California ISO

FAST FACTS

SB 350 Study: RENEWABLE INTEGRATION AND GRID RELIABILITY

Regional energy market operations and planning will allow for more cost effective and reliable integration and balancing of renewable energy, as California works toward its goal of getting half its energy from renewable sources by 2030.

A larger regional electric grid will enhance system reliability while incorporating cleaner energy in California and across the West. The potential benefits include:

- Increased investment in low-cost clean energy generation, including new wind and solar resources to meet the state's renewable energy targets.
- Expanded access to lower-cost out-of-state resources in wind- or solar-rich areas of the West.
- Better real-time visibility of system conditions and energy forecasting in the larger geographic footprint and enhanced management of regional power flows.
- Increased integration of renewables through improved coordination of dispatchable resources.
- Reduced need for curtailment of renewable resources by offering excess energy across the West.
- Streamlined long-term transmission planning to ensure resources are adequate, assets are strategically placed, and systems can be better controlled.

The ISO's western Energy Imbalance Market (EIM) has already demonstrated improved grid reliability and reductions of emissions in the real-time market since its launch in 2014, and those would be magnified by a fully-integrated day-ahead market.

A regional grid would be especially important for reliability during times of stressed system conditions, such as extreme weather events, drought and unexpected outages.

Click here to go to the study

California Senate Bill 350, passed in 2015, directed the ISO to study the impacts of a regional western US grid. The study, conducted by leading experts, found that a western states energy market will yield significant environmental and economic benefits to California and the West, including cost savings to ratepayers, reduced air pollution, new jobs, market efficiencies and improved transmission planning.