

Price Formation Enhancements (PFE)

WEM BOSR Monthly Meeting

March 14, 2025

Introduction

- The purpose of this presentation is to provide an update to the WEM Body of State Regulators (BOSR) on the status of the Price Formation Enhancements (PFE) initiative
- The PFE initiative seeks to improve price signals and market efficiency in the WEIM
 - Scarcity Pricing
 - BAA-Level Market Power Mitigation (MPM)
 - Fast-Start Pricing



Scarcity Pricing

- When supply falls short of demand, scarcity pricing sets market prices in ways that reflect the severity of the shortfall (i.e., the larger the shortfall the higher the prices). This motivates additional generation to come online and prompts demand reduction during critical periods.
- Key topics covered in working group:
 - Ancillary service procurement enhancements
 - Mechanisms to gradually raise prices as shortages approach
 - Exploring Value of Lost Load (VOLL) to set penalty prices
 - Integrating emergency actions into market pricing





- BAA-level MPM prevents suppliers from exercising BAA-level market power to influence prices in the WEIM.
- Key topics covered in working group:
 - Exploring a grouping approach
 - Exploring mitigating only pivotal suppliers
 - Exploring using an impact test
 - Analyzing data to assess the structural competitiveness of the CAISO BAA and how a grouping approach could affect mitigation frequency





- Fast-start pricing reflects the costs of fast-start resources that can quickly come online to meet demand into LMPs. Standard LMP pricing often doesn't let these resources set market prices even when they're effectively meeting the next increment of demand because their operating requirements limit their flexibility to adjust output.
- Key topics covered in working group:
 - The method and timing to amortize commitment costs
 - Defining fast-start resources
 - Presentations from MISO and PJM staff on their fast-start pricing implementations and the perspectives of their respective IMMs, including reactions from CAISO and its independent market expert





Briefing on PacifiCorp OATT filing implementing EDAM

Body of State Regulators (BOSR) Meeting March 14, 2025

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PacifiCorp OATT filing implementing EDAM

- FERC approved the EDAM design in December 2023.
- PacifiCorp, as the first participant, developed revisions to its Open Access Transmission Tariff (OATT) to implement EDAM.
- PacifiCorp initiated its stakeholder process on EDAM Open Access Transmission Tariff (OATT) changes in June 2024.
- PacifiCorp re-filed its EDAM OATT changes in January 2025.
- Seeking FERC decision by May 16, 2025.



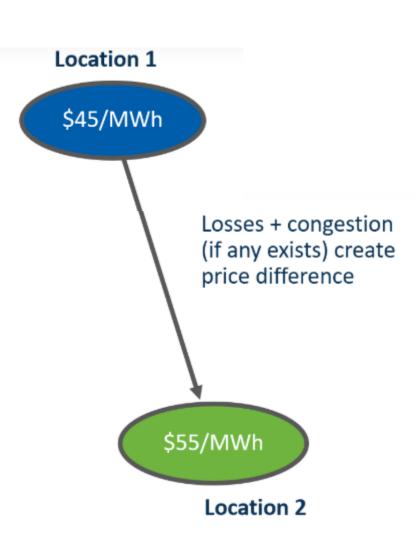
Key issue raised in proceeding: Congestion Revenue Allocation

- Commenters expressed concern that the EDAM congestion revenue allocation method creates significant uncertainty in managing congestion cost exposure.
- Parties exercising their firm OATT transmission rights may not be able to fully hedge their congestion cost exposure.
 - Congestion price at a location may be reflective of transmission constraints within the EDAM area or adjacent EDAM balancing area
- PacifiCorp OATT revisions provide a congestion hedge to parties exercising firm OATT rights in EDAM based on congestion revenues received from the market operator.



What is Congestion Revenue?

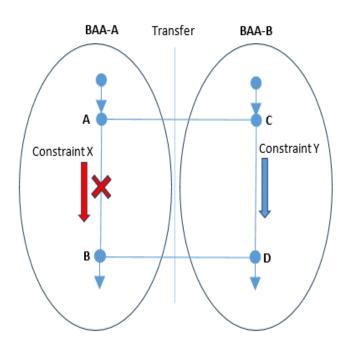
- Locational Marginal Prices contain a congestion component considering congestion contribution across the market footprint.
- Locational Marginal Prices represent the prices that generators are paid and that load pays at their respective locations.
- In aggregate, the ISO collects more from load than it pays generators and the remainder is "congestion revenue."
- Across an interconnected market footprint, the ISO allocates congestion revenues to the EDAM entity who further sub-allocates to its customers.





Congestion Revenue Allocation in EDAM

- Congestion revenues associated with an internal transmission constraint are fully allocated to the entity where the constraint materialized.
- Congestion price at a location in an EDAM area may be driven by modeled flow impacts of a constraint in an adjacent EDAM area due to "parallel flow."
 - Proportional congestion revenue is allocated to the adjacent EDAM entity associated with the constraint in its area.
- The current design allocates congestion revenues to the area where the constraint is located and which most effectively experiences and manages the constraint.



Upcoming EDAM Stakeholder Initiative

- In its answer to the PacifiCorp OATT proceeding, the ISO indicated the intent to open an expedited stakeholder initiative on EDAM congestion revenue allocation.
- The initiative will focus on:
 - Establishing understanding of the existing EDAM design for congestion revenue allocation
 - Introduction of potential transitional approaches that consider mechanisms for allocation of congestion revenues between EDAM areas accounting for parallel flows (may enable some EDAM entities to provide fuller congestion hedge to parties exercising OATT rights)



Next Steps

- The ISO will publish an issue paper on March 17th
 - Description of existing EDAM design and introduction of potential approaches for allocation of congestion revenues associated with parallel flows
- Stakeholder workshop meeting scheduled for March 24th
 - Discussion of existing design in depth and potential approaches introduced.
- We encourage stakeholder participation on this important topic.

