



IMM Report

ERCOT Board of Directors Meeting

September 18, 2012

Dan L. Jones
Vice President
Director, ERCOT IMM
Potomac Economics

ERCOT IMM: Seven full time staff, located in Austin

- **Dan Jones (Director)**

- BS Electrical Engineering, MBA, nineteen years of energy economics and engineering experience, with Potomac Economics since October 2006

- **Beth Garza (Deputy Director)**

- BS Industrial Engineering, more than twenty-five years of experience in ERCOT, with Potomac Economics since October 2008

- **Young Li (Principal Engineer)**

- Ph.D. Electrical Engineering, eleven years experience in ERCOT market, with Potomac Economics since November 2006

- **Bryan Zhang (Economist)**

- Ph.D. in Economics, major in Macroeconomics and Industrial Organization.
 - Five years experience in marketing research in automotive industry. Five years of experience in power market monitoring with Potomac since March 2007.

- **Hailing Zang (Economist)**

- Ph.D. in Economics, dissertation on ERCOT wholesale market bidding behavior study;
 - One year research fellow appointment at Harvard Kennedy School of Government, researching under the direction of Bill Hogan;
 - Six years of experience in power market monitoring with Potomac Economics since October 2006

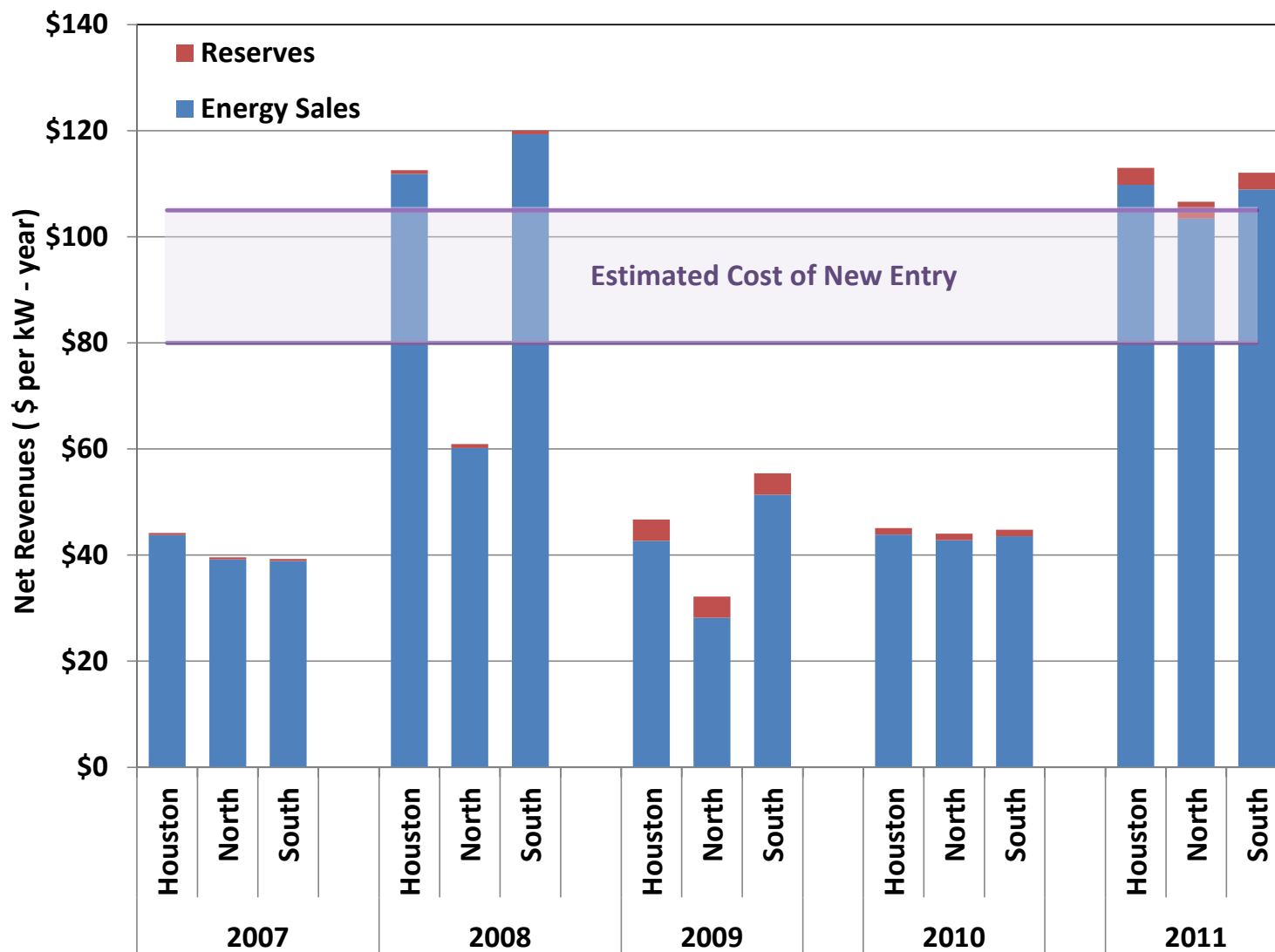
- **Thuy Huynh (Transmission Engineer)**

- BS Electrical Engineering, six years experience in ERCOT, ten years total in the power industry, with Potomac Economics since December 2008.

- **Tony Garcia (Programmer)**

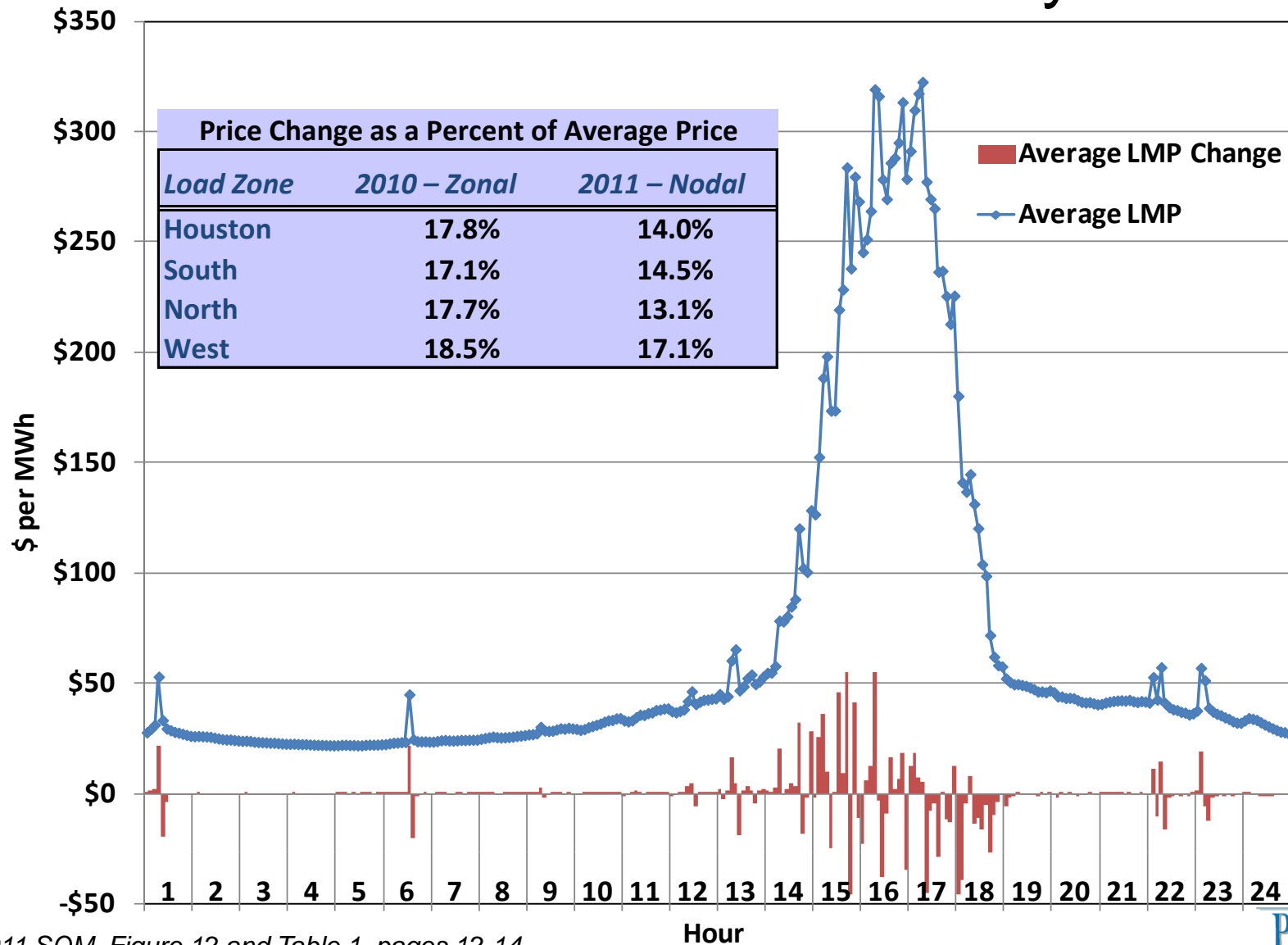
- Eleven years data analysis experience, nine years SAS programming experience, with Potomac Economics since July 2007, BA in LA

Gas Turbine Net Revenues



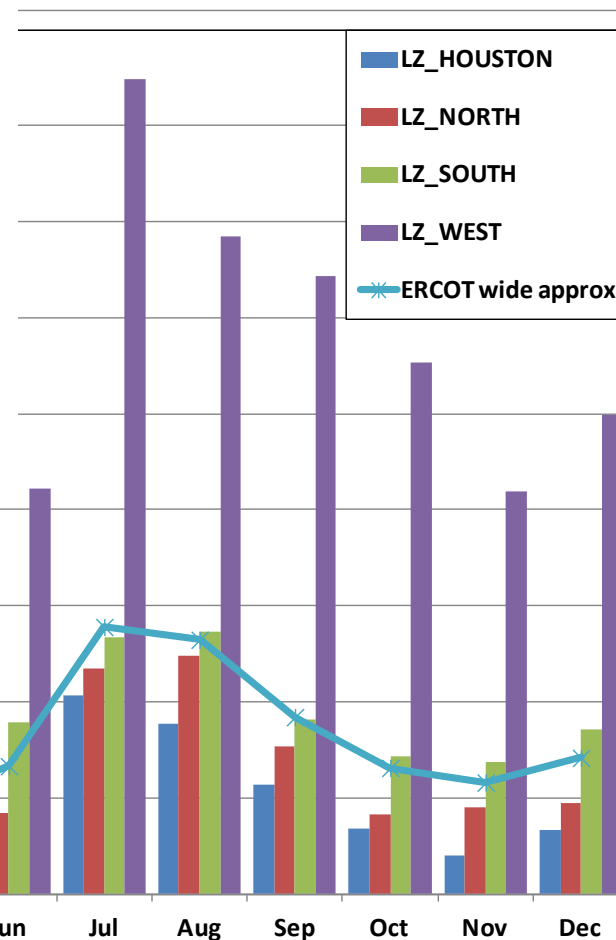
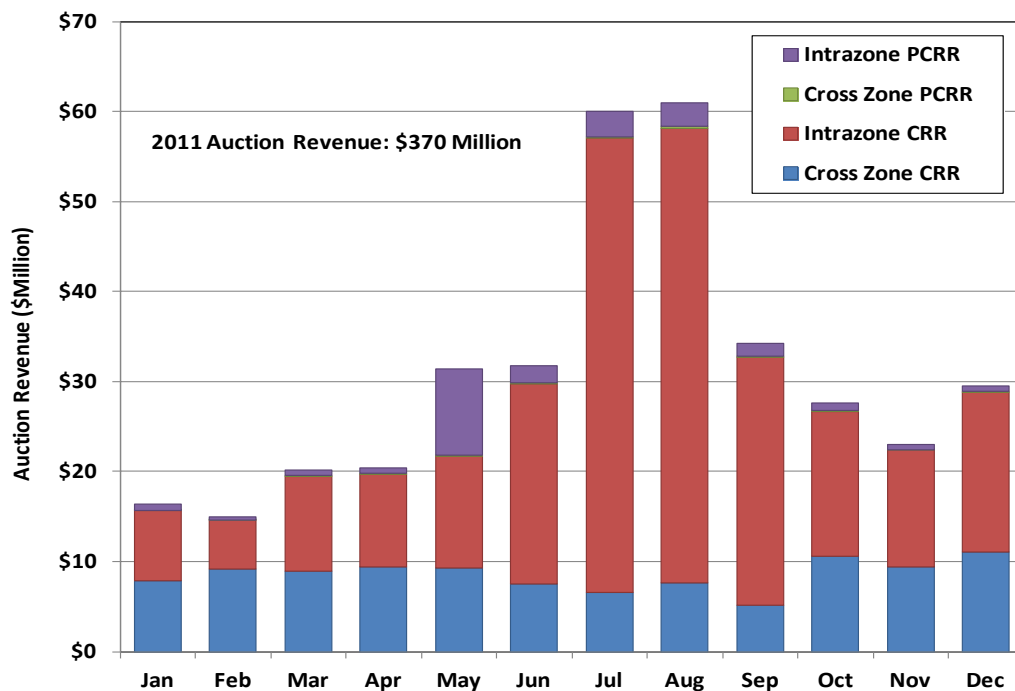
2011 SOM, Figure 62, pages 75-80

Reduced Real-Time Price Volatility



2011 SOM, Figure 12 and Table 1, pages 12-14

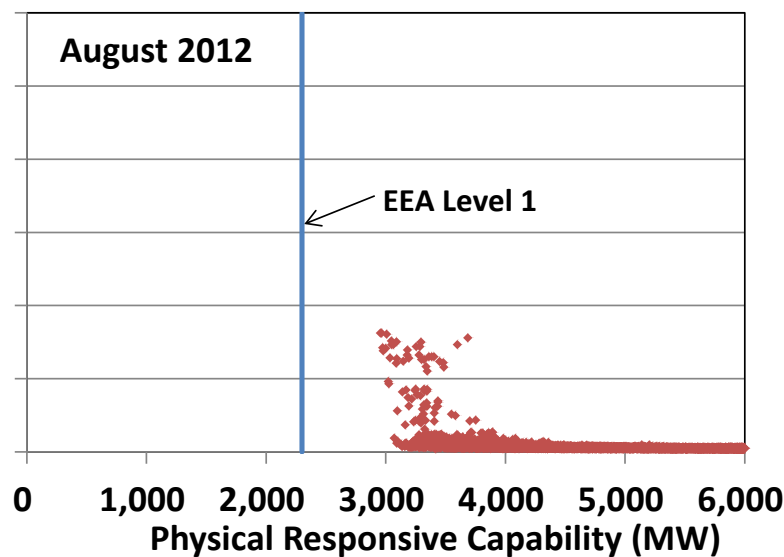
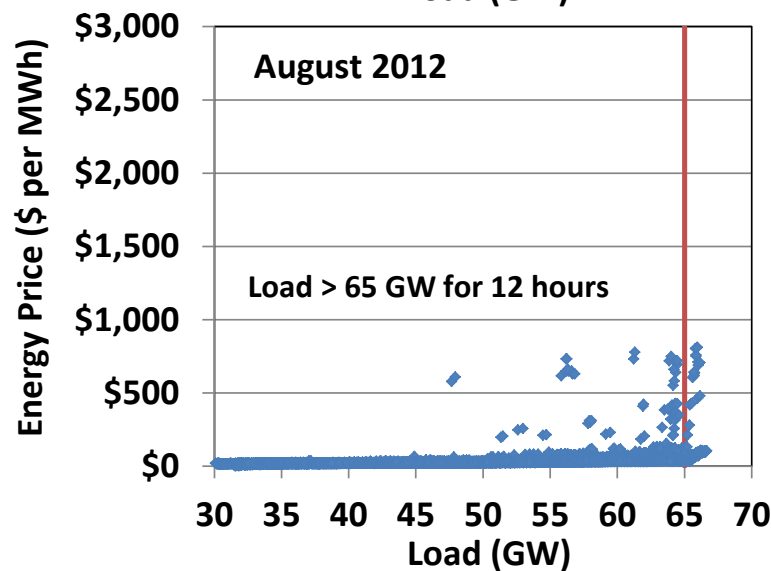
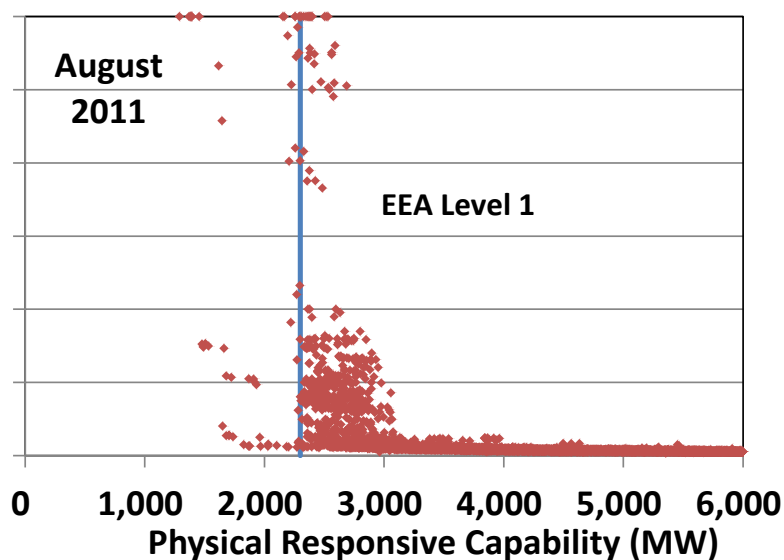
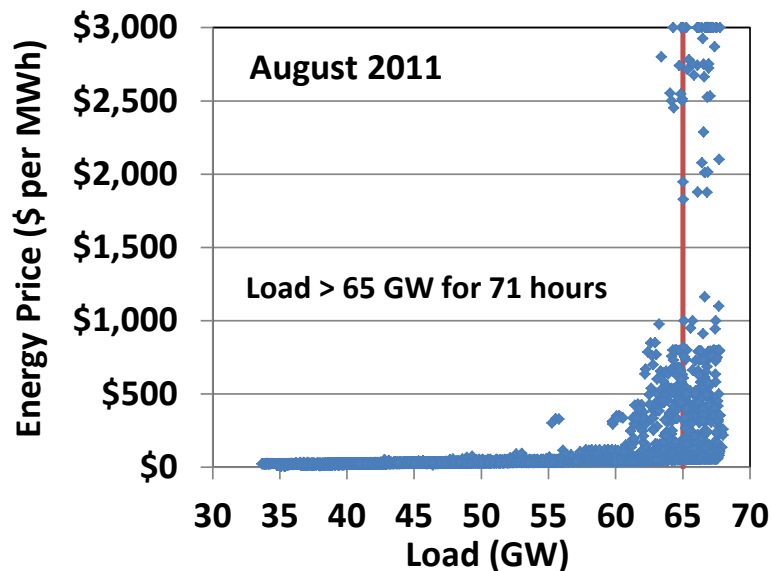
CRR Auction Revenues



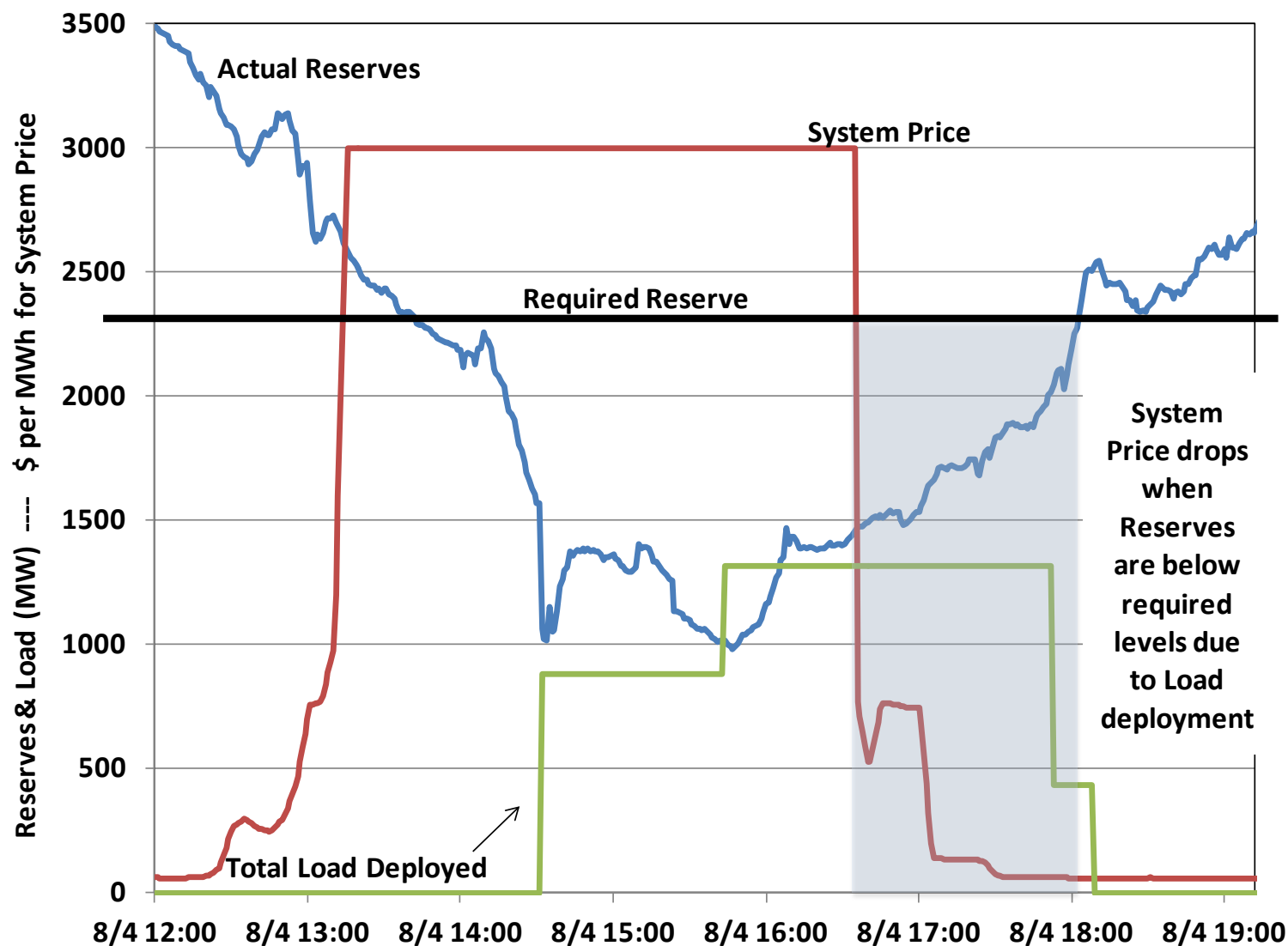
2011 SOM, Figure 39,
pages 49-50

Load – Reserves – Price

2011 SOM, Figure 21, pages 24-26 - Updated



Pricing During Load Deployments



Key Recommendations

- Improve the real-time dispatch automated mitigation procedures by introducing a test to determine whether a unit is either contributing to, or helping to resolve a transmission constraint and only subject the relieving units to mitigation.
- Improve the real-time market software to allow it to "look ahead" a sufficient amount of time to better commit load and generation resources that can be online within 15 to 30 minutes.
- Absent is a specific recommendation regarding resource adequacy concerns in deference to the ongoing efforts at the PUCT.