California ISO | WESTERN ENERGY MARKETS

Market performance update

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Joint General Session
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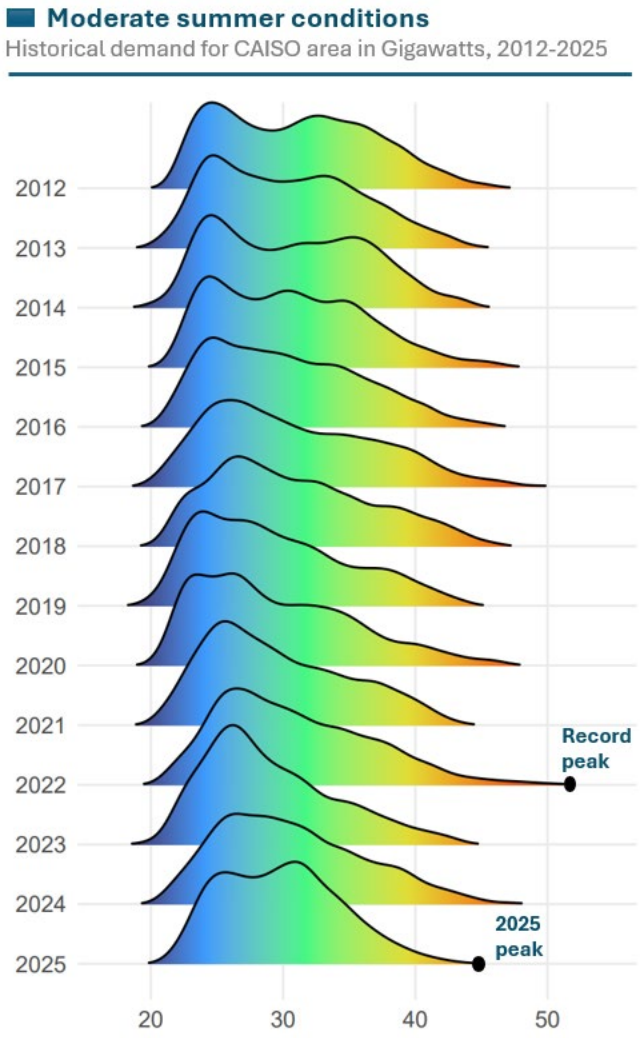
Summer system conditions were moderate and stable compared to previous years

Demand in the Western Energy Imbalance Market (WEIM) footprint peaked at 128,916 MW on August 21. CAISO reached a peak of 44,434 MW on August 21, well below the near-record 52,000 MW peak in 2022.

The CAISO area was well positioned, with sufficient resource adequacy capacity to meet all load obligations easily. Resource adequacy capacity peaked in July at 60,000 MW, well above the approximately 40,000 MW peak demand.

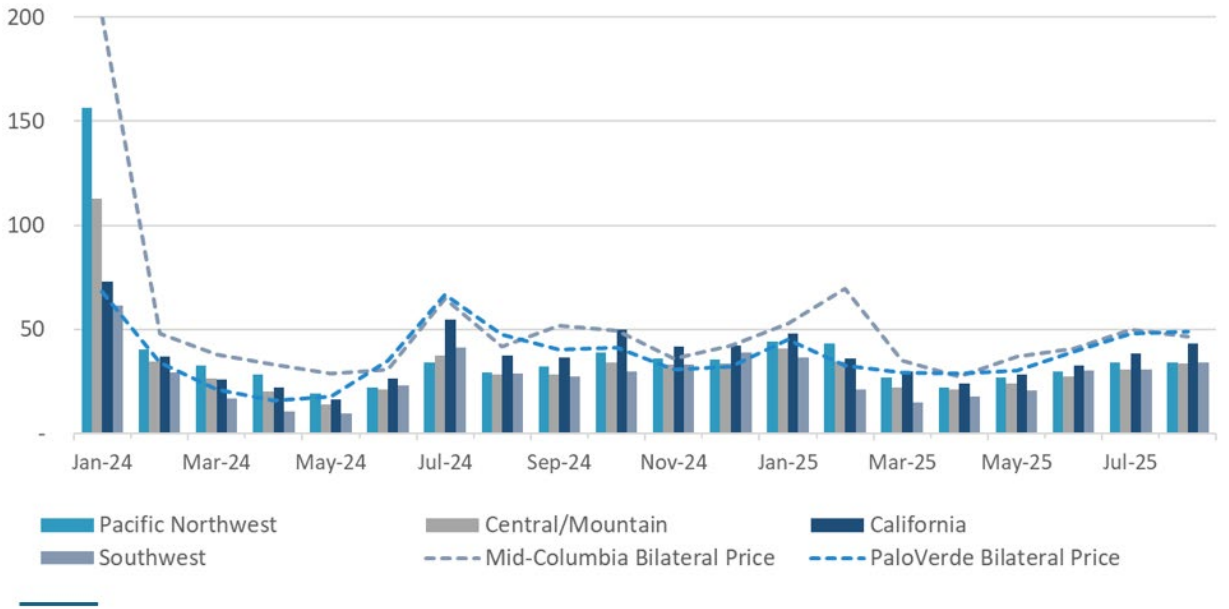
Resource adequacy capacity shown for summer 2025 was higher than in 2024, supported by additional contributions from solar (4,000 MW), wind (1,000 MW), and storage (1,300 MW). In contrast, the capacity shown by gas resources and imports declined by 400 MW and 650 MW, respectively.



Summer prices were moderate in the WEIM, tracking demand conditions

Price signals in the West

Average real-time prices in the Western energy imbalance market areas, in dollar per Megawatt-hour



Note: For reference, external bilateral prices shown in dotted lines

Real-time prices rose as the summer progressed. California areas experienced the highest average prices, although these remained lower than the average prices in 2024.

External bilateral prices averaged $12 higher than prices in the Western Energy Imbalance Market.

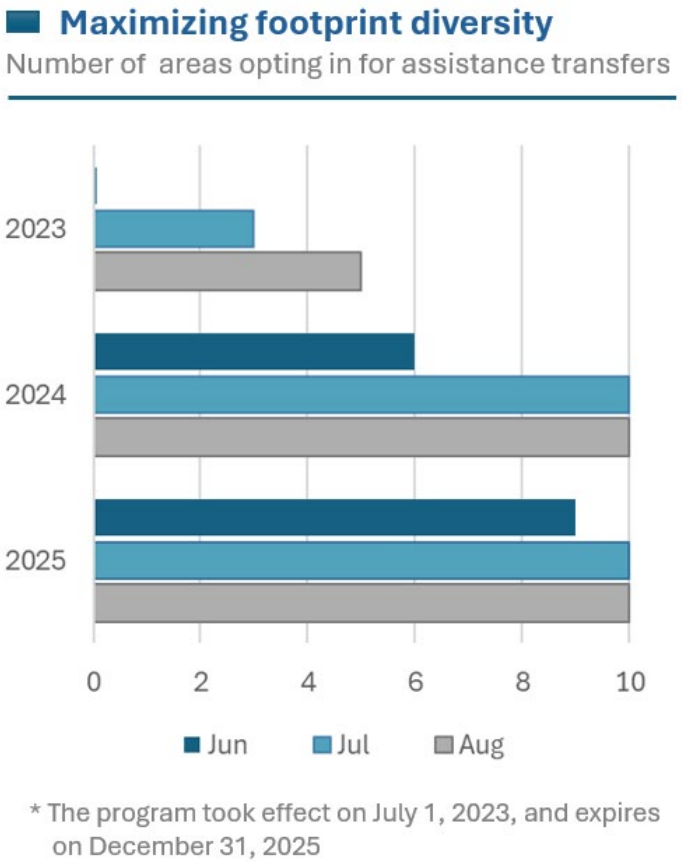
In the CAISO area, day-ahead prices averaged $4.50 higher than fifteen-minute real-time prices during peak hours, with a maximum price of $63 recorded in August.

The assistance energy transfer (AET) program was used this summer by 10 different entities

The AET program enables areas to receive energy transfers when they do not meet the WEIM's resource sufficiency requirements.

Ten balancing areas used the program during summer months. Participation has grown since the program's inception.

CAISO filed tariff changes with the Federal Energy Regulatory Commission that are necessary for the ISO to continue to offer this program beyond 2025



A market enhancement to include flexible ramping product up awards in storage state of charge calculations was implemented on June 3, 2025

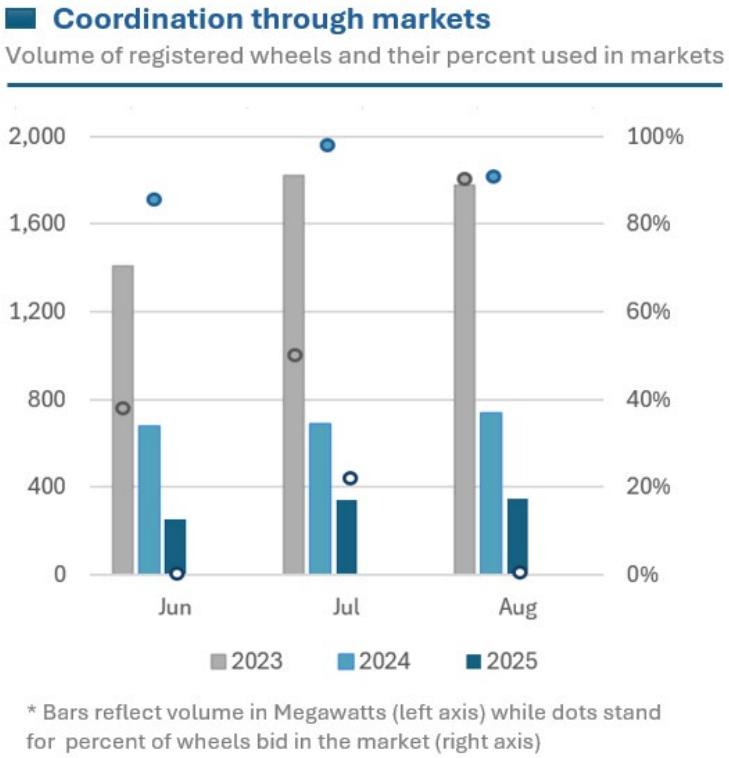
This enhancement addresses situations where flexible capacity was procured from storage resources that lacked sufficient state of charge to respond when uncertainty materialized.

The benefits of this enhancement are not yet fully evident due to moderate summer conditions. However, the share of the flexible ramping product awarded to CAISO storage resources has fallen slightly.

CAISO is assessing several instances of negative prices for flexible ramping product up observed since this enhancement was implemented.

CAISO has reported on the performance of this enhancement during stakeholder meetings on storage resource enhancements and in recent Market Performance and Planning Forum meetings.

The use of registered high-priority wheels in summer 2025 was significantly lower than the levels observed in previous summers



CAISO markets facilitate wheel-through transactions by clearing, in balance, an import at a source location with an export at a sink location. This allows non-CAISO areas to move power through CAISO.

Entities can register their wheeling transactions in advance to secure higher scheduling priority in CAISO markets.

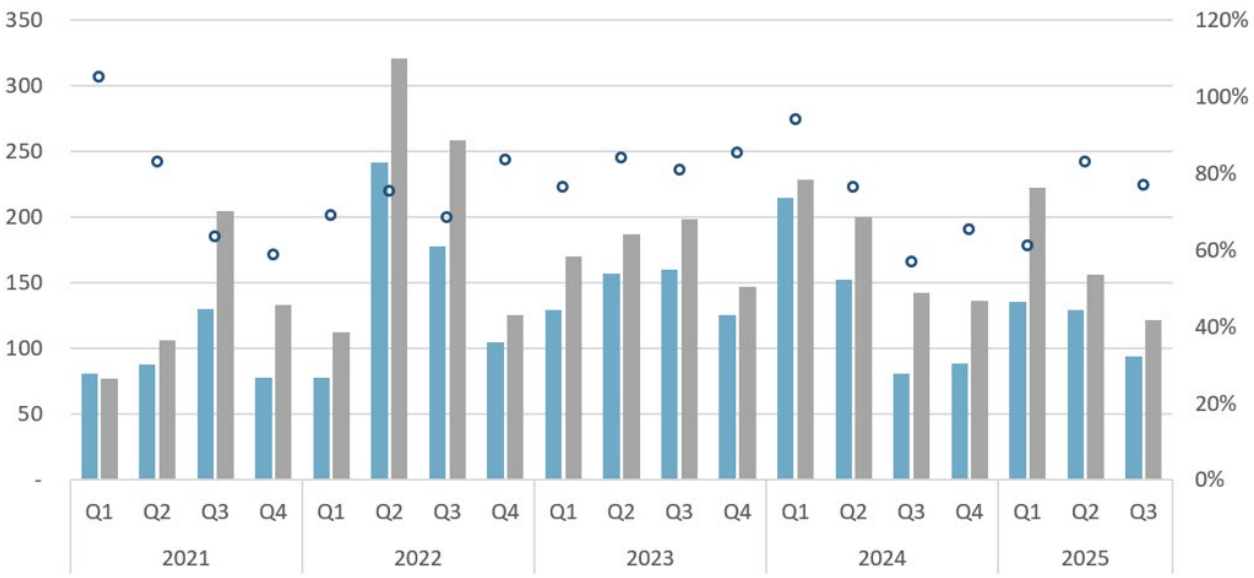
In summer 2025, the maximum volume of wheels registered was 344 MW, with only 75 MW of these actually bid in the market. This is significantly lower than the volumes of 1,800 MW registered and 700 MW bid in the market in the summer of 2023.

Additionally, CAISO supported up to 9,000 MW of exports transactions. Most of these exports were low-priority self-schedules bid in the day-ahead market.

Day-ahead market congestion averaged $47 million per month during the summer, comparable with the first half of the year

Day-ahead congestion in CAISO market

Congestion rents (blue bars), congestion revenue right payments (grey bars), and revenue adequacy (dots)



* Bars are in $ millions; revenue adequacy is in percent as the ratio of rents to payments
Values for Q3 2025 include only July and August

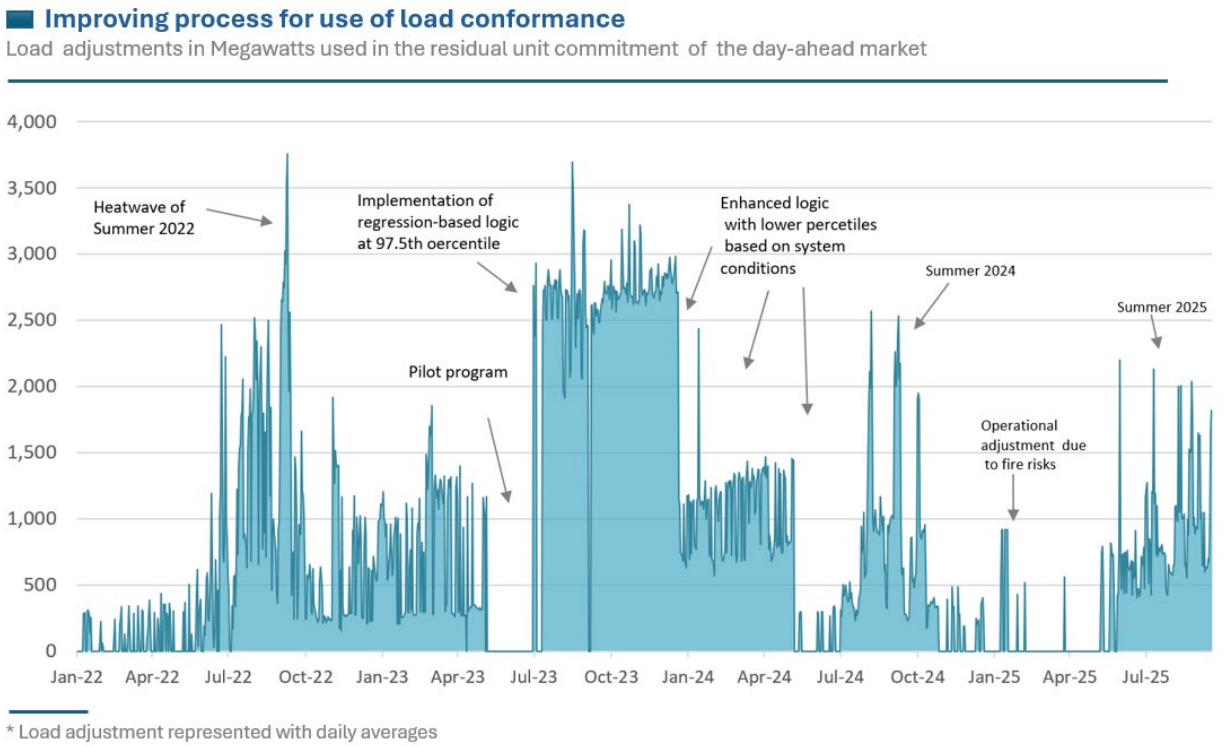
Congestion revenue rights payments totaled about $61 million per month, resulting in a revenue shortfall of $14 million and reflecting a 77 percent adequacy rate. This is slightly higher inadequacy than the average adequacy of $11 million per month seen earlier in the year.

CAISO has enhanced its load conformance process in the day-ahead market

This has resulted in more targeted use, primarily during periods of high demand, such as summer conditions.

To support transparency, load conformance values used in the CAISO balancing area are publicly available on the OASIS portal.

In 2025, due to milder summer conditions, load conformance was applied at lower levels compared to summer 2024.



During spring, when demand was lighter, usage was minimal. This may result in lower level of bid cost recovery in the residual unit commitment process since no units need to be committed out of merit to meet the additional requirement.

Update on working group for configurable parameters for the day-ahead market enhancements

- CAISO held its fourth configurable parameters working group session on October 21, 2025. The next session is scheduled for November 20, 2025.

- This initiative is a collaborative effort with market participants to evaluate the impact of five configurable parameters in the day-ahead market enhancements and determine the appropriate values to be used at go-live in May 2026.

- The five parameters are i) set of enforced transmission constraints, ii) percent of imbalance reserves to deploy, iii) imbalance reserve bid cap, iv) default bid price for imbalance reserves, and v) attenuation factors for storage resources.

- Additional information about this effort is available on the day-ahead market enhancement site.