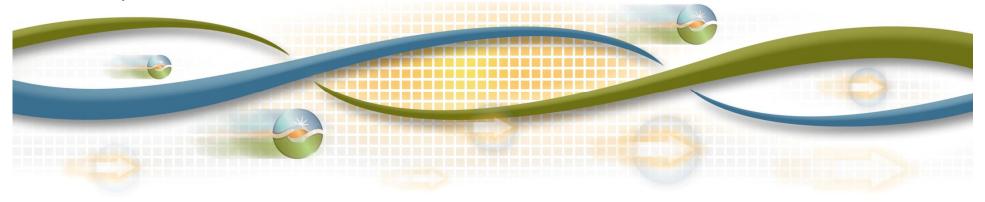


Analysis of proposal to assign Real Time Imbalance Energy charges to responsible parties

Ryan Kurlinski Senior Market Monitoring Analyst

Market Surveillance Committee Meeting General Session April 29, 2011

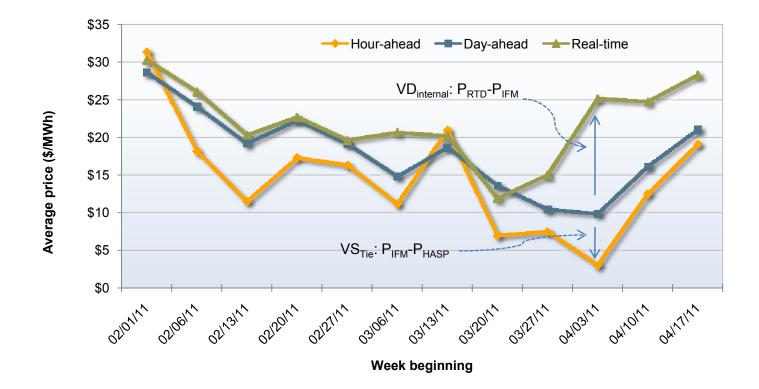




- Convergence bidding causing large uplift cost due to predictable price difference between RTD and HASP.
- Majority of uplift cost attributable to within-portfolio convergence bid – can profit via simple strategy.
- Proposal disincents strategy by allocating resulting uplift to the virtual bidding portfolios that caused it.
- Proposal is short-term mitigation long term pricing issues remain to be resolved.



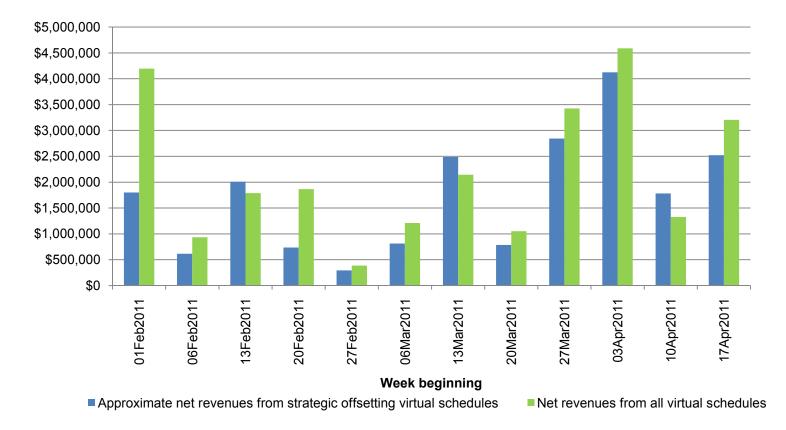
Average off-peak energy prices in day-ahead, hourahead, and real-time markets



• RTD-HASP price difference provides most reliable profits.



Comparison of net revenues from all virtual schedules to those off-setting within-portfolio.

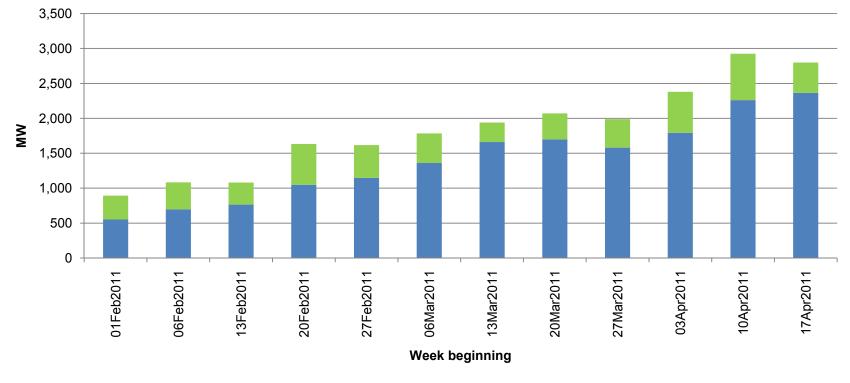


• Within-portfolio offsetting virtuals account for large majority of all virtual bidding net revenues

California ISO



Hourly average quantity of intertie virtual schedules offset by internal virtual schedules



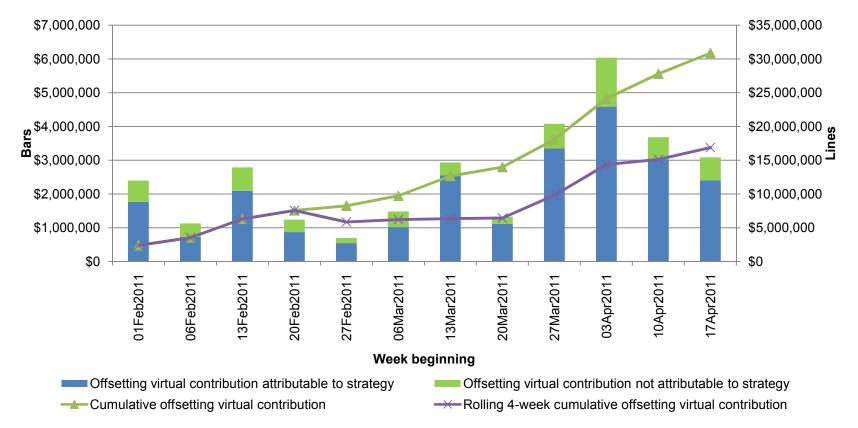
Hourly avg offsetting virtuals attributable to strategy

California ISO

Hourly avg offsetting virtuals not attributable to strategy

• Within-portfolio offsetting virtual MWhs are growing.

Contribution to RT Imbalance Energy Offset uplift charge from intertie virtuals offset by internal virtuals



- Proposal eliminates uplift from within-portfolio virtual offsets.
- Other sources of RT Imbalance charges may increase.

California ISO



• Proposed settlement charge should be applied at affiliate level.





Questions?



Slide 8