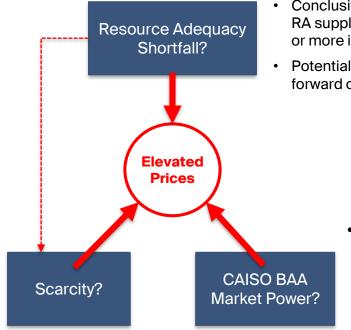
Powerex

August 27, 2019
Jeff Spires

# System Market Power in the CAISO BAA EIM Regional Issues Forum Meeting

## Elevated Prices Can Be An Indicator Of Different Challenges (With Different Solutions)



CAISO BAA also short

sufficient day-ahead

reserves" by **2,500 MW** or

Strongly suggests scarcity

upward "balancing

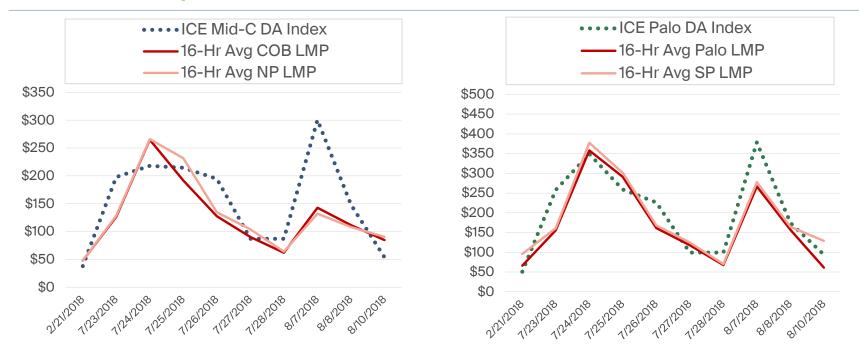
more on peak days

conditions

- Conclusive evidence that California RA supply falls short by 4,000 MW or more in peak hours
- Potential concerns of insufficient forward contracting/hedging

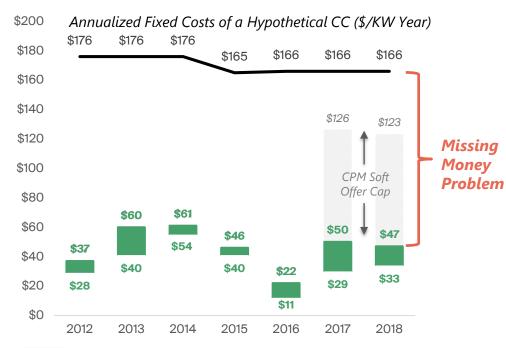
- Structural analysis to date does not conclusively demonstrate current presence or exercise of system-wide market power in the CAISO BAA in a material number of hours; but
- May change over time

# CAISO Day-Ahead LMPs Consistent with External Bilateral Prices Reflects Competitive Outcomes



Dates correspond to days evaluated in Dr. Harvey's presentation at August 19, 2019 MSC Meeting (slides 17, 33). Day-ahead bilateral market liquidity focused on standard 16-hour HLH (and 8-hour LLH) blocks. Charts show price comparison to CAISO DAM prices over the same corresponding hours.

#### Re-Thinking Competitive Outcomes When New Supply Is Needed



Range of Theoretical Spot Market Revenues of a Combined Cycle Resource (\$/KW Year)

Current CAISO Capacity Backstop Mechanism (CPM) Soft Offer Cap (76 \$/KW Year)

- Narrow focus to date on risk of elevated spot prices in some hours
- Overall, energy market revenues in California are far below levels to support new supply
  - Discussion of methods to prevent/mitigate market power should be balanced with broader examination of efficient market outcomes to avoid:
    - making "missing money problem" even worse
    - paying for the wrong resources/attributes
    - indirectly increasing costs to RA program
  - Consider improving scarcity pricing in tandem with improved market power mitigation for CAISO BAA?

## How To Address Broader CAISO Market Power Concern (If It Arises)?

Topic	Challenges of "System" MPM	Potential for a BAA-Level Mitigation Approach for CAISO BAA
What specific circumstances raise a market power concern?	RSI trigger; metric ignores <u>potential</u> external supply that <u>could</u> be offered to CAISO	CAISO BAA (or NP, SP) is import constrained and 3 pivotal supplier test fails
What resources would be mitigated?	Mitigation applies to offers inside and outside CAISO BAA	Mitigation only applies to resources within constrained BAA (similar to EIM approach)
What effect on external voluntary supply?	Discourages voluntary supply from external resources	Allows CAISO prices to appropriately rise when necessary to compete for additional external supply
What is the geographic extent of CAISO's mitigation?	Effectively leads to CAISO mitigation of supply from any resource <u>across the</u> <u>WECC</u>	Mitigation limited to the resources inside the CAISO BAA (as only those resources can relieve import constraint)



#### Thank You

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