Western Energy Imbalance Market Benefits and Market Update Q1 2024

Guillermo Bautista Alderete
Director Market Performance and Advanced Analytics

ISO Board of Governors meeting
General Session
May 23, 2024
Economic benefits total $436.3 million in Q1 2024

Gross economic benefits driven by:

- Wide footprint consisting of 22 balancing areas
- Economic transfers among areas
- Energy prices and economic displacement of high-value energy
$5.49 billion cumulative benefits through Q1 2024
The WEIM continues to reduce renewable curtailment

Avoided curtailment since 2015 represent a reduction of 925,568 equivalent tons CO₂
Onboarding new entities added transfer capacity
WEIM transfers were substantial in Q1 2024
WEIM transfers in Q1 2024 tracked solar production
Prices spiked in January due to the cold-weather conditions in the Pacific Northwest

Bilateral prices diverged in January from WEIM prices.
The day-ahead market cleared over 6 GW of exports during the long weekend

- ISO area had sufficient supply available to meet its own demand needs and support exports
- Exports were greater than imports in the day-ahead market
- The ISO was a net exporter for all hours of the long weekend in the day-ahead market
The real-time market economically rebalanced supply across the wider footprint to meet demand and manage congestion.

From day-ahead to real-time, WEIM transfers economically displaced ISO generation to meet exports while managing congestion on key south to north transmission elements.

What supply is used to meet demand and where it’s located matters for congestion management.

As conditions evolved in real time, ISO area was net exporting through hour 16 to then start net importing.

All available power that could flow from ISO to Northwest was used as much as the markets could clear.
The WEIM facilitated Northwest balancing areas to access assistance energy transfers, providing operational benefits

- Six WEIM balancing areas opted into the assistance energy transfer (AET) program
- This allowed them to receive energy transfers when they could not meet resource sufficiency requirements
- Two Pacific Northwest areas received as much as 176 MW of AETs
- This energy would not have been available without the AET program