

Electricity Market Price Forecasts

Snapshot on CAISO

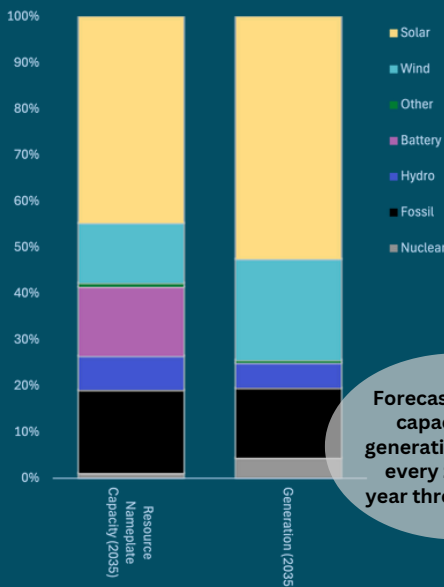


Key Trends

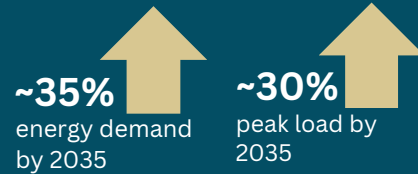
- + CA experiences successive waves of load growth—first in the near term with new data center demand and then in the longer term from electric vehicle adoption and growth in residential and commercial customers. EV loads are by far the most significant driver of long-term load growth, contributing almost 120 TWh of new electric load by 2045.
- + CA continues to need new capacity resources over the forecast horizon. In line with state policies and the CPUC's Mid-Term Reliability procurement orders, E3 expects new capacity resources to be required to have zero emissions—predominantly 4- and 8-hour battery storage and some new geothermal resources will meet these needs.
- + Meeting CA's 100% clean energy target by 2045 calls for CA to continue building out its sizeable renewable portfolio. An additional 46 GW of solar and 35 GW of battery storage is built by 2045, and new transmission projects facilitate access to out of state wind, supporting 21 GW in total new onshore wind by 2045.

Resource Mix in 2035

Clean energy as a percentage of the total CA portfolio grows significantly as renewable penetration increases with policy achievement. Gas generation remains relatively stable over the long term, even while the share of gas generation in the growing energy mix shrinks, as gas remains an important component of the energy system for reliability.



Forecasts include capacity and generation data for every zone and year through 2050.



Hourly Day-Ahead Energy Prices

Growing power demand and escalating carbon and gas prices keep day-ahead prices increasing on average, even as the duck curve grows steeper as more solar is added. Volatility in the summer months continues during high demand periods in which capacity is tight and energy prices spike, while springtime prices remain low and winter prices are higher and flatter.

