



Briefing on Market Performance

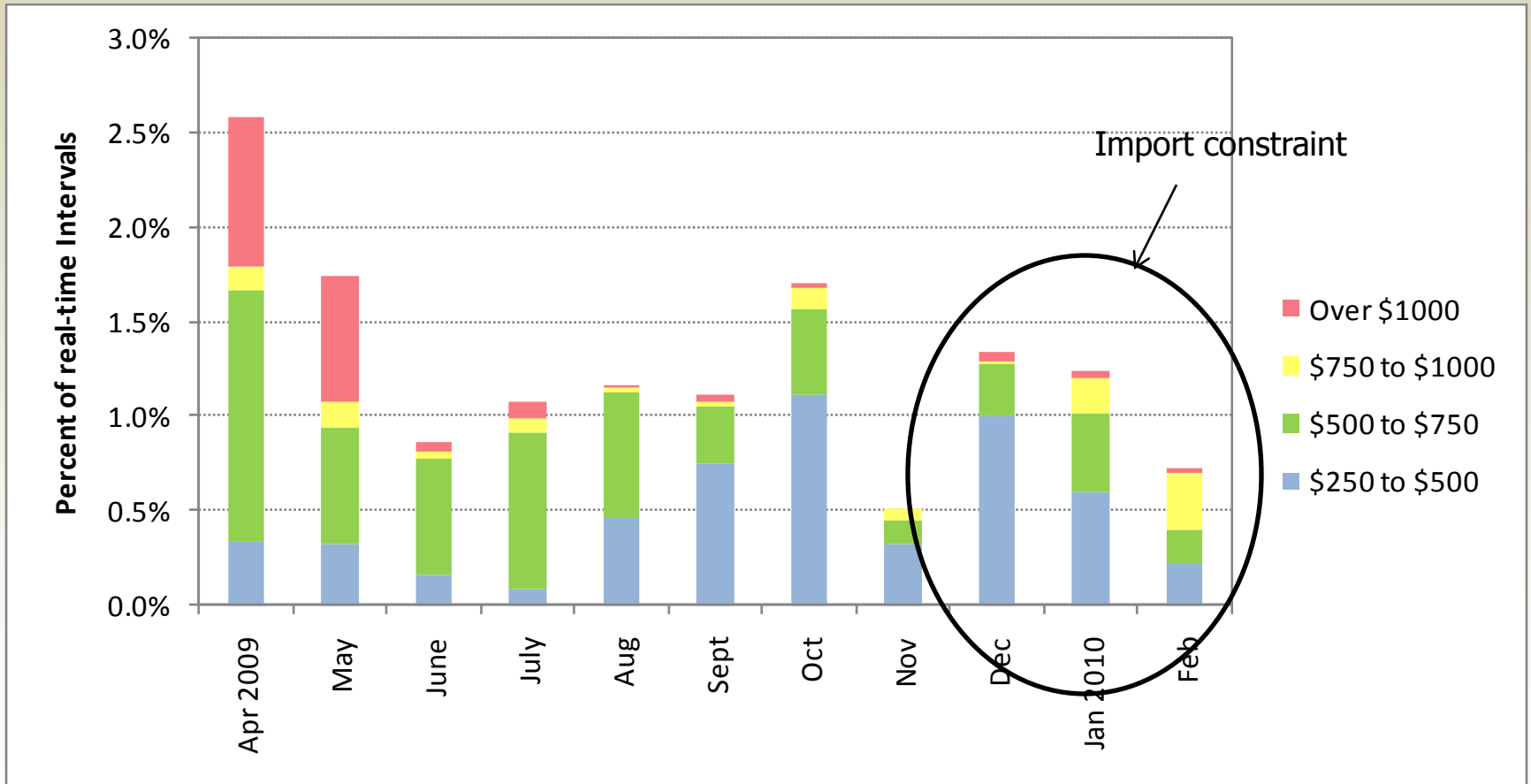
Mark Rothleder
Director, Market Analysis and Development

Board of Governors Meeting
General Session
March 25-26, 2010

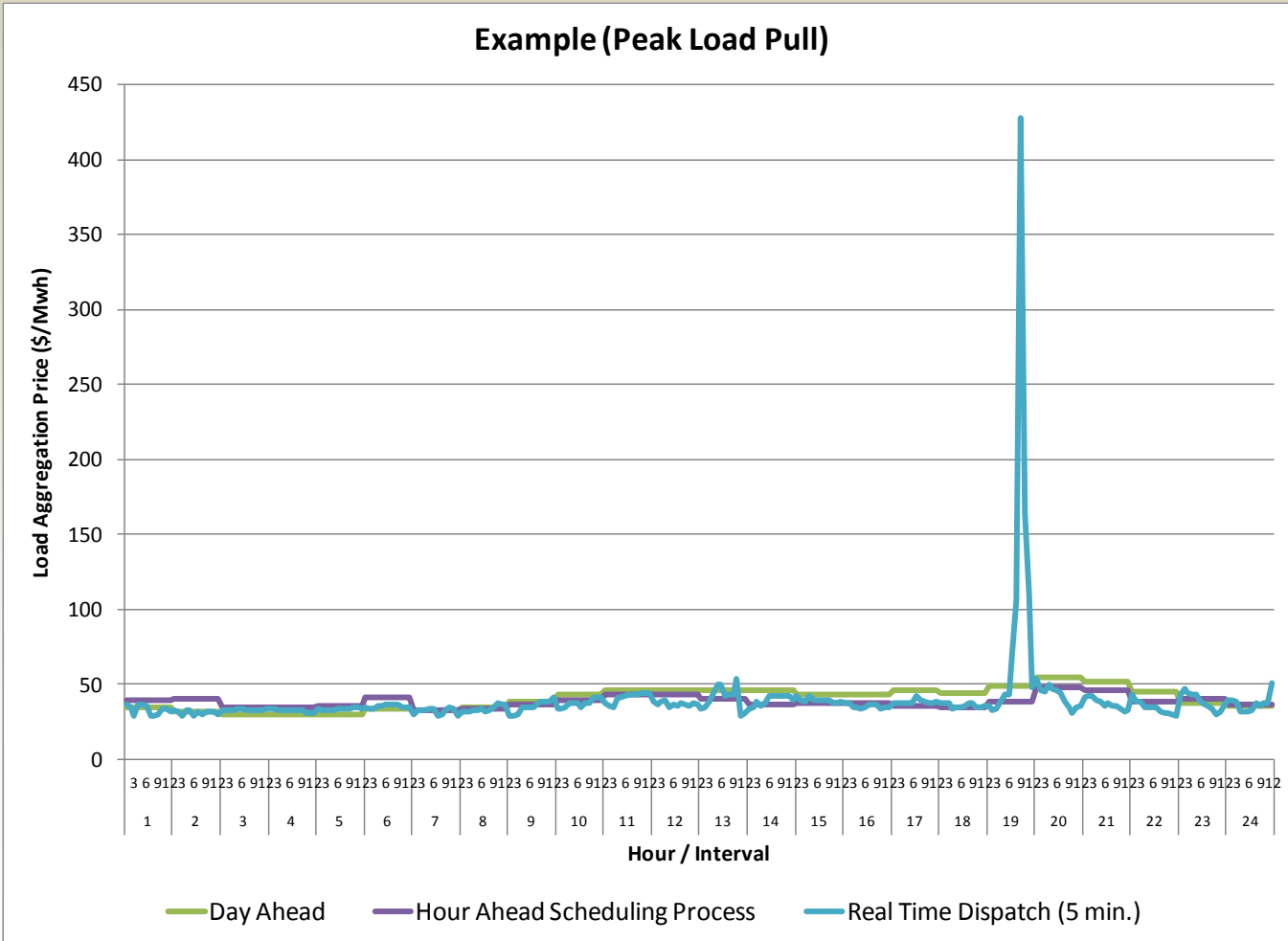
Energy Markets - Overview

- Market successful since launch
 - Price volatility is reasonable
 - Price convergence has improved
 - Exceptional Dispatches have declined
- Several areas still need improvement
 - Congestion revenue right (CRR) adequacy
 - Quality of data
 - Market model
 - Load forecasting

Frequency and magnitude of price volatility in real-time has generally decreased, particularly for extreme price (>\$500/MWh).

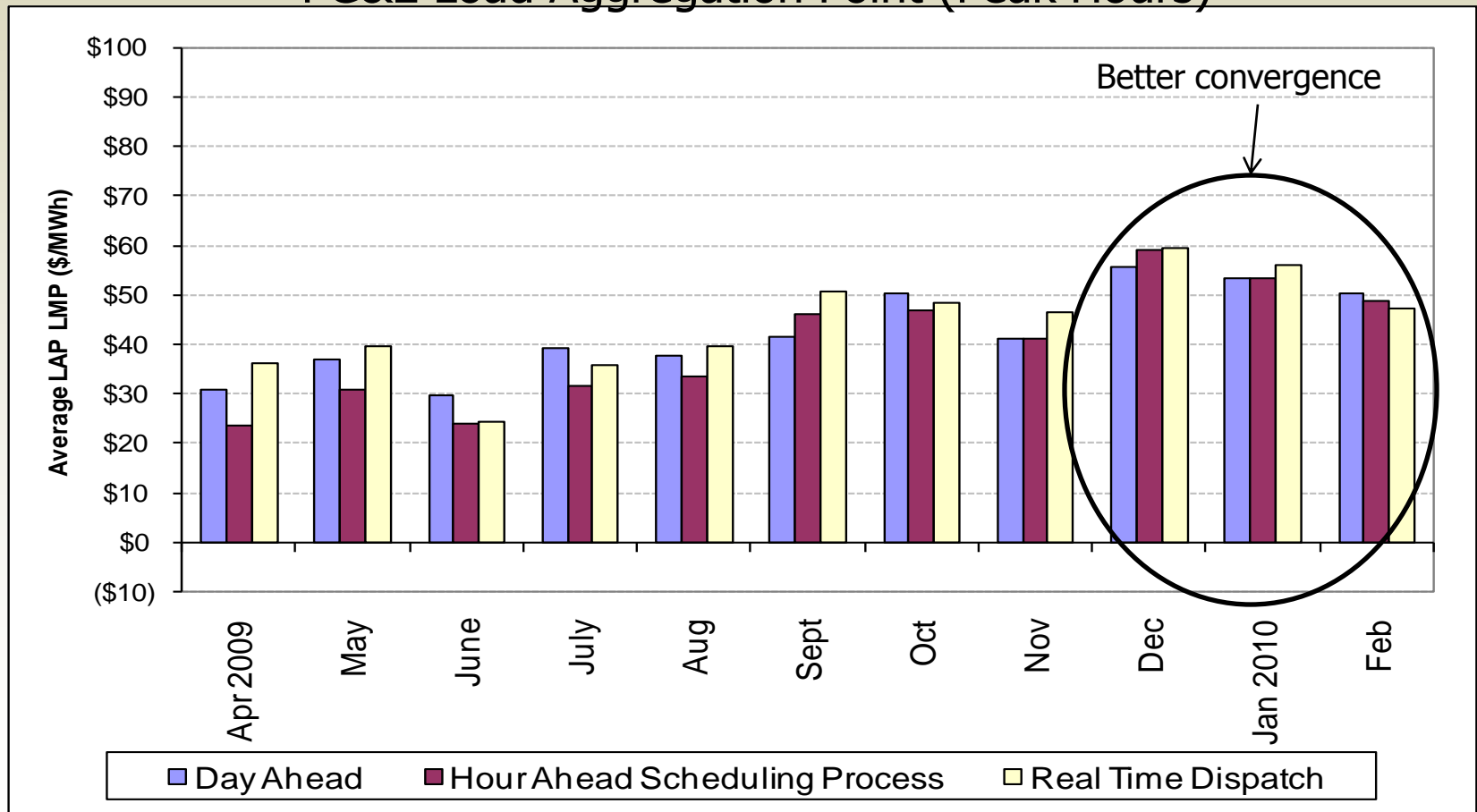


When real-time volatility occurs it is related to system conditions.

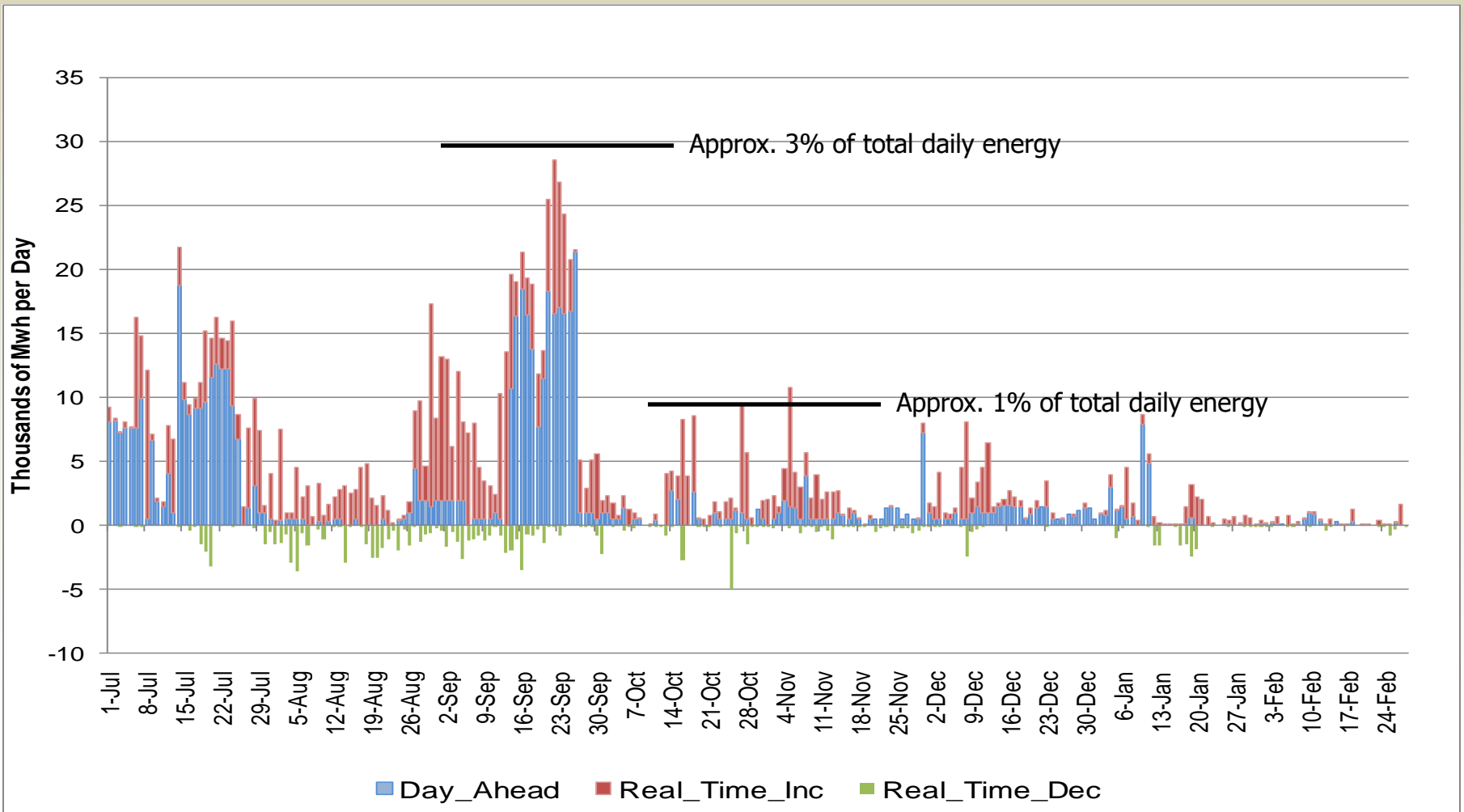


Price convergence between markets has improved.

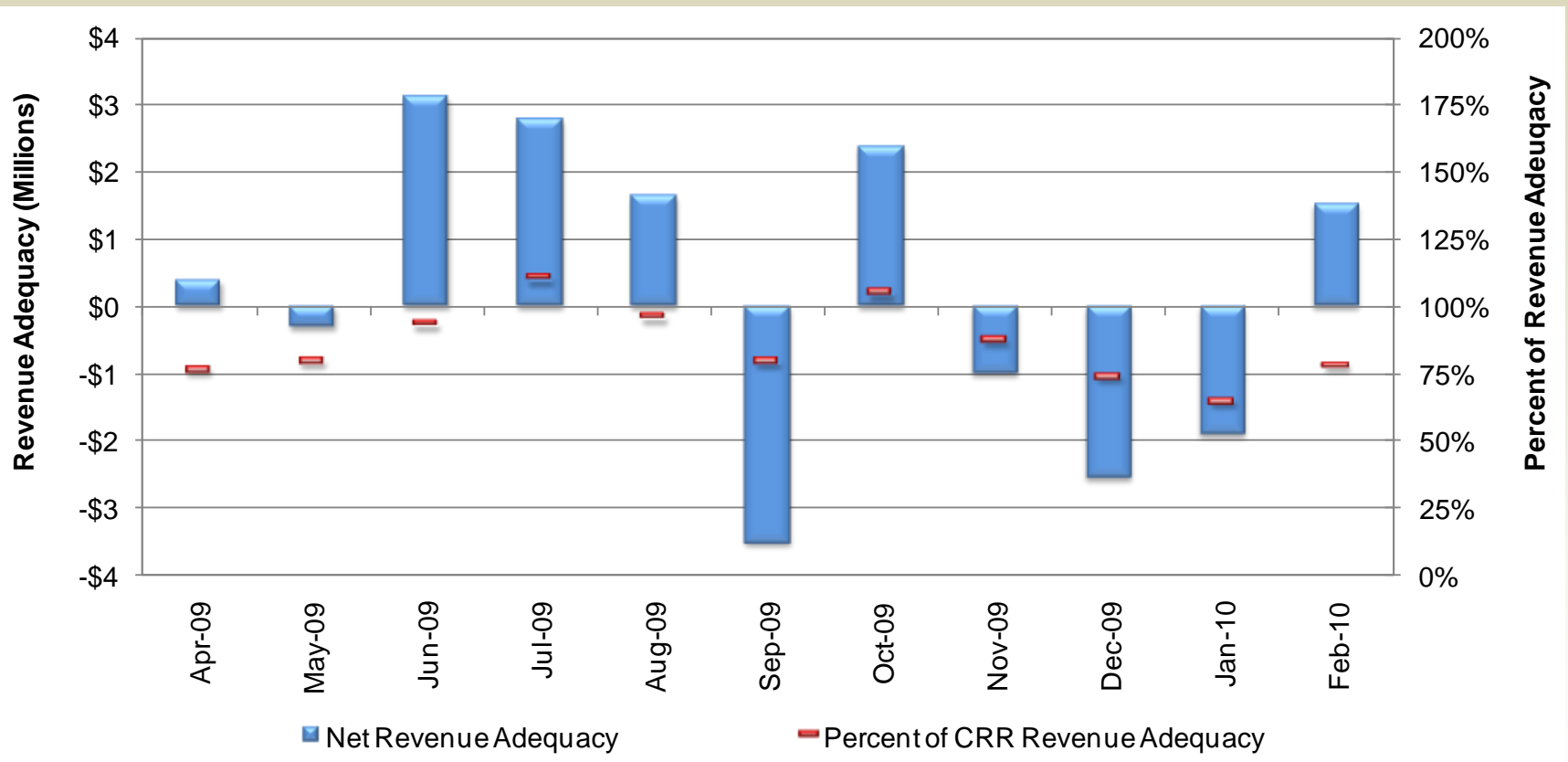
Average Monthly Prices – PG&E Load Aggregation Point (Peak Hours)



Exceptional dispatch volumes continue to decrease as effort to incorporate constraint into the market continues.

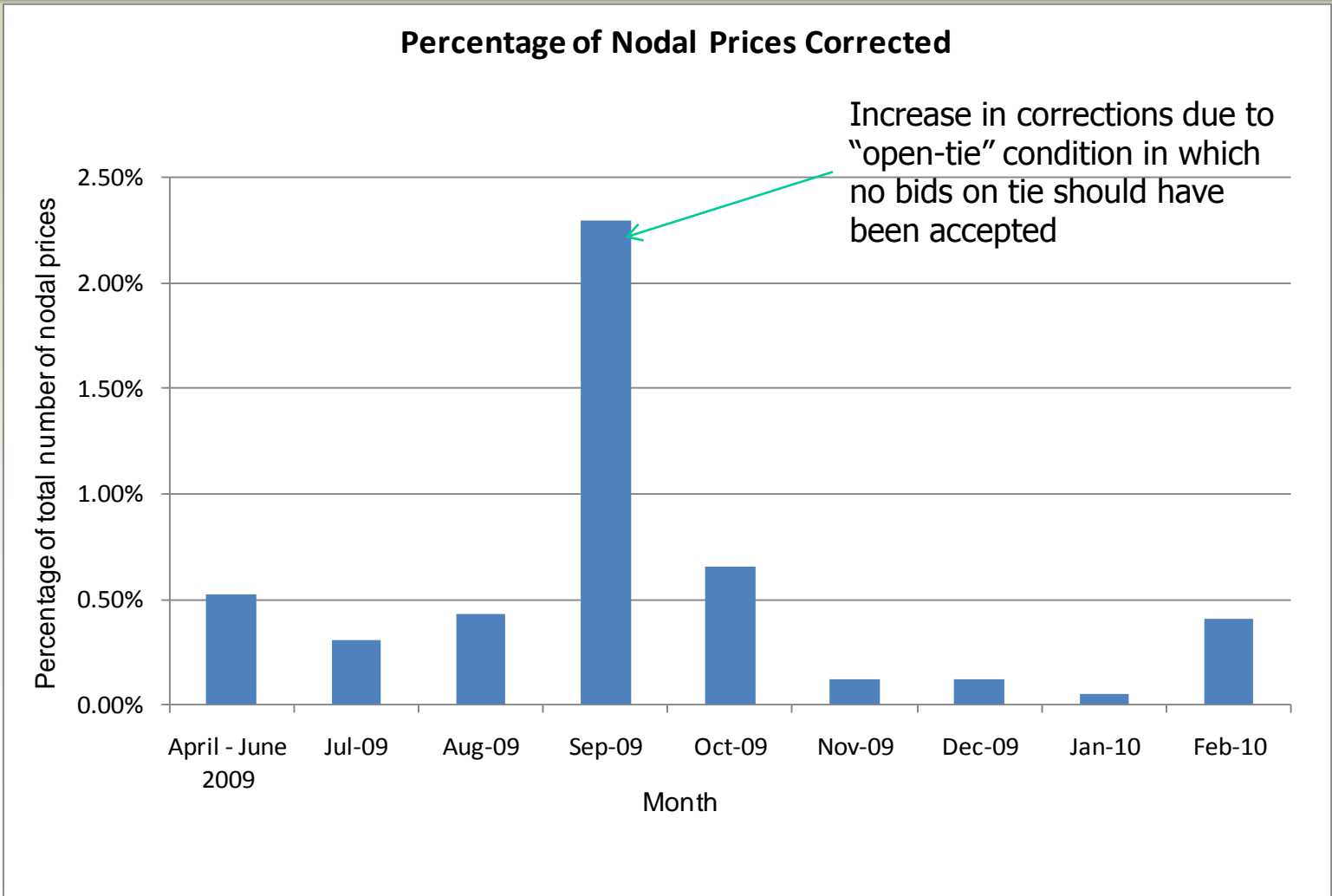


Monthly CRR revenue adequacy continues to be an issue due to unanticipated transmission outages.



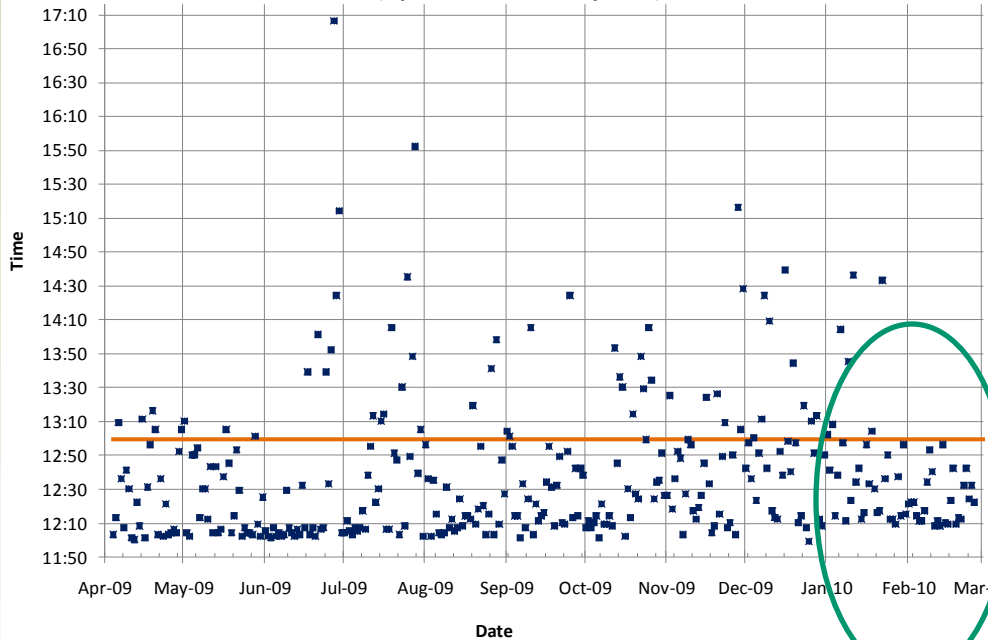
Note: Net revenue adequacy includes auction revenue

Price-corrections have fluctuated due to “open-tie” conditions.

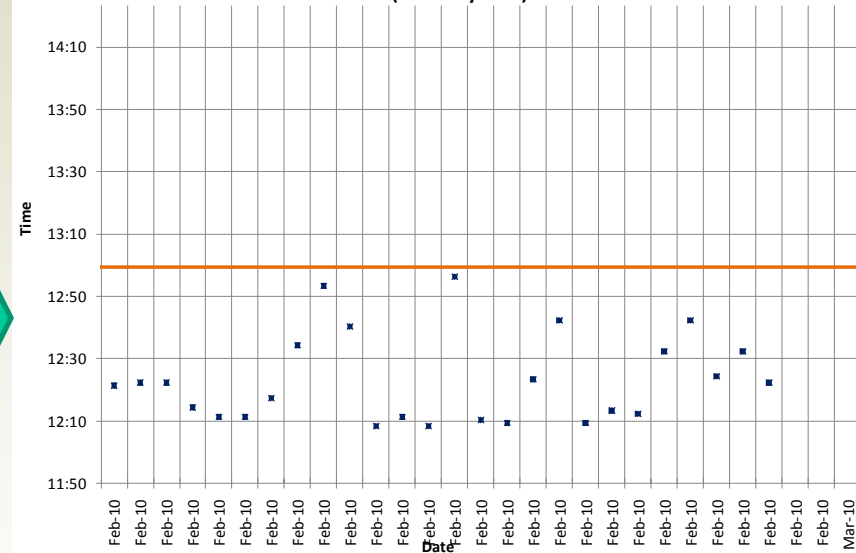


Day-ahead market timing improved in February

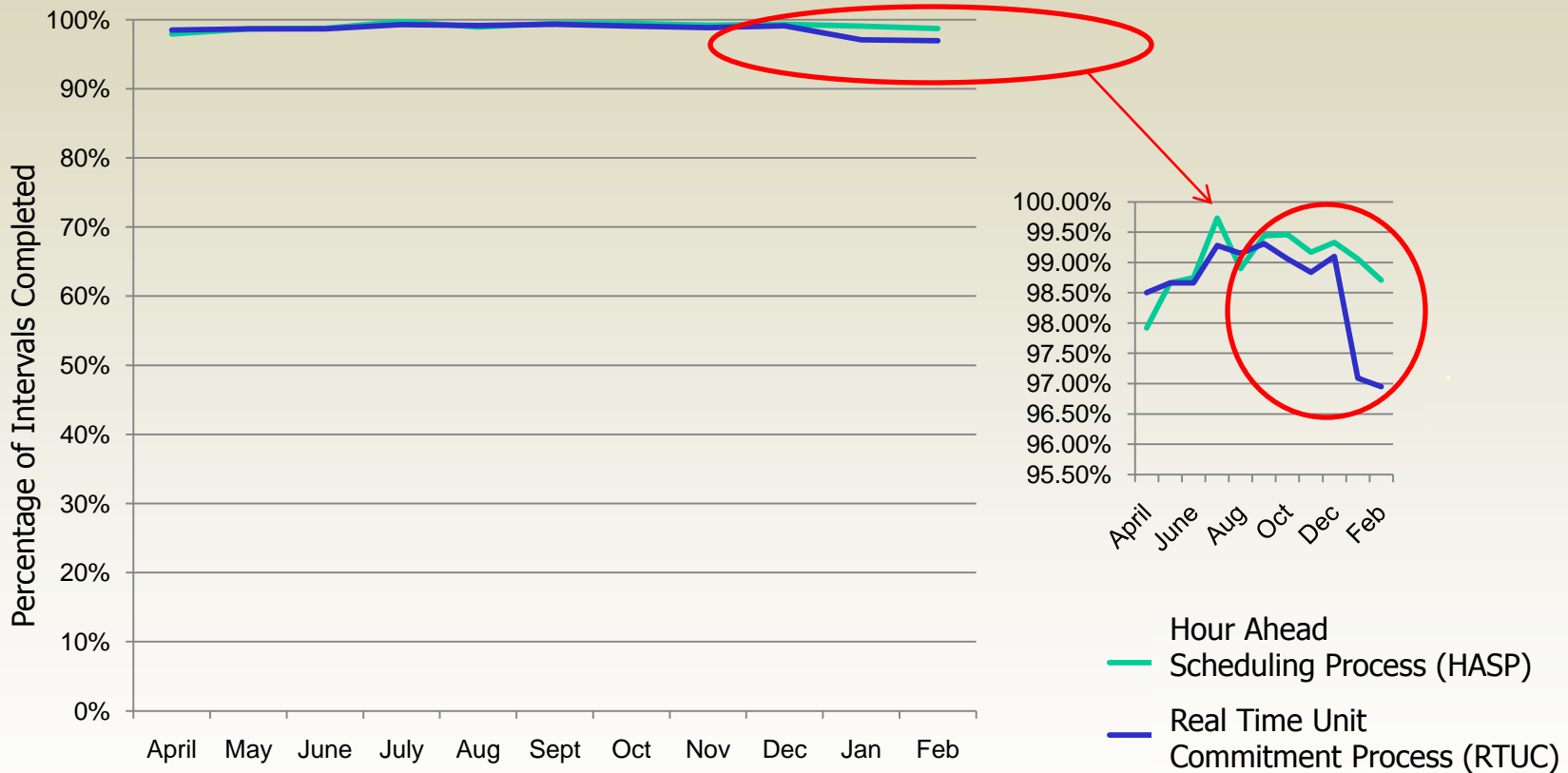
Day Ahead Market Publish Time
(April, 2009 - February 2010)



Day Ahead Market Publish Time
(February 2010)



Real-time market completions have been near 100%, but declined in January and February.



Areas of focus going forward.

- April 1 – 1 year changes
 - Spring release
 - Scarcity price, forbidden region, ancillary service in hour ahead process
 - Energy bid-cap increases from \$500 to \$750
 - Eliminate \$2,500 price cap
 - Update to competitive path assessment
 - Mitigated bid adder
- Congestion revenue rights adequacy
- Reduce need for exceptional dispatch
- Increase market transparency
- Improve market model process and detail