



California ISO

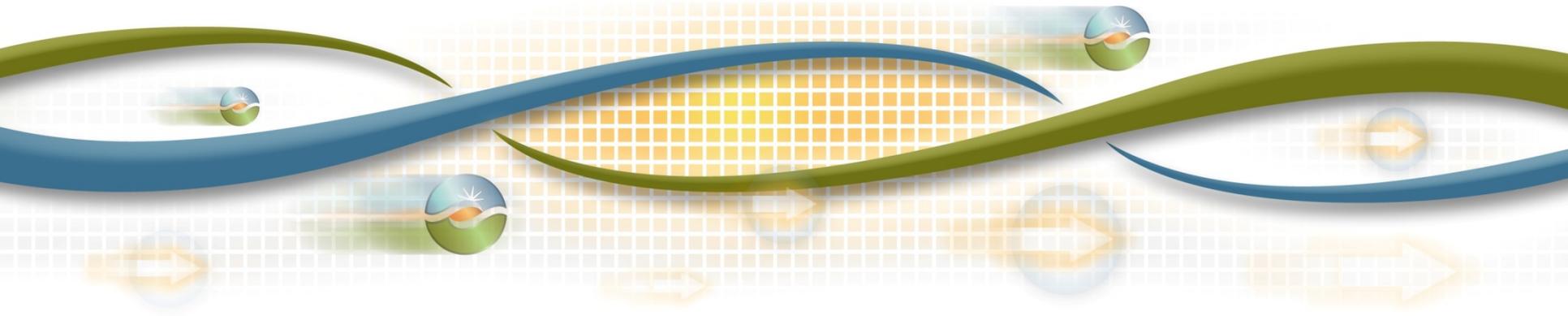
# Briefing on Energy Imbalance Market

John Anders, Lead Counsel

EIM Transitional Committee Meeting

General Session

June 25, 2015



# Agenda

- EIM operations update
  - Current ISO/PAC transfers
  - 15- and 5-minute pricing
  - Status of FERC issues
- Year one enhancements
  - status of Phase 1 tariff revisions
  - beginning Phase 2 stakeholder process
- EIM implementation update
  - NV Energy
  - Puget Sound Energy
  - Arizona Public Service

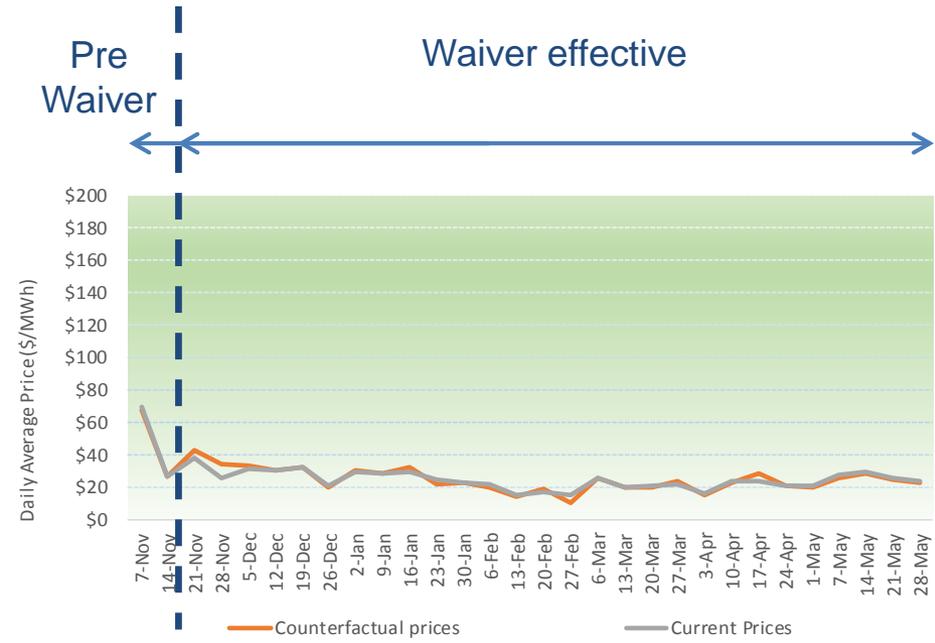
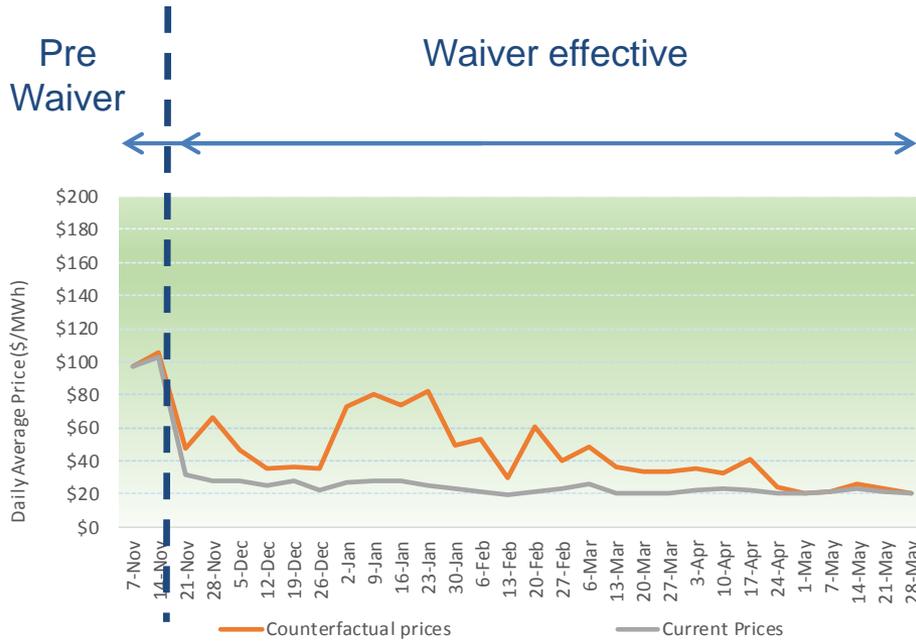
# EIM Operations update

- Benefits assessment for 2015-Q2 prepared by July 30.
- Pricing discovery waiver update
  - FERC extended waiver until the implementation of a solution directed in a subsequent FERC order
  - ISO filed proposal to automate recognition of capability available to EIM Entity
  - Infeasibilities improved in PACW but continue in PACE
- Transfers increase in May
- Frequency of infeasibilities improves in May

# Pricing performance continues to improve in May

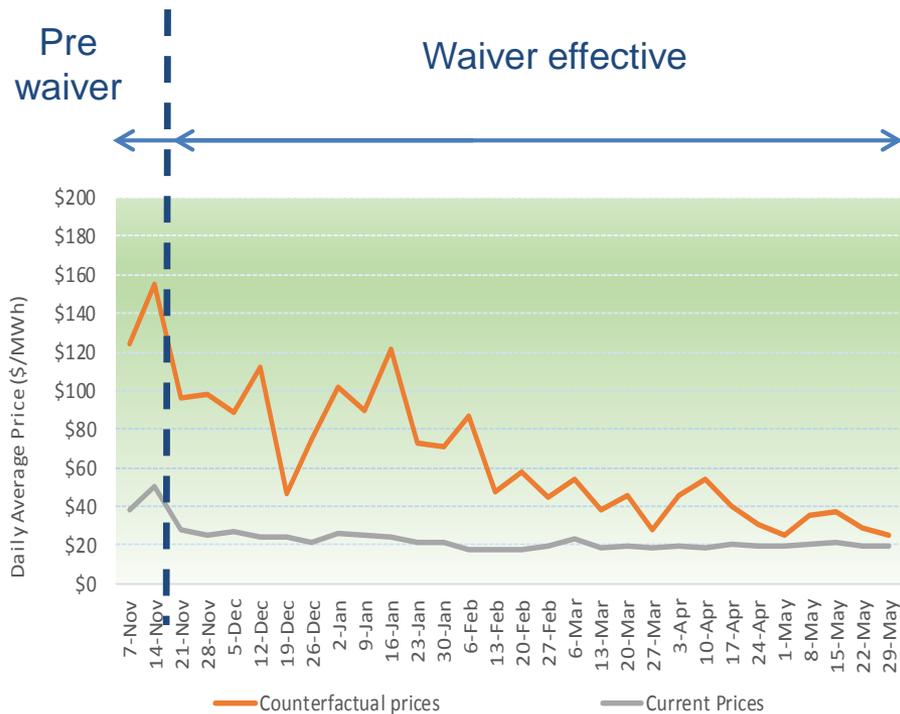
## 15-minute PACE Aggregate Price

## 15-minute PACW Aggregate Price

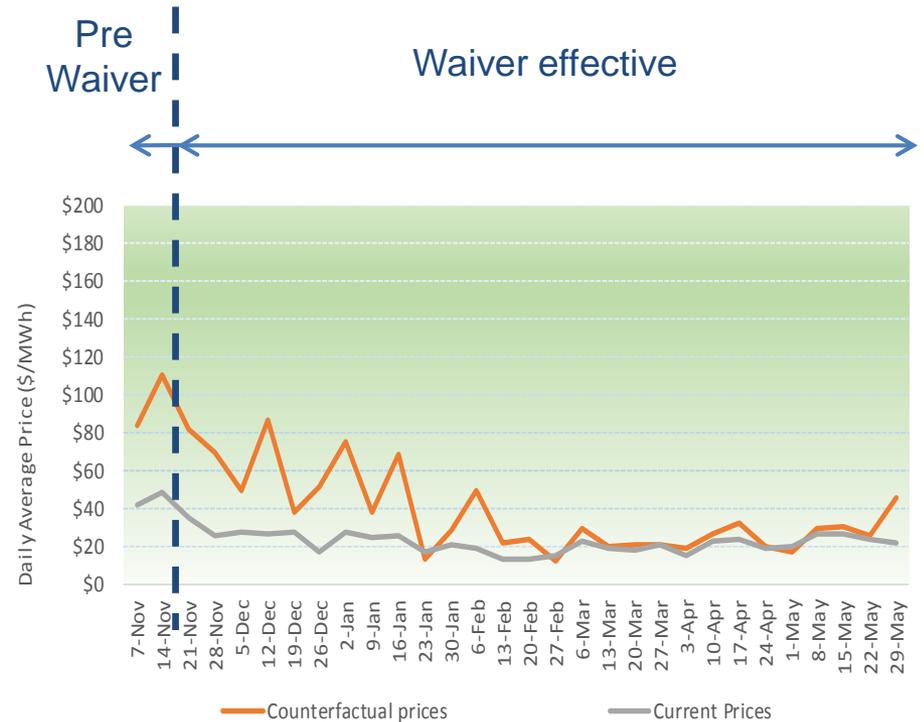


# Pricing performance continues to improve in May

## 5-minute PACE Aggregate Price

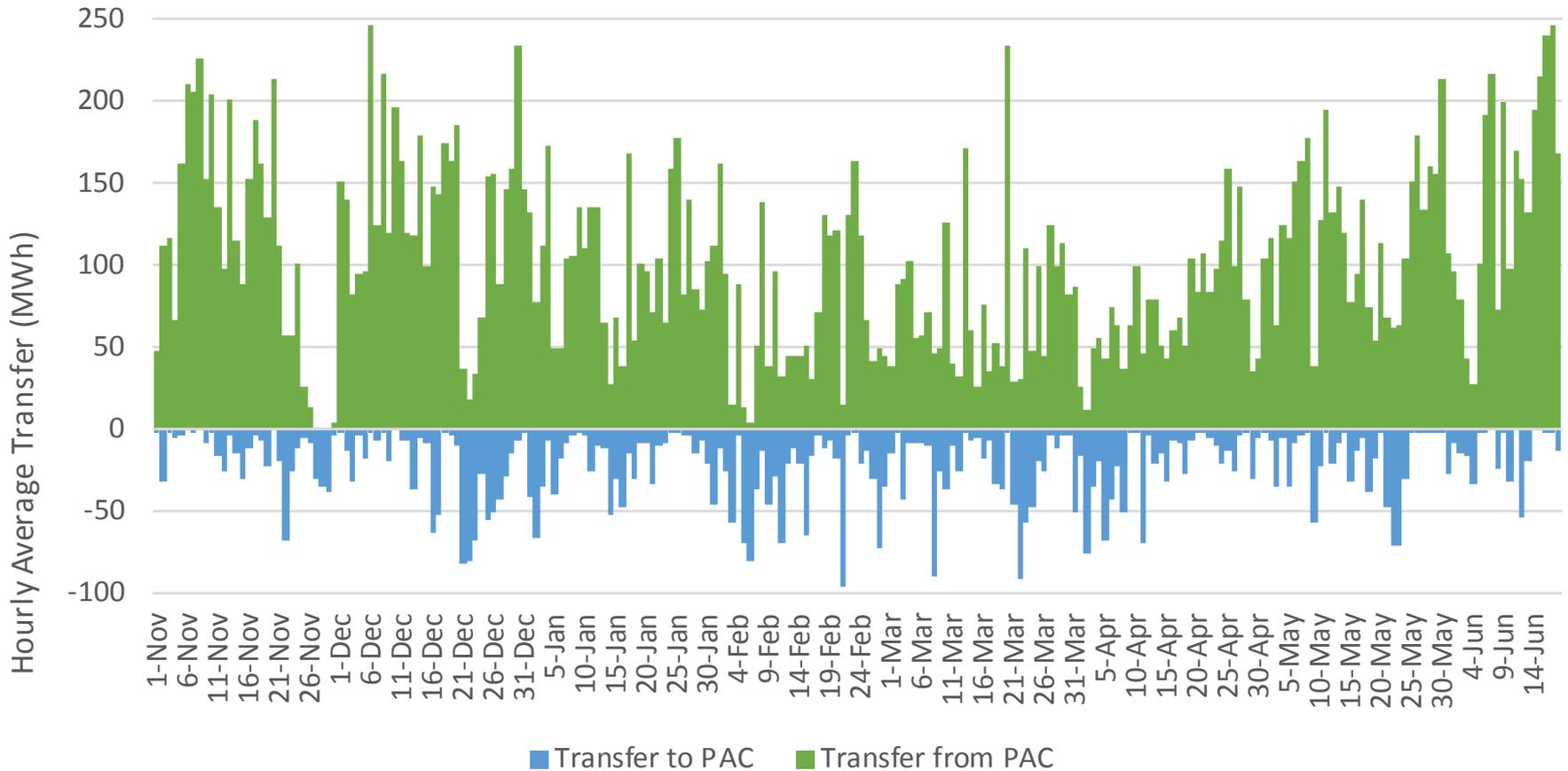


## 5-minute PACW Aggregate Price



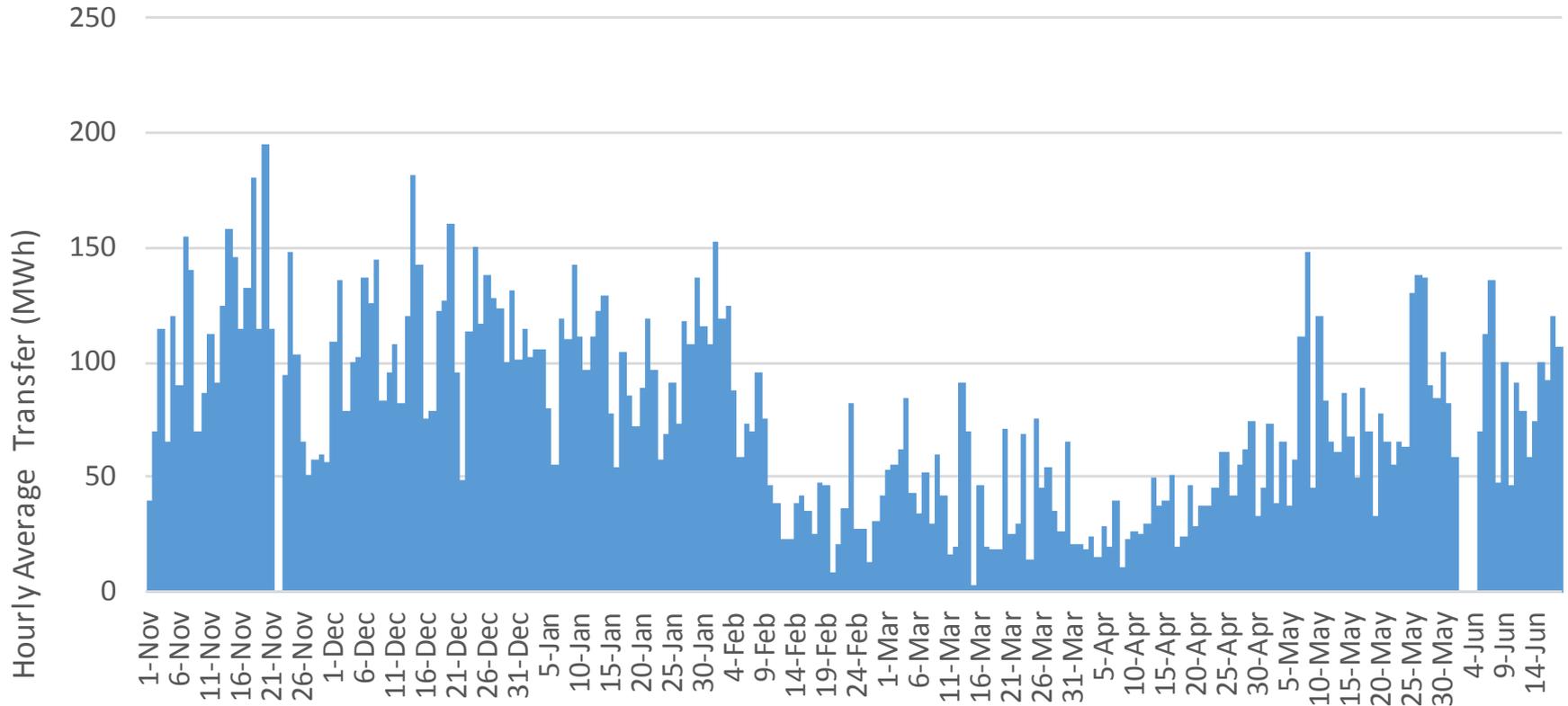
# Hourly average transfers from PacifiCorp and ISO increased in May

(+) PacifiCorp to ISO / (-) ISO to PacifiCorp

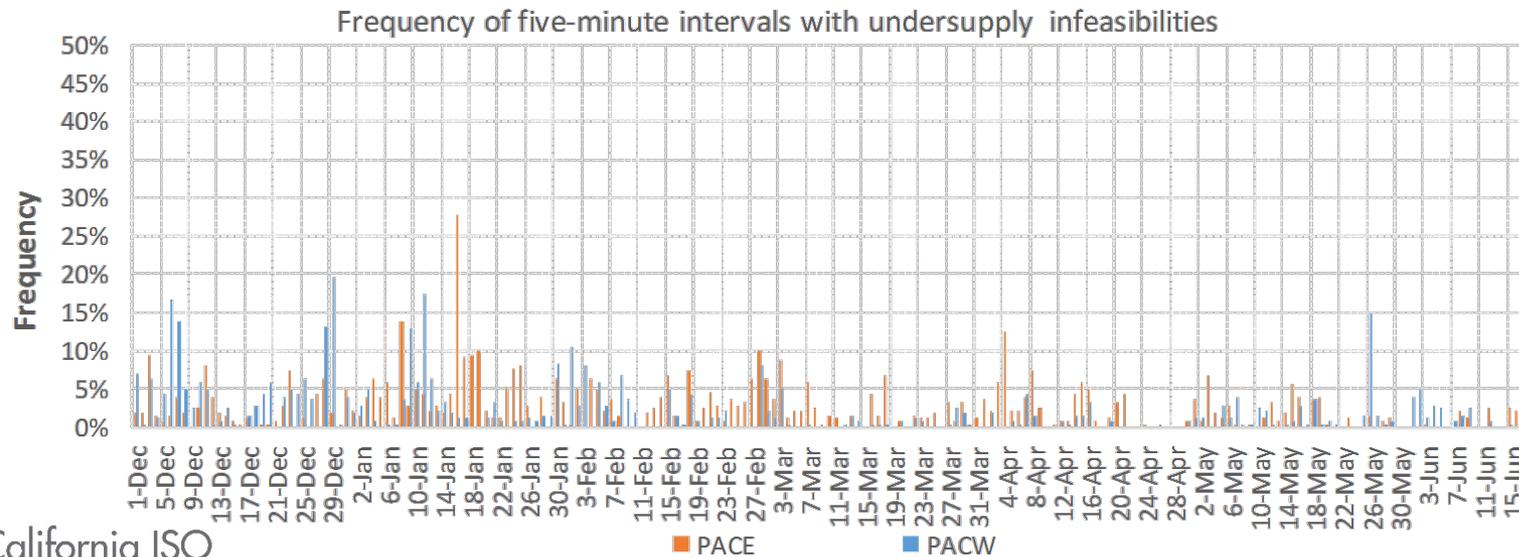
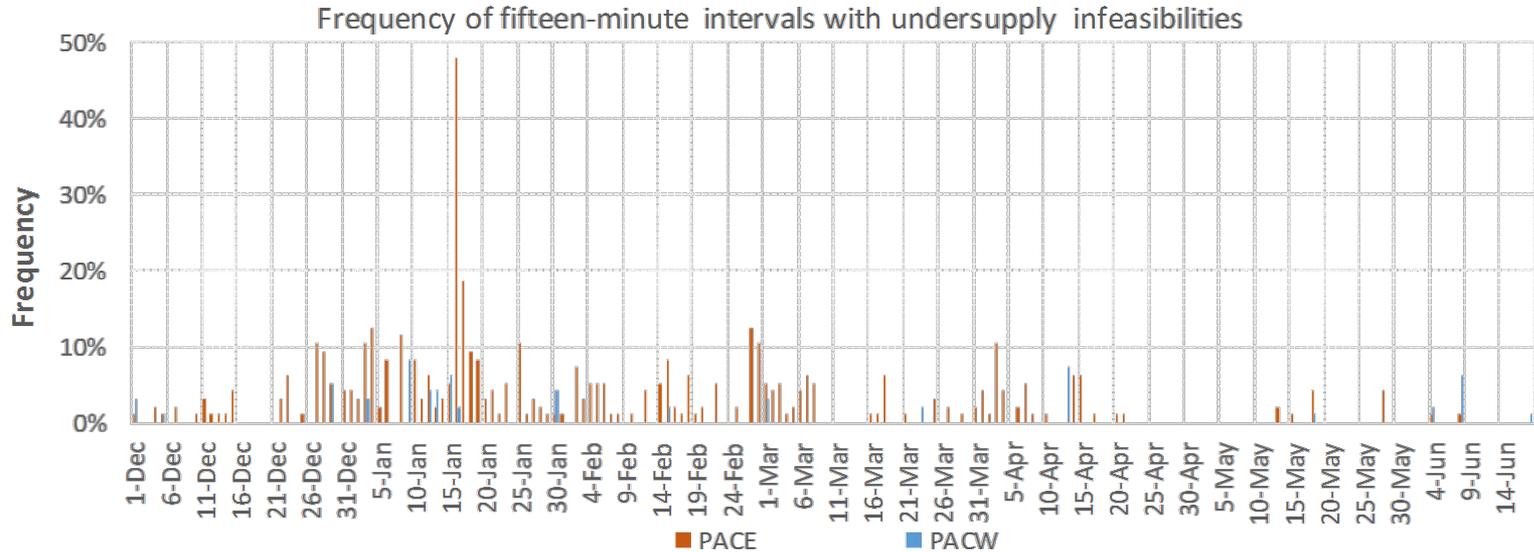


# Hourly average transfers between PACE and PACW increased in May

(+) PacifiCorp East to PacifiCorp West



# Frequency of 5' and 15' intervals with MW undersupply infeasibilities continue to show improvement in May



# Status of FERC matters

- 206 proceeding from rejection of 1 year transition period
  - Technical Conference: proposal regarding available capacity
    - Extended pricing waiver until proposal can be implemented
    - Decision on available capacity proposal is still pending
    - Must file additional waiver of flexible ramping constraint relaxation parameter by July 6
  - Readiness criteria
    - Compliance filing made May 6, FERC acceptance pending
    - 2015 readiness criteria stakeholder comments June 24, finalize June 30
- EIM Year 1 Enhancements Phase 1 tariff filing
  - Filed June 15, Seeking decision by September 1
- Updated transition period
  - 6 month duration with ability to request additional 6 months
    - Price discovery mechanism is in effect
  - Updated tariff will be reviewed with stakeholders mid July
  - Filing planned by end of July, decision by October 1

## Year One Enhancements: Phase 2 items informed by one year of operational experience or need additional discussion

- EIM transmission charge
- Additional sub-allocation of real-time congestion offset (flow entitlements)
- 15-minute bidding on intertie scheduling points
- Congestion settlement on EIM transfer limits
- Dynamic market power mitigation
- Other items identified during implementation

May seek Board decision on discussion items in 2015

Data

Discussion

## Proposed schedule for Phase 2

- June 30 Post issue paper/straw proposal
- July 8 Stakeholder call
- July 22 Comments due
- Aug 5 Post revised straw proposal
- Aug 12 Stakeholder meeting (Bellevue, WA)
- Aug 26 Comments due
- Sept 17 Post draft final proposal\*
- Sept 24 Stakeholder call
- Oct 1 Comments due

\* For “discussion” items seeking 2015 Board decision

# EIM Implementation project – NV Energy

## On track for EIM activation (full binding) on 10/1/15

- Initiated connectivity testing in MAP Stage environment on 6/18/15.
- Plan to post draft settlement configuration files on 6/30/15.
- Formally start “day-in-the-life” practice exercises on 7/1/15 (anticipate earlier start based on connectivity success to date).
- NVE full network model to be included in DB 2015Q3 on 7/23/15.
- Preparing for start of structured market simulation scenarios on 8/3/15.
- Anticipate filing EIM readiness criteria certification on 8/31/15.
- Plan to start parallel production on 9/1/15.

## Operational readiness track

- Continued operator training according to plan and readiness criteria.
- Certification of real-time desk completed.
- Operations involvement in connectivity, “day-in-the-life” and market simulation.

# EIM Implementation project – Puget Sound Energy

- Created baseline of project plan and schedule on 6/1/15.
- Initiated all work streams and they are progressing per the project plan.
- Held monthly executive meeting on 6/8/15; topics included:
  - Working with BPA on execution of MOU
  - PSE is evaluating work and options associated with exporting the full network model in the required CIM 15 format
  - PSE is completing vendor selection for EIM system interfaces
- High level touch point mapping held on 6/10/15
- Operations touch point mapping held on 6/16/15
- Settlements 101 scheduled for 6/26/15
- Overall status is on track for scope, budget, and resource with minor schedule caution related to exporting full network model.

# EIM Implementation project – Arizona Public Service

- Implementation agreement signed on 5/28/15.
- Project planning and implementation kickoff meeting held on 6/15/15.
- Plan to baseline project plan and schedule on 7/1/15.
  - Initiating work streams and project tracks
  - Aligning target dates with PSE implementation
- APS has capability to export their full network model in CIM 15 format which meets ISO requirement.

# Questions