



California ISO

Summer Readiness

September 2021 Market Performance

Guillermo Bautista Alderete
Director, Market Analysis and Forecasting
California ISO

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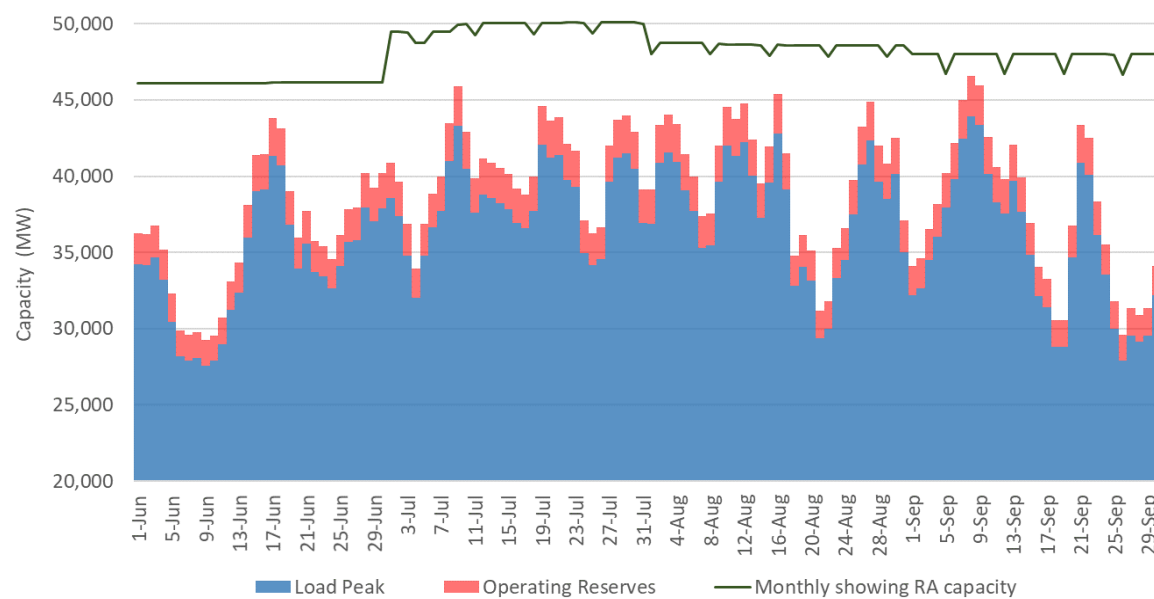
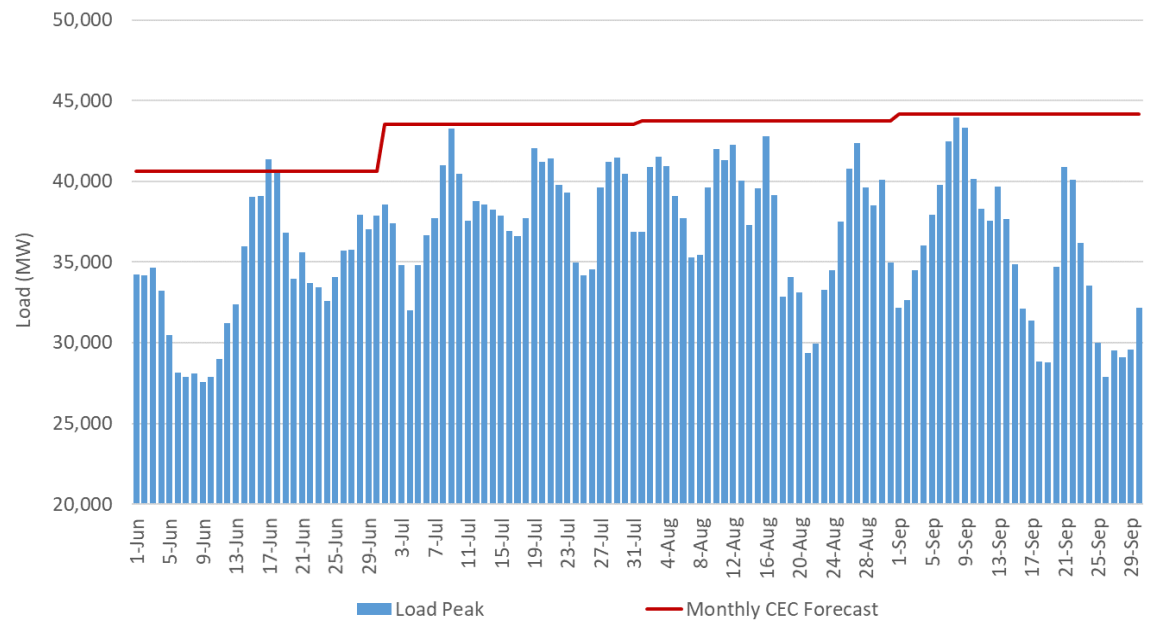
All Summer enhancements have been implemented by August 4

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

* The wheeling through priorities the CAISO placed into effect are interim only and will sunset after May 31, 2022.

The CAISO's load peak for the year happened on September 8 at about 43,947 MW

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

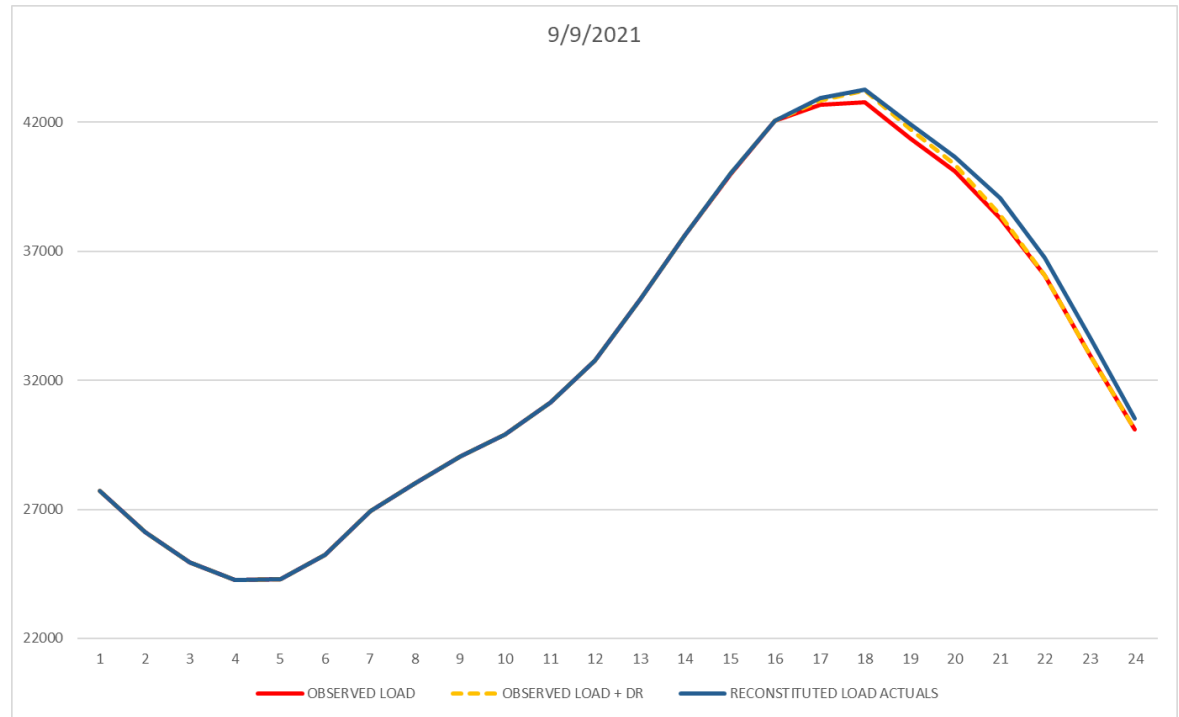


September experienced less challenging conditions than previous months

- There were no energy warning or EEAs
- CAISO did not trigger scarcity pricing
- The minimum state of charge constraints were not enforced
- Reliability demand response was not activated

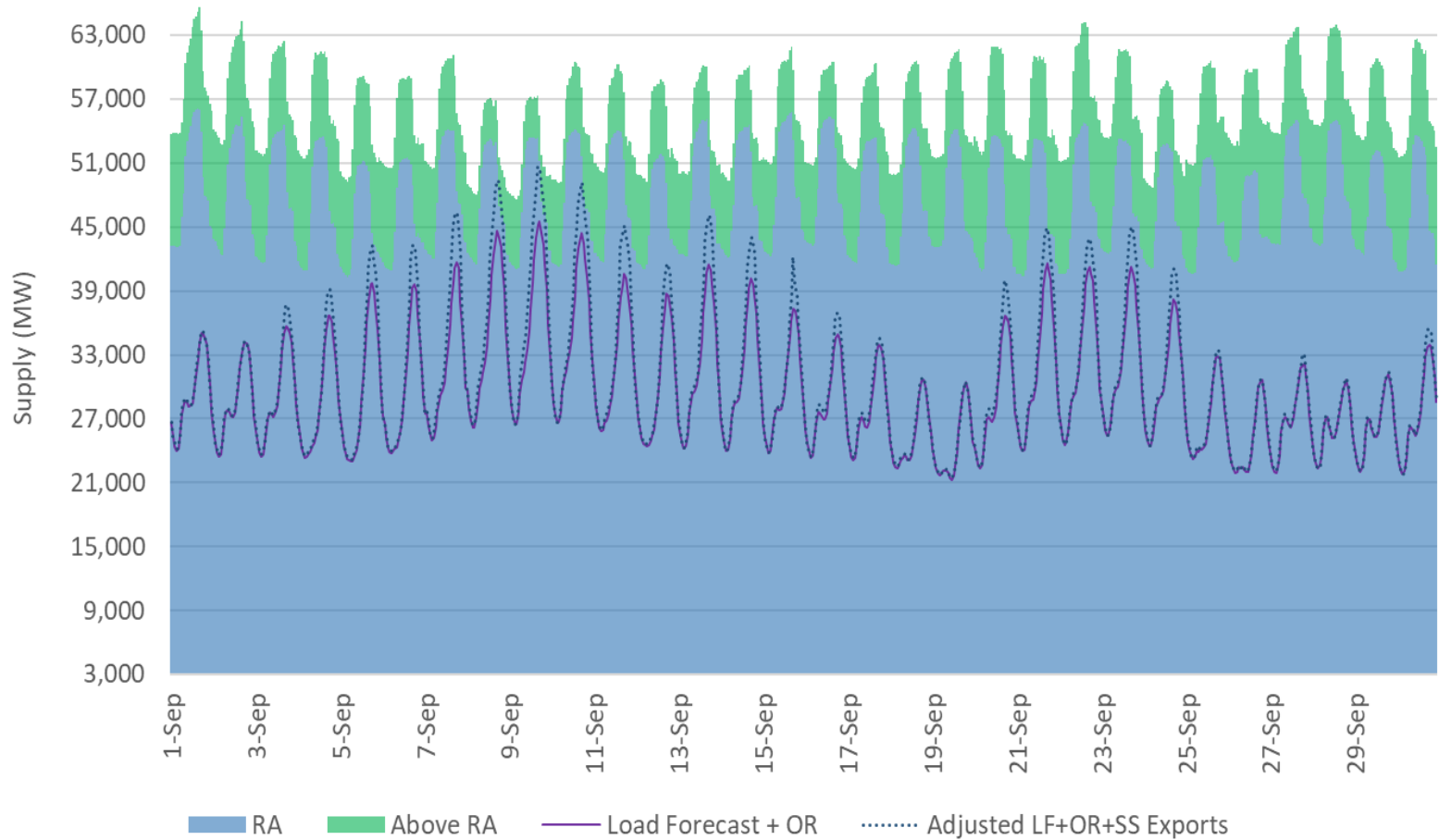
CAISO called for Flex alerts September 8 and 9

Flex Alert impact for September 9, 2021

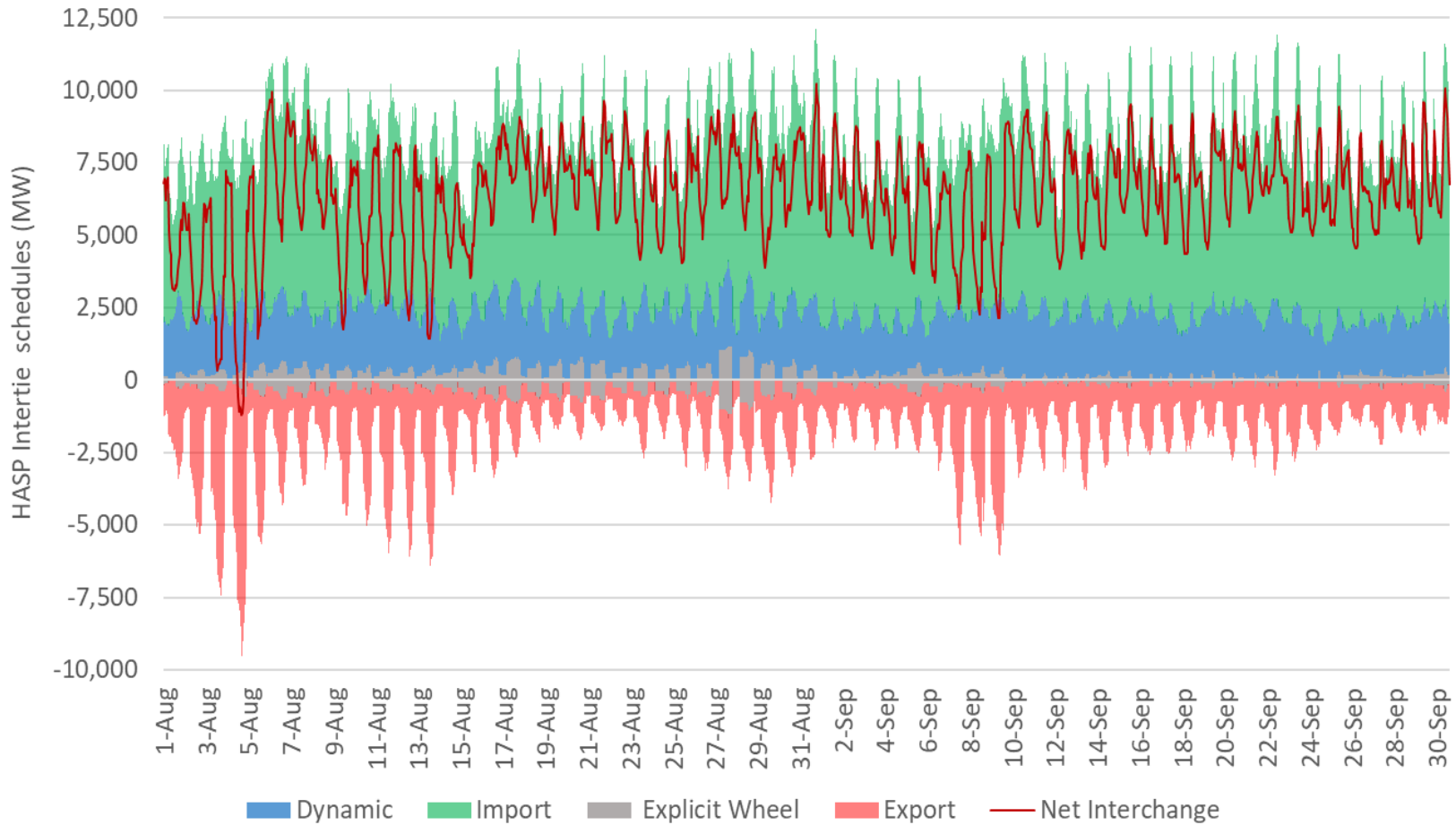


Date	Conservation
8-Sep-21	0-120MW
9-Sep-21	40-650MW

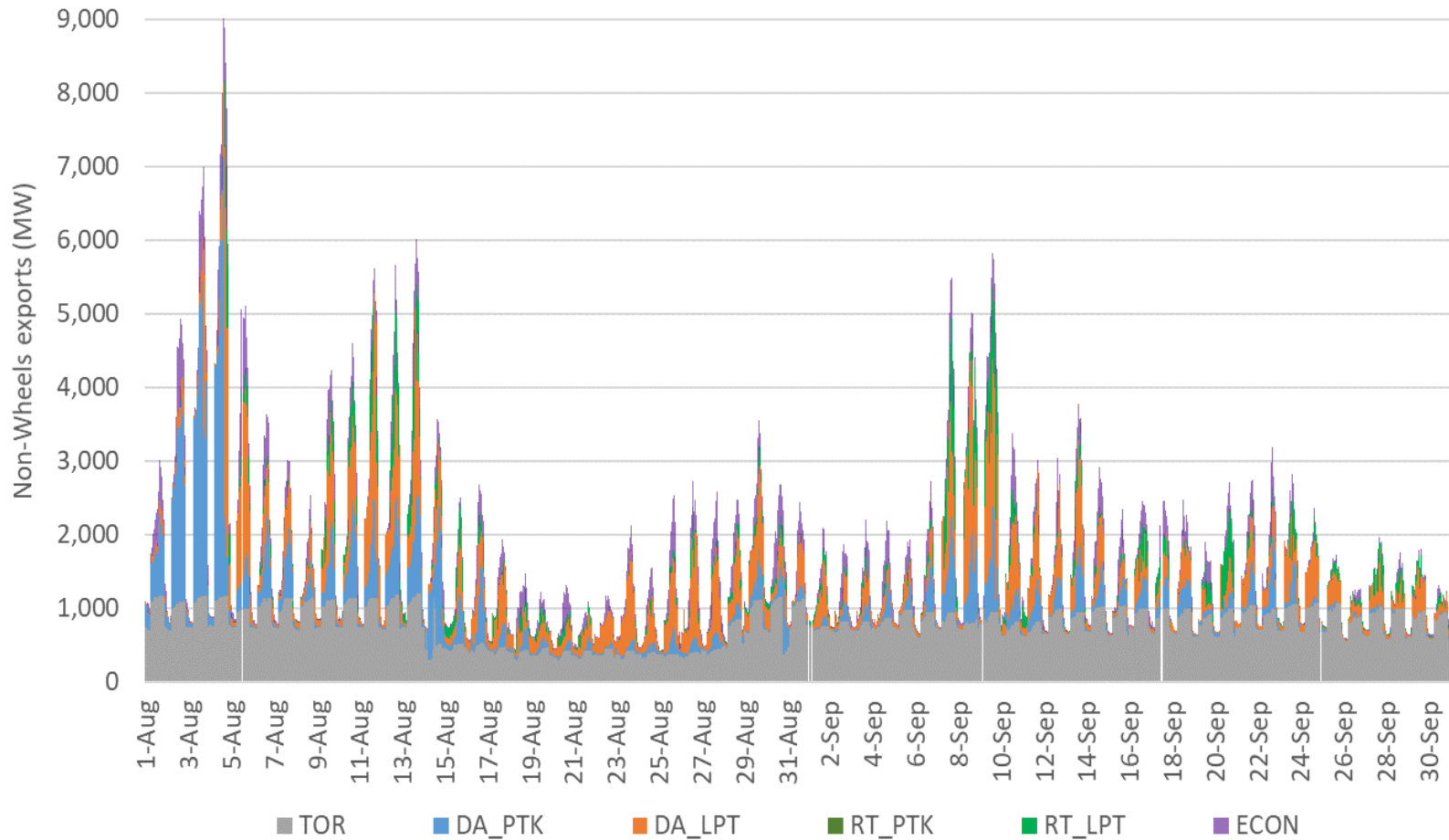
RA capacity was generally sufficient in September to meet load needs



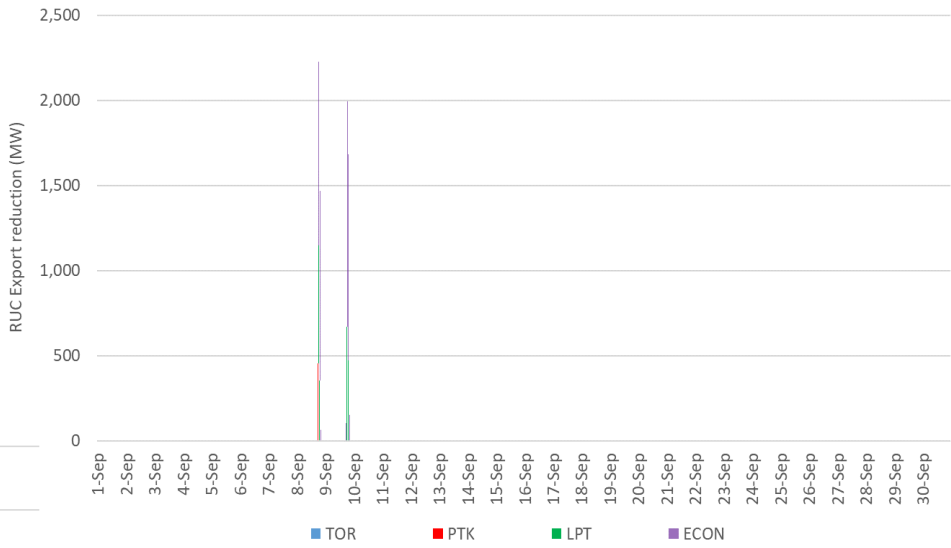
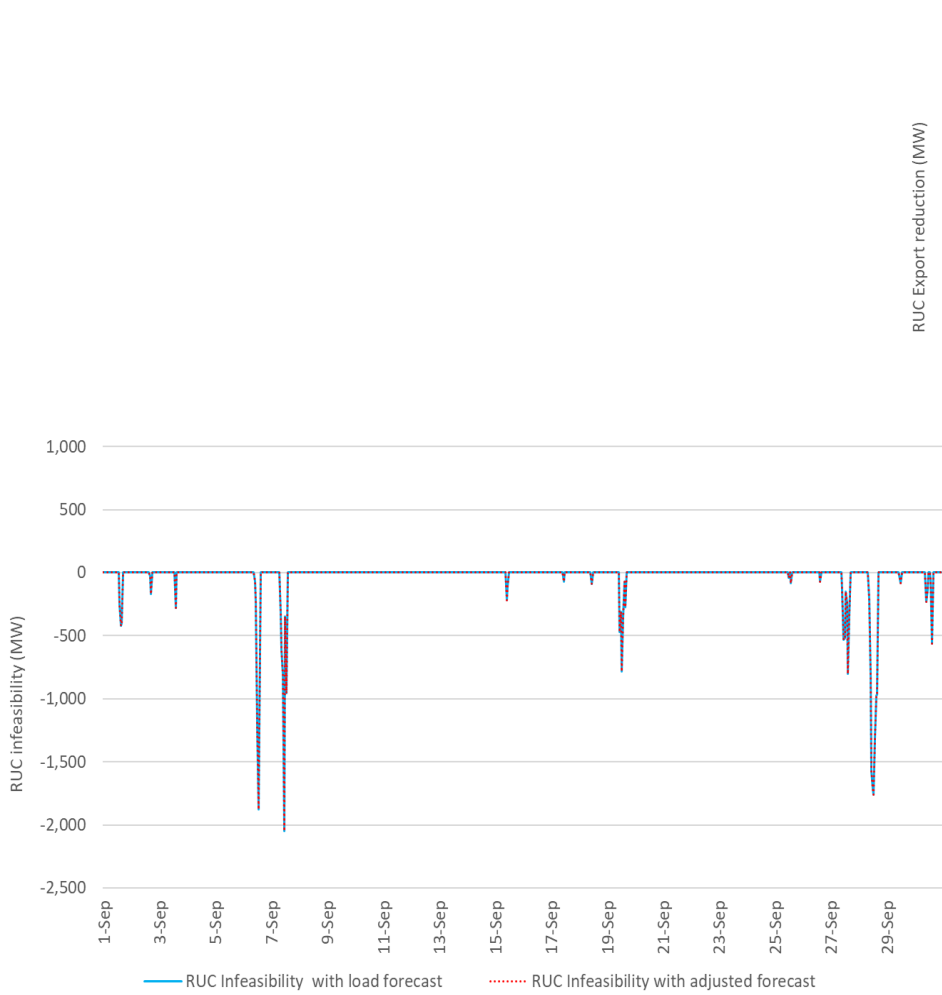
Net intertie schedules for peak hours increased to 7,500 MW in September compared to August's 6,020 MW



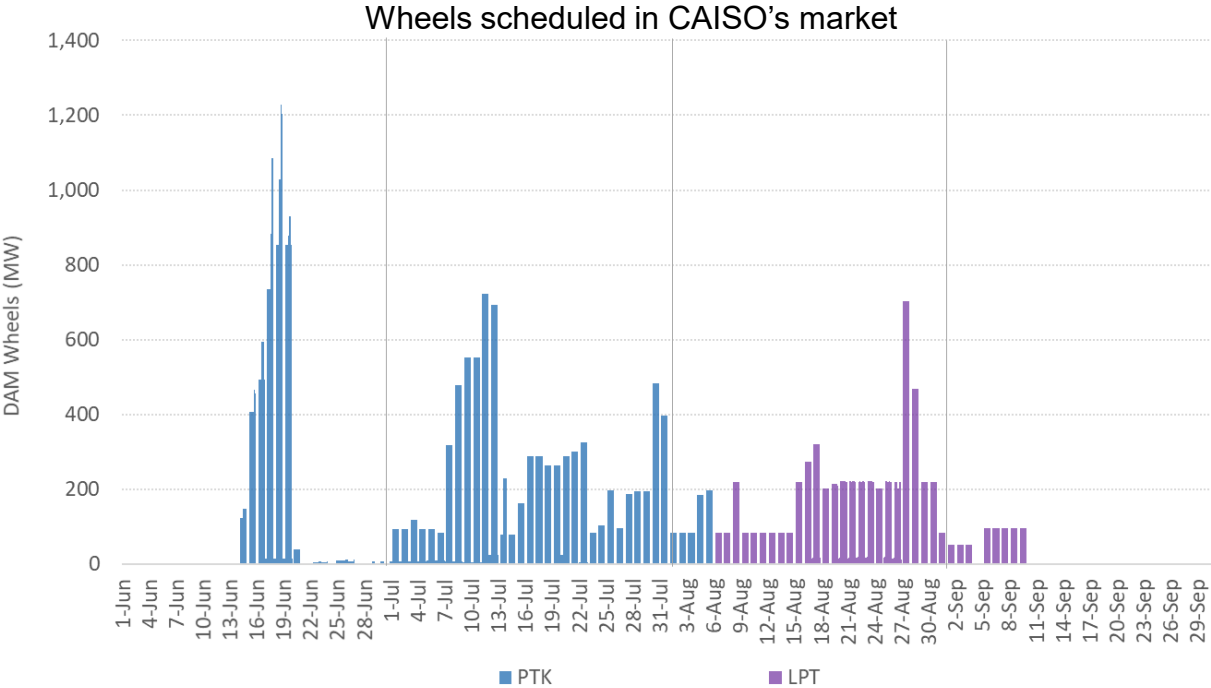
Volume of exports in CAISO's market reflects overall supply conditions in September



There were no RUC undersupply infeasibilities in September, but economic and low priority exports were reduced in September 8 & 9



Volumes of cleared wheels in September were lower than those in previous months



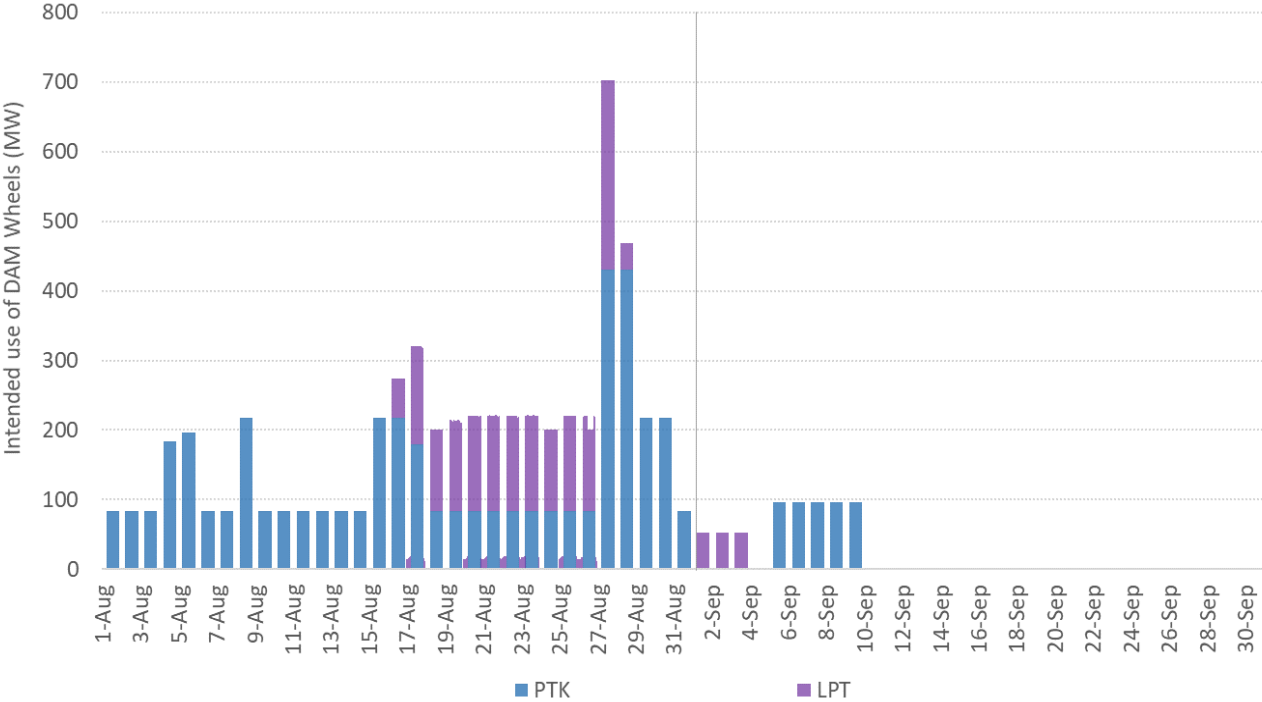
Maximum Wheels

	Sink	
Source	ELDORADO230	PVWEST
MALIN500	96.0	
SYLMAR		52.0

Registered PTK wheels were intended to be used in September. Out of 687 MW of registered wheels, only 96 MW were used in September 5 - 9

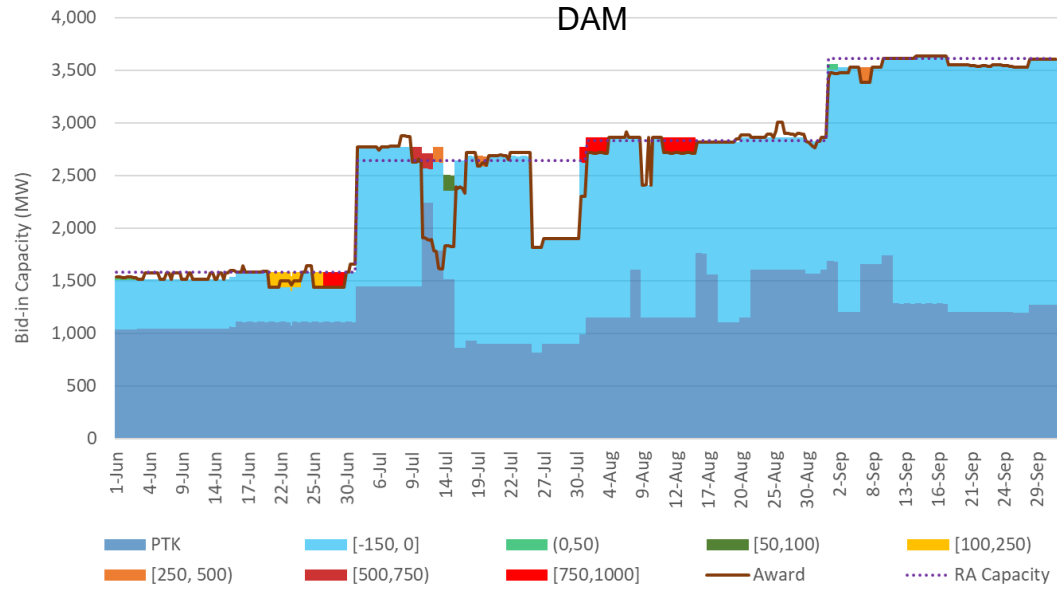
Registered PTK wheels

Source	Sink	MW
MALIN	PVWEST	33
MALIN	PVWEST	75
MALIN	MEAD230	20
MALIN	ELDORADO	96
MALIN	PVWEST	150
NOB	MEAD230	65
NOB	MEAD230	35
NOB	MCCULLOUG500	75
NOB	PVWEST	100
SYLMAR	MCCULLOUG500	38
Total		687

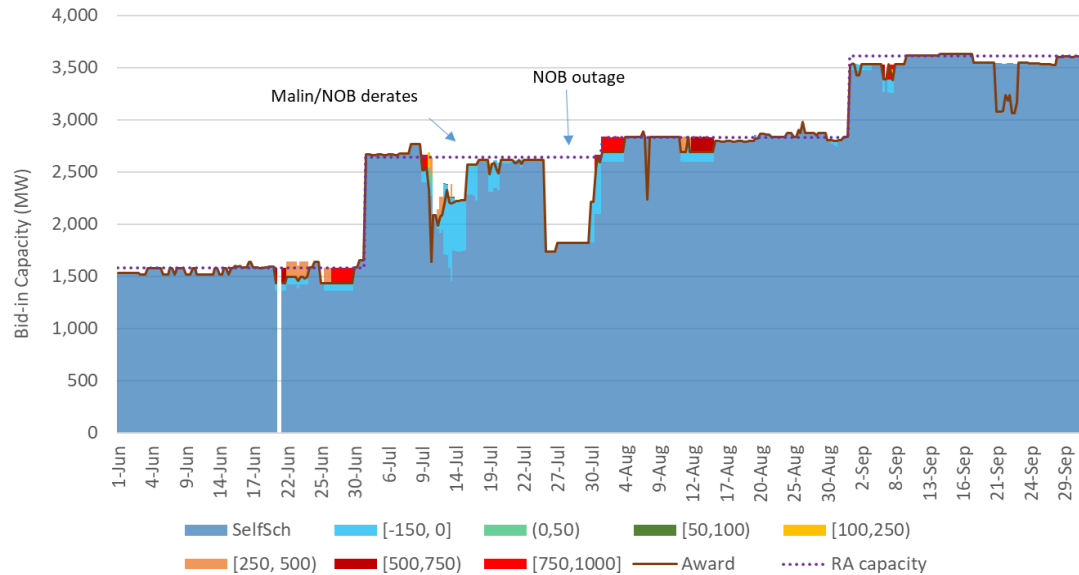


Intended use of registered PTK wheels was also impacted by mapping and validation challenges in the submission process

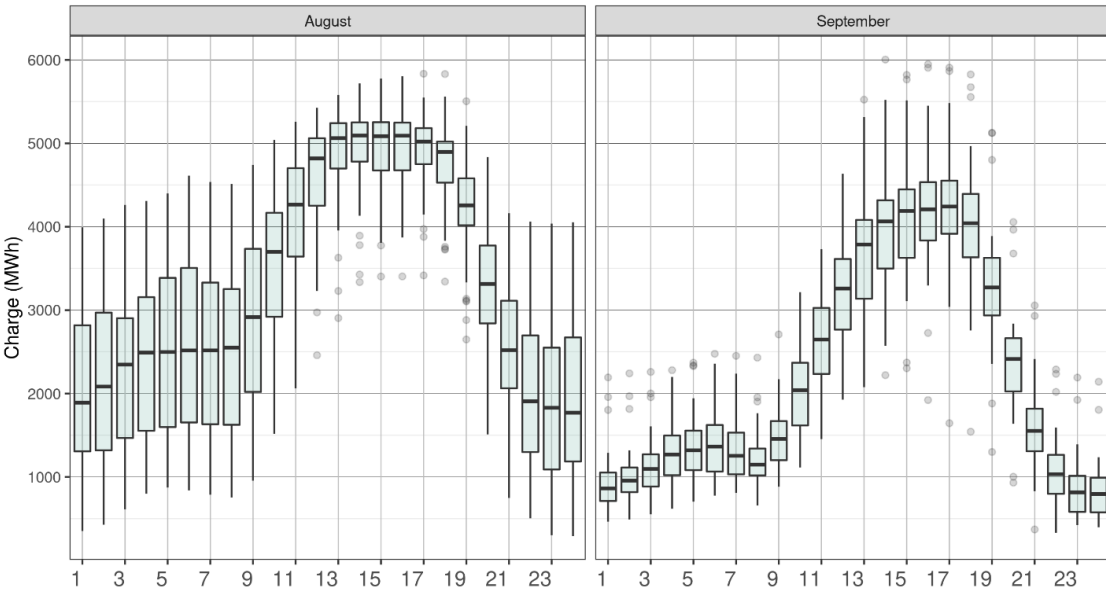
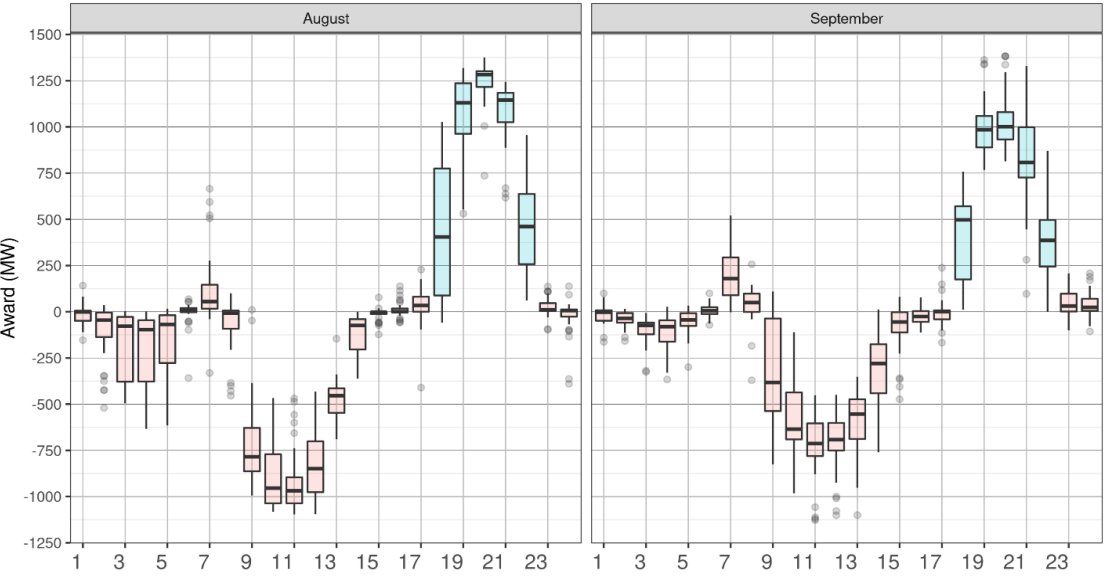
About 99 percent of RA imports bid in at or below \$0/MWh in Sept



RTM



Storage resources saw reduction of capacity in Sept due to resource outages



Since the addition of the uncertainty requirement to the capacity test, EIM entities have seen a significant increase in capacity test failures. Capacity test failures in September increased from 71 to 193



Issues identified in September

1. Incorrect treatment of a single wheel transaction

Action: Software fix on September 23

2. Processing of priority for registered wheels

Action: Software enhancement under assessment