



California ISO

Western Energy Imbalance Market Benefits and Market Update Q4 2023

Guillermo Bautista Alderete

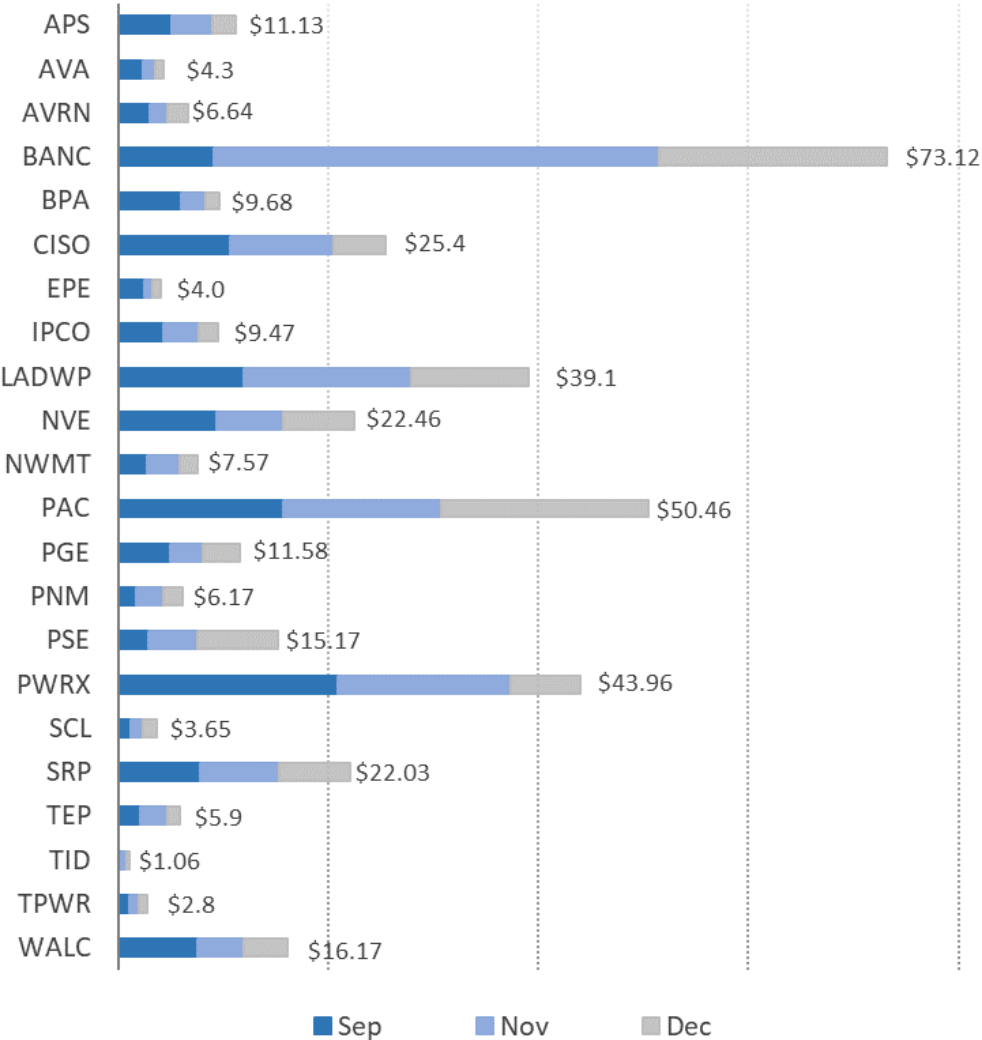
Director Market Performance and Advanced Analytics

ISO Board of Governors meeting

General Session

February 7, 2024

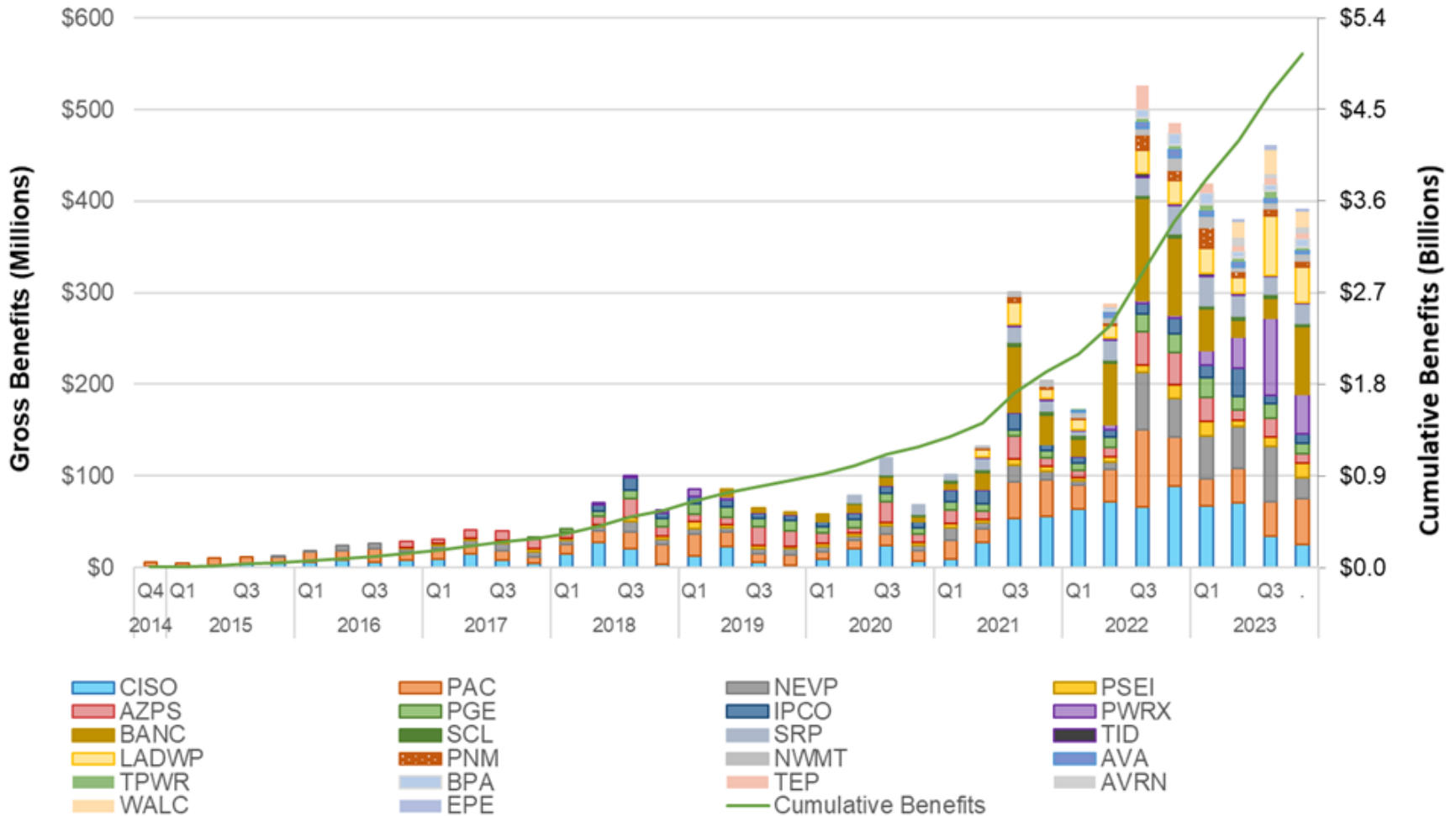
Economic benefits total \$391.82 million in Q4 2023



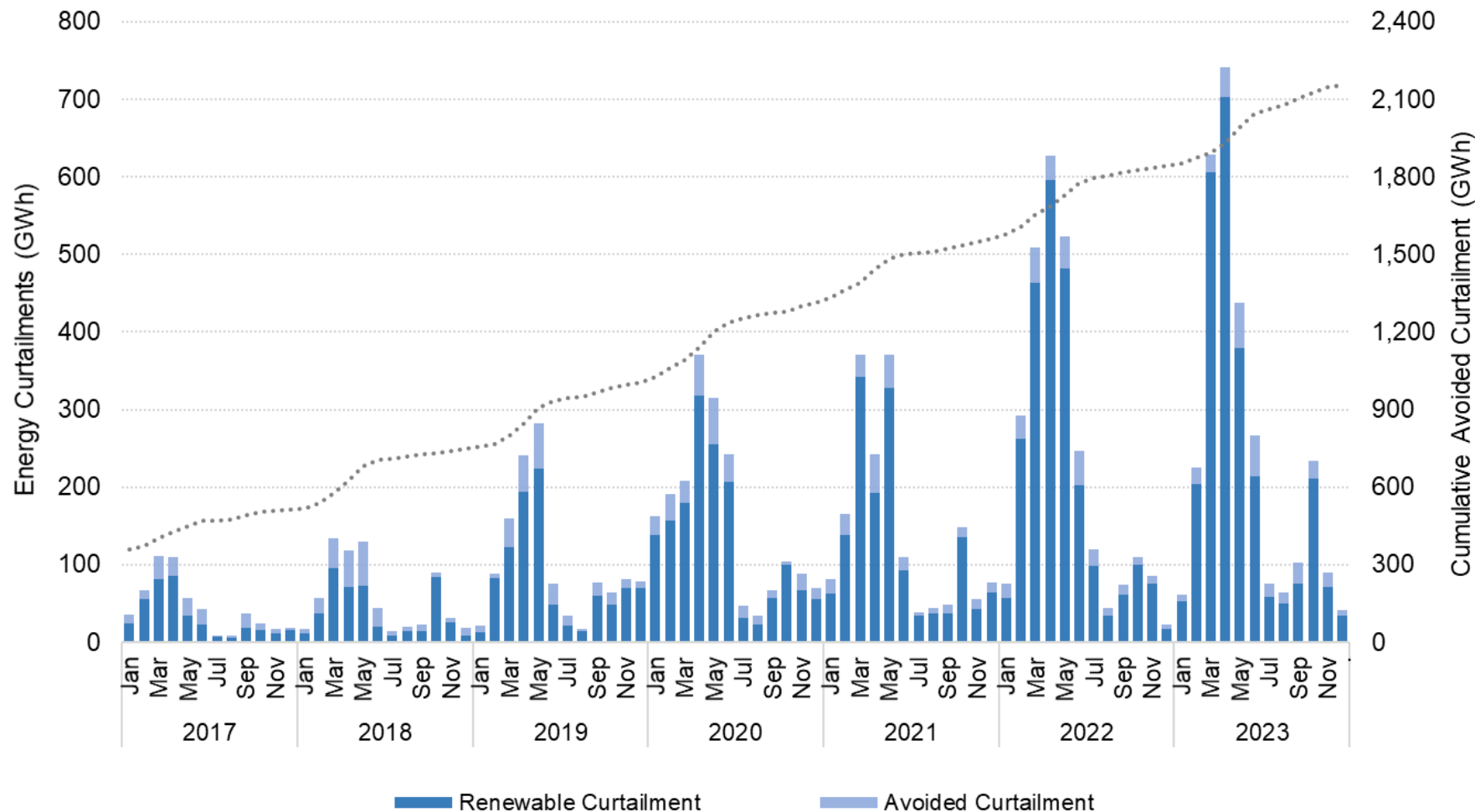
Gross economic benefits driven by:

- Wide footprint consisting of 22 balancing areas
- Economic transfers among areas
- Energy prices and economic displacement of high-value energy

\$5.05 billion cumulative benefits through Q4 2023

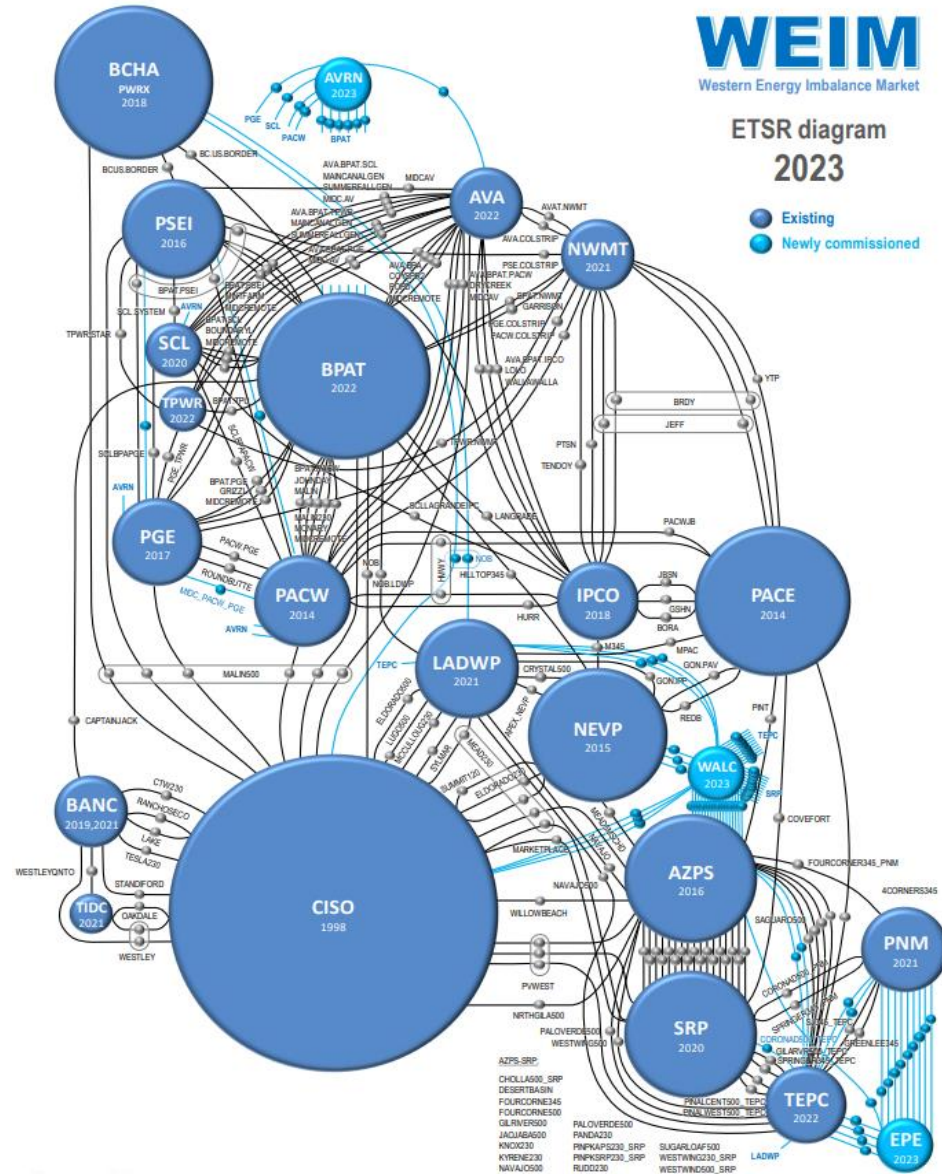


The WEIM continues to reduce renewable curtailment

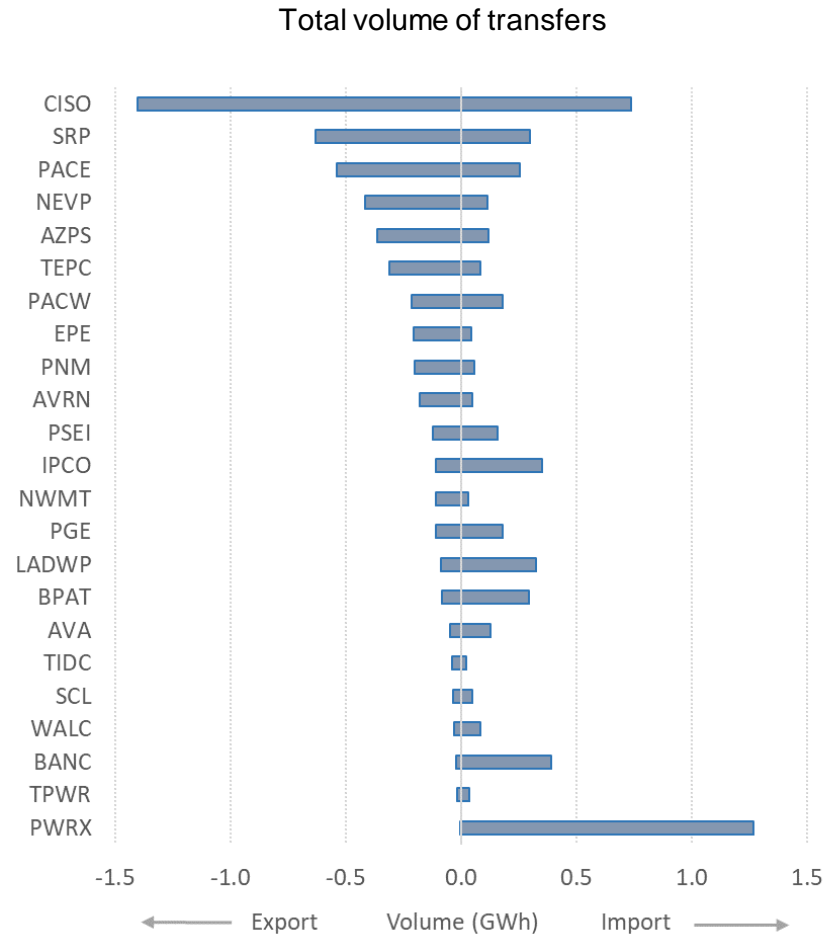
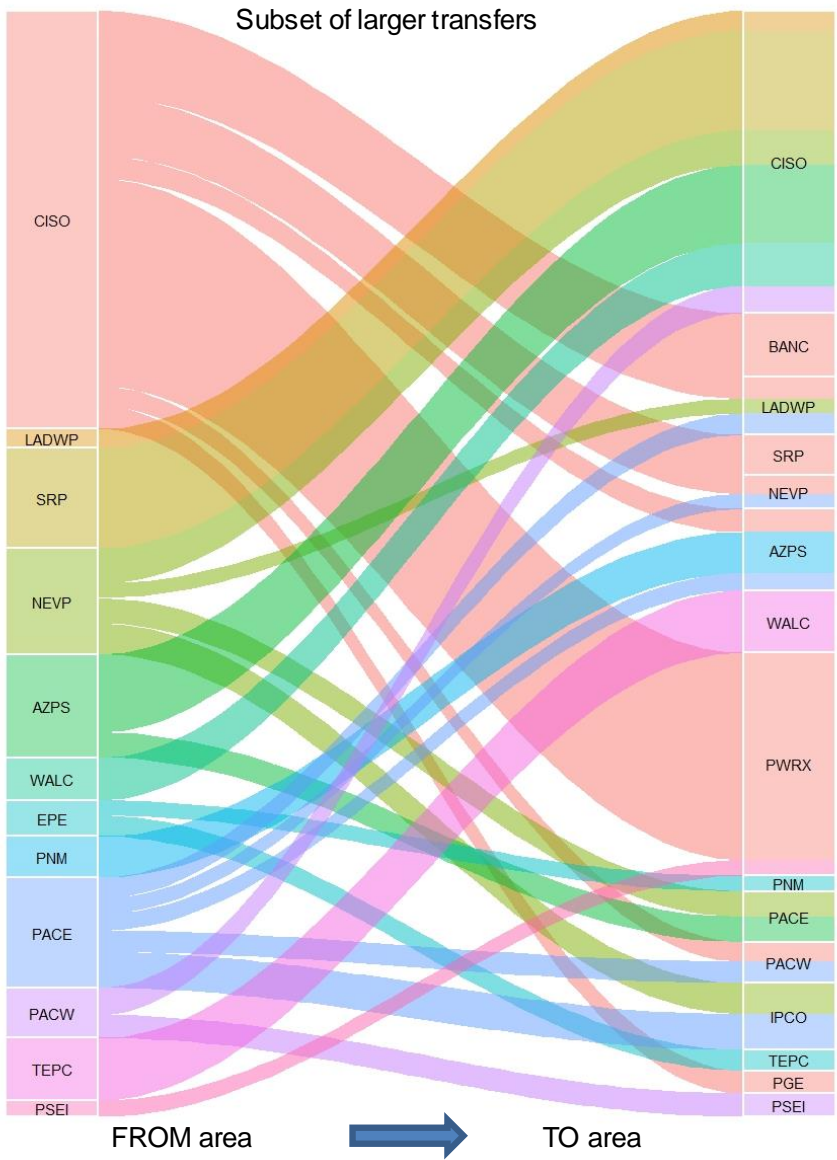


Avoided curtailment since 2015 represent a reduction of 925,568 equivalent tons CO₂

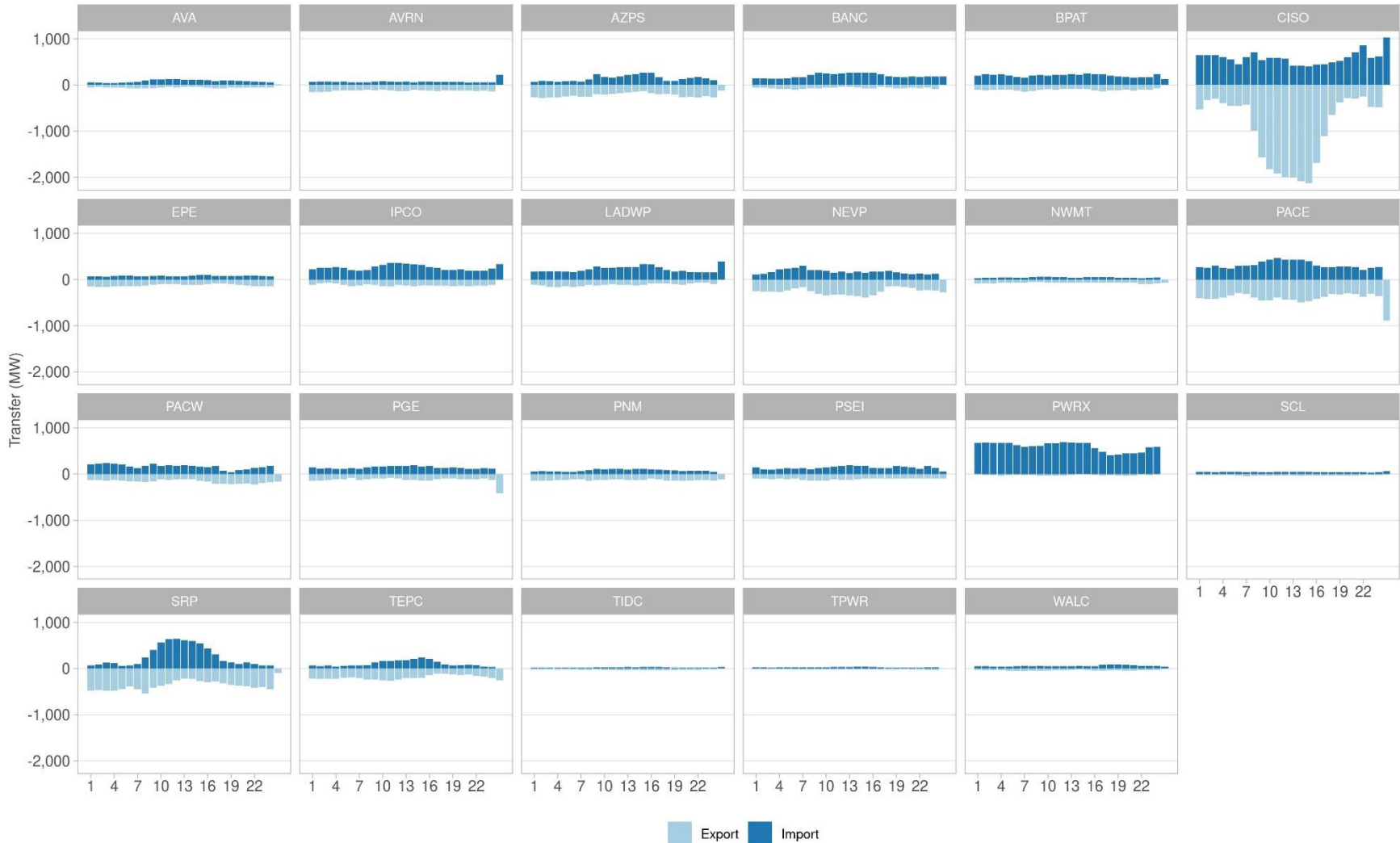
Onboarding new entities added transfer capacity



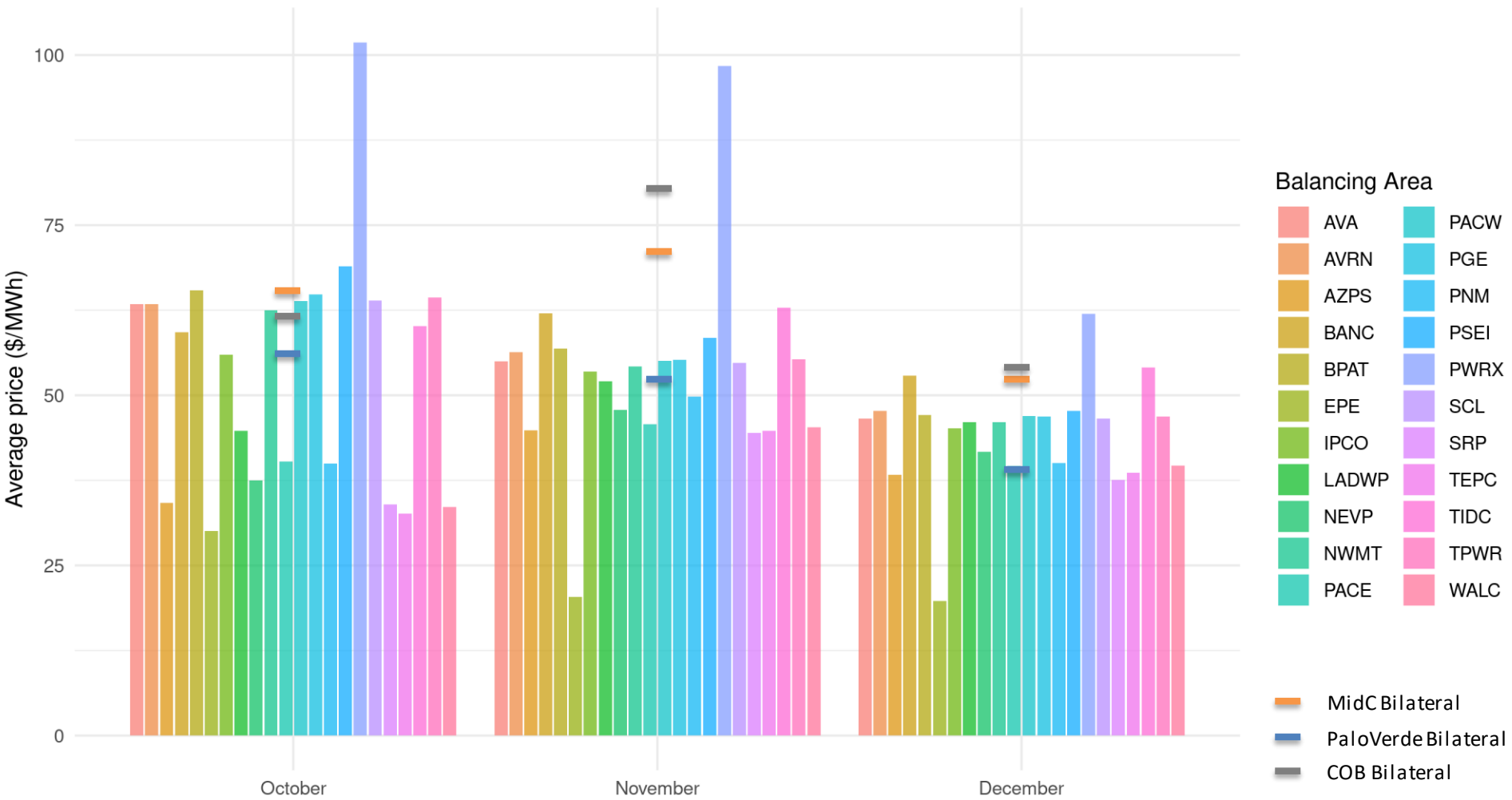
WEIM transfers were substantial in Q4 2023



WEIM transfers in Q4 2023 tracked solar production



Prices trended down with bilateral prices through December



Bilateral prices generally tracked close to WEIM prices