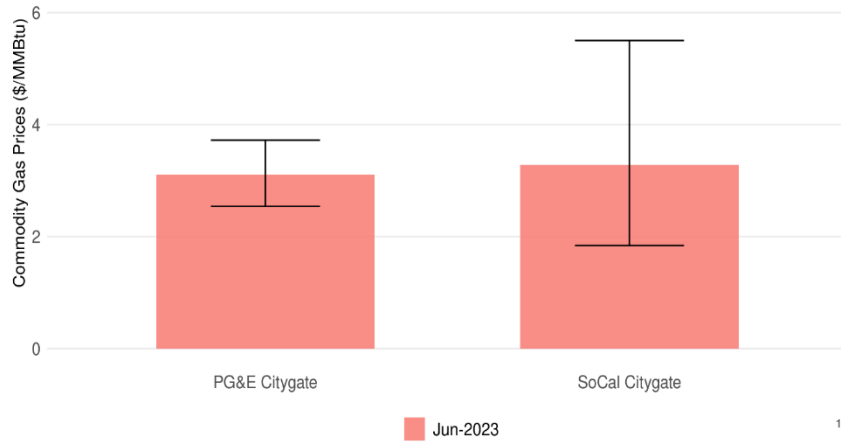
June 2023 saw an 86% increase of hydro relative to June 2022

CALIFORNIA MAJOR WATER SUPPLY RESERVOIRS CURRENT CONDITIONS

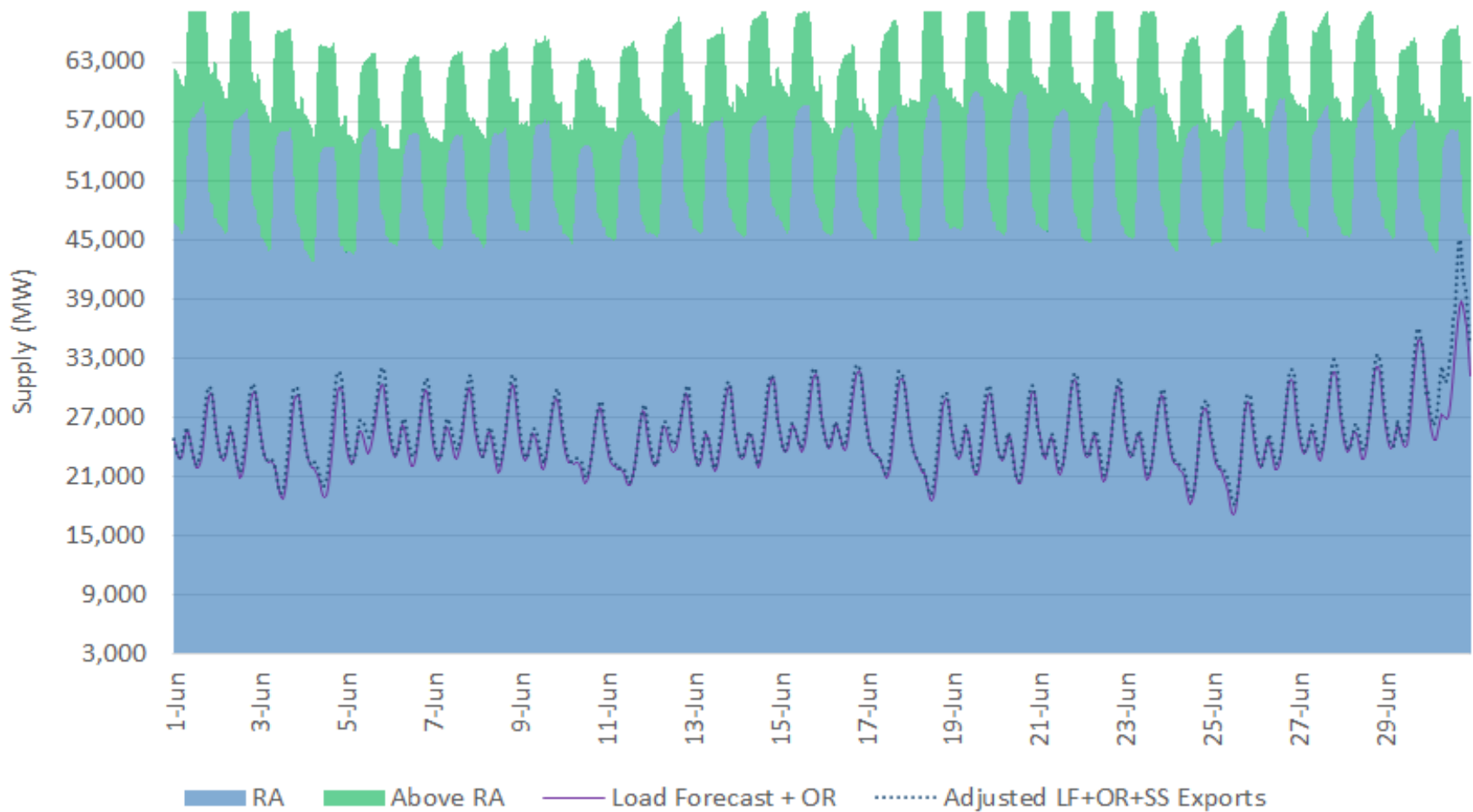


Updated 07/10/2023 01:18 PM

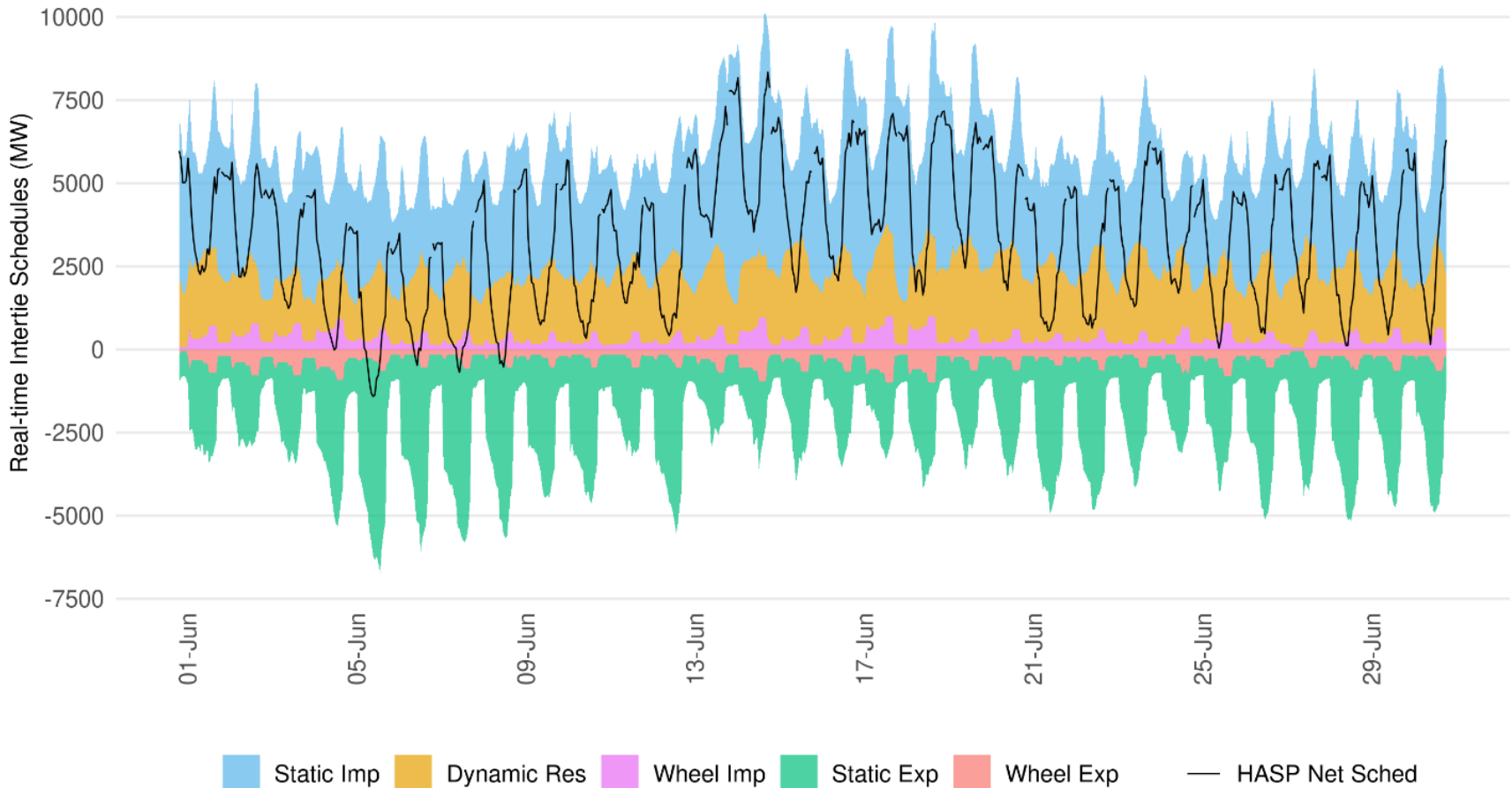
Prices across CAISO's markets for the month of June relatively stable with relative low gas prices



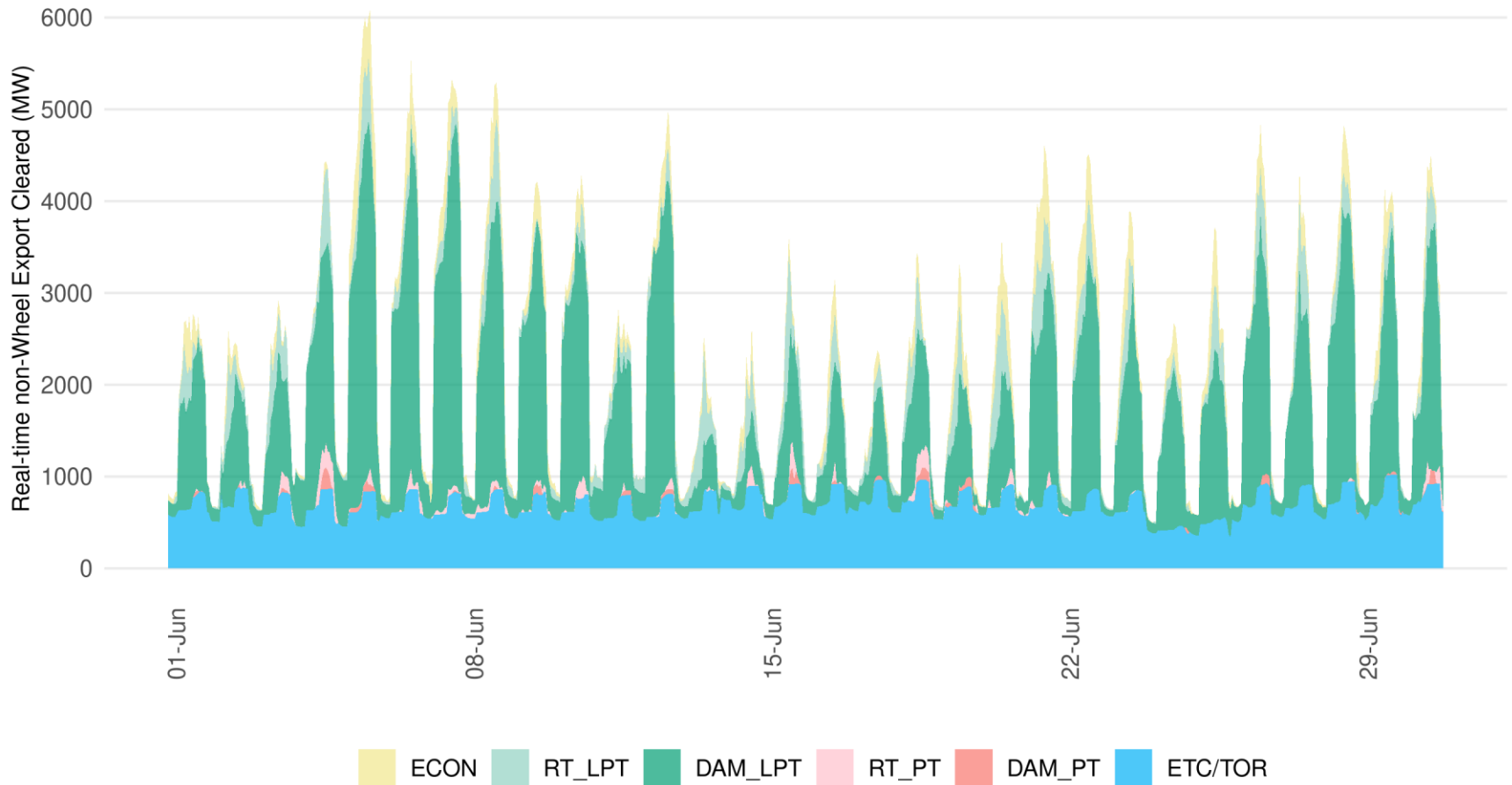
RA capacity was sufficient in June to meet load needs



Average net intertie schedules for peak hours was about 2,568 MW for June

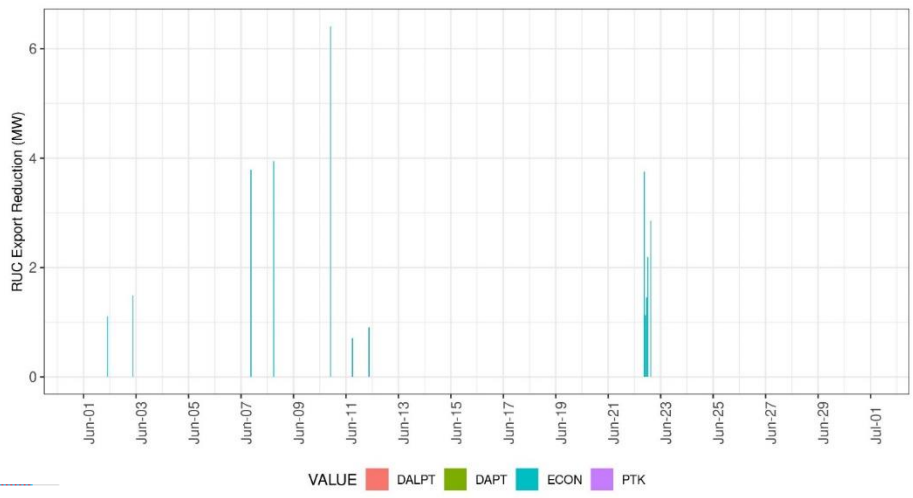
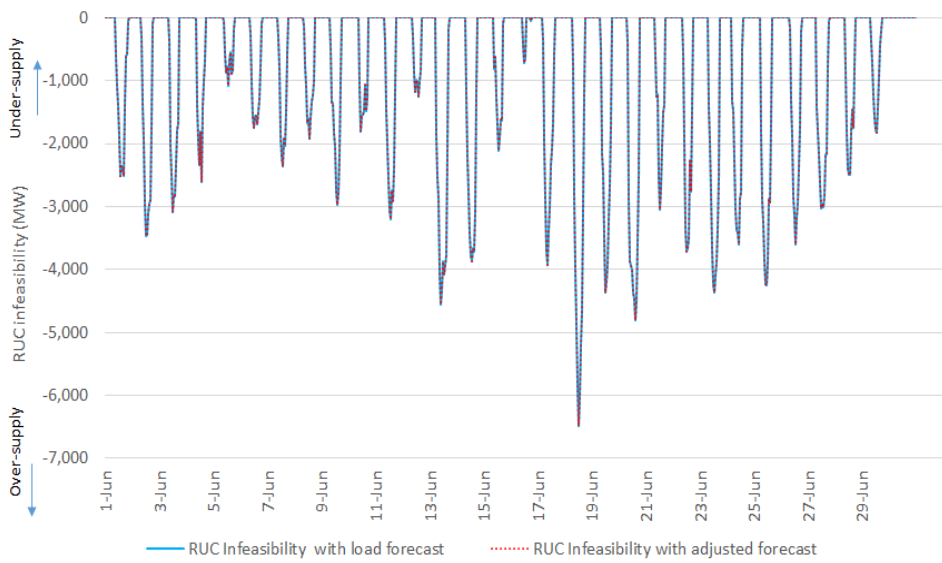


Volume of exports in CAISO's market has been relatively higher, reaching up to 5,000 MW in June



Maximum levels of exports are typically observed in midday hours when solar supply is plentiful

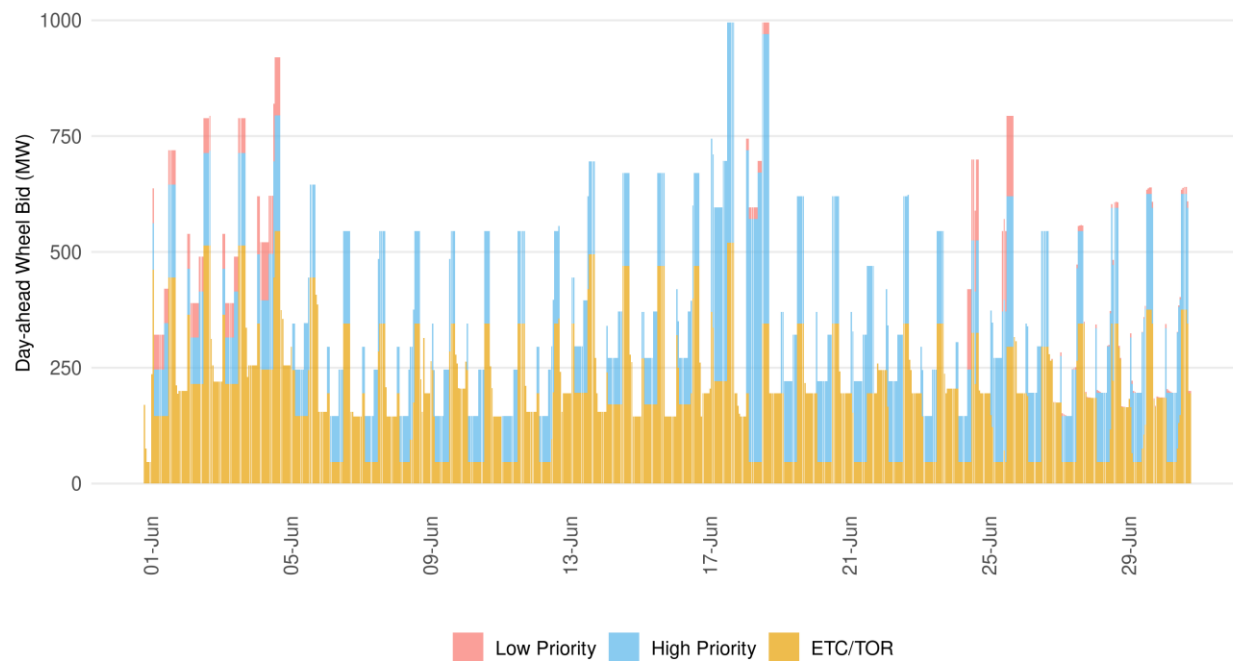
There were no RUC undersupply infeasibilities in June, but low volume of economic exports were reduced intermittently for few days in June



June observed consistently oversupply conditions during midday hours

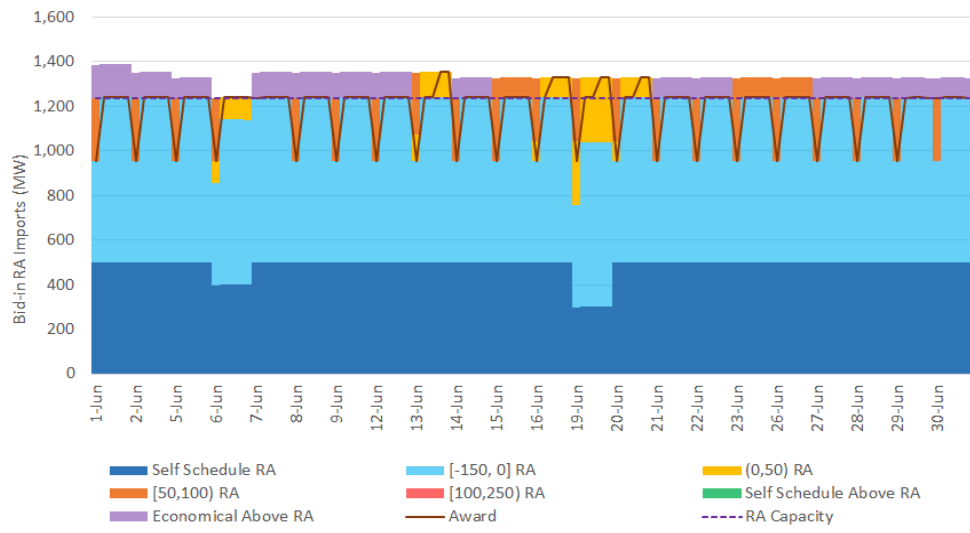
Up to 550 MW out of 1,412 MW of wheel-through transactions were bid in and cleared in the day-ahead market

Source	Sink	MW
CFEROA	PVWEST	50
CFETIJ	MEAD230	75
CTW230	LLL115	105
MALIN500	MEAD230	325
MALIN500	MCCULLOUG500	100
MALIN500	PVWEST	325
MIR2	RANCHOSECO	30
NOB	MEAD230	252
NOB	PVWEST	150
Total:		1412

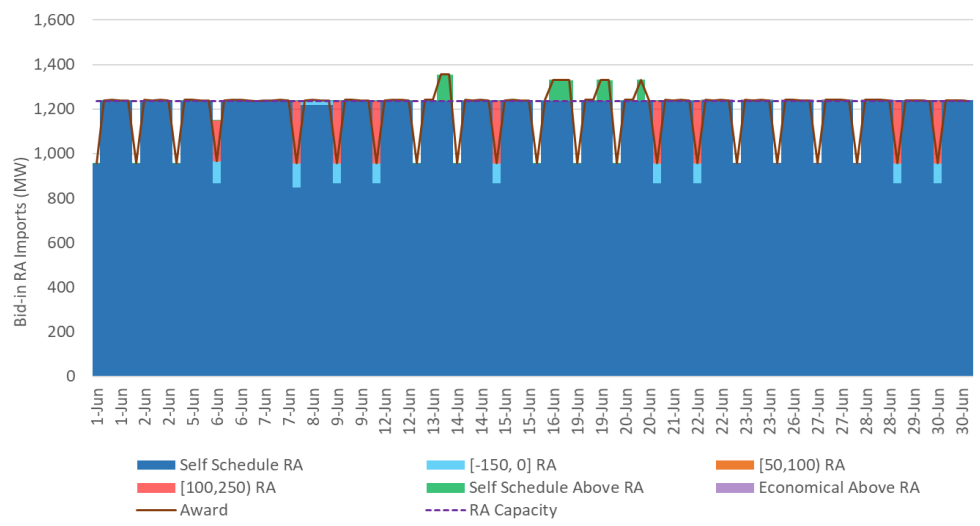


No wheel-through transactions were curtailed in June

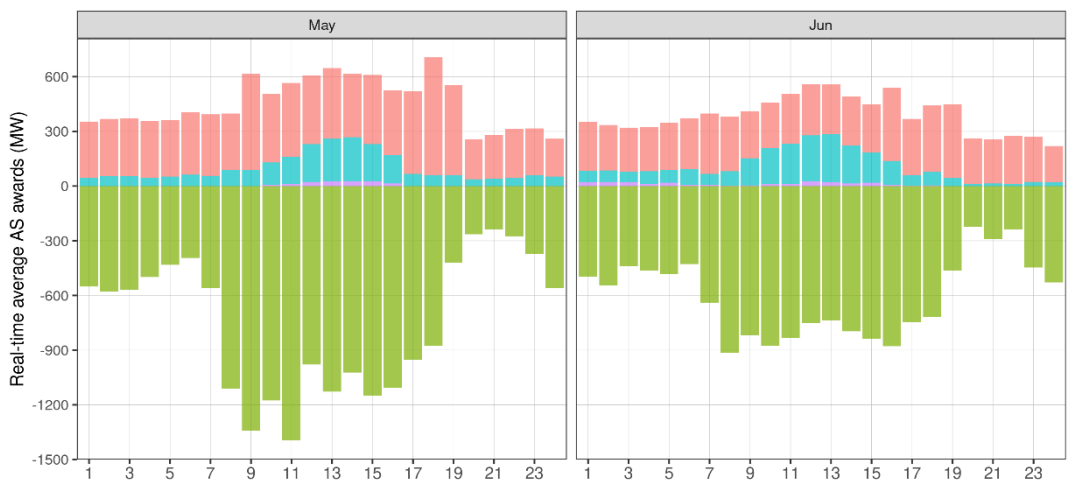
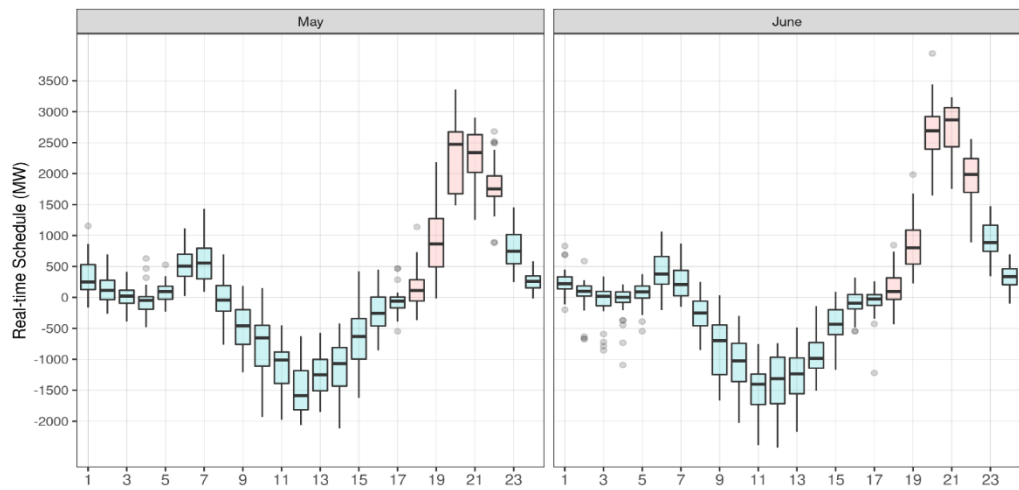
About 92 percent of RA imports bid in at or below \$0/MWh in June



RTM

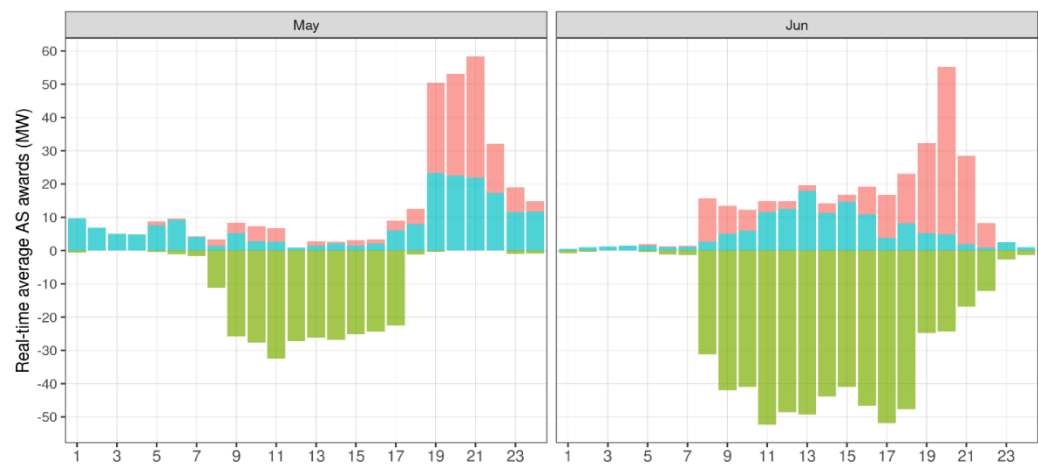
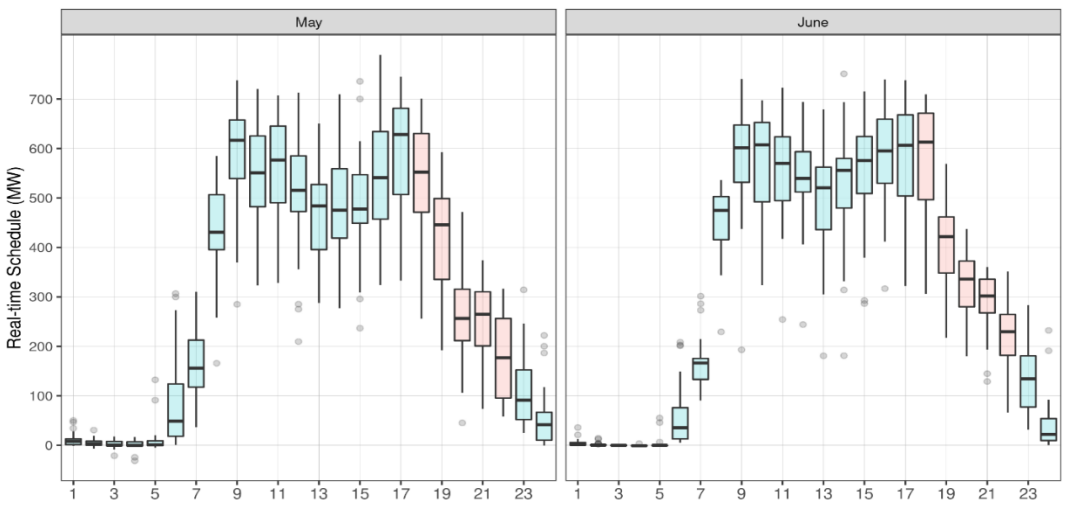


Storage resources exceeded 3000MW of energy dispatches and provided a significant portion of the regulation requirement



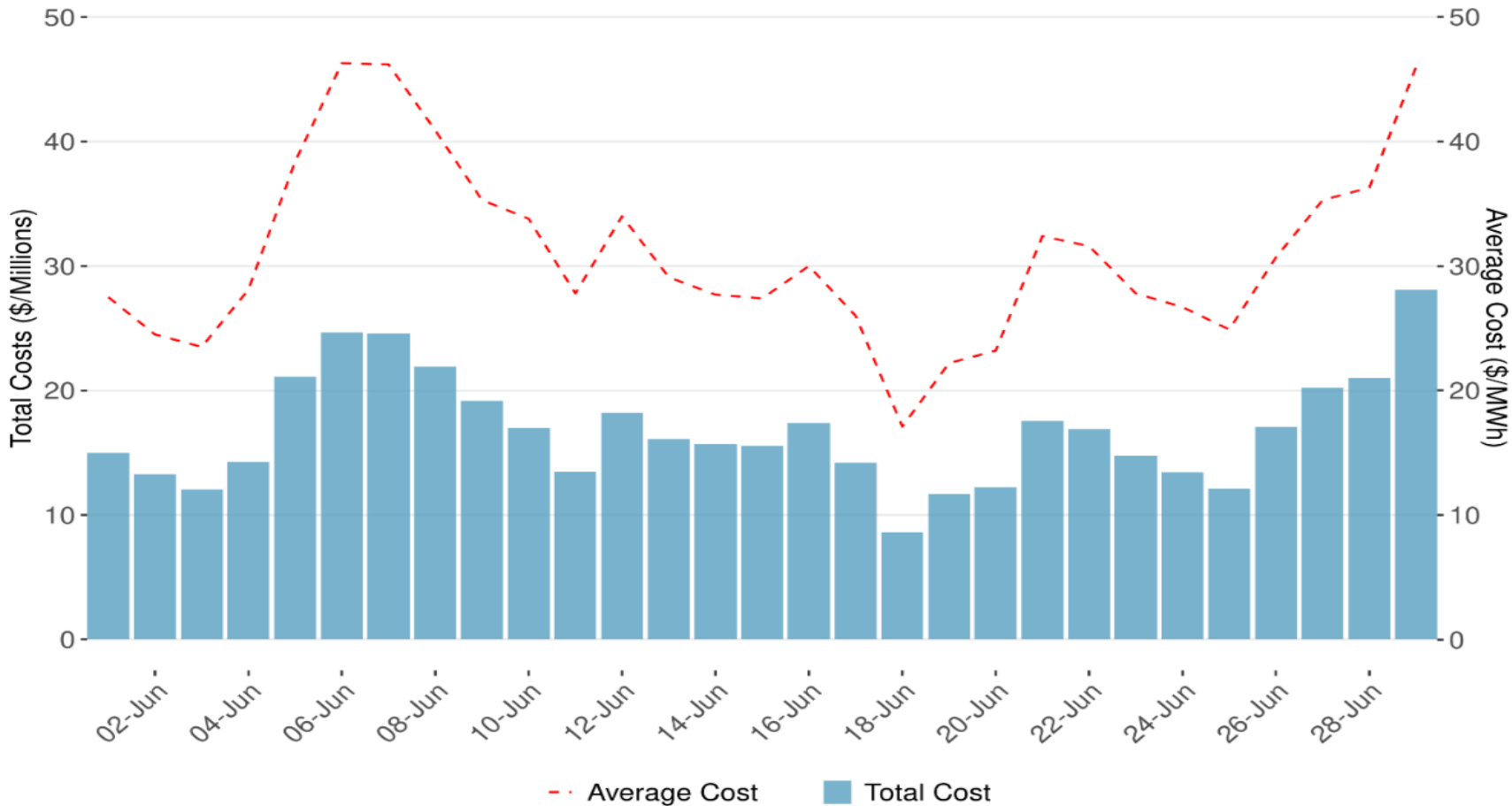
RU RD SR NR

Hybrid resources contributed with up to 700 MW in midday hours, following a pattern of extended solar production



RU RD SR NR

Average daily wholesale cost in July was about \$16.80 million



Metric based on preliminary settlements information and subject to change

For reference

- Visit initiative webpage for more information: [California ISO - Miscellaneous Stakeholder Meetings \(caiso.com\)](http://caiso.com)
- If you have any questions, please contact Brenda Corona at bcorona@caiso.com or 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>.

Read a recent article featured in the blog:



July 24, 2023
Transmission

A big step forward on transmission infrastructure

By Deb Le Vine, Director, Infrastructure Contracts & Management

As anyone in the electricity business knows, planning, siting, permitting, financing and building transmission infrastructure is a complex, time-consuming and difficult process. Congress, the Federal Energy Regulatory Commission (FERC), state legislators and bulk electric system operators like the California ISO and others around the country ...

[READ MORE](#)

- Subscribe to [Energy Matters blog monthly summary](#)