



Measures of Price Convergence

RMWG

November 17, 2006

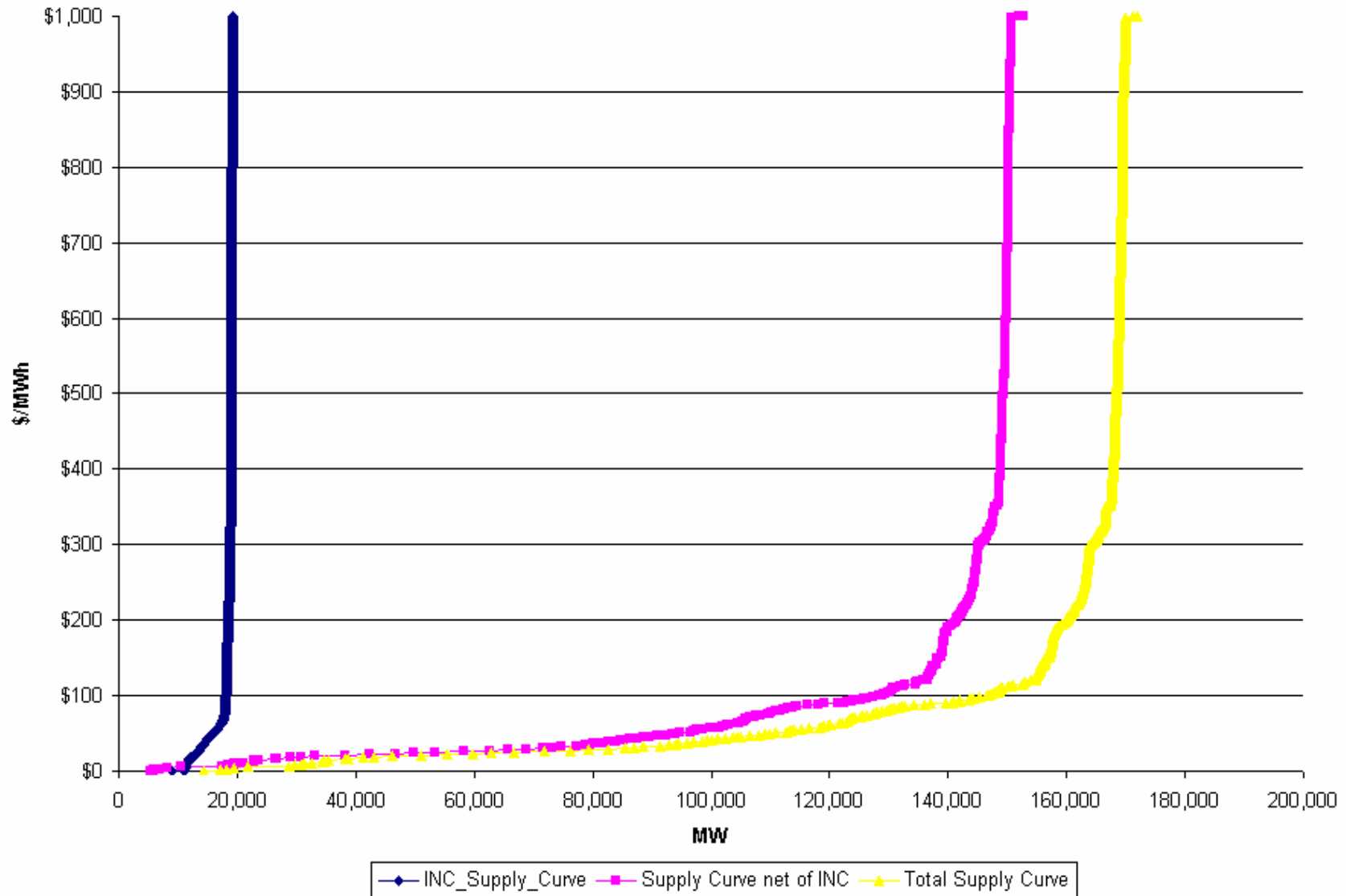
Joe Bowring

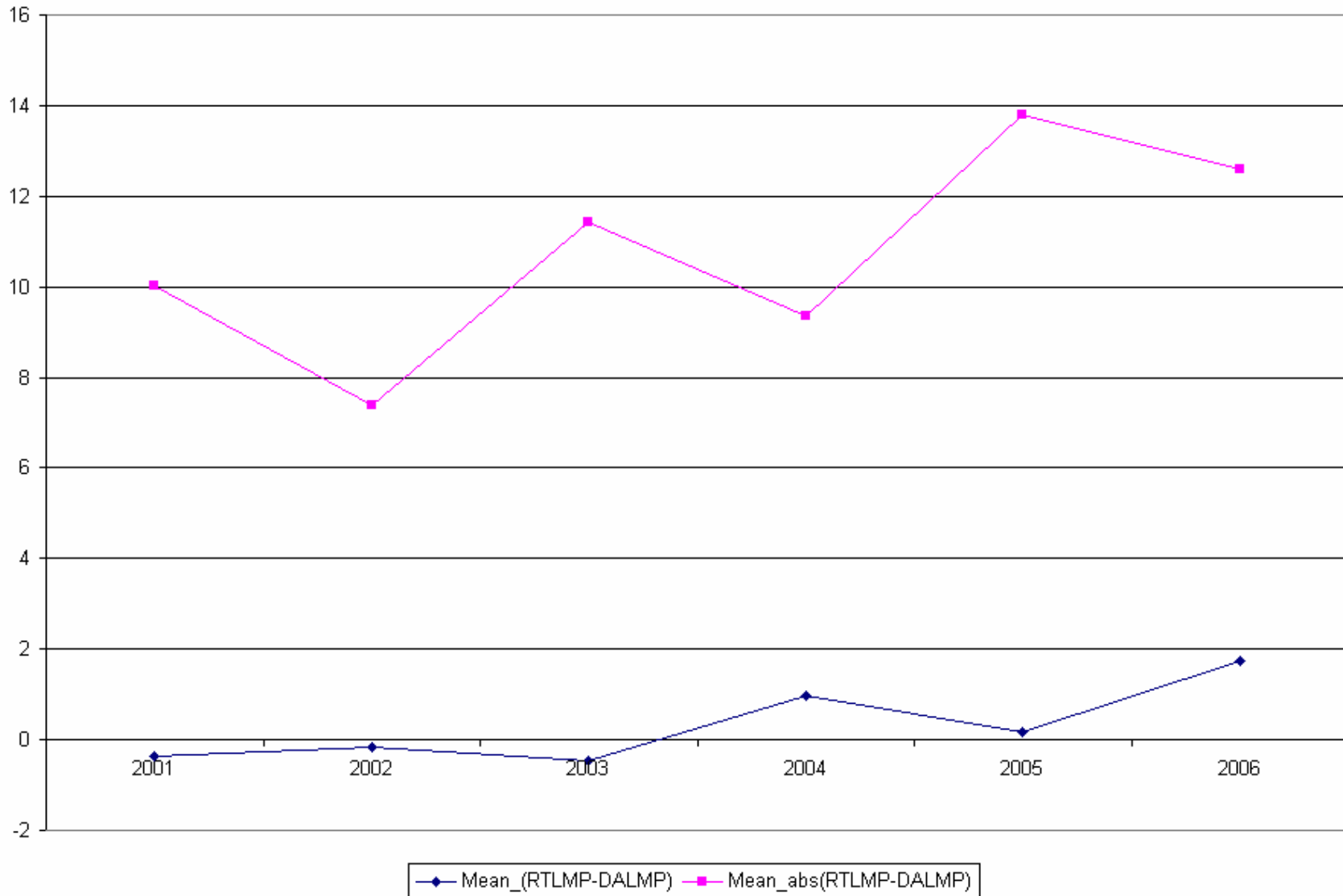
Market Monitor

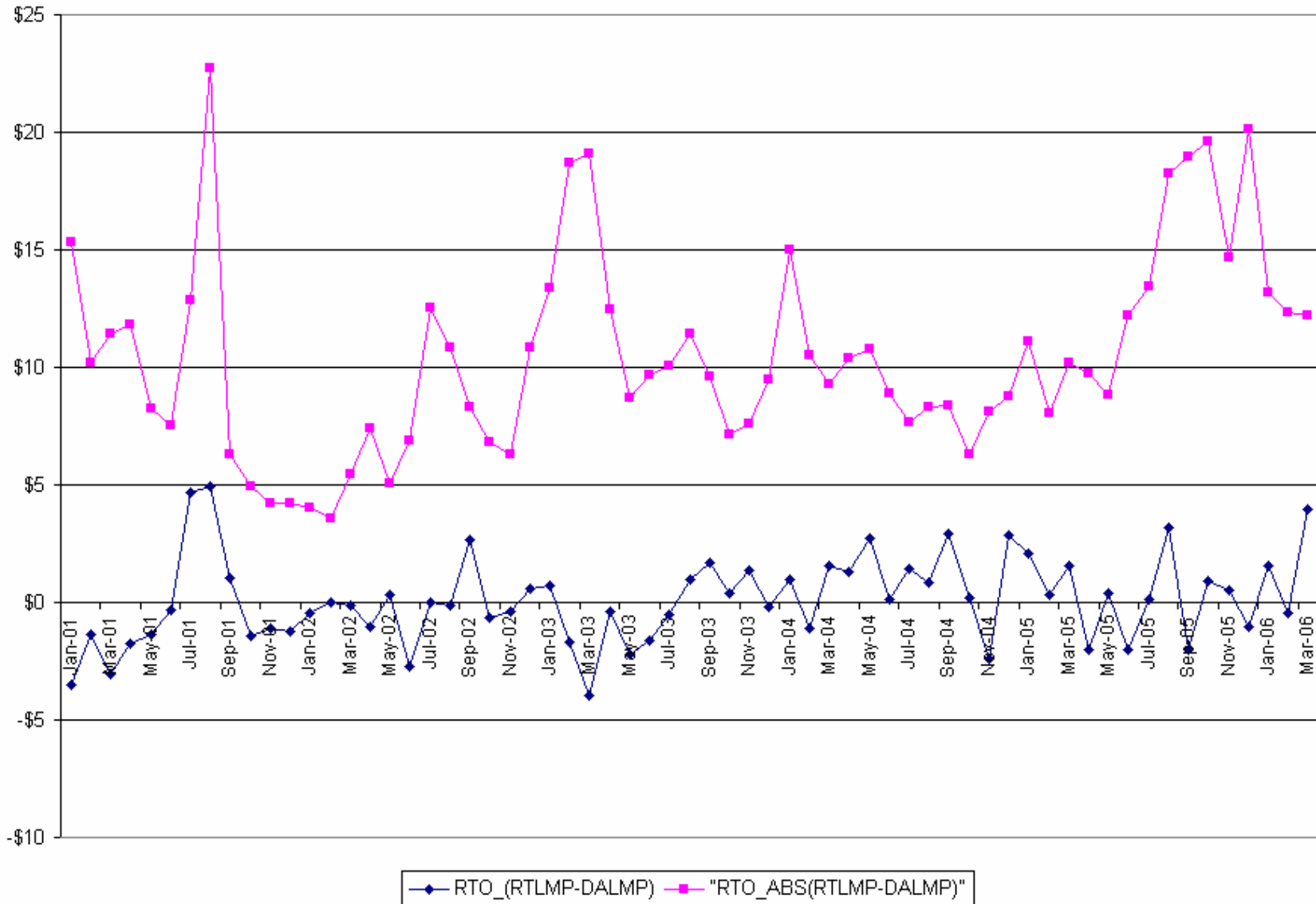
- Measures of price convergence between Day-Ahead and Real-Time Energy Markets



PJM Day-Ahead Aggregate Supply Curves – Example Day

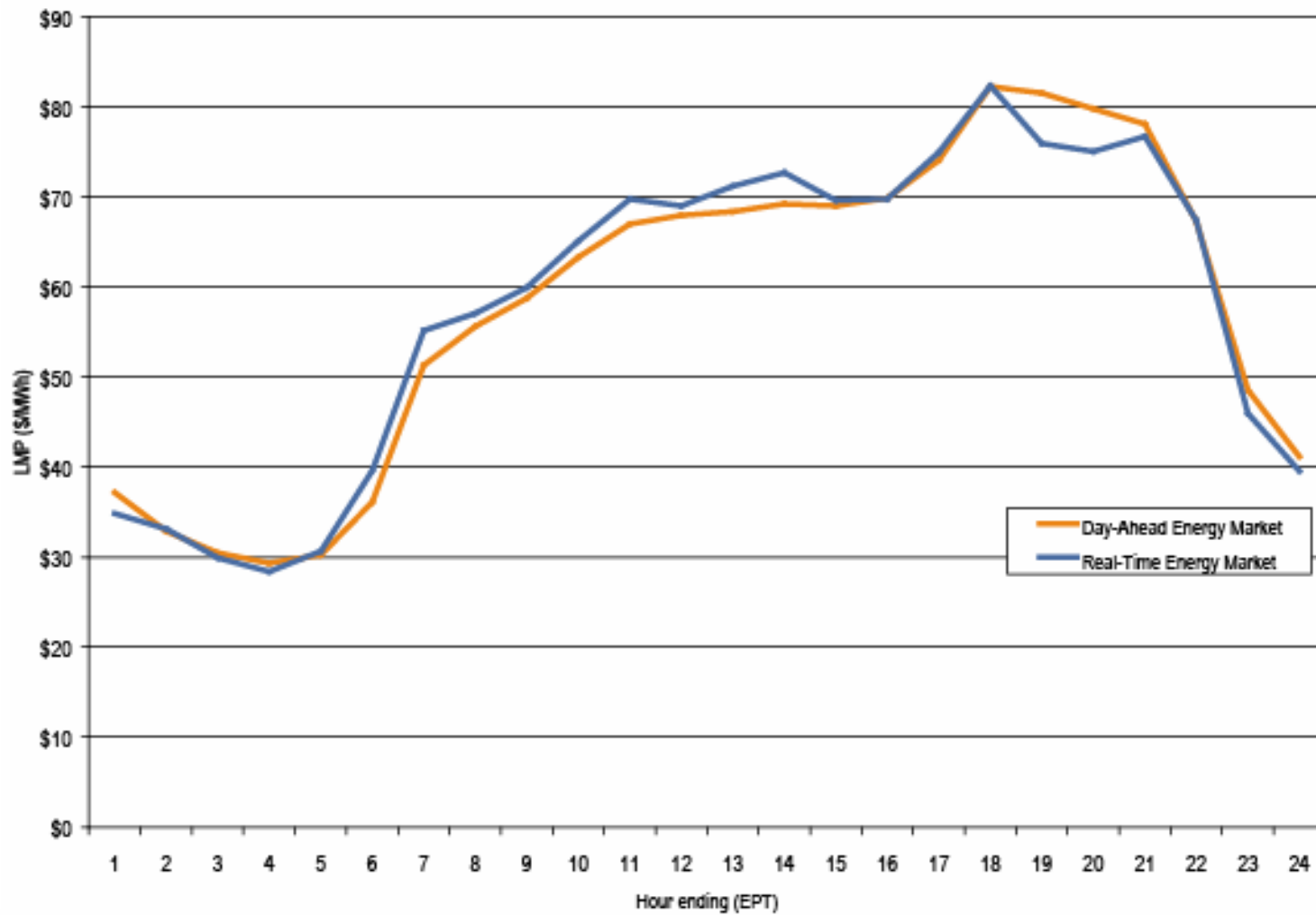






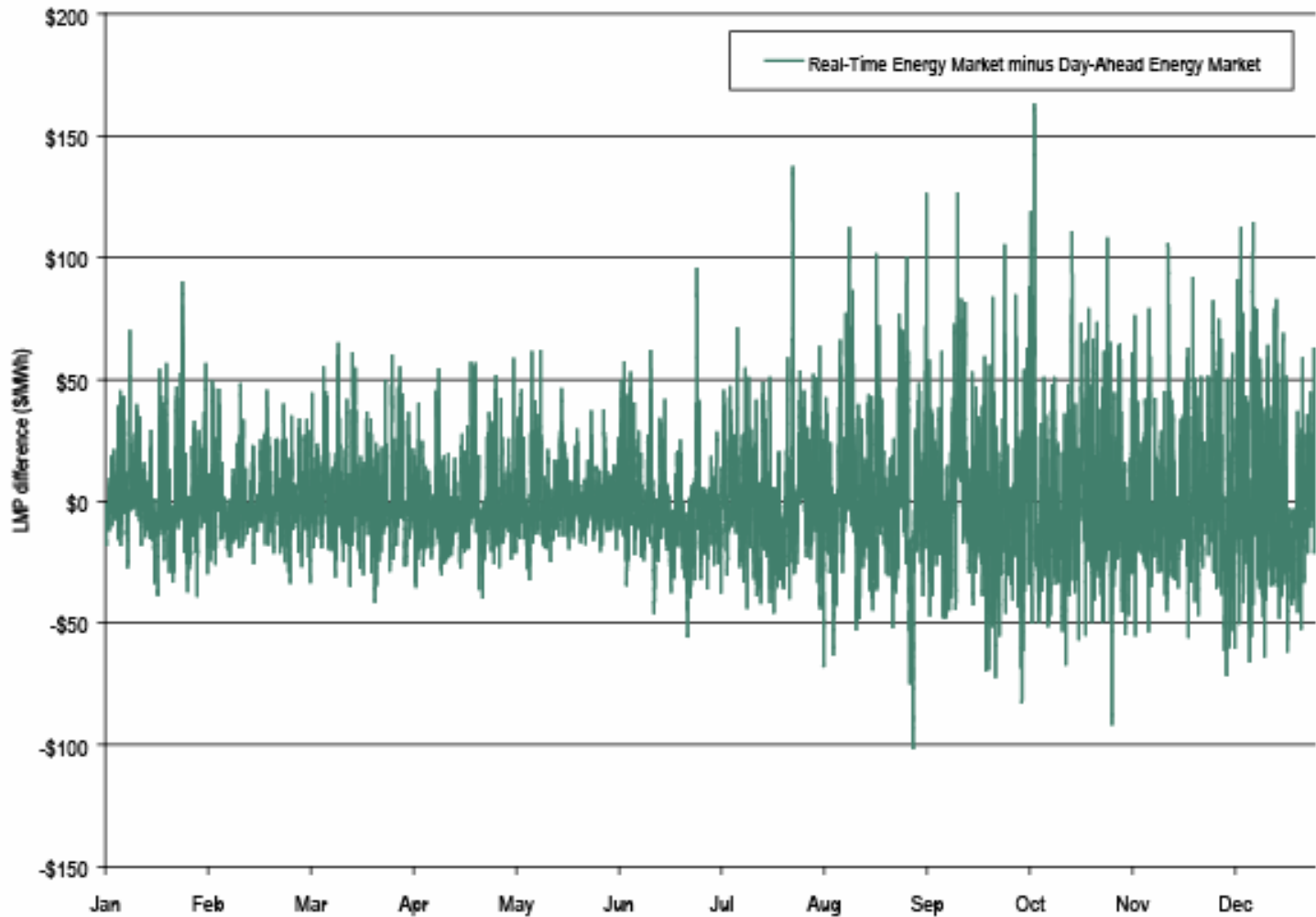


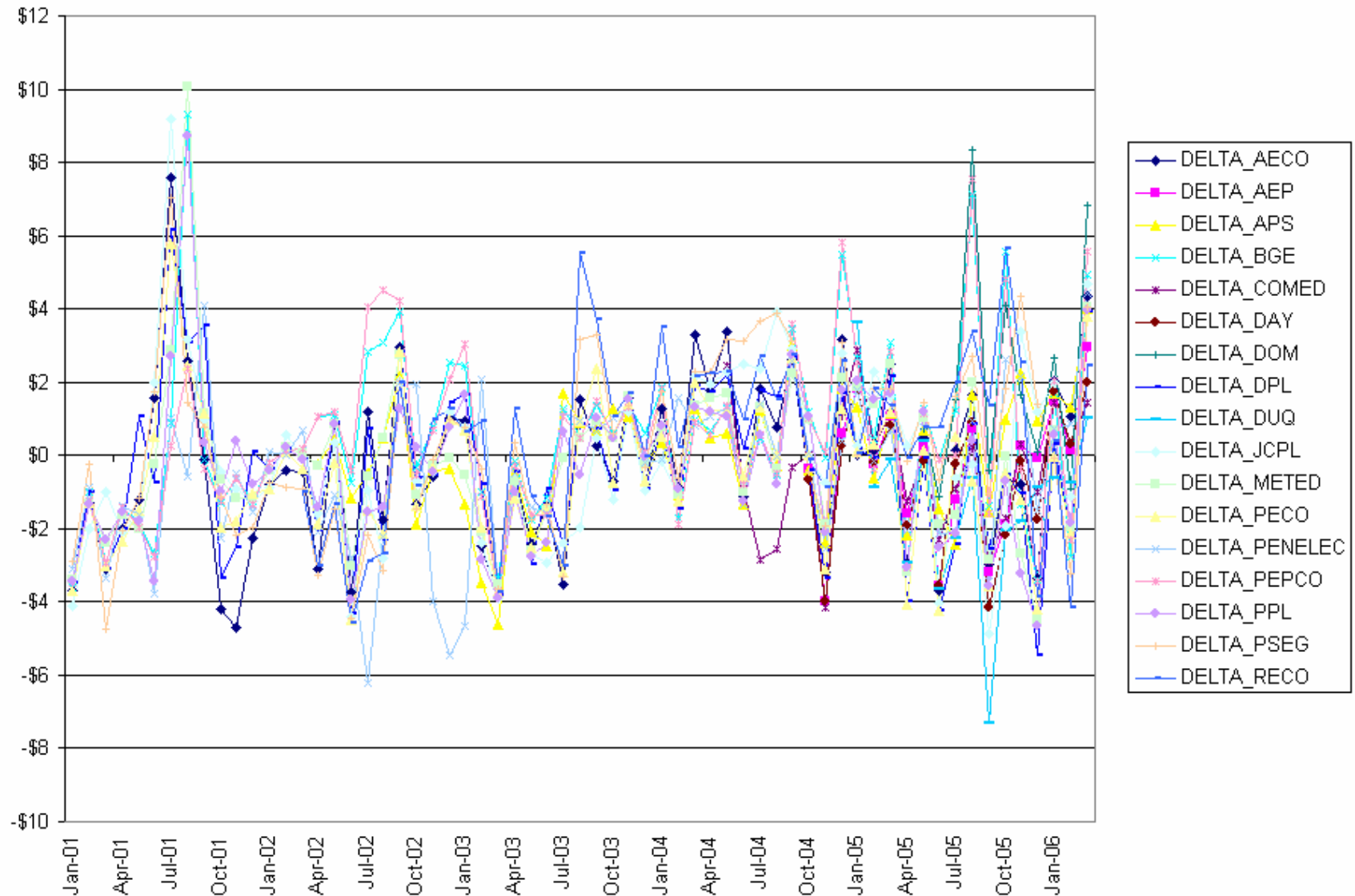
PJM Hourly System Average LMP: 2005

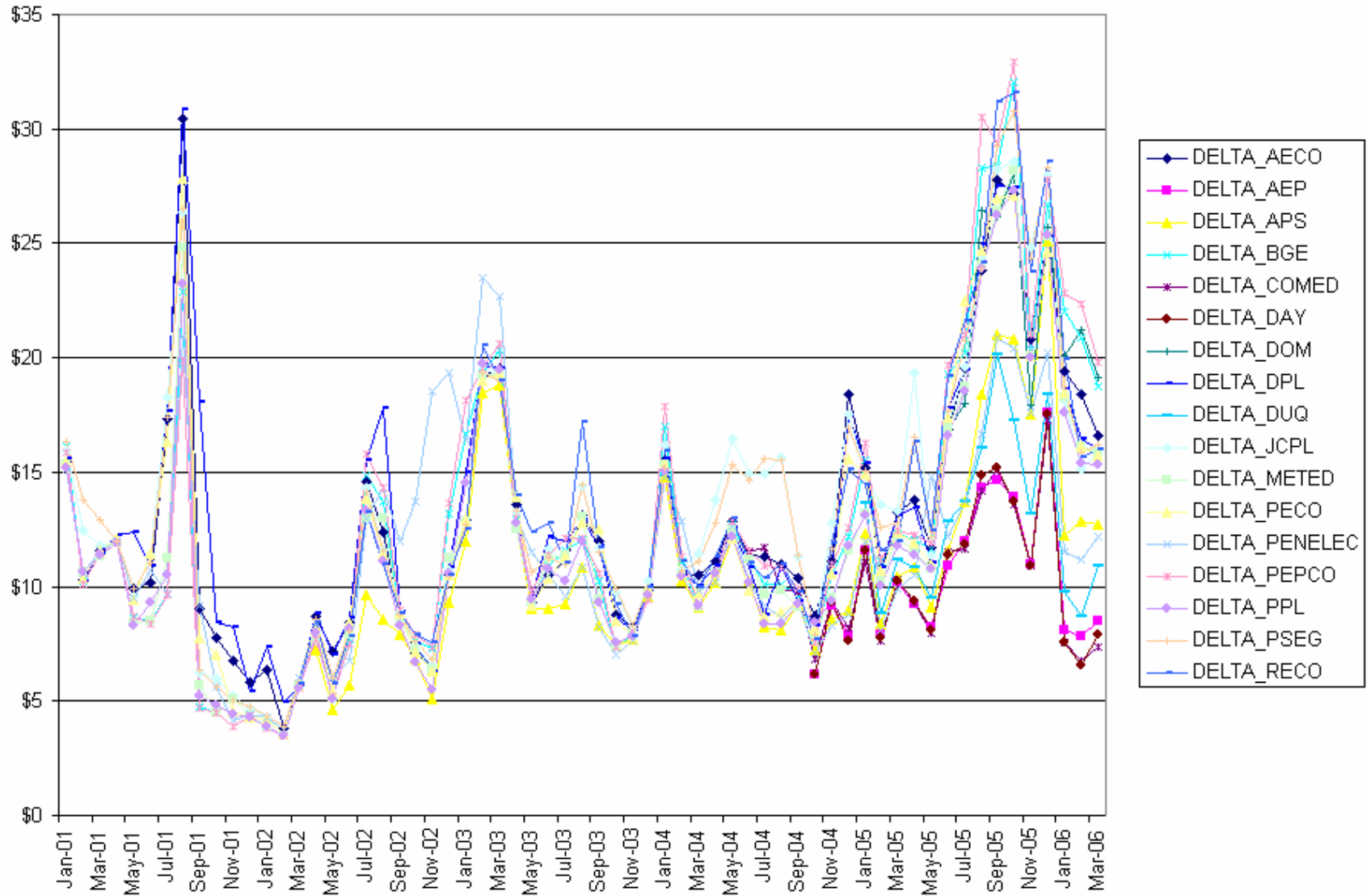


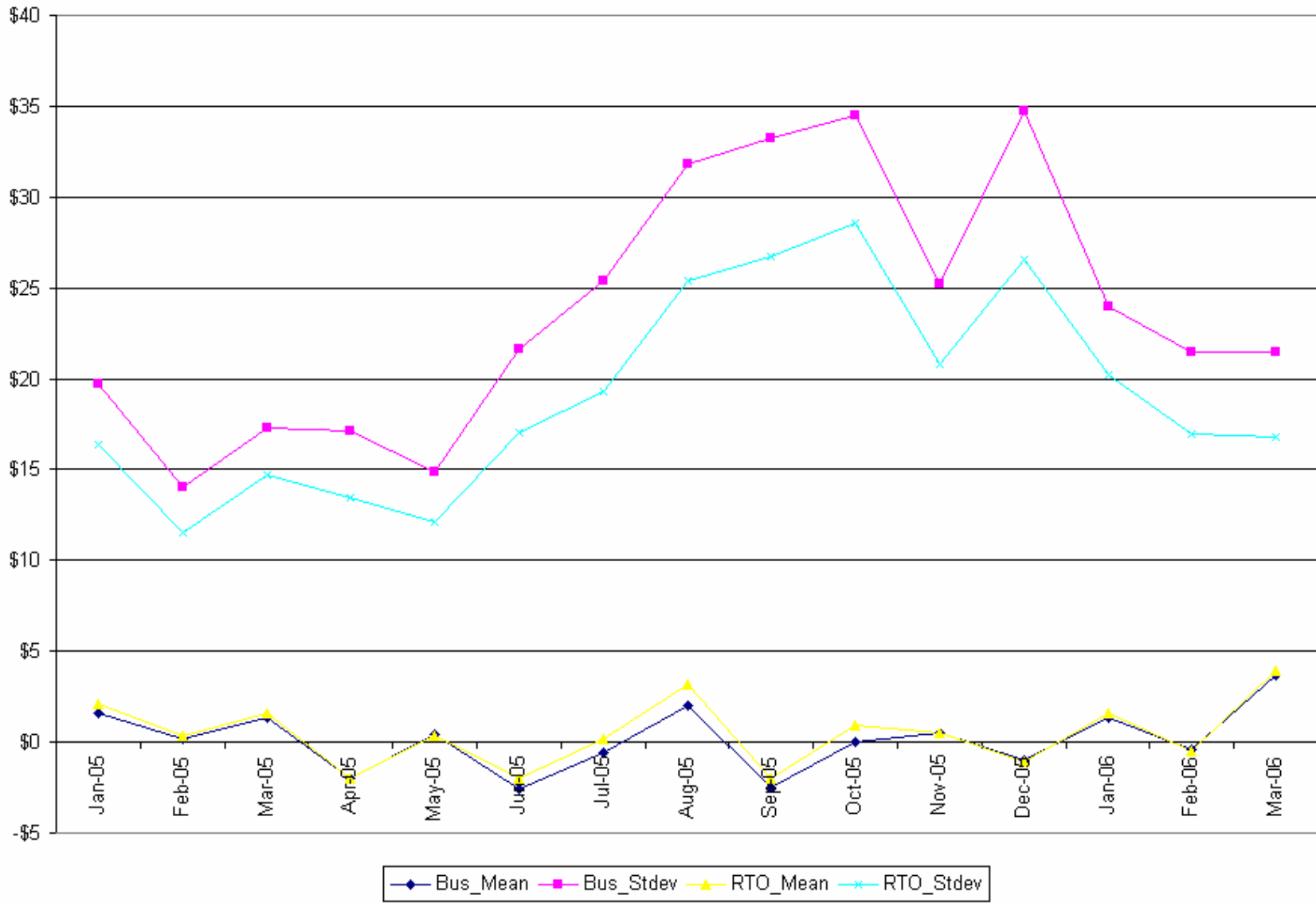


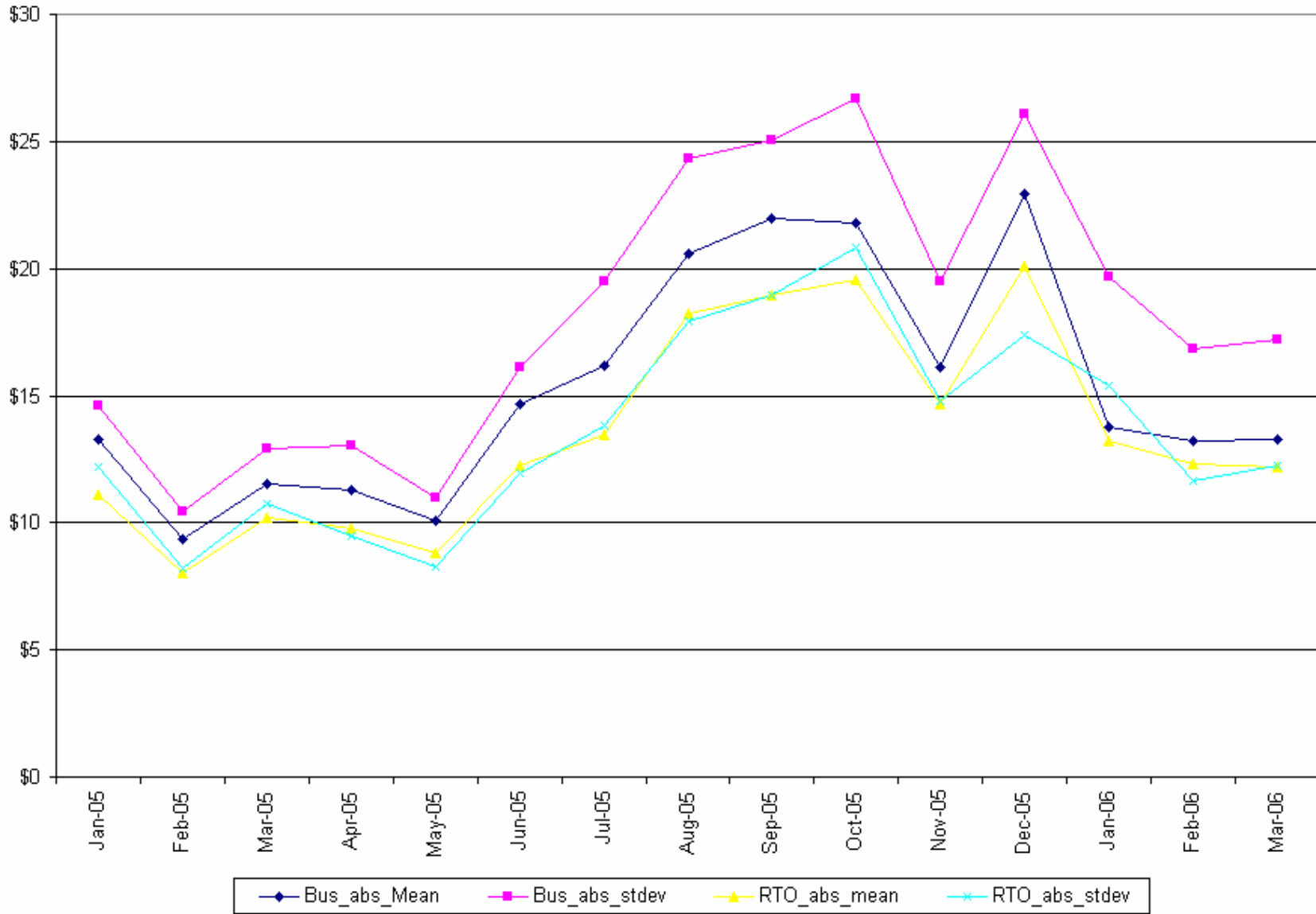
Hourly Real-time Minus Day-ahead Average LMP: 2005











- Mechanism to arbitrage differences between day-ahead and real-time markets
- Provides mechanism to manage day-ahead vs. real-time risk without withholding
 - Generation risks
 - Load risks
 - Bilateral contract risks
- Provides more granular supply and demand curves in day-ahead market
- Result is systematic, market-driven relationship between day-ahead and real-time markets
- Expectation is not identical prices
 - Uncertainty