



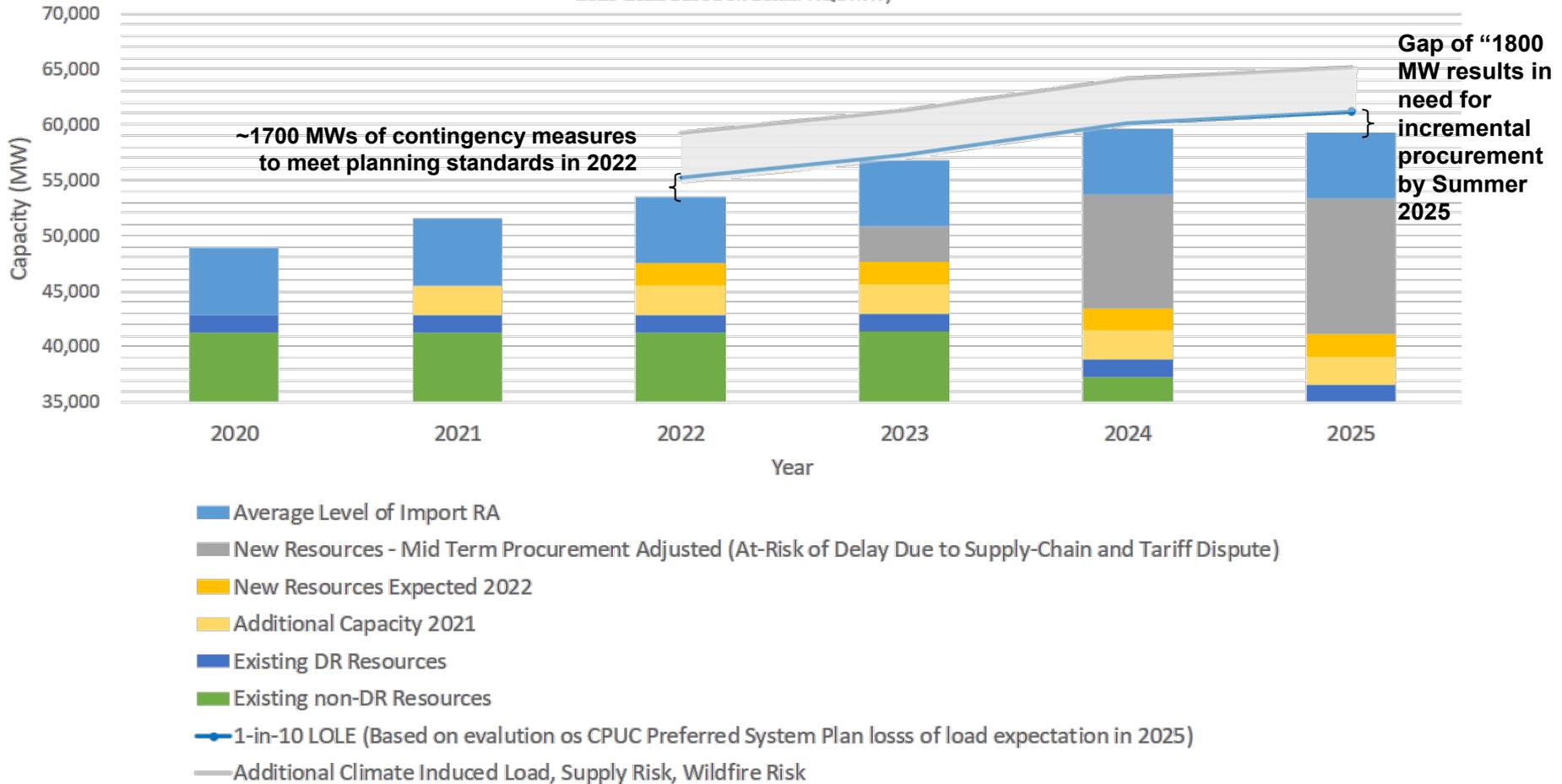
# CAISO Outlooks

Mark Rothleder  
SVP & Chief Operating Officer

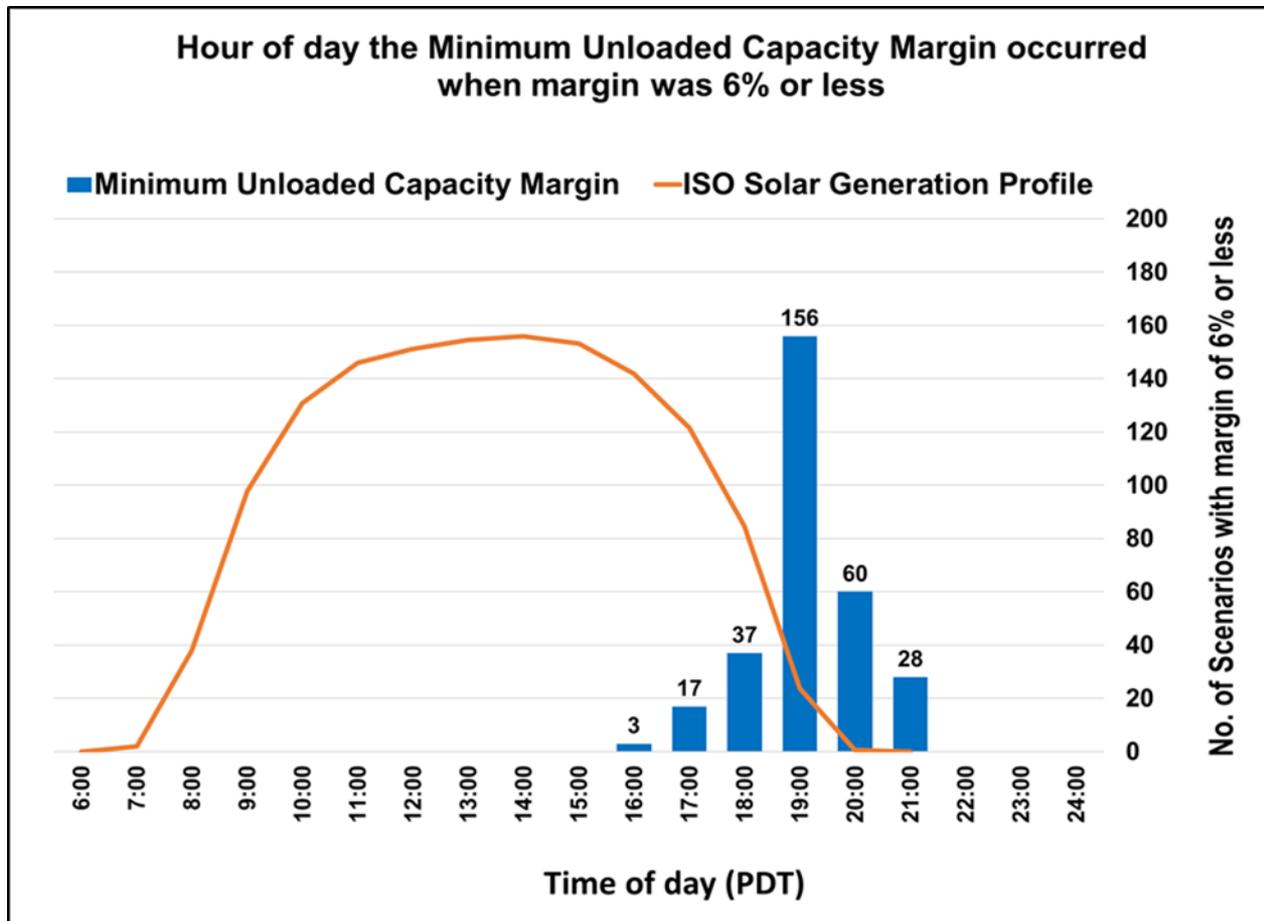
**SMUD – Energy Resources & Customer Services  
Committee Meeting  
May 18, 2022**

# September peak conditions 2022-2025

Comparison of Capacity vs Performance Target  
 (2022-2025 Based on September 8pm authorized procurement NQC MW)  
 2020-2021 Based on actual NQC MW)



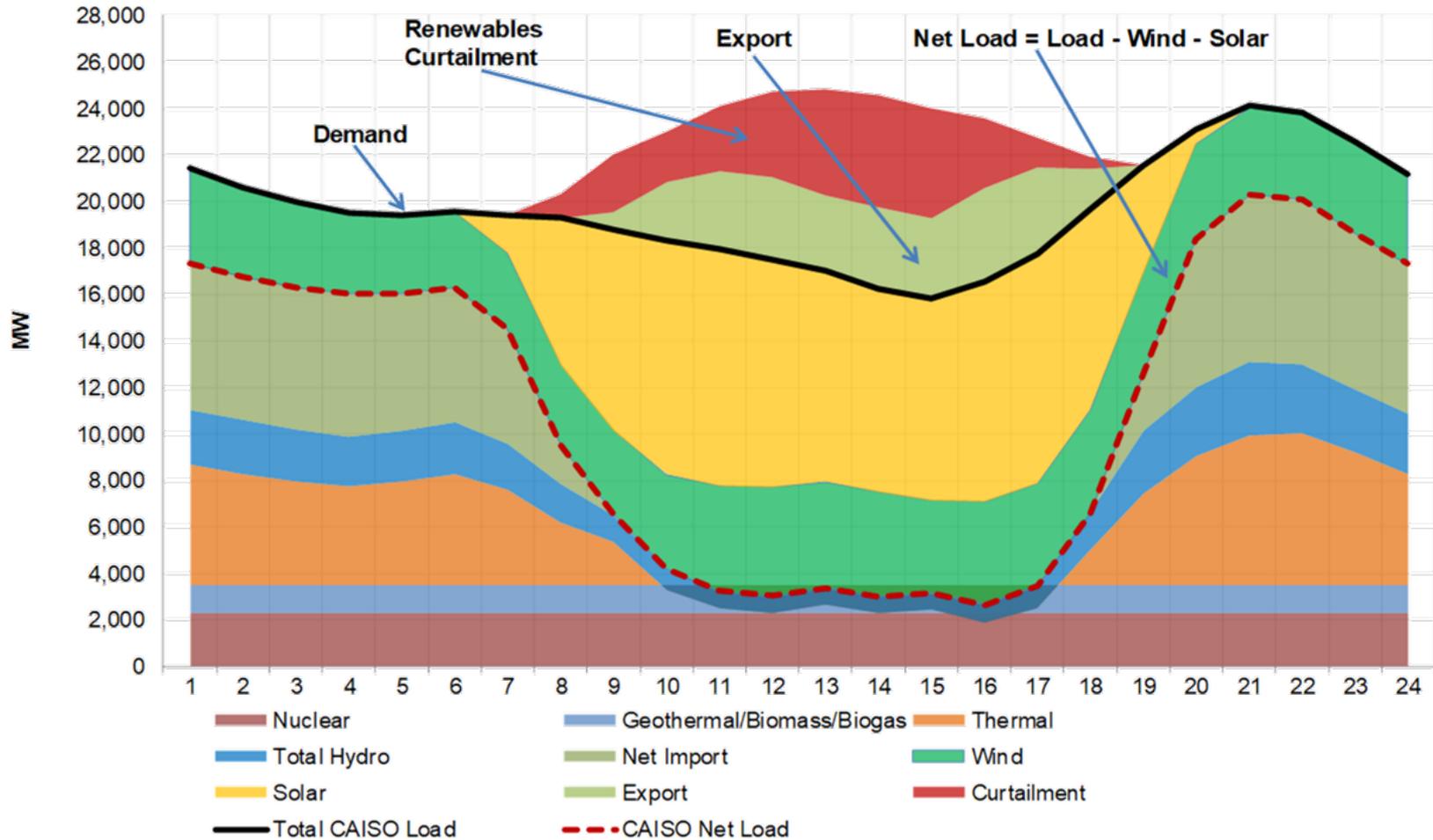
# The greatest risk of low reserve margins is when solar is unavailable



- 81% percent of the minimum reserve margins occurred during the hours ending 19:00 to 21:00 – hours of little to no production from solar resources.

# Non-carbon resources grow to meet 119.6 percent of load plus exports.

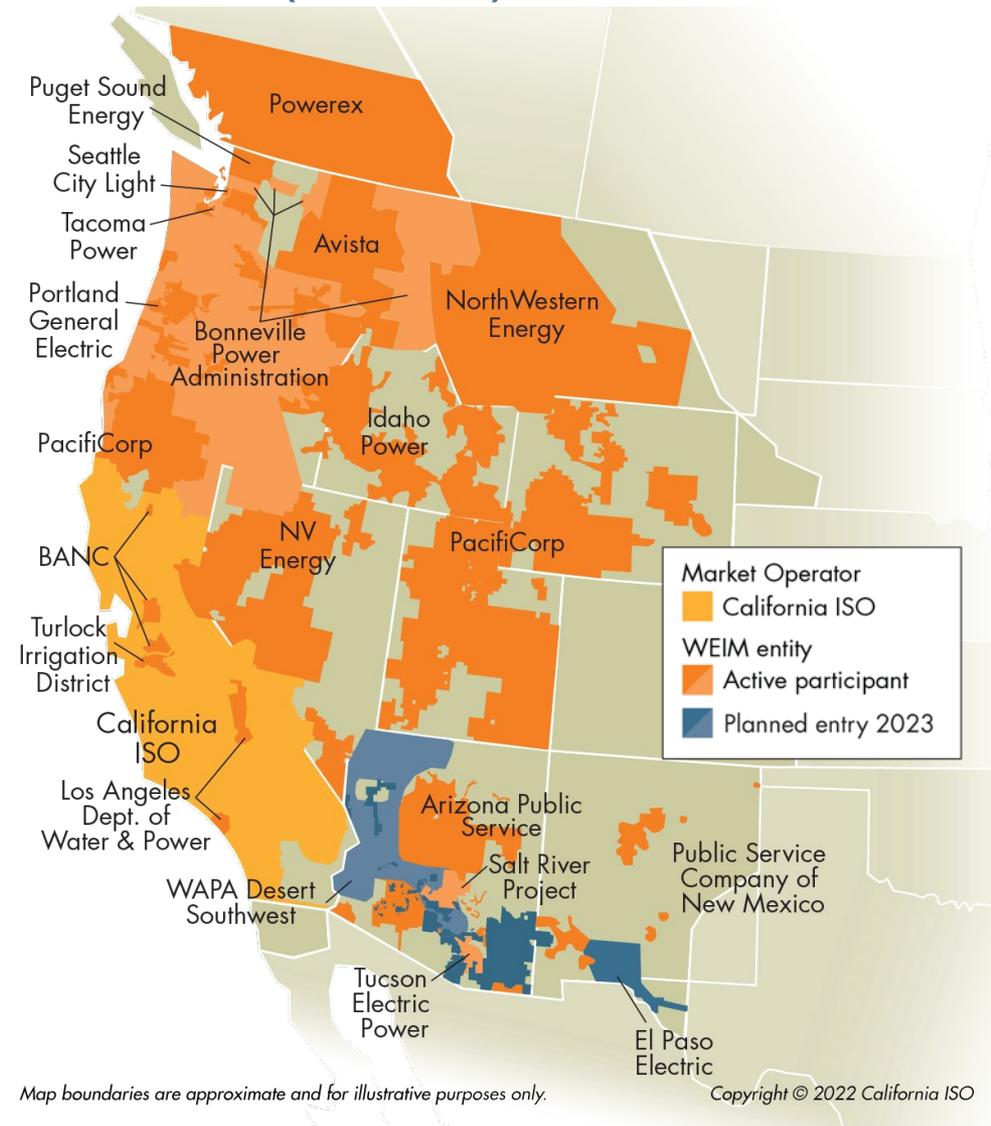
Generation Breakdown --- 05/08/2022



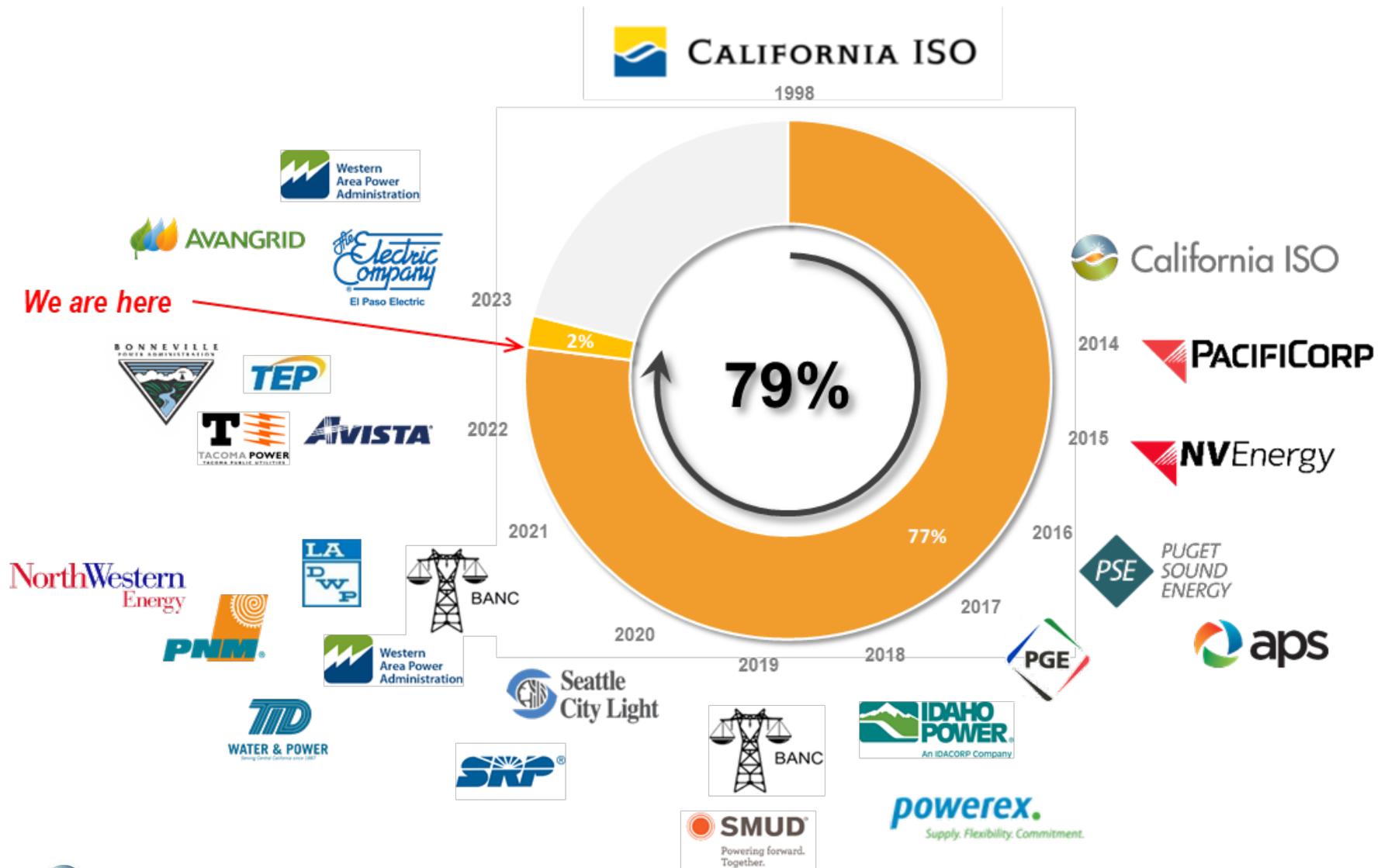
# Western Energy Imbalance Market (WEIM)

Since its launch in 2014, the WEIM has enhanced grid reliability, generated ~ \$2 billion in benefits for participants, and improved the integration of renewable energy resources.

- Voluntary wholesale energy real-time market.
- Optimally and economically dispatches resources.



# WEIM Implementation Status





# Comprehensive Straw Proposal Released May 28th

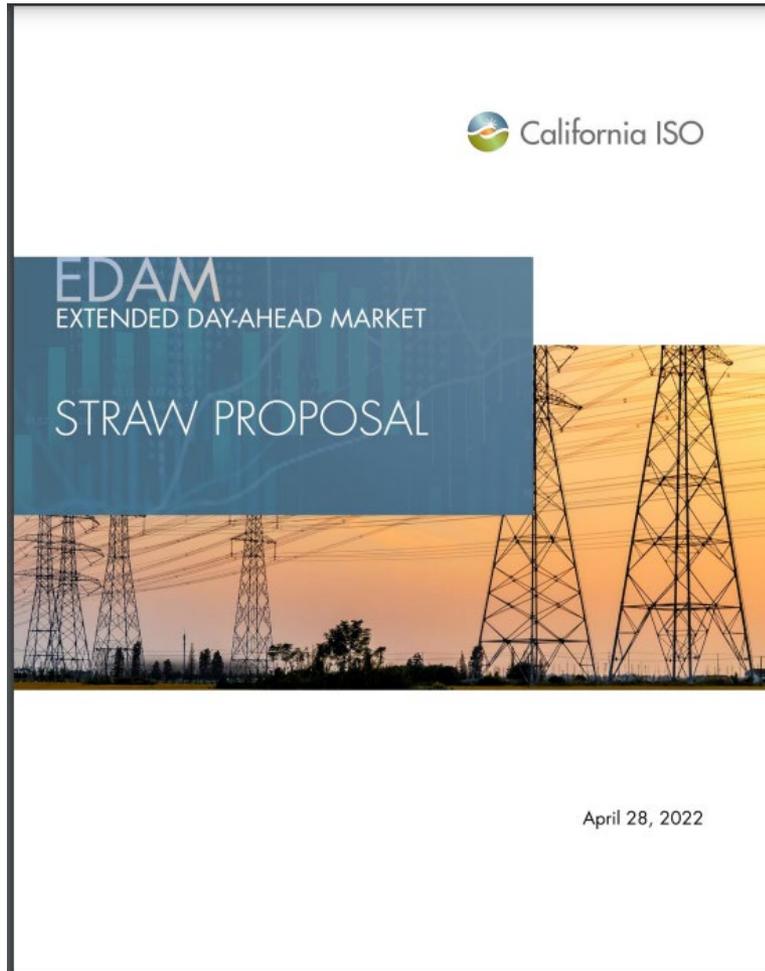


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Link: <http://www.caiso.com/InitiativeDocuments/StrawProposal-ExtendedDay-AheadMarket.pdf>

# Evolving regional collaboration in the West



Market governance considerations

Coordinated long-term planning  
Resource adequacy  
Transmission access

**RTO**  
**Single control & planning area**

A regional, multi-state entity under independent governance

Transmission provisioning  
Resource sufficiency  
Efficient resource commitment

**EDAM**  
**Day-ahead market**

The EDAM would cover the complete wholesale market from Day-ahead to Real-time

Bid-to-bill  
Full network model  
Metering

**EIM** Under joint governance  
**Real-time market**

The EIM achieves efficient “last minute” trading across participating regions



# Overview of Resource and Transmission Development

- In-state
- Offshore
- Out of state

