



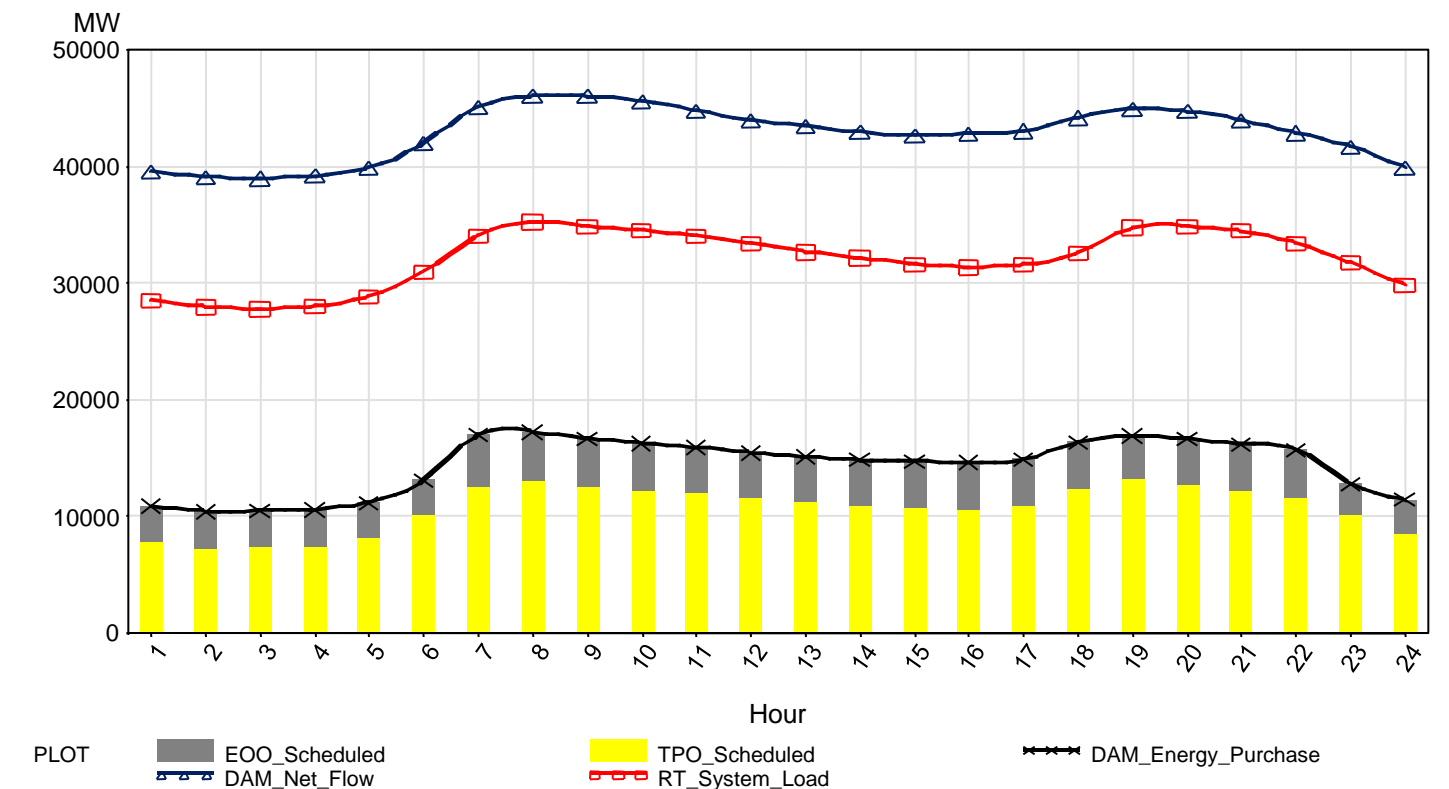
Wholesale Market Operations Update

Board of Directors Meeting

February 21, 2012

Day-Ahead Schedule

- On average the DAM net transmission flow (defined below) was greater than the real-time system load for all 24 hours

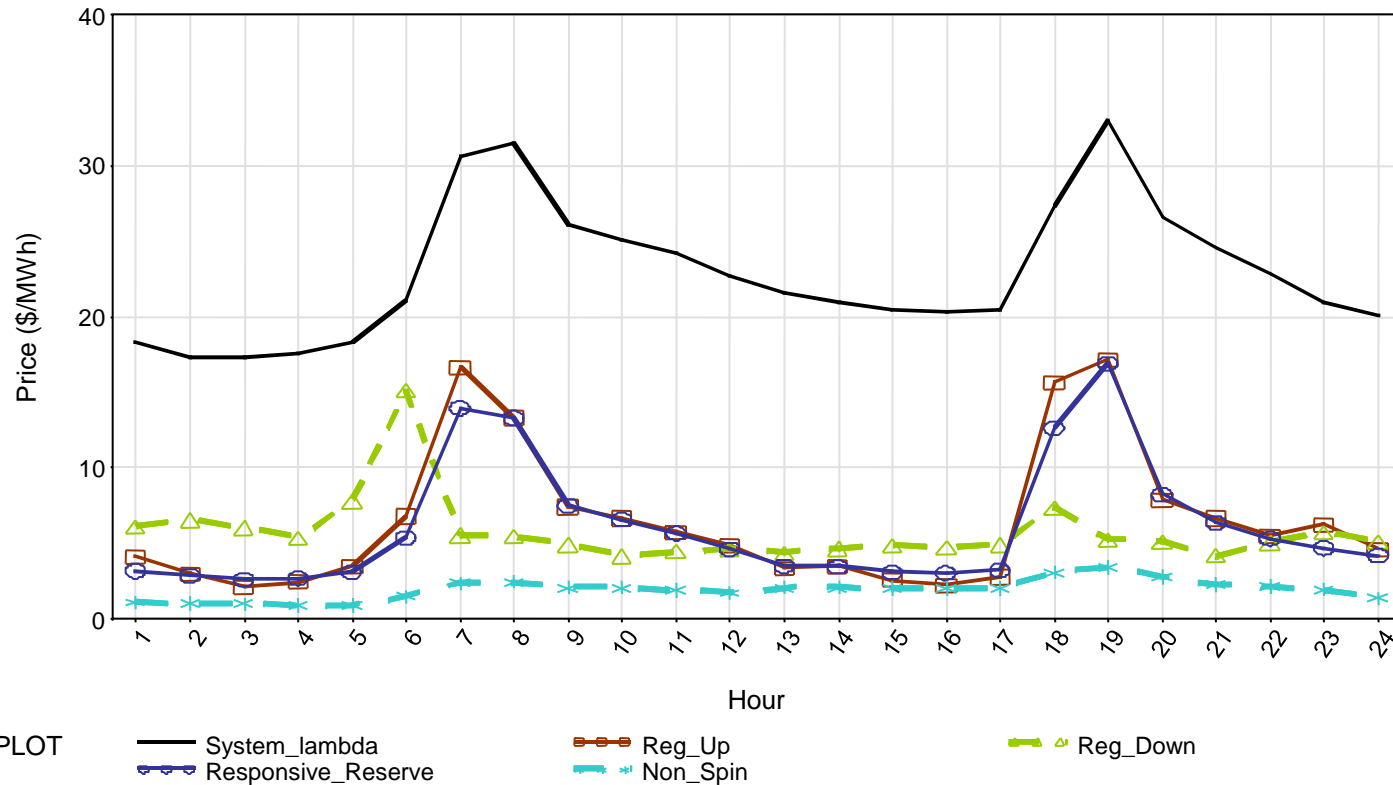


Average DAM Schedule

01JAN2012-31JAN2012

Acronym : TPO - Three Part Offer; EOO – Energy Only Offer;
 DAM_Net_Flow = Combined market transmission flow of Energy purchased/sold in Day-Ahead Market plus Point-to-Point Obligations and NOIE CRR Options carried forward to real-time.

Day-Ahead Electricity And Ancillary Service Hourly Average Prices

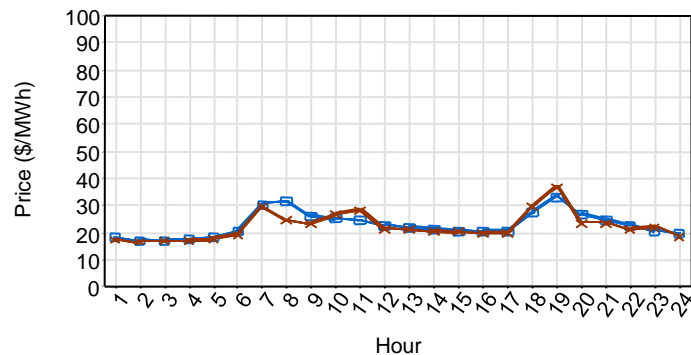
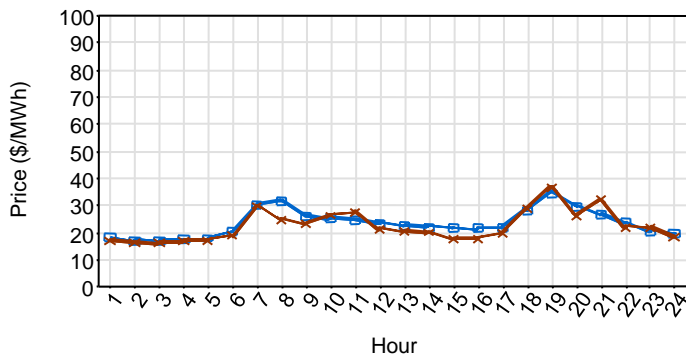
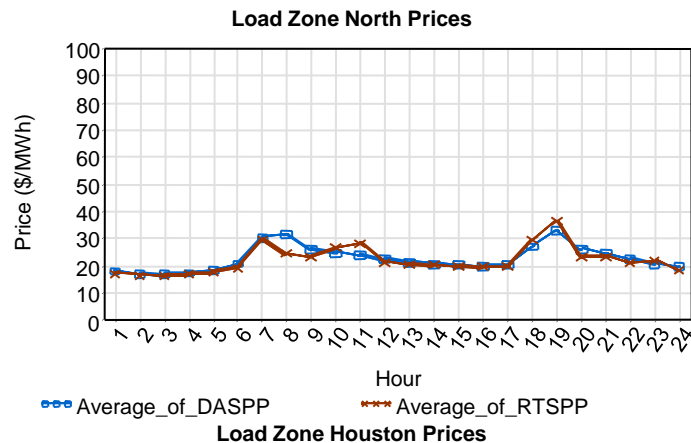
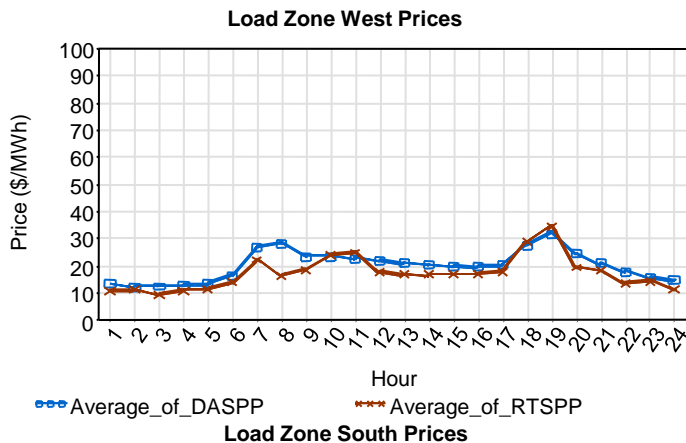


Day-Ahead Electricity and Ancillary Service Hourly Average Prices

01JAN2012-31JAN2012

- Both Energy and AS prices followed the trend of load profile on average.
- In all hours, Responsive Reserve prices were close to Regulation Up prices.

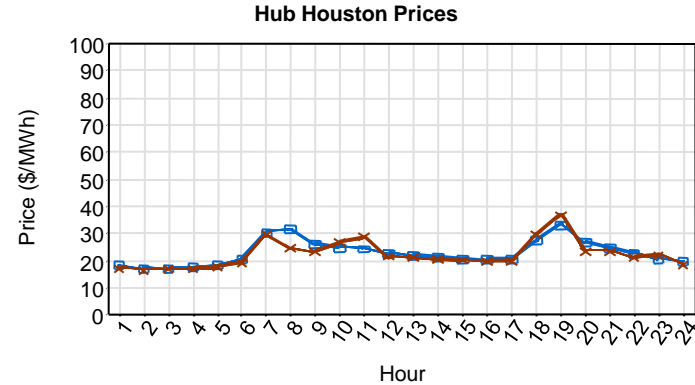
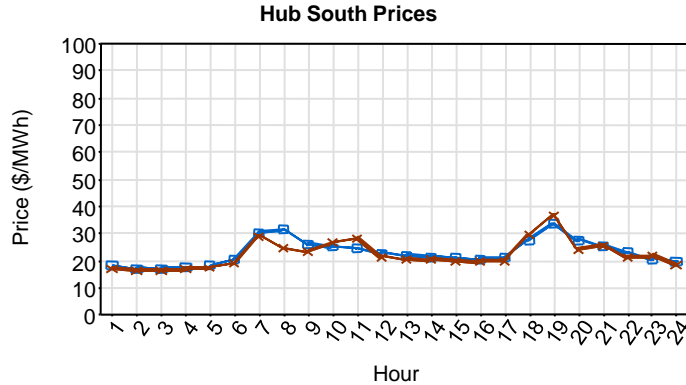
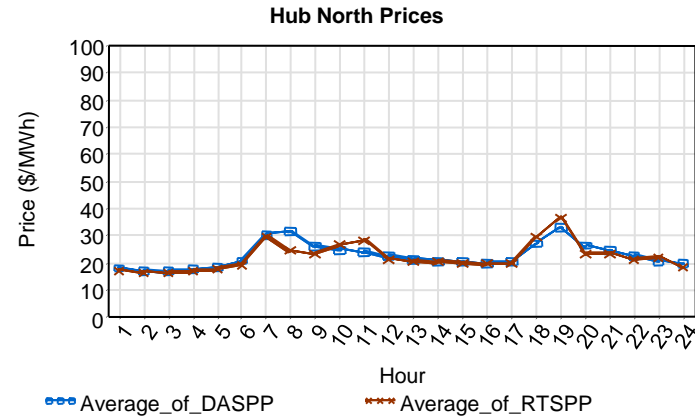
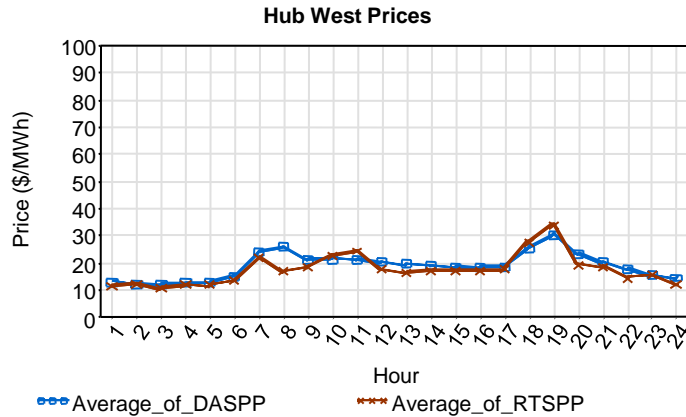
Day-Ahead Vs Real-Time Load Zone SPP (Hourly Average)



DA Vs RT Hourly Average SPP Load Zone Summary

01JAN2012-31JAN2012

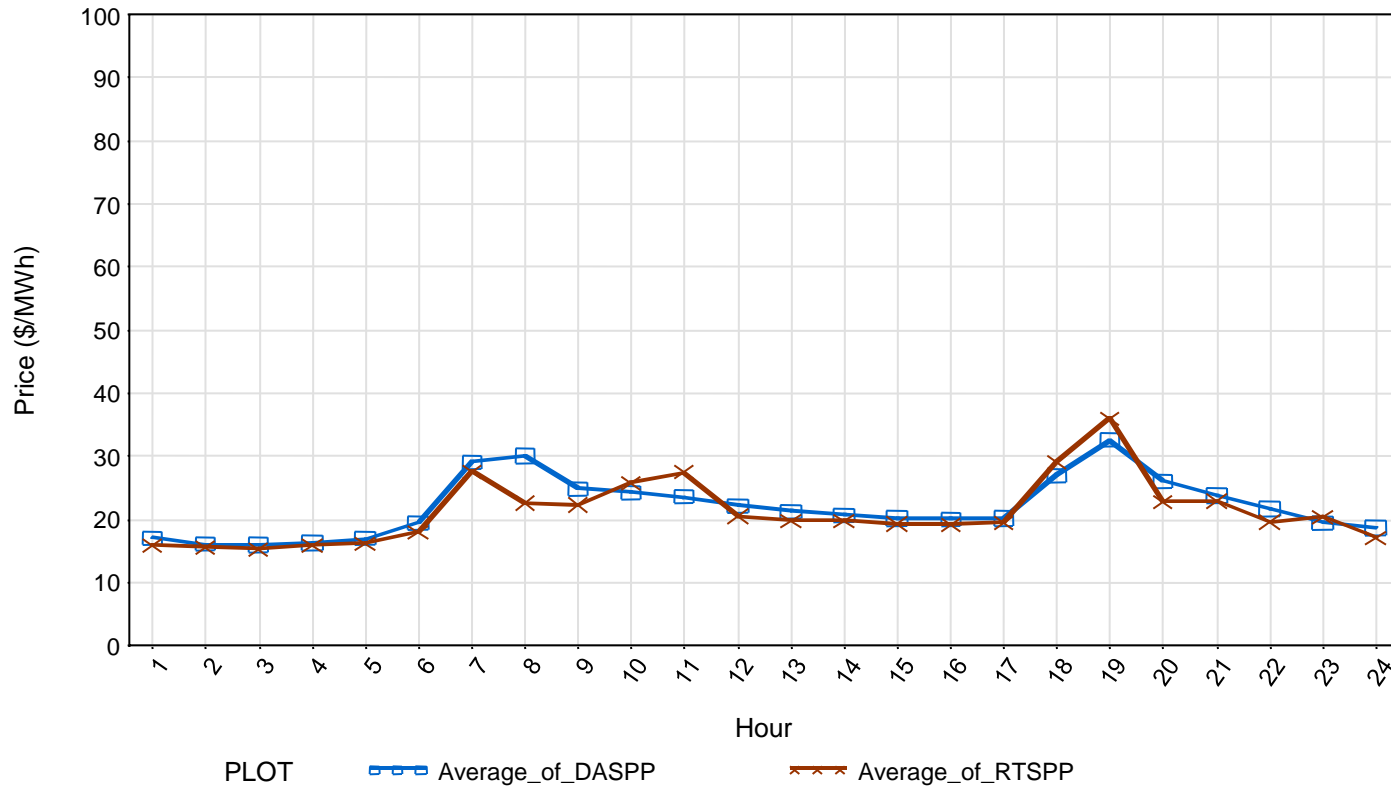
Day-Ahead vs Real-Time HUB SPP (Hourly Average)



DA Vs RT Hourly Average SPP Hub Summary

01JAN2012-31JAN2012

Day-Ahead Vs Real-Time Hub Average SPP (Hourly Average)

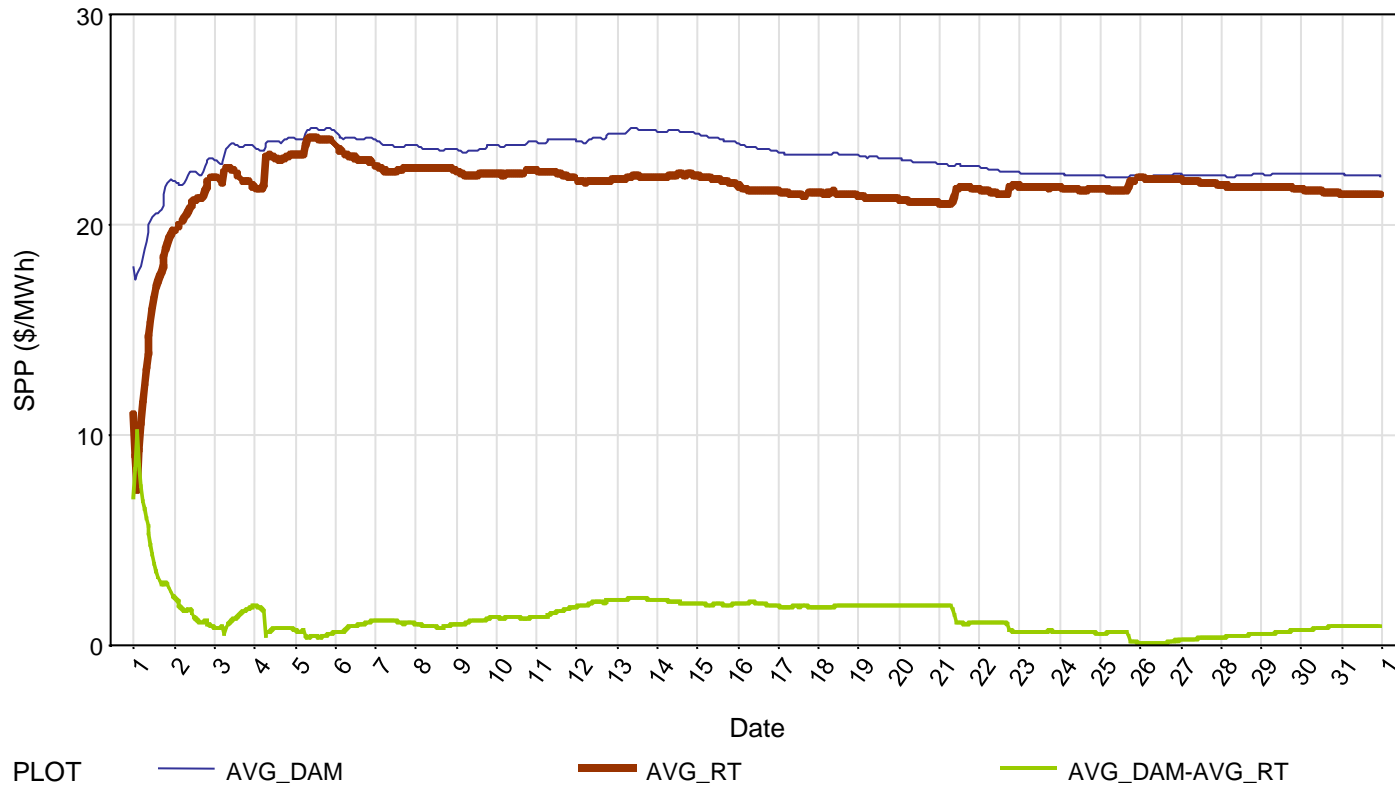


Day-Ahead Vs Real-Time Hourly Average SPP of Hub Hub-Average Prices

01JAN2012-31JAN2012

- Day Ahead prices were close to Real-Time prices, especially during off-peak hours.
- Day Ahead prices were on average higher than Real-Time prices for peak hours 7-9.
- Real-Time prices were on average higher than Day Ahead prices for peak hours 18-19.

Day-Ahead Vs Real-Time Cumulative Average SPP

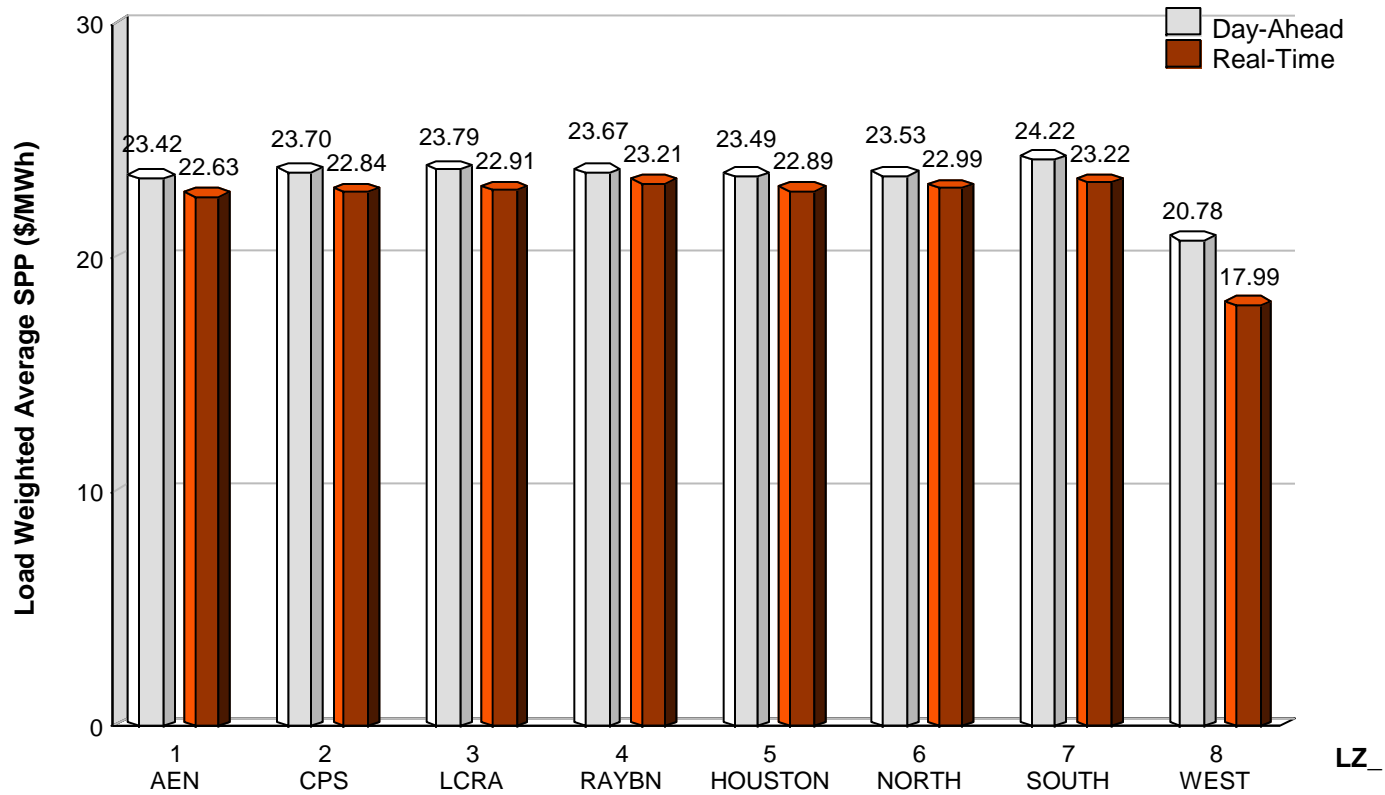


Day-Ahead Vs Real-Time Cumulative Average SPP for Simple Average Prices

01JAN2012-31JAN2012

- **The cumulative Real Time prices were typically more volatile than the Day-Ahead prices**

Load Weighted Average SPP



Load Weighted Average SPP for Each Zone

01JAN2012-31JAN2012

- The load weighted average RT SPPs were lower than the load weighted average DAM SPPs in all 8 load zones.

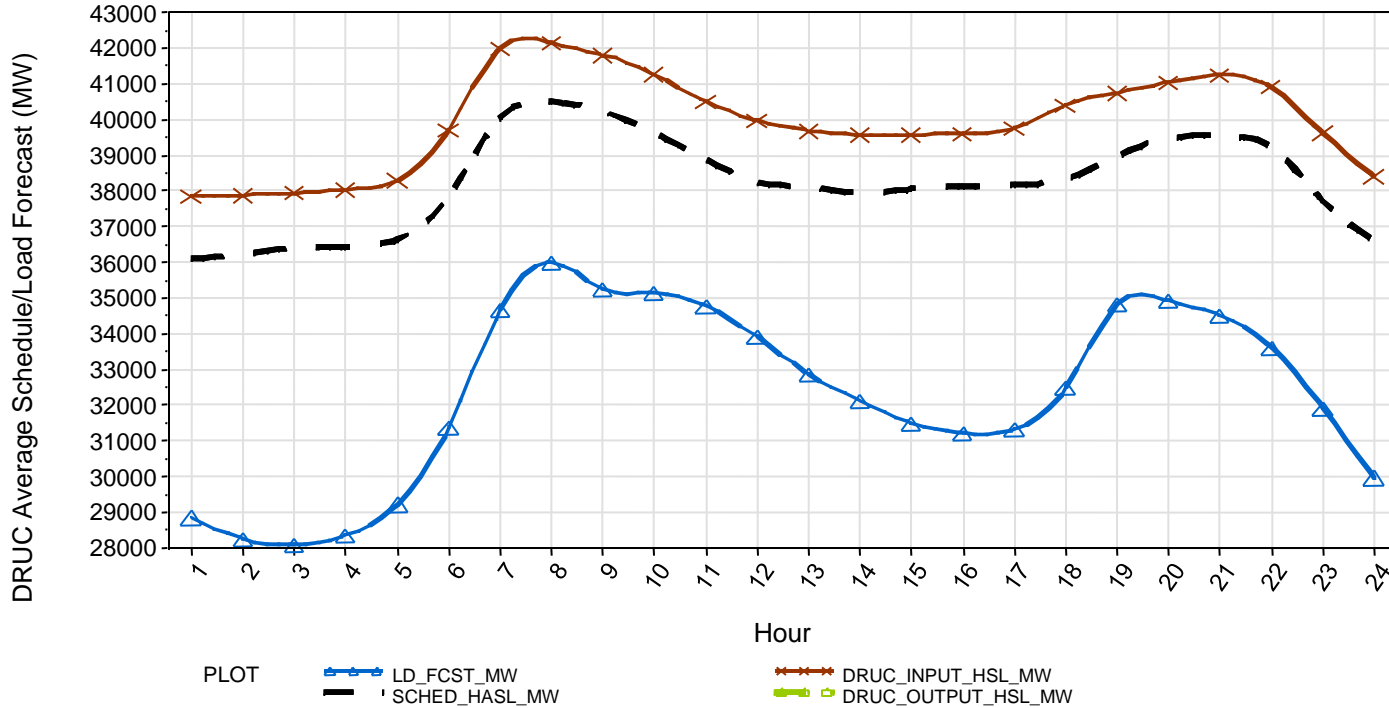
DRUC Monthly Summary

31 Executions (0 Missed)

5.30-Min Average Execution Time

1 Published after 1600; None published after 1800

No Resources Committed

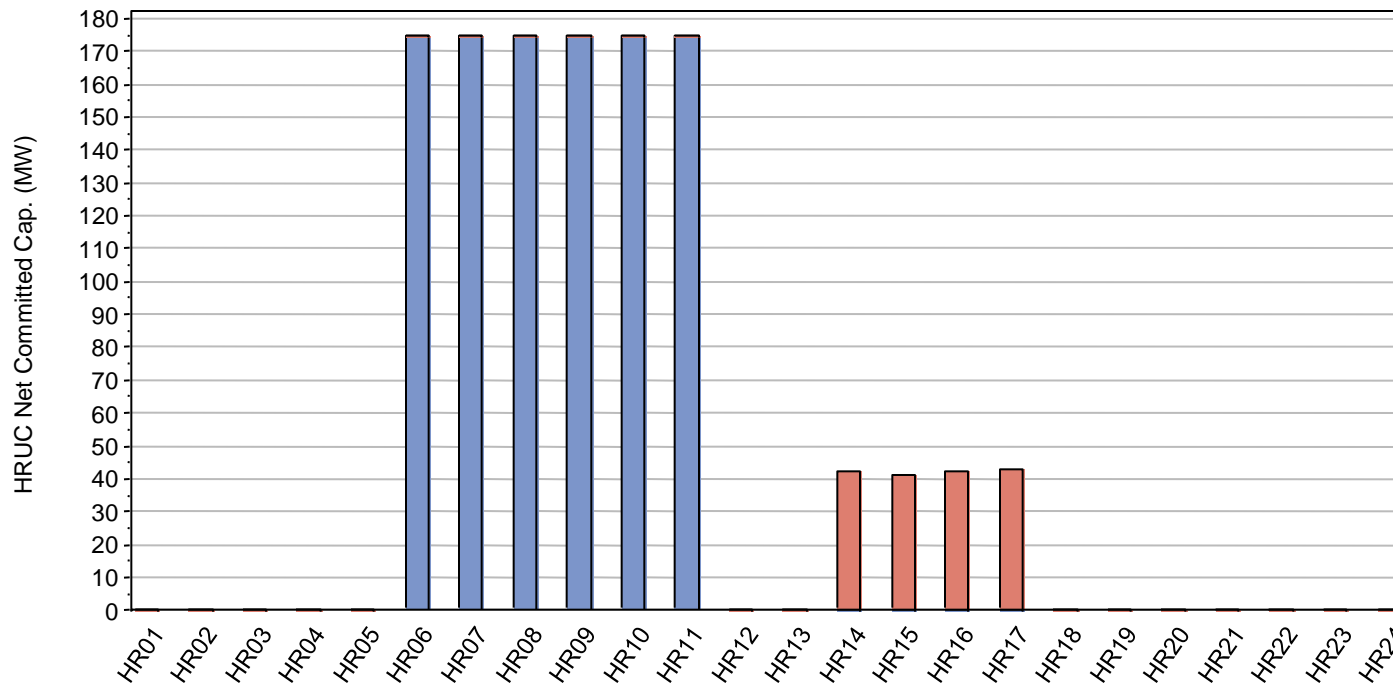


DRUC Average QSE Scheduled Capacity/Load Forecast

01JAN2012-31JAN2012

HRUC Monthly Summary

744 Executions (0 Missed)
5.40-Min Average Execution Time
Note: Colors Indicate Individual Resources

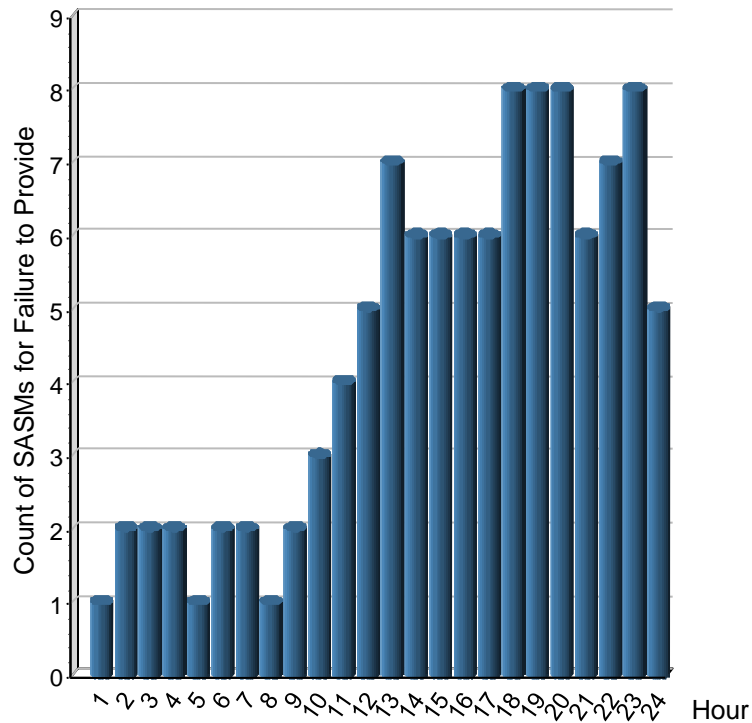


Net Committed Capacity in HRUC

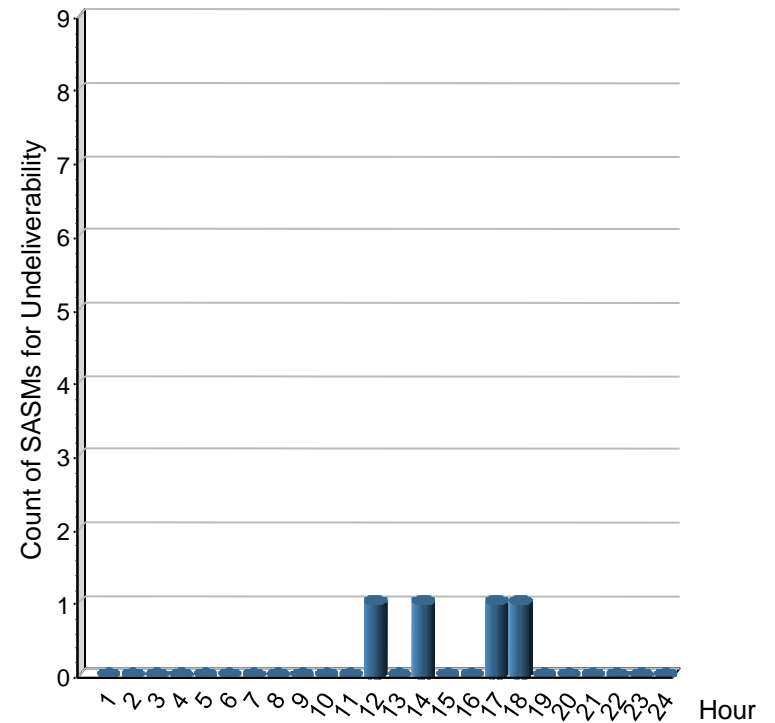
01JAN2012-31JAN2012

Supplemental Ancillary Service Market (SASM) Summary

**11 SASMs in 01JAN2012-31JAN2012
For AS Failure to Provide**



**1 SASMs in 01JAN2012-31JAN2012
For AS Undeliverability**

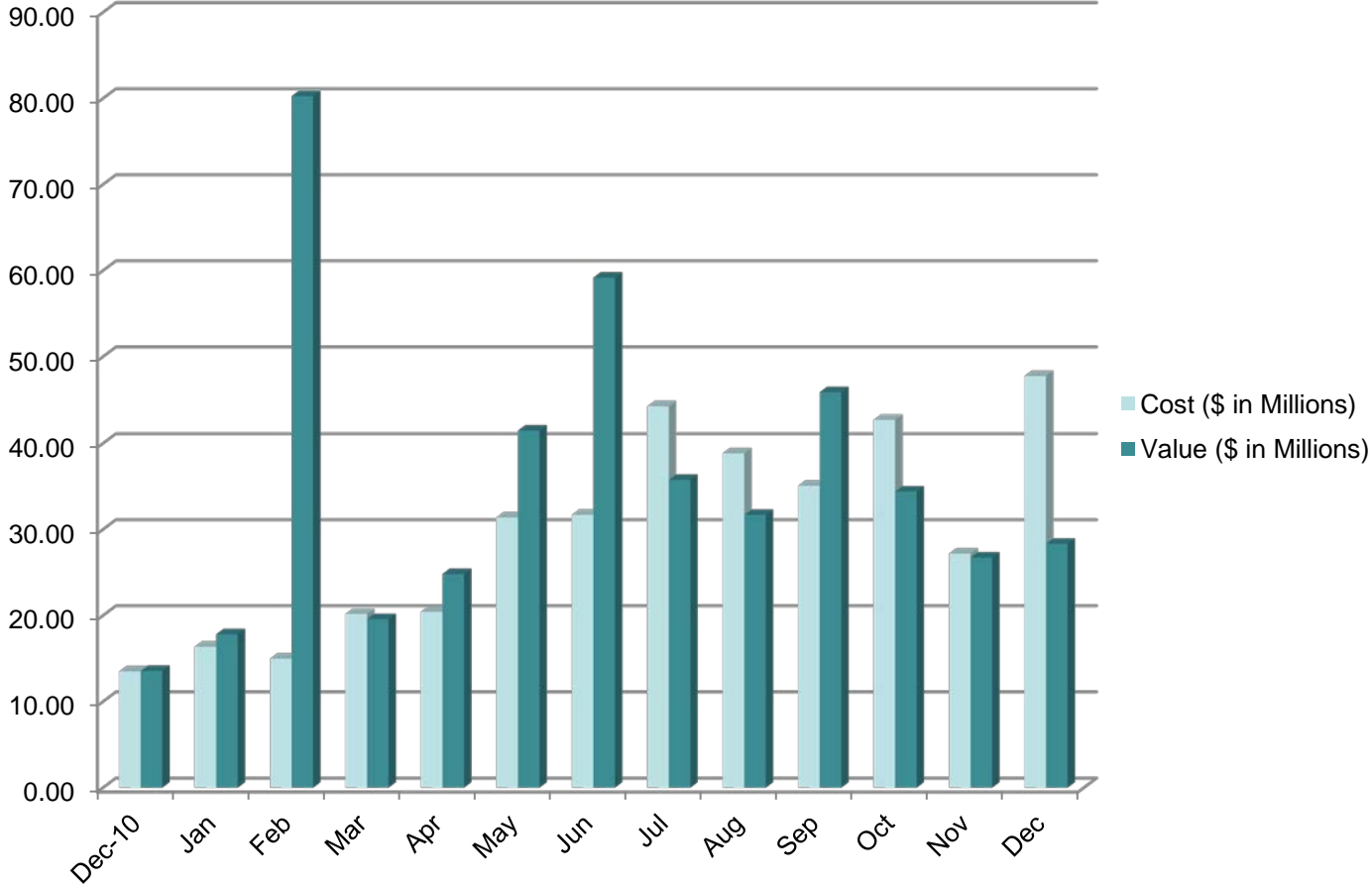


Non-Spinning Reserve Service Deployment

Deployment Start	Deployment End	Deployment Duration Hours	Max Deployment MW	Reason
1/14/2012 2:42	1/14/2012 3:36	0.9	6.4	Congestion

- **149,620 Bids/Offers**
- **13,387 Auction Awards**
 - **141,590.8 MW**
 - **46,657.0 Peak WD**
 - **48,327.5 Peak WE**
 - **46,606.3 Off-peak**
- **Total Auction/Allocation Revenue = \$ 9.078 M**

CRR Price Convergence



Graphic to compare purchase cost of CRRs in auctions to CRR revenue collected and paid out to CRR Account Holders

Market Enhancements Under Consideration

- **Evaluating market design improvement proposals**
 - 0- LSL of RUC committed Resources and Off-Line Non-Spin Resources
 - Changing Power Balance penalty cost.
- **Evaluating feasibility of implementing Pilots for**
 - Fast response regulation service
 - 30 min EILS service
 - Active deployment of Load Resources participating in Non-Spin based on forecasted price
- **Demand Response**
 - EILS Proposed Rule Enhancements
 - Option to renew contract after deployment obligations are met early in a contract period
 - Adding Distributed Generation could potentially add an additional 50 – 100MW by summer
 - 30 minute EILS response could potentially add an additional 80 – 100 MW by summer
- **Look-Ahead SCED functions framed for market consideration**
 - NPRR351 - Phase I of Implementation (indicative future prices and ramping) is scheduled to be implemented by this summer
 - Working with Market Participants on a task force (MET) to draft scope for future stages of Look Ahead SCED