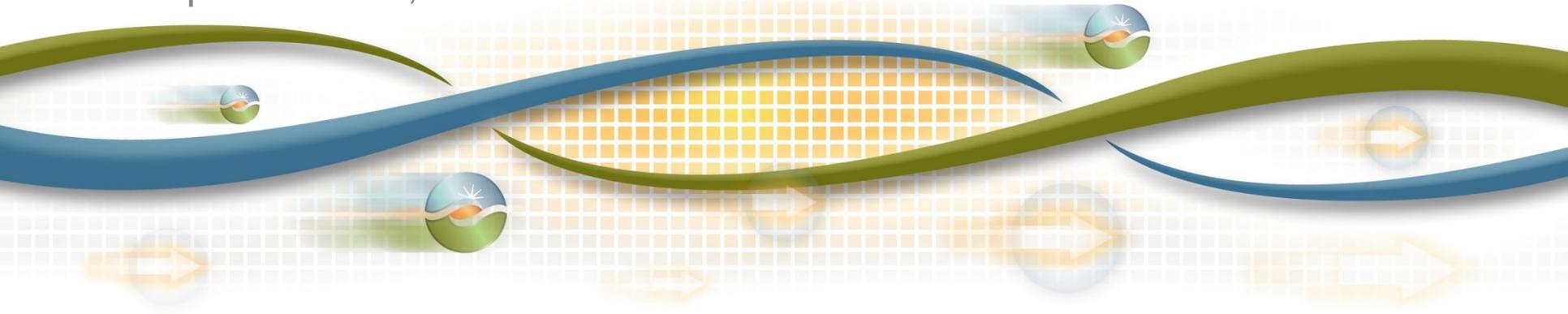




DMM comments on Aliso Canyon market impacts

Keith Collins – Manager, Monitoring and Reporting
Department of Market Monitoring
California ISO

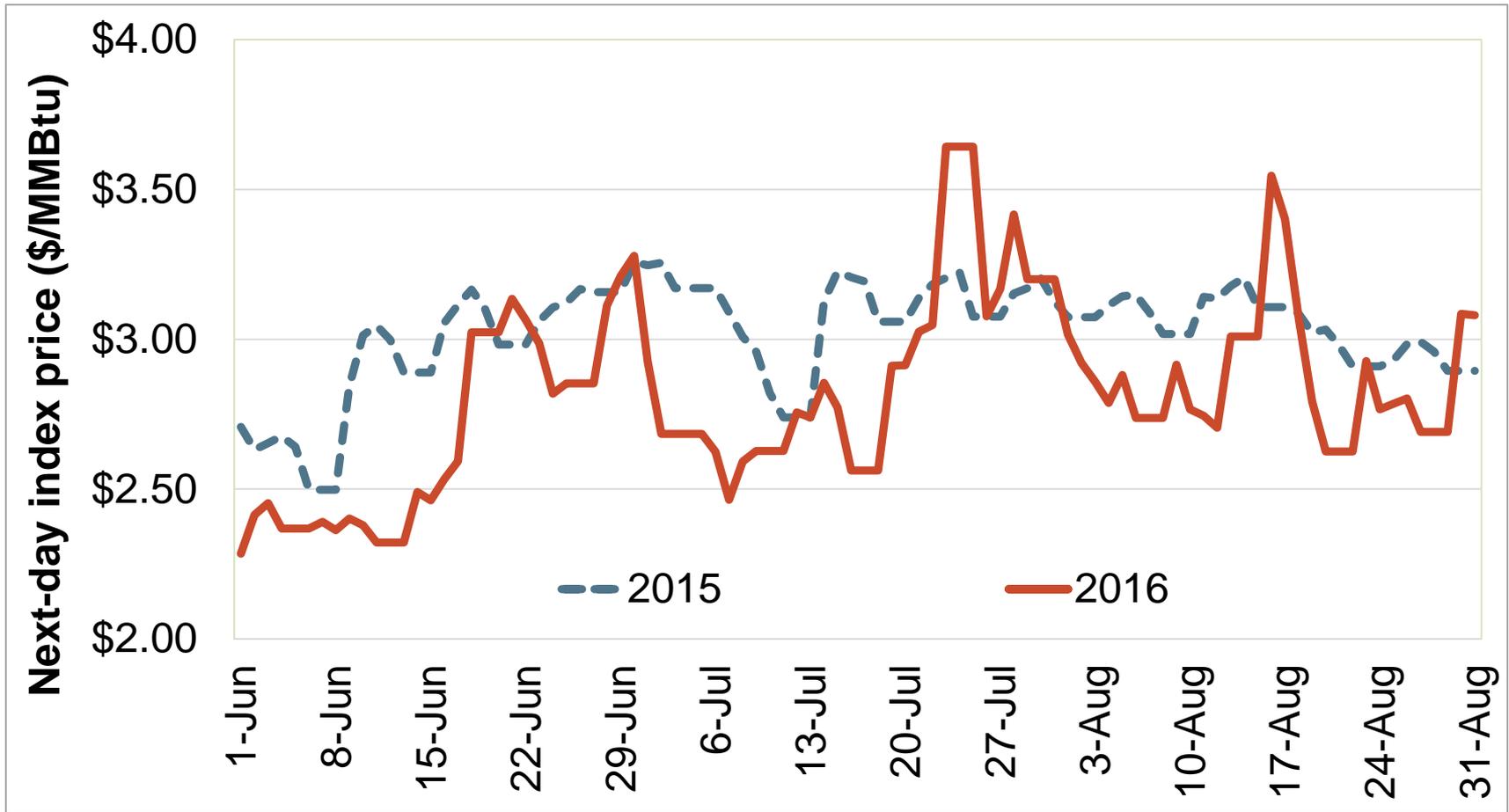
Federal Energy Regulatory Commission
Washington, DC
September 16, 2016



Presentation outline

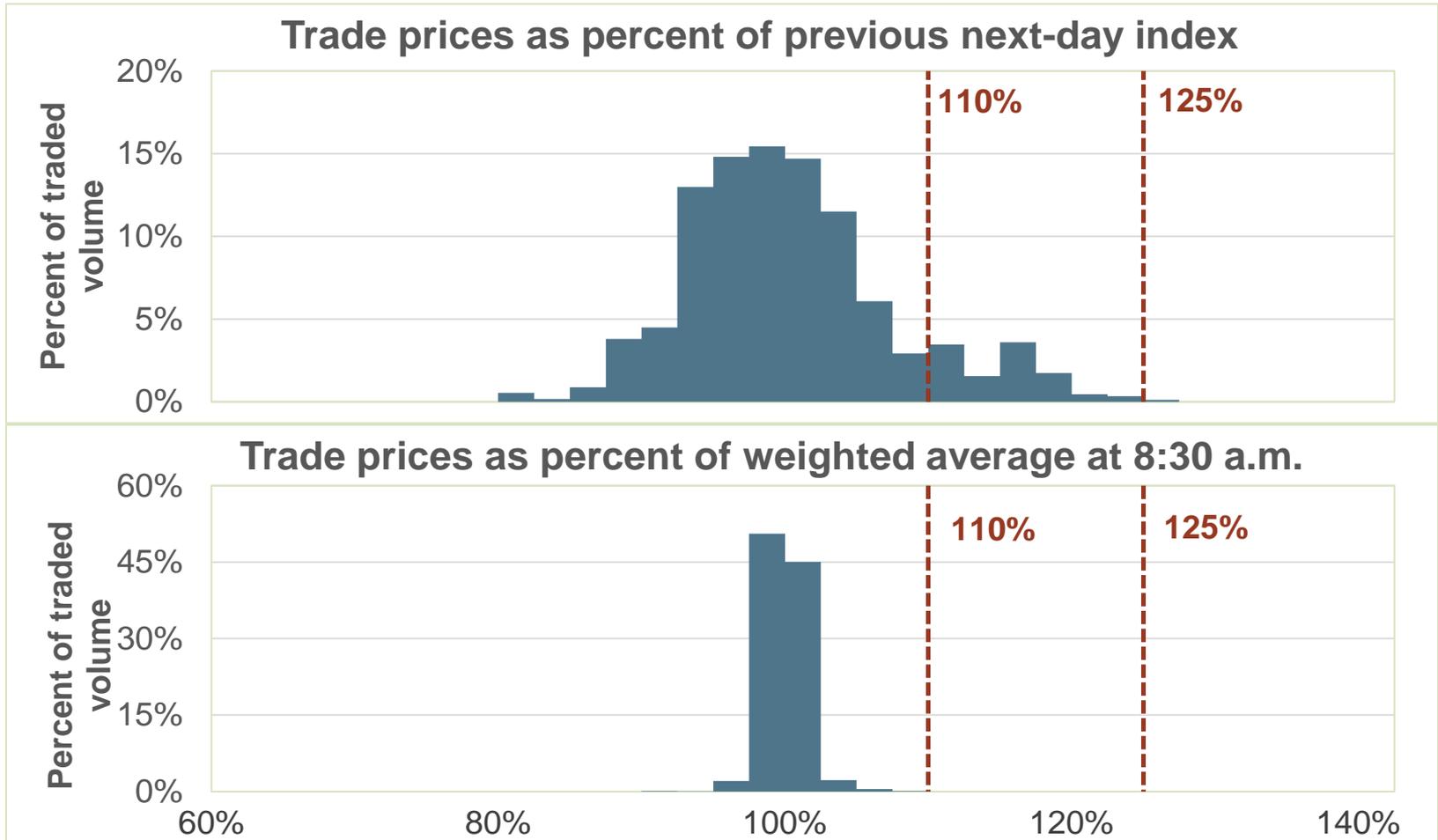
- Natural gas market prices
- Electric market prices
- Bidding changes with gas scalar adders
- Impacts of scalars on bid cost recovery
- Summary of key points

SoCal Citygate natural gas prices lower but more variable in 2016 compared to 2015



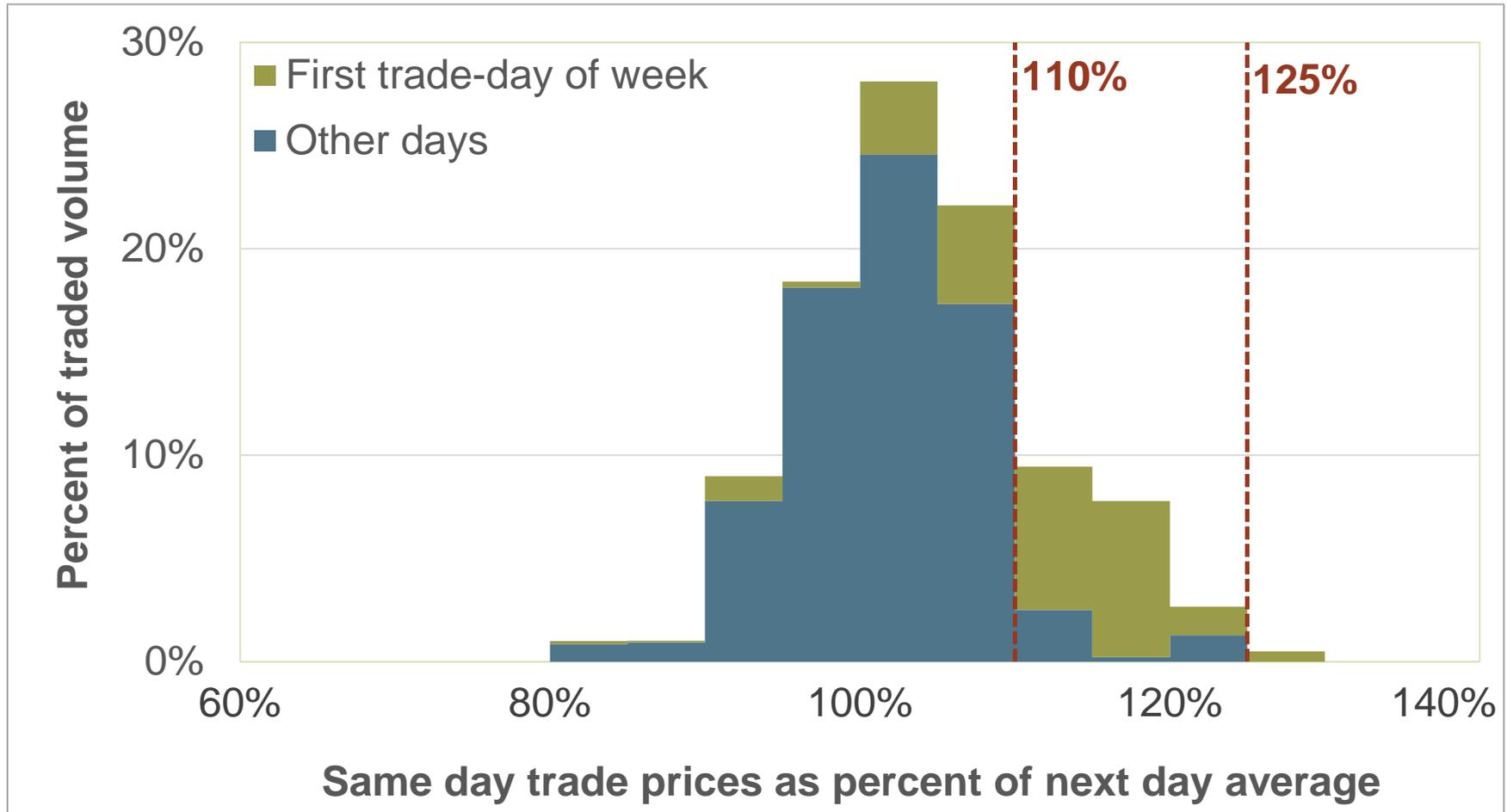
Source: ICE next-day index data

Failure to update the next-day index increased differences of trades from index in day-ahead



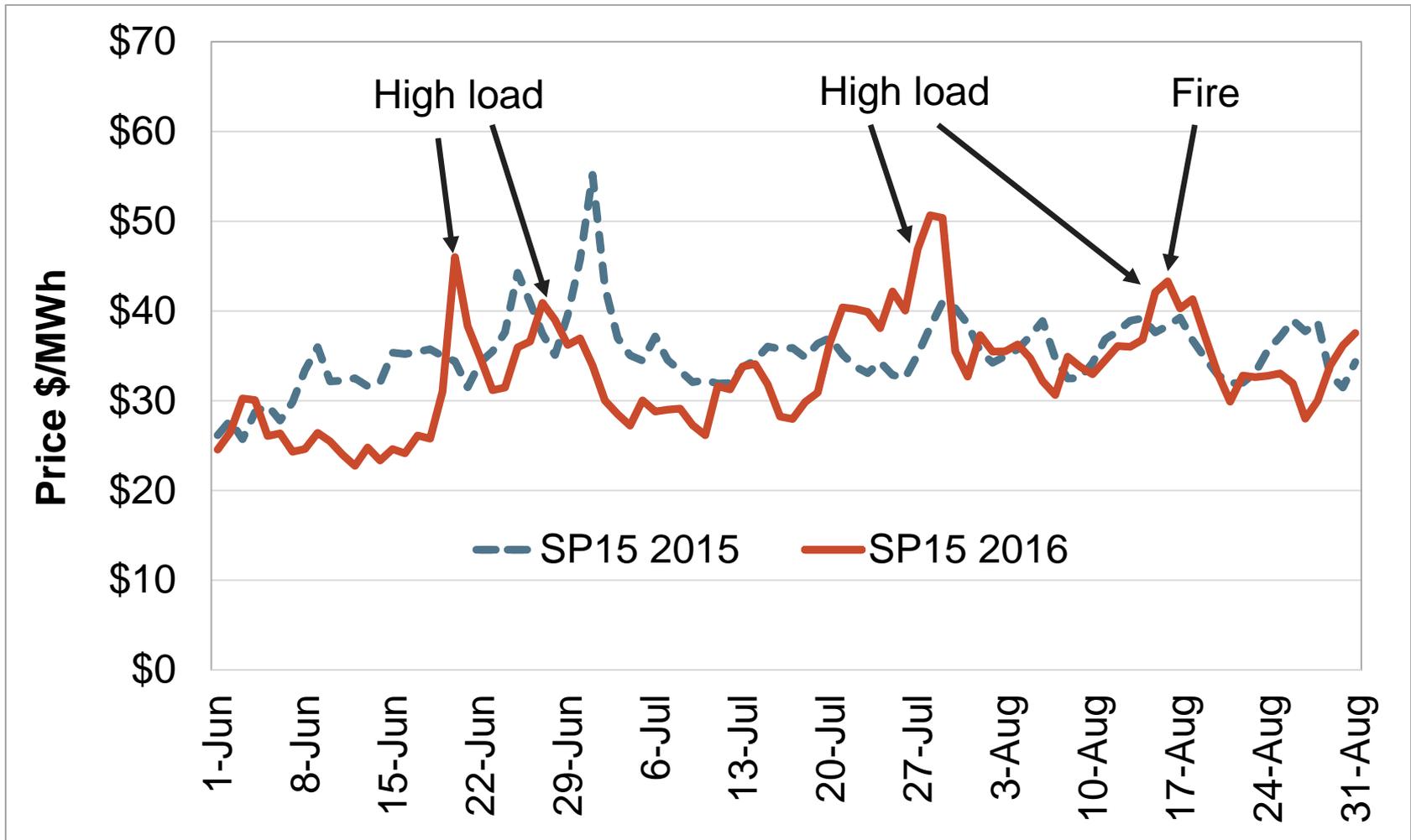
Source: Derived from ICE next-day data for the SoCal Citygate (June through August 2016)

Energy bid scalar covered observed same day trading variability, which was mostly on Mondays



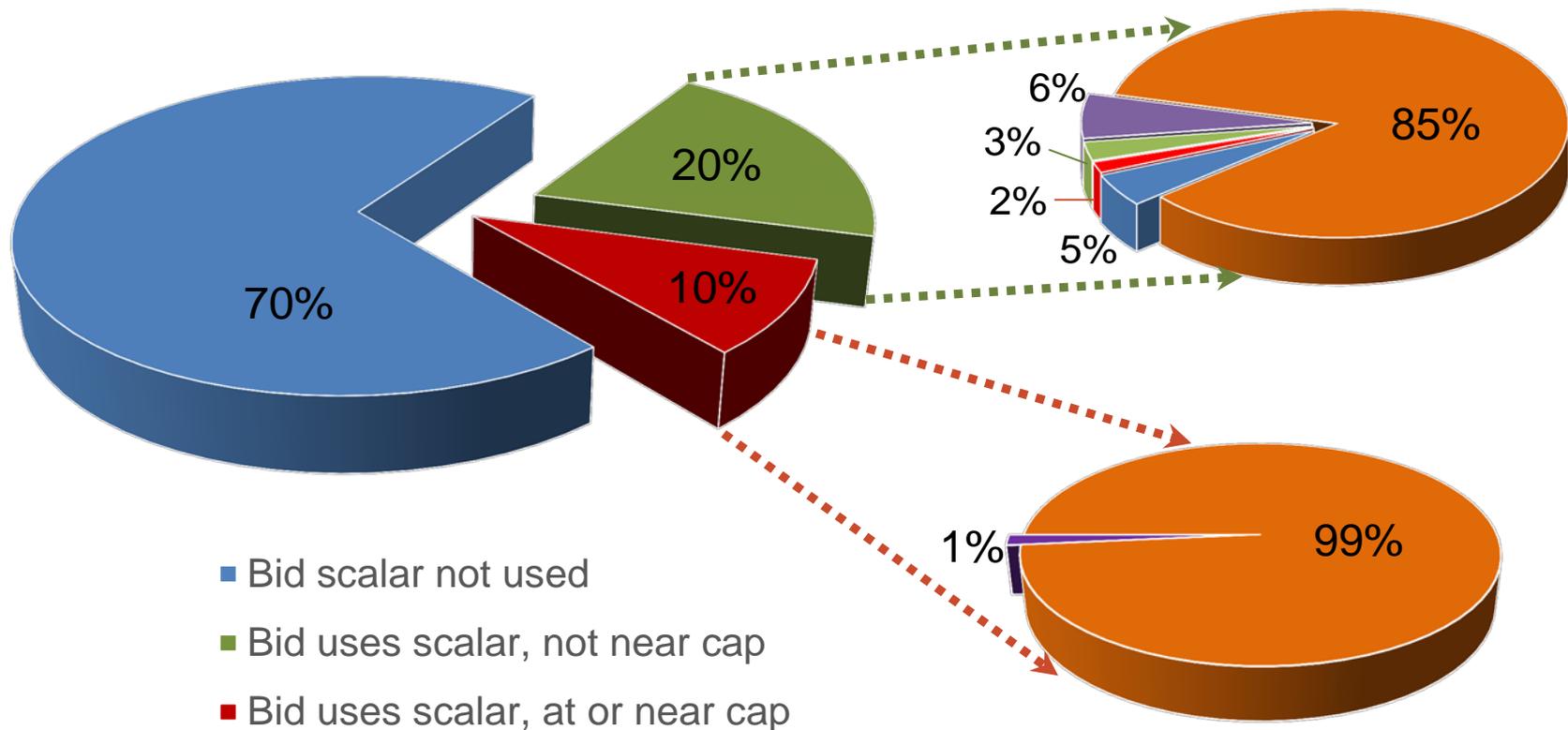
Source: Derived from ICE same day and next-day data for the SoCal Citygate (June through August 2016)

Day-ahead SP15 prices in 2016 similar to 2015



Source: SNL Financial data

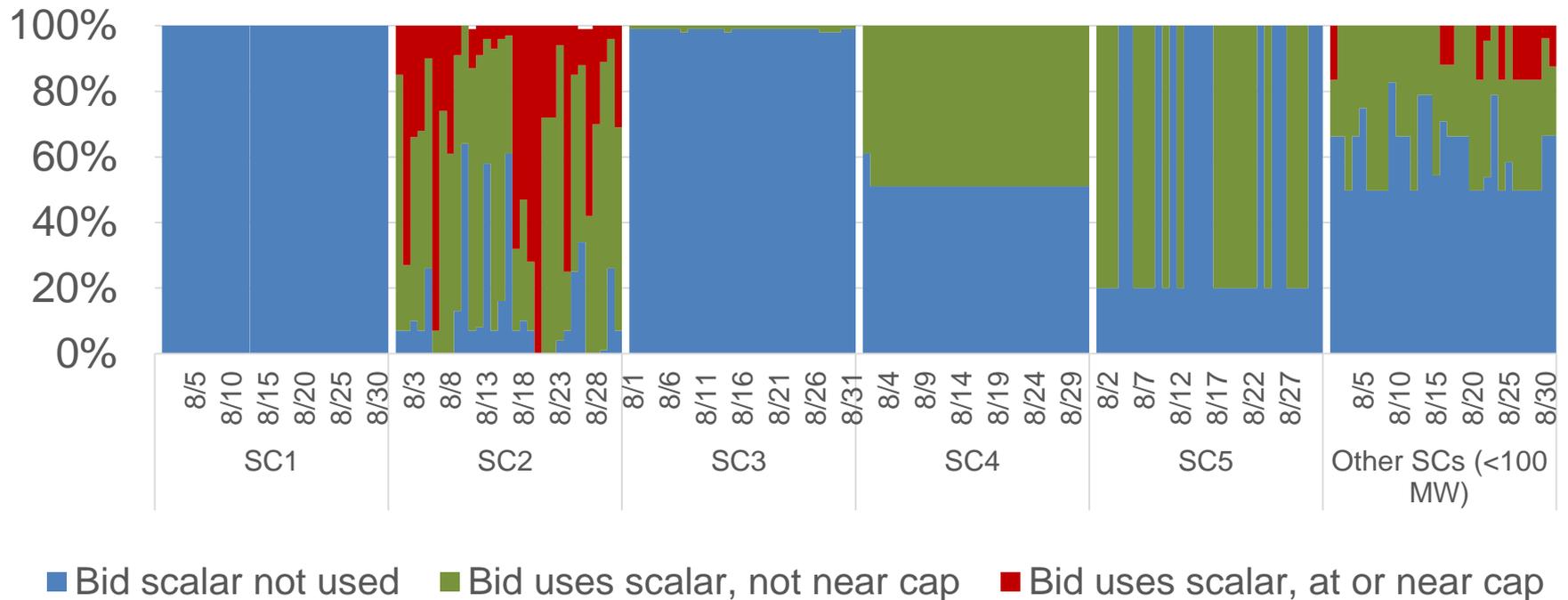
Most capacity did not incorporate the natural gas scalar in minimum load bids



Note: Percent of total capacity on the SoCal Gas and SDG&E systems incorporating natural gas scalar in minimum load bids during August. Excludes units with a 24 hour day-ahead schedule.

A majority of participants used the minimum load natural gas scalar adder to some extent

Daily percent of megawatts in August (bids for minimum load costs)



Note: Includes SoCal Gas and SDG&E capacity. Excludes units with a 24 hour day-ahead schedule. Other SCs include 8 other scheduling coordinator portfolio's with total capacity below 100 MW. Multiple SCs under one company are grouped.

Aliso Canyon mitigation measures have been important, but impact has been low

- Natural gas and ISO market impacts appear relatively low overall
- Updating the next-day gas price would have significantly increased accuracy of gas prices
- Increased bidding flexibility has been used, but gas scalars could be lowered going forward
- Market mitigation tools not used but important if operational measures extended