



California ISO

WESTERN ENERGY IMBALANCE MARKET (WEIM)

Decision on the Extended Day-Ahead Market (EDAM)

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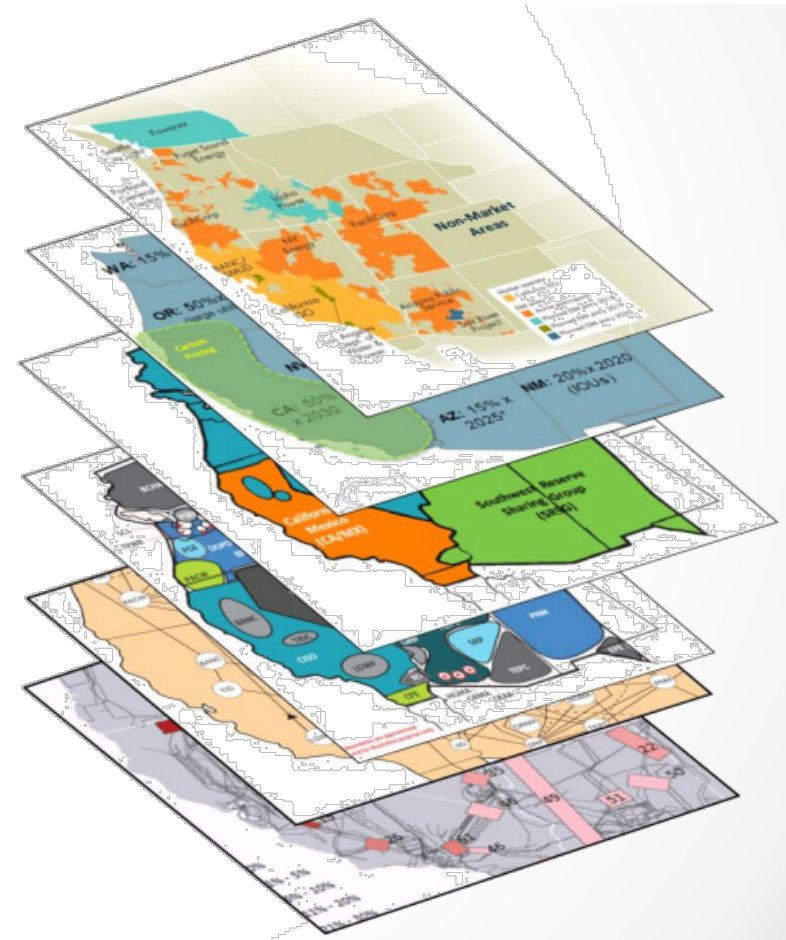
Joint ISO Board of Governors and WEIM Governing Body Meeting

General Session

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Extended Day-Ahead Market across the West

- Extension of the ISO day-ahead market across the West allows for optimized commitment of generation in the day ahead timeframe
- Builds upon the WEIM, providing incremental economic, reliability, and environmental benefits
- EDAM balancing areas retain resource planning, transmission planning and reliability functions



Harnessing the benefits of a day-ahead market in the West

Economic

- Optimized unit commitment in day-ahead timeframe across footprint
- Incremental studied savings range \$543 M/year to \$1.2 B/year.

Reliability

- Operational visibility into supply conditions and operational coordination
- Access to diverse resource pool across footprint

Environmental

- Reduced curtailment of renewable generation
- Respecting evolving state policies

Management proposes WEIM entities have the option to participate in the EDAM

- WEIM entities can voluntarily elect to extend participation to the EDAM
 - Can elect to participate only in WEIM
- Proposal includes transitional measures to manage unexpected reliability or market impacts
- Proposal provides for a six month notice period to exit the EDAM, with no exit fees
 - Same exit provisions as WEIM

Management proposes a day-ahead resource sufficiency evaluation to ensure sufficient supply

- Day-ahead resource sufficiency evaluation tests whether EDAM entities have sufficient supply to meet next day forecast demand and uncertainty
- Proposal includes financial incentives for meeting resource sufficiency requirements
- EDAM entities that pass the sufficiency evaluation will be evaluated as a pool in the WEIM sufficiency evaluation
- Proposal includes an optional “net EDAM export transfer constraint” that allows balancing areas to manage how much internal supply is available to support transfers

Proposal maximizes transmission availability to support transfers harmonized with OATT

- As in WEIM, transmission internal to an EDAM balancing area is available to support optimized resource commitment and transfers
- Proposal provides for transmission providers to make high quality transmission available at interfaces between EDAM areas to support transfers
 - Unsold firm transmission made available at interfaces between EDAM areas
- Transmission customers have three pathways to make transmission available to EDAM:
 - Pathway 1: exercise OATT rights in day-ahead market
 - Pathway 2: elect to release transmission to the market
 - Pathway 3: leave transmission unscheduled, and ability to exercise those rights after day ahead market
 - Market will seek to redispatch to accommodate the of these rights without disrupting DA schedules.

Proposal maximizes transmission availability to support transfers, harmonized with OATT

- Transmission customers can exercise their firm OATT transmission rights to wheel through or export from the EDAM footprint
 - Can indicate to market in advance expected use of rights and the market will seek to redispatch
- Proposal includes provisions for transmission providers to recover historical transmission revenues through the EDAM

Key day-ahead market features will be part of the EDAM

- Integrated forward market produces efficient unit commitment, imbalance reserves awards, and energy schedules resulting in transfers between EDAM areas
- The residual unit commitment procures additional capacity, beyond the integrated forward market, if necessary to meet the EDAM entity load forecasts
- Proposal includes current market power mitigation design used in the WEIM
 - Evaluate more broadly a day-ahead market power mitigation design through the *Price Formation Enhancements* initiative
- EDAM entities have the option to enable convergence bidding in their area at the start of EDAM participation

Management proposes external resources can participate in the EDAM

- Extend the current WEIM external resource participation design to the EDAM
 - Contracted supply can self-schedule to serve load
 - Non-source specific, non-contracted, supply cannot bid economically at EDAM entity interties
- External designated network resources (under terms of OATT), that are specific and modeled, can economically bid at an EDAM entity intertie
- Full intertie bidding allowed at ISO interties with non-EDAM entity balancing areas

The proposed design provides high confidence in transfers between EDAM balancing areas

- The EDAM provides efficient unit commitment and transfers among areas to serve load
- Multiple components of the design provide confidence in transfers, including the resource sufficiency evaluation and imbalance reserves
- During stressed conditions, if the market is unable to come to a solution, EDAM balancing authorities would rely on their operational tools to manage reliability
- In the event all options have been exhausted and load shed is at risk, transfers are provided equal priority to load

Management proposes to extend the current WEIM GHG accounting approach to the EDAM

- Apply the “current WEIM resource specific” GHG accounting
- Resources located outside of a GHG regulation area elect whether to be considered for serving load in a regulation area
- Update the geographic boundary of a GHG regulation area to reflect state lines as opposed to balancing area boundaries
- Support bidding and attribution to multiple state GHG regulation areas
- Establish an attribution baseline and introduce net export constraint to reduce the potential for secondary dispatch

Proposal equitably allocates congestion and transfer revenue among EDAM entities

- Congestion revenue due to internal transmission limits will be allocated to the EDAM entity where the internal limit is reached
- Transfer revenue due to limits at interfaces between two EDAM balancing areas will be shared equally (50:50) between the two EDAM entities

Stakeholder support extending the day ahead market to WEIM entities

- Stakeholder perspectives vary across different elements of the design
- Two of the primary concerns raised by some stakeholders include:
 - the inability to withhold OATT transmission from the EDAM or to impose transmission hurdle rates, and
 - the proposed GHG net export transfer constraint based on efficiency and reliability tradeoffs

Management recommends the ISO Board of Governors and WEIM Governing Body approve the Extended Day-Ahead Market proposal

- Proposal provides significant efficiency and reliability benefits by extending the day-ahead market to WEIM entities
 - optimizes commitment of resources and use of transmission capability across a larger footprint to efficiently and reliably position resources to meet next-day demand