



# ERCOT Monthly Operational Overview (February 2013)

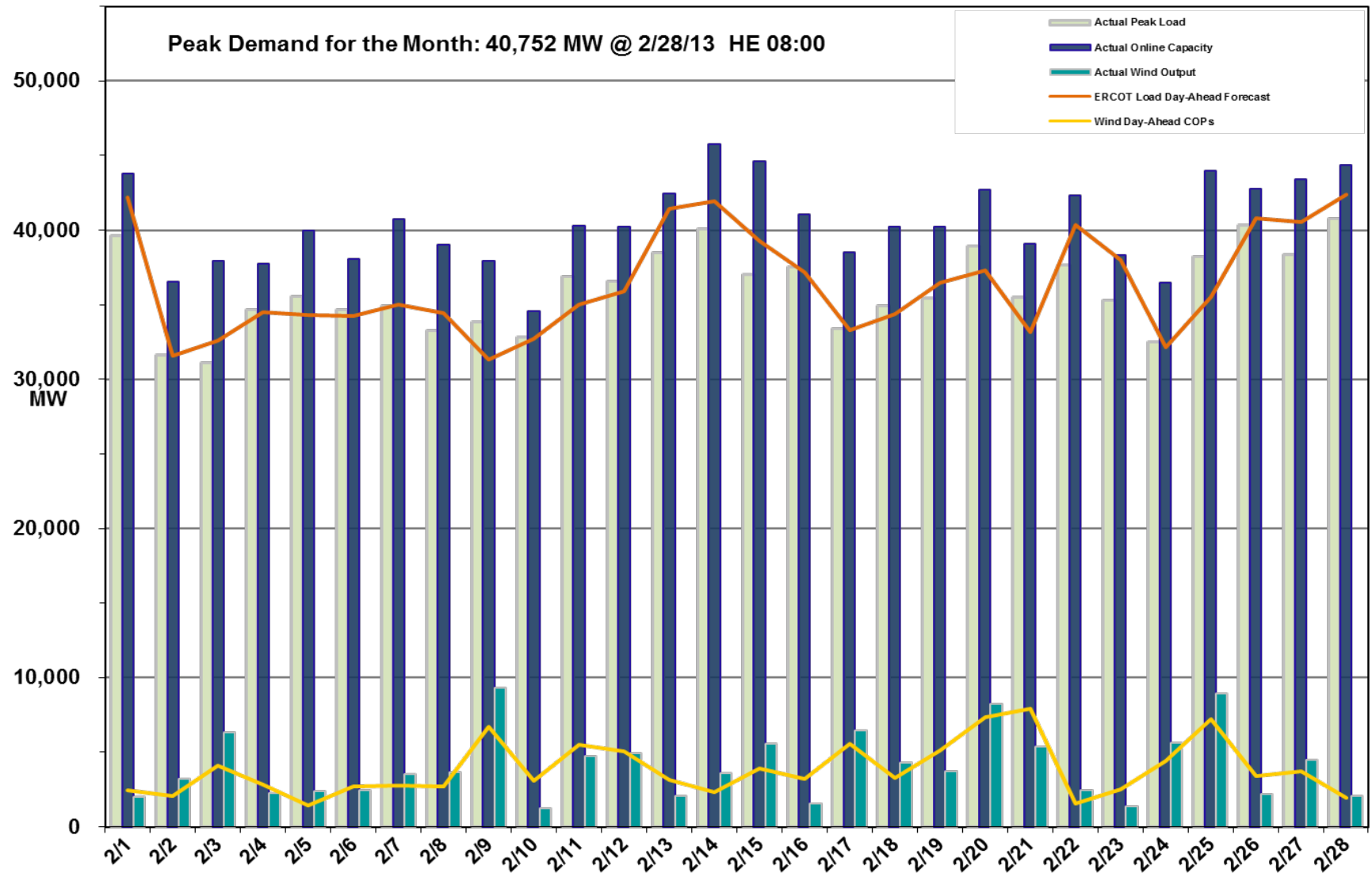
March 15, 2013



# Grid Operations & Planning

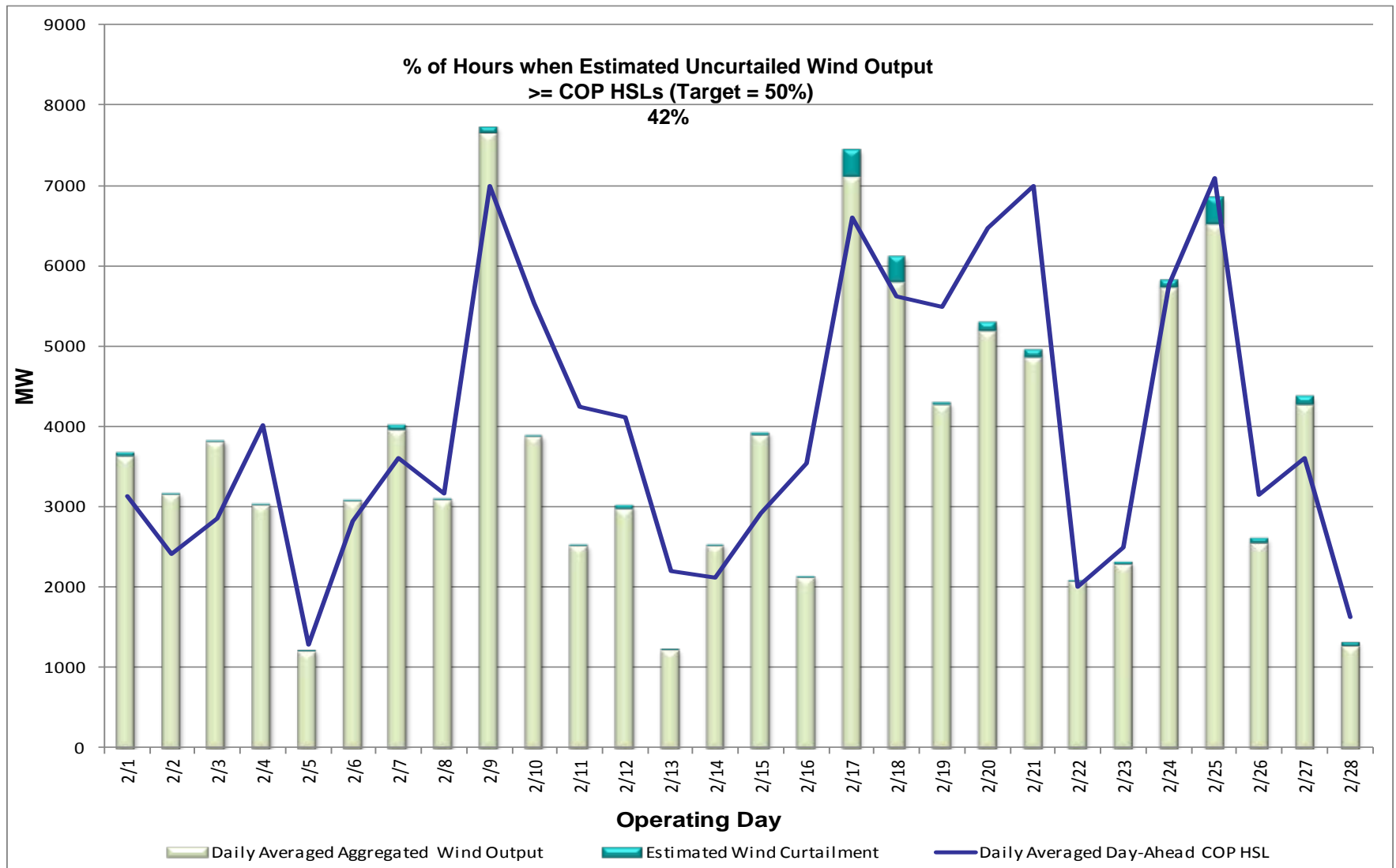
- February 2013 Operations
  - Peak Demand: Actual vs. Forecast
  - On-line Resources: Total at Peak and Wind
  - CPS1 Monthly Performance
  - Historical Peak and Minimum Loads
  - Day-Ahead Load Forecast Performance
  - Reliability Unit Commitment Capacity (RUC) by weather zone
  - Generic Transmission Limits (GTLs)
  - Advisories, Watches and EEAs
  - Significant System Incidents
- February 2013 Planning Activities
  - Summary
  - Generation Interconnection Requests
  - Wind Capacity

# February 2013 Daily Peak Demand: Hourly Average Actual vs. Forecast, Wind Day-Ahead COPs & On-line Capacity at Peak



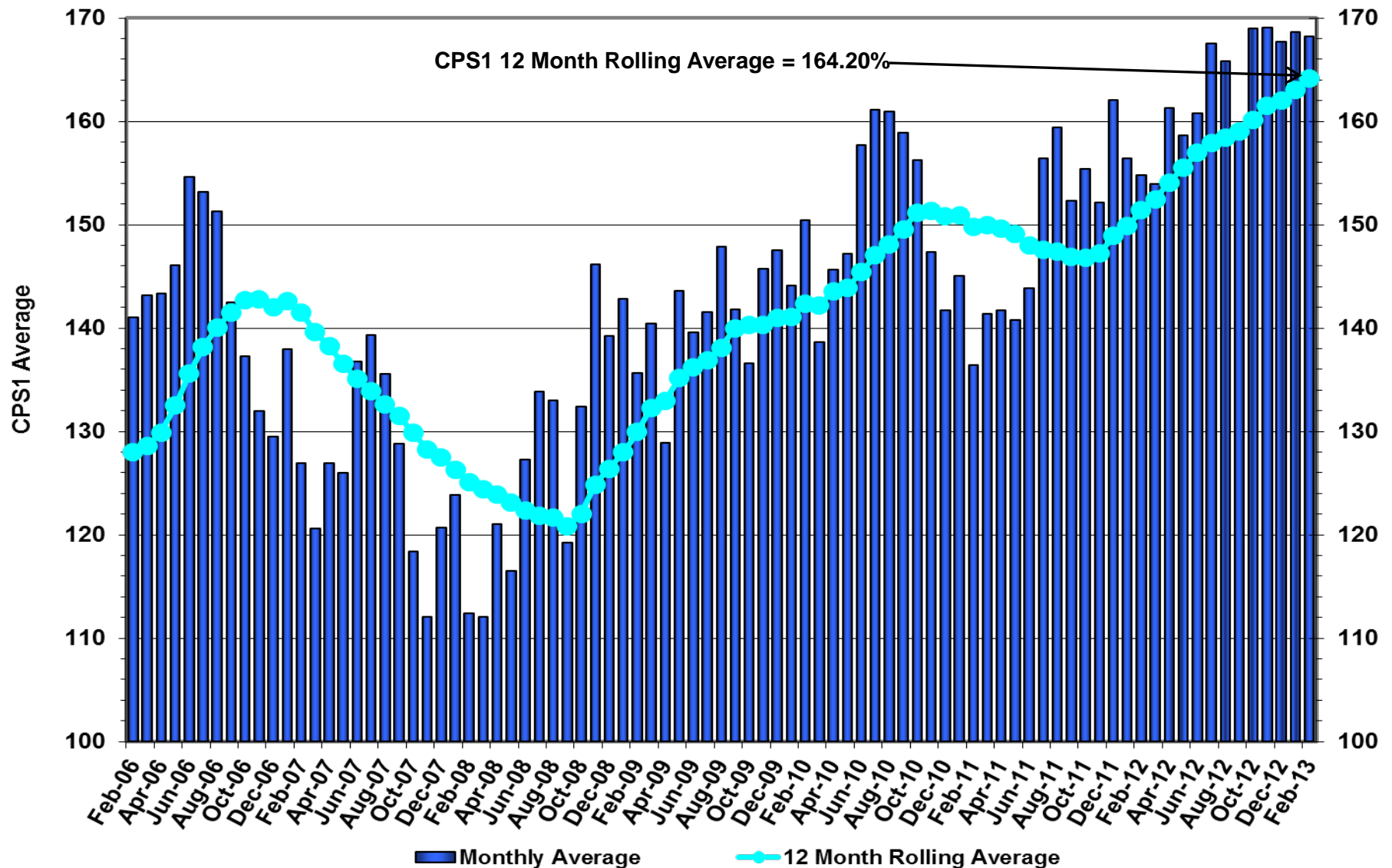
Note: All data are hourly averages during the peak load hour obtained from COPs, and EMMS.

# February 2013 Actual Wind Output plus Curtailments vs. Wind Day-Ahead COPs for All Hours

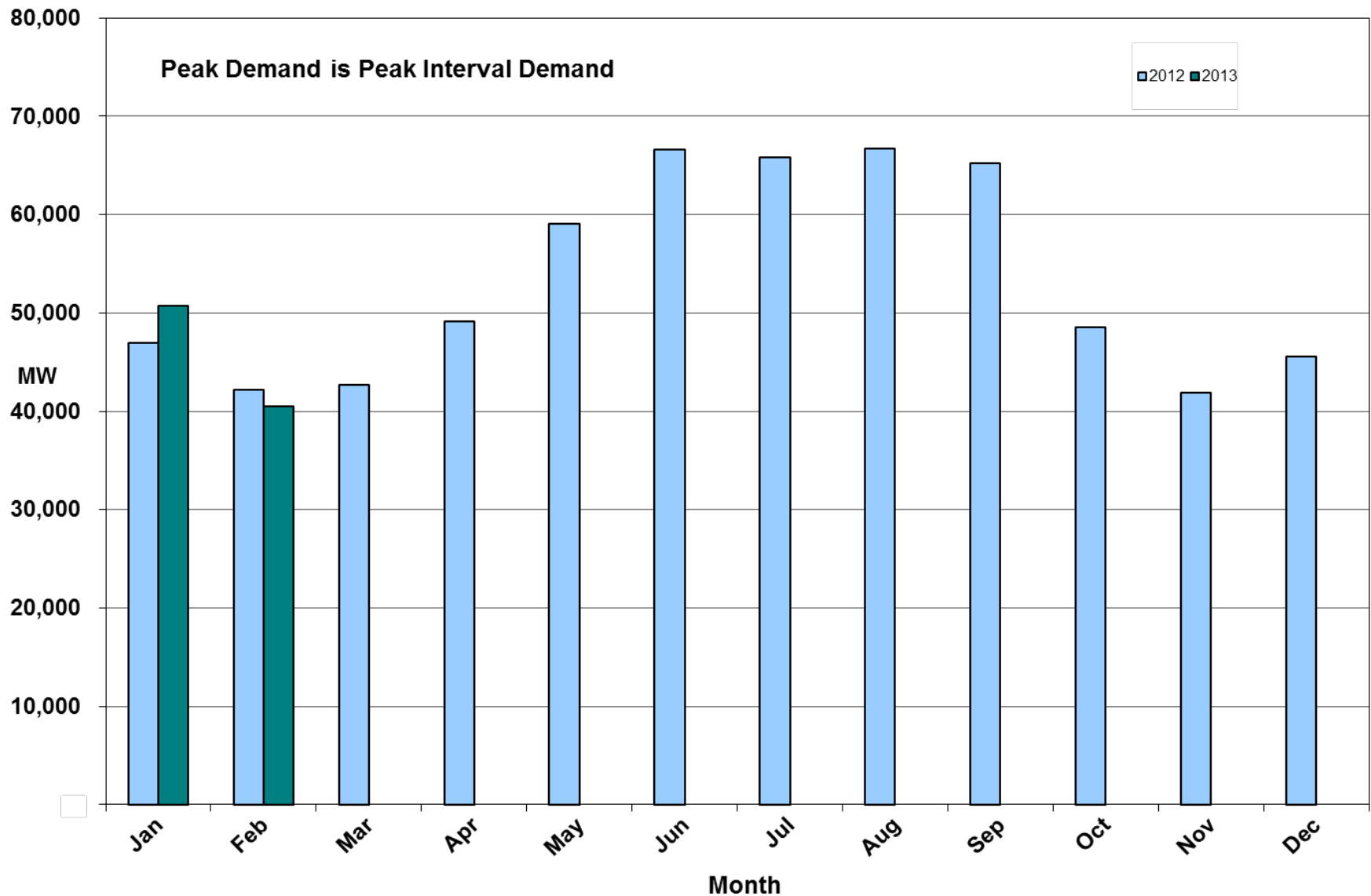


**Note: QSEs must use the AWT 50% probability of exceedance forecast as the HSL in their COPs**

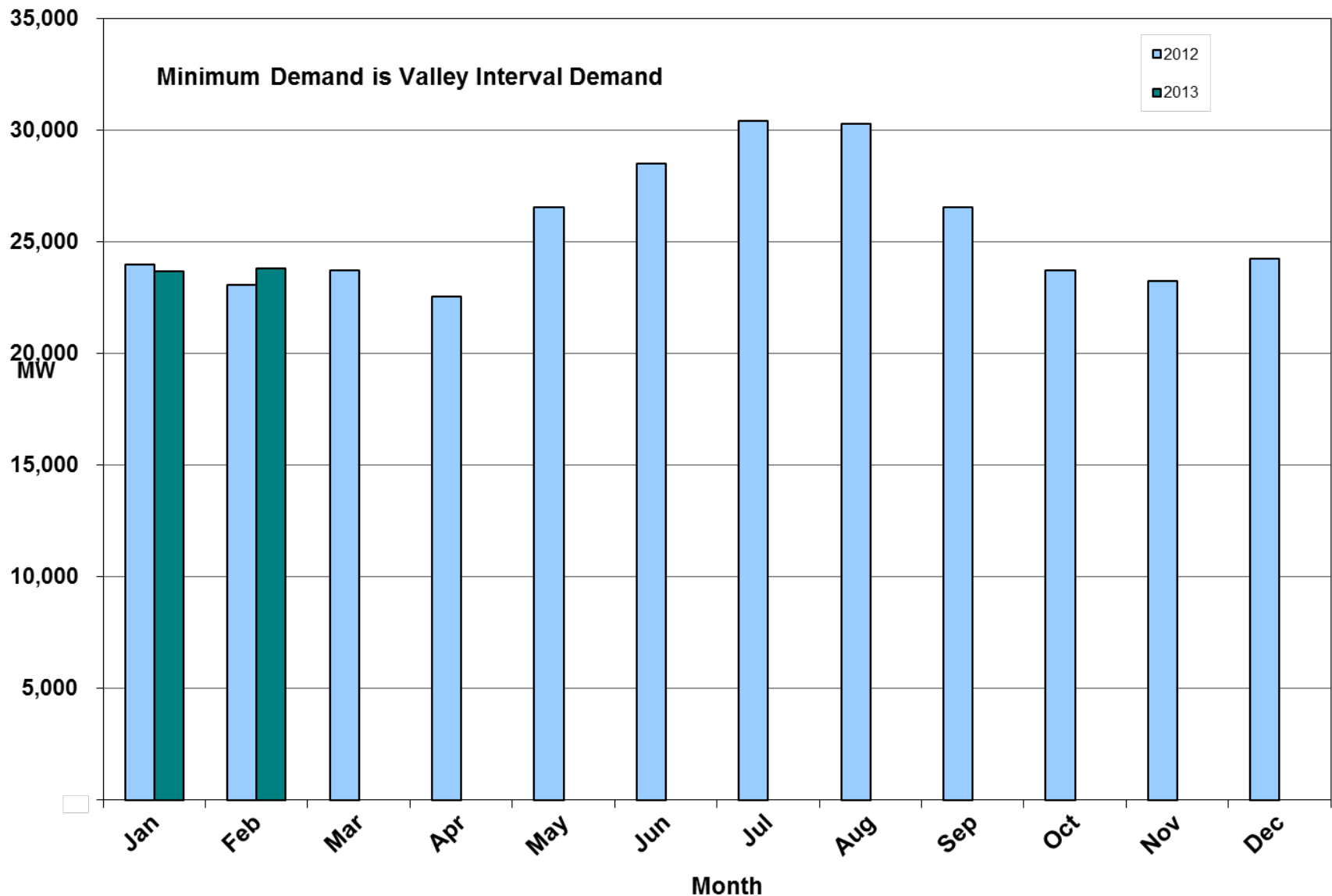
# February 2013 ERCOT's CPS1 Monthly Performance



# February 2013 Monthly Peak Actual Demand



# February 2013 Monthly Minimum Actual Demand





# Day-Ahead Load Forecast Performance – February 2013

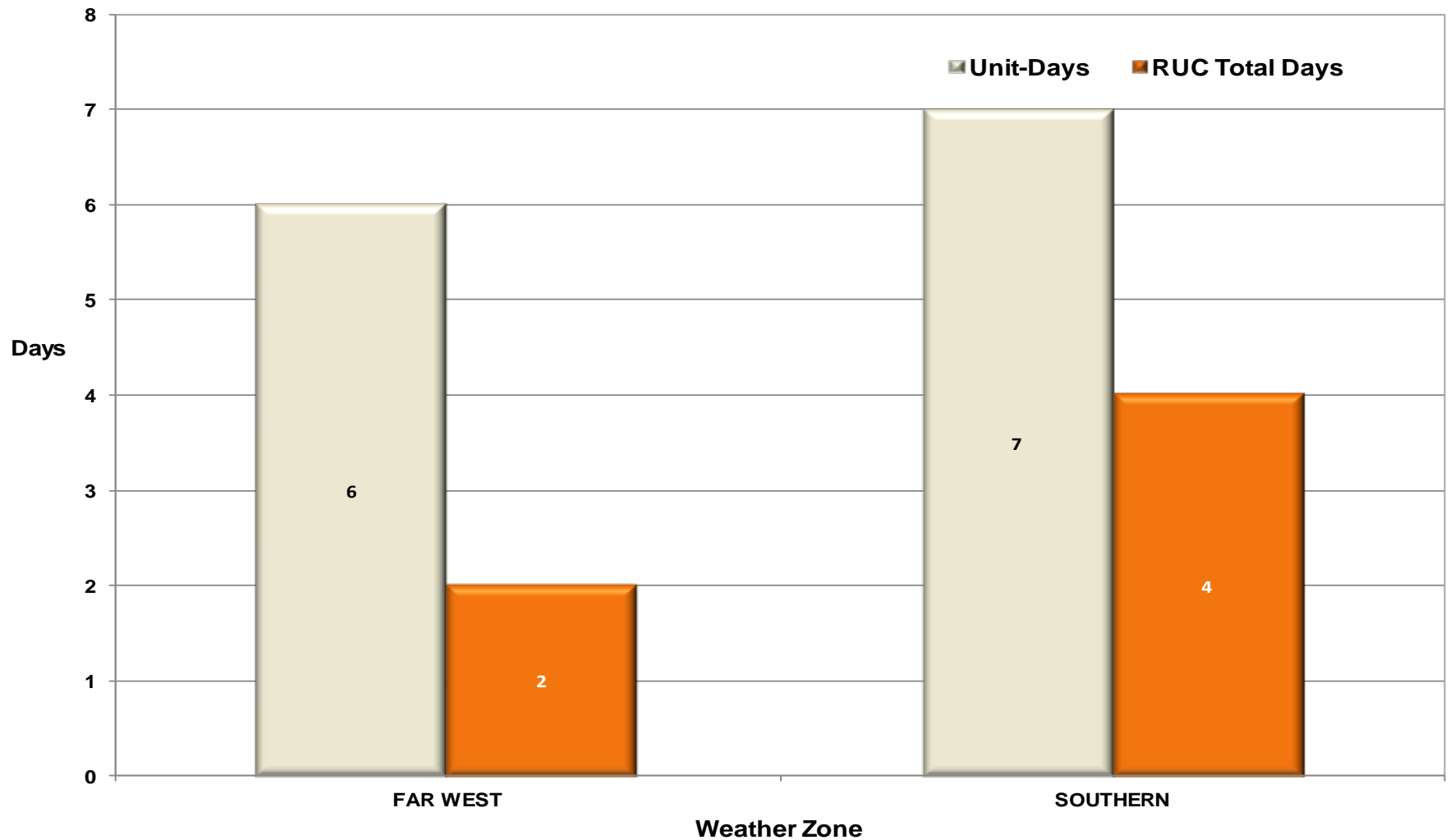
**Mean Absolute Percent Error (MAPE) for ERCOT Mid-Term Load Forecast (MTLF)  
Run at 14:00 Day Ahead**

	<b>2010 MAPE</b>	<b>2011 MAPE</b>	<b>2012 MAPE</b>	<b>2013 MAPE</b>	<b>Feb 2013 MAPE</b>	
<b>Average Annual MAPE</b>	2.83	2.83	3.02	3.17	2.83	
<b>Lowest Monthly MAPE</b>	2.24	1.63	2.51	2.83	<b>Lowest Daily MAPE</b>	0.72 Feb – 07
<b>Highest Monthly MAPE</b>	3.79	3.55	3.49	3.50	<b>Highest Daily MAPE</b>	5.40 Feb – 23

# Reliability Unit Commitment (RUC) Capacity by Weather Zone

## Zone – February 2013

**RUC Commitments by Weather Zone**



## February 2013 Generic Transmission Limits (GTLs)

GTLs	Feb 12 Days GTLs	Dec 12 Days GTLs	Jan 13 Days GTLs	Feb 13 Days GTLs	Last 12 Months Total Days (Jan12 – Jan13)
North – Houston	0	0	0	0	0
West – North	17	19	6	5 Feb (9,12,23-25)	142
Valley Import	0	0	0	0	0

**GTL:** A transmission flow limit more constraining than a Transmission Element's normal limit established to constrain flow between geographic areas of the ERCOT Transmission System that is used to enforce stability and voltage constraints that cannot be modeled directly in ERCOT's transmission security analysis applications.

**Note:** This table lists how many times a constraint has been activated to avoid exceeding a GTL limit, it does not imply an exceedance of the GTL occurred.

# Advisories and Watches – February 2013

- **Advisories issued for Physical Responsive Capability (PRC) below 3000 MW.**
  - Issued for one day (02/10)
- **Watches issued for Physical Responsive Capability (PRC) below 2500 MW.**
  - None
- **Transmission Watches**
  - None.
- **Emergency Notice**
  - None.
- **Energy Emergency Alerts**
  - None

# Lake Levels Update – March 1, 2013

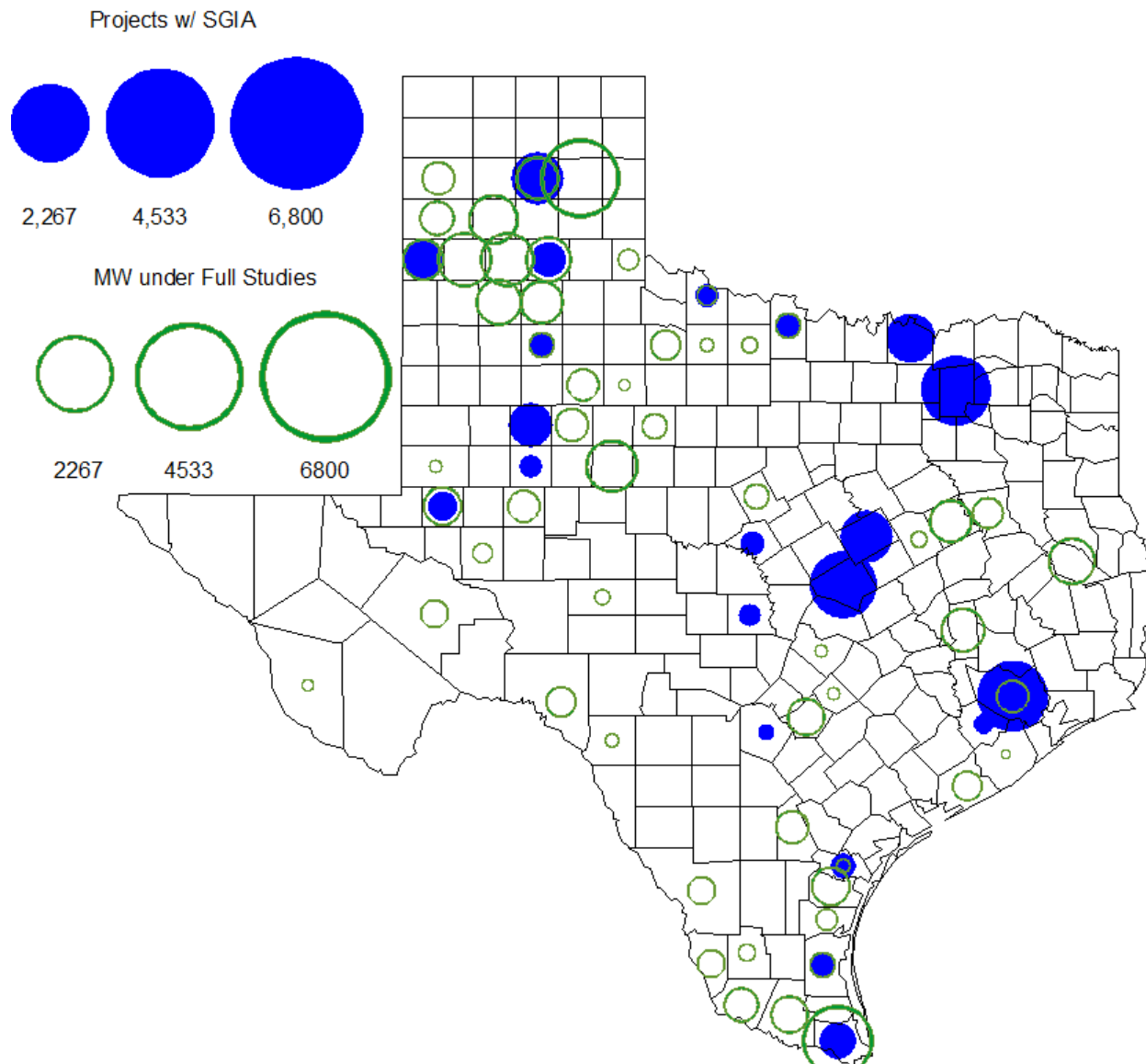
Surface Water & (MW)	*Level @ Full Conservation Pool	*Level on Jan 1, 2011	*Level on Oct 7, 2011	*Level on Mar 1, 2013
Lake Texana (56)	44.50	41.00	32.81	41.82
Bardwell Lake (312)	421.00	420.71	416.23	418.59
Lake Colorado City (407)	2,070.20	2057.33	2052.4	2052.76
Lake Ray Hubbard (916)	435.50	432.37	429.22	432.09
Lake Granbury (983)	693.00	691.90	686.27	687.54
Lake Houston (1016)	41.73	42.10	36.76	42.14
Twin Oaks Reservoir (1616)	400	398.87	398.27	400.12
Lake Limestone (1689)	363	359.03	354	360.46
Martin Lake (2425)	306	300.48	295.06	304.26

\* In Feet above Mean Sea Level

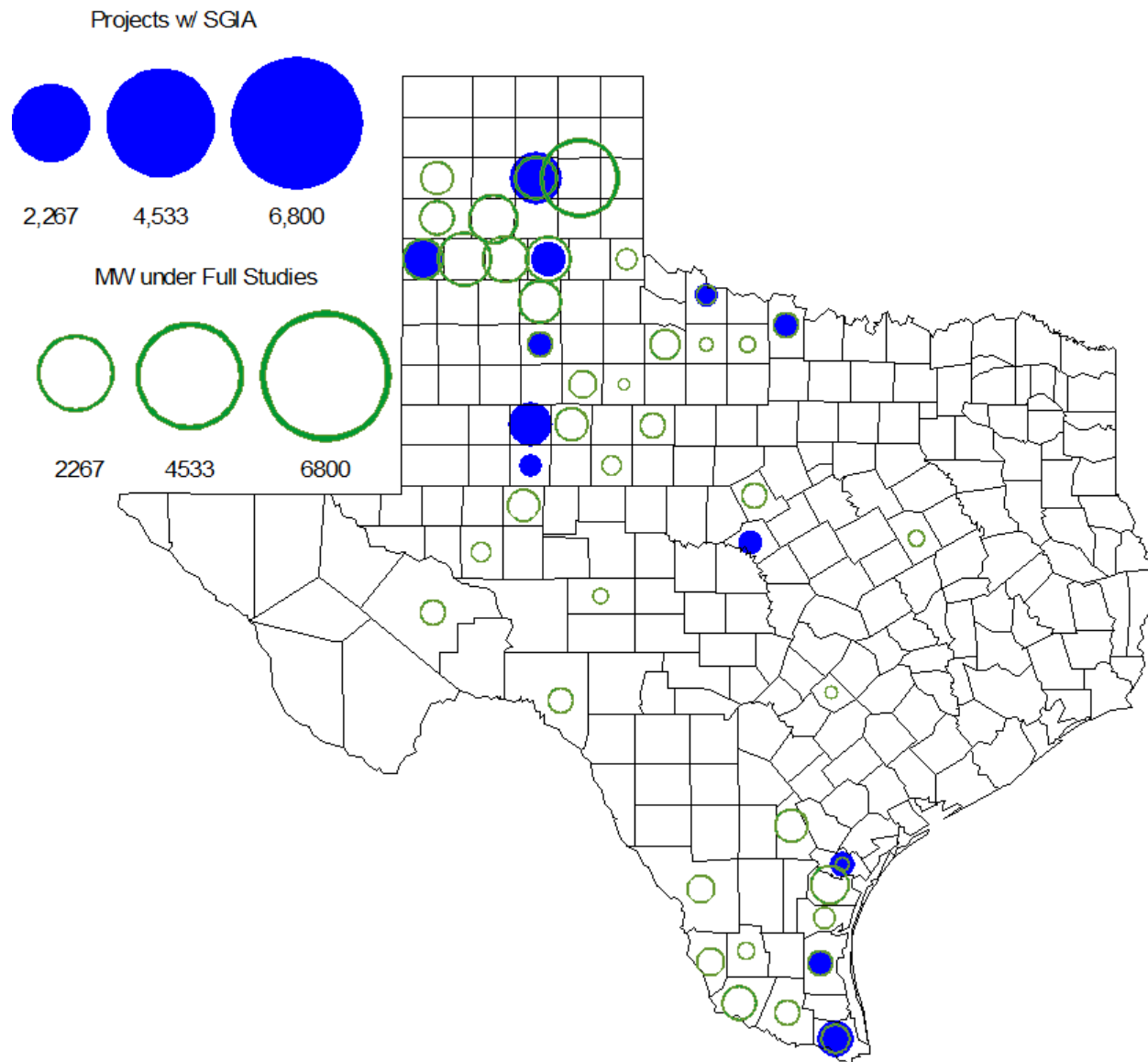
# Planning Summary – February 2013

- ERCOT is currently tracking 162 active generation interconnection requests totaling over 48,000 MW. This includes over 21,000 MW of wind generation.
- ERCOT is currently reviewing proposed transmission improvements with a total cost of \$261 Million
- Transmission Projects endorsed in 2013 total \$138 Million
- All projects (in engineering, routing, licensing and construction) total approximately \$9.97 Billion.
- Transmission Projects energized in 2012 total about \$854.2 million

# County Location of Planned Generation with Interconnection Requests (all fuels) February 2013

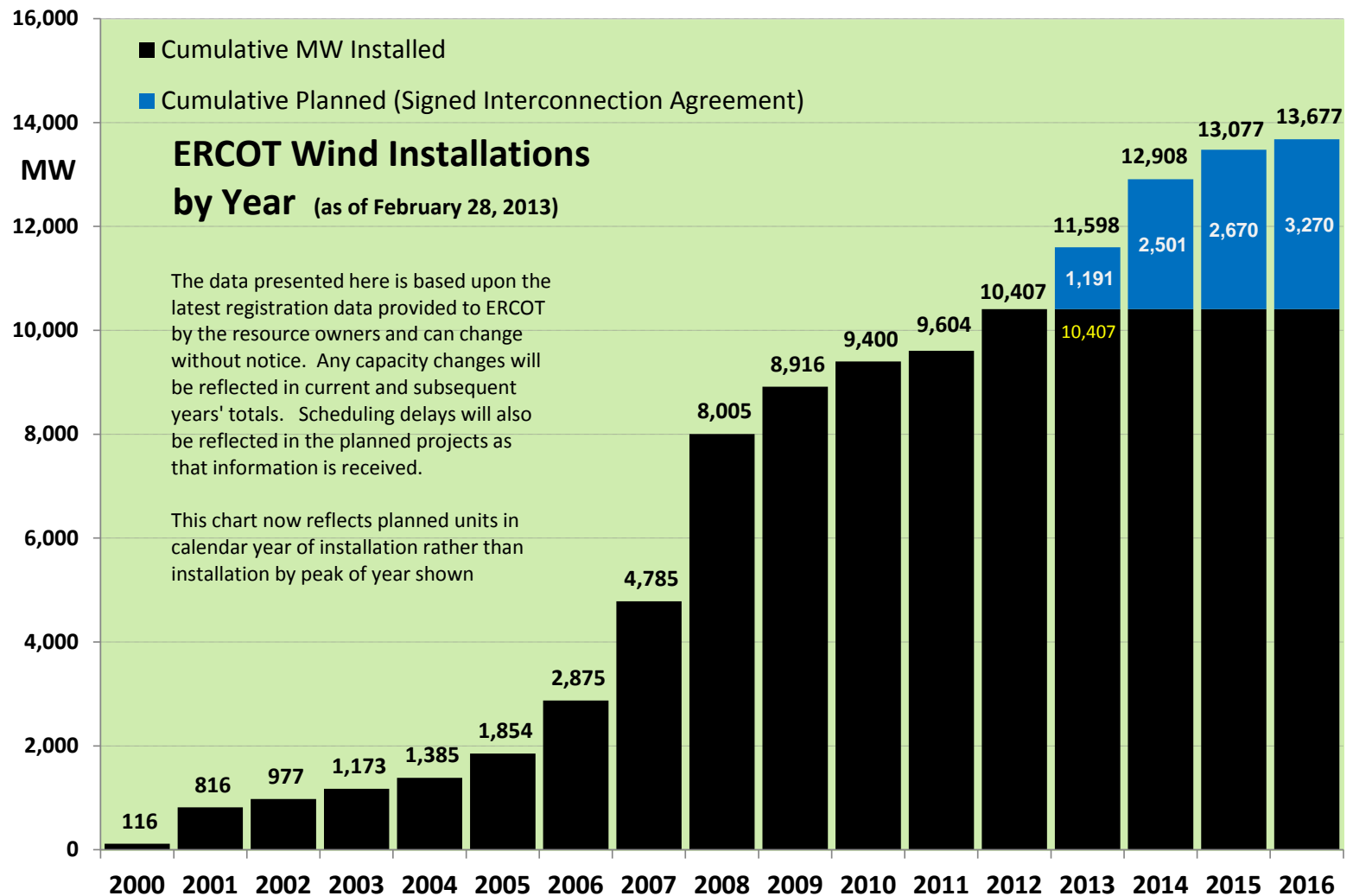


# County Location of Planned Generation with Interconnection Requests (Wind) February 2013

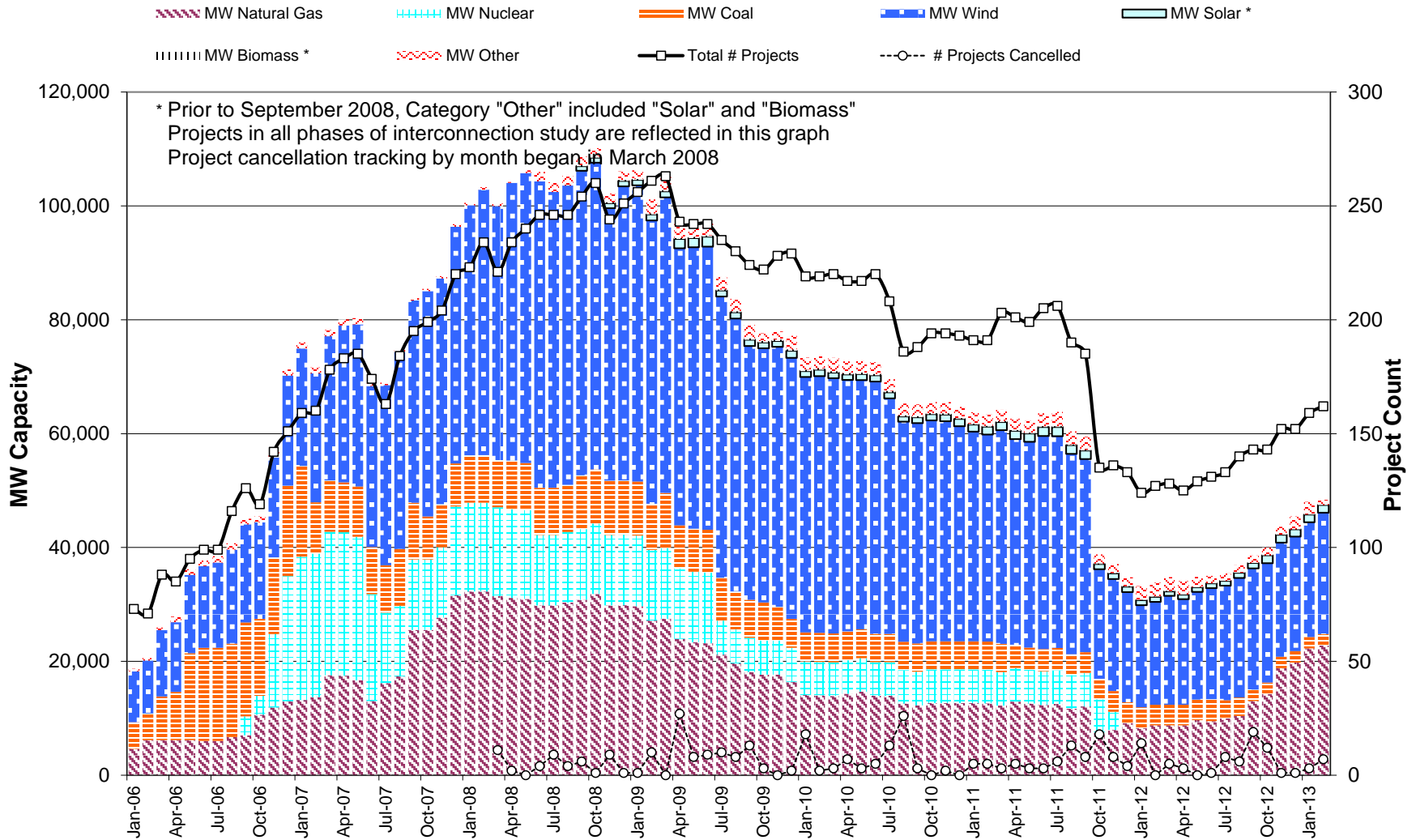




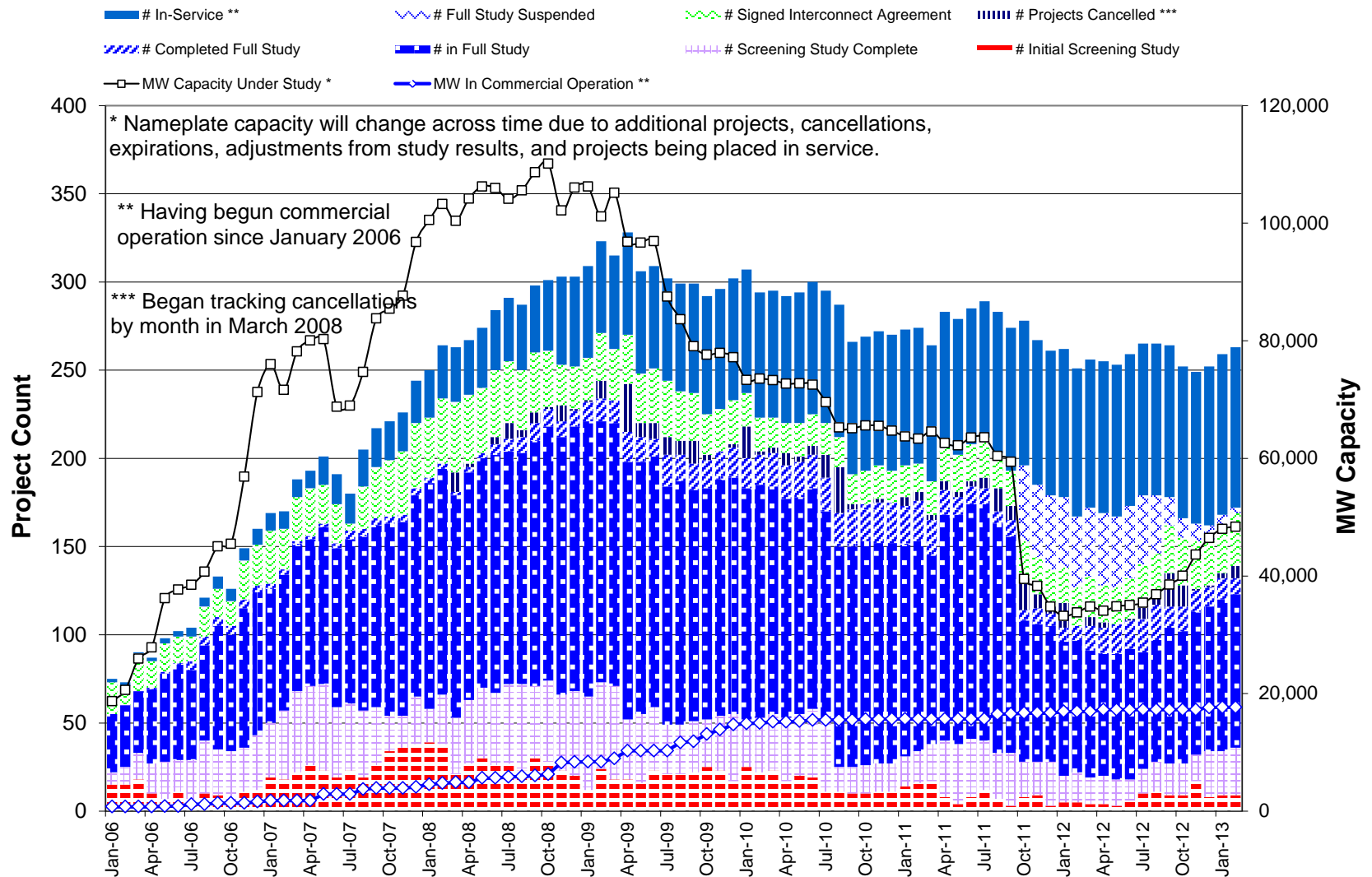
# Wind Generation – February 2013



# Generation Interconnection Activity by Fuel – February 2013



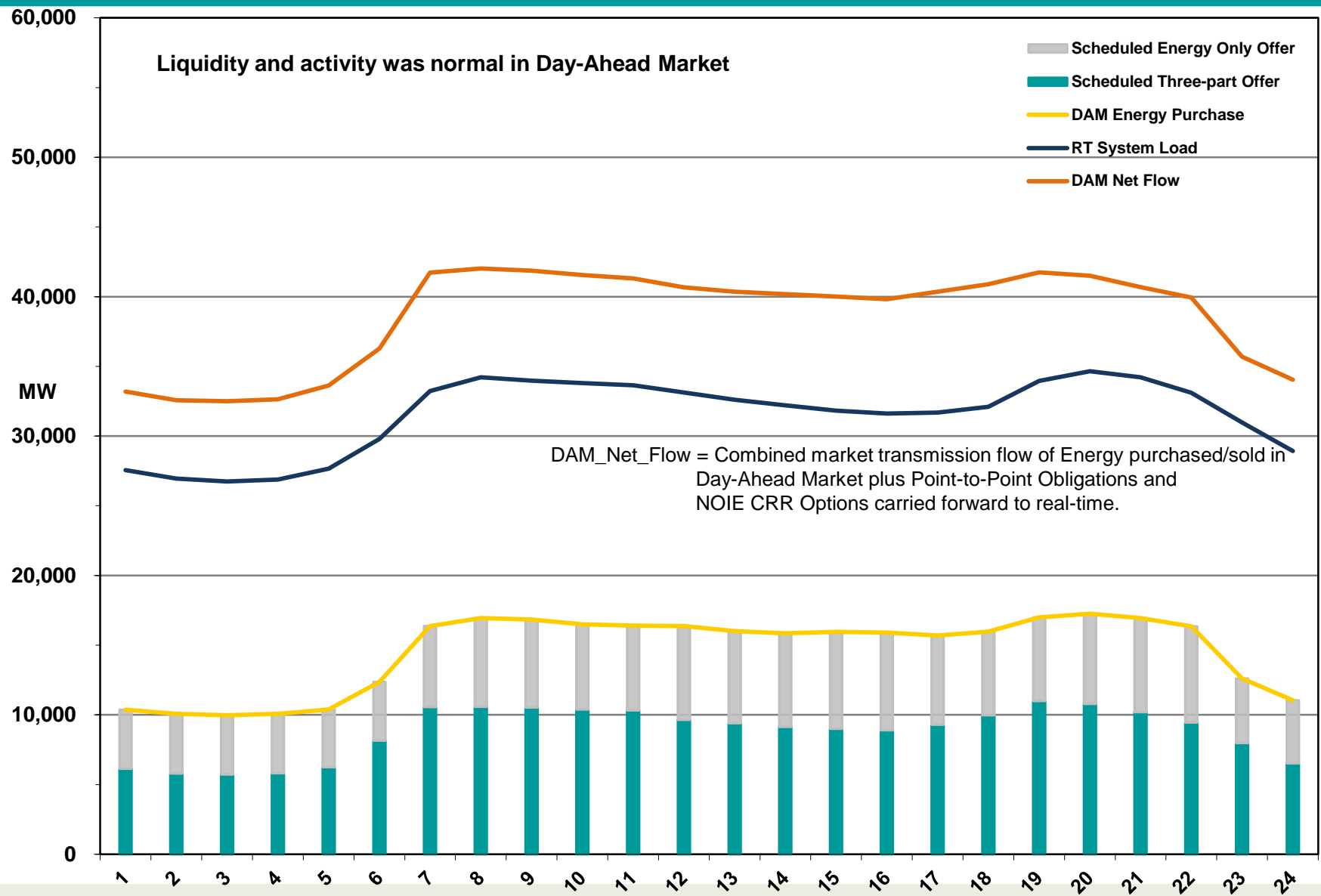
# Generation Interconnection Activity by Project Phase – February 2013



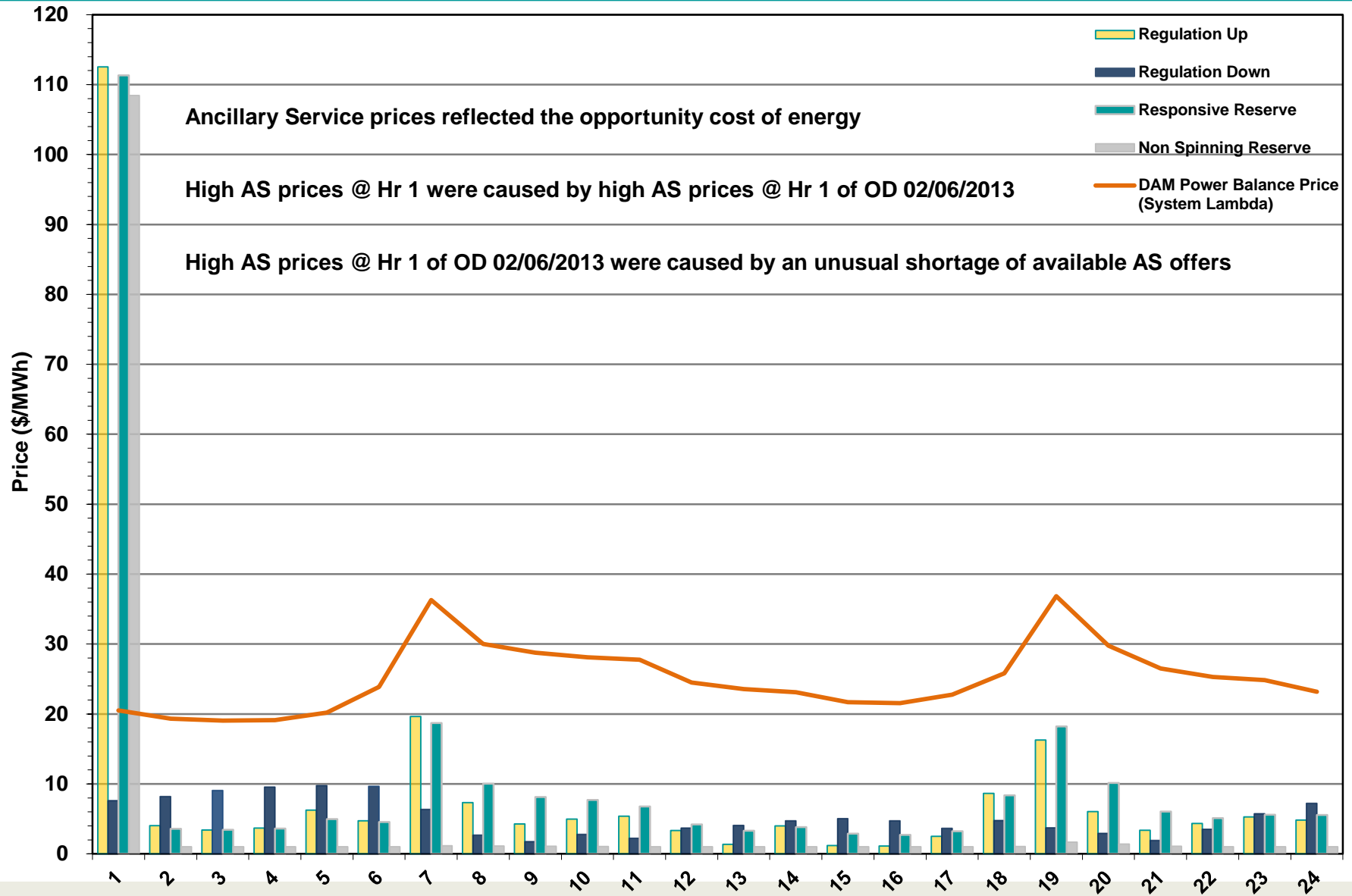


# Market Operations

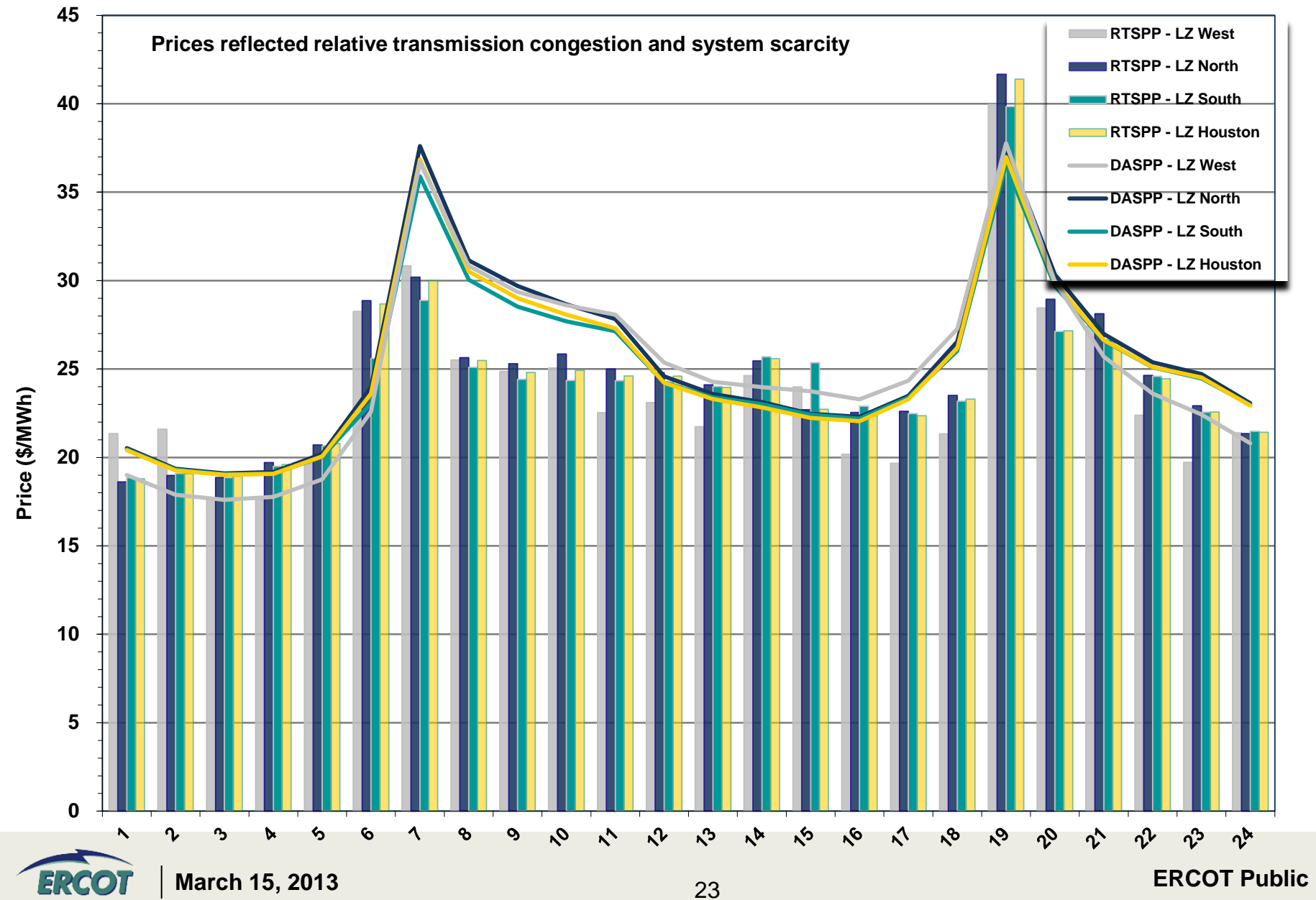
# Day-Ahead Schedule – February 2013



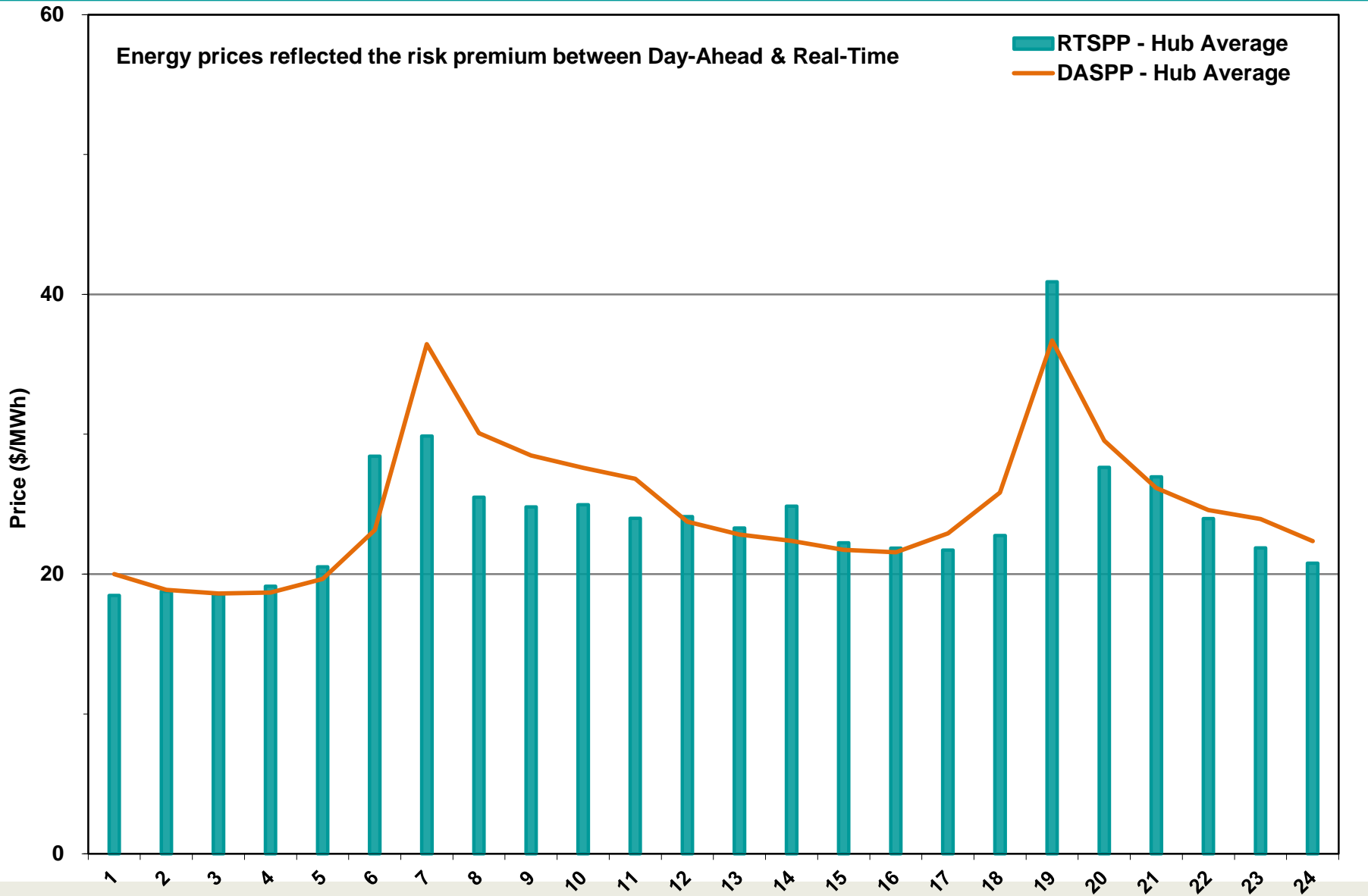
# Day-Ahead Electricity And Ancillary Service Hourly Average Prices – February 2013



## Day-Ahead Vs Real-Time Load Zone SPP (Hourly Average) – February 2013

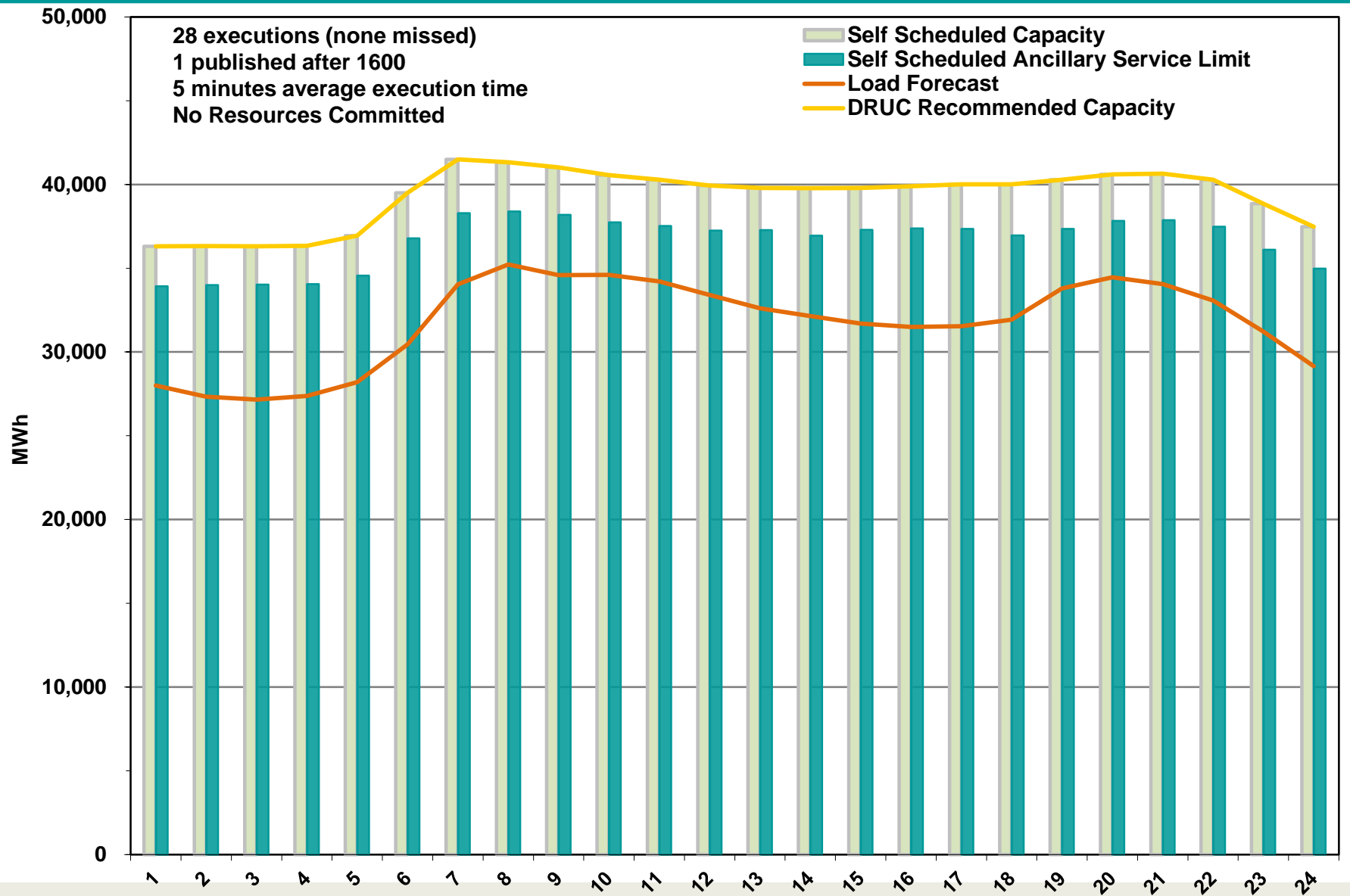


# Day-Ahead Vs Real-Time Hub Average SPP (Hourly Average) - February 2013

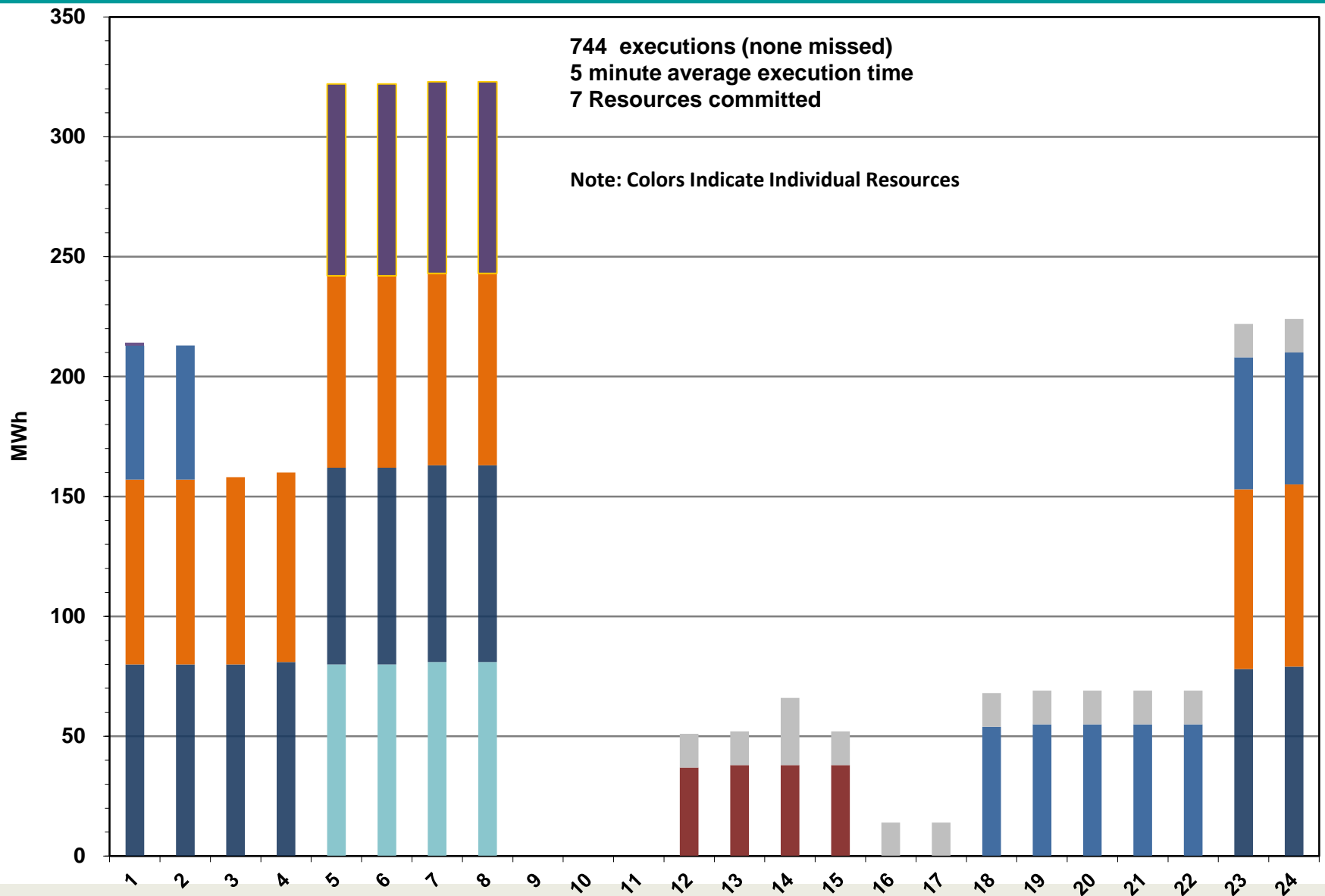




# DRUC Monthly Summary – February 2013



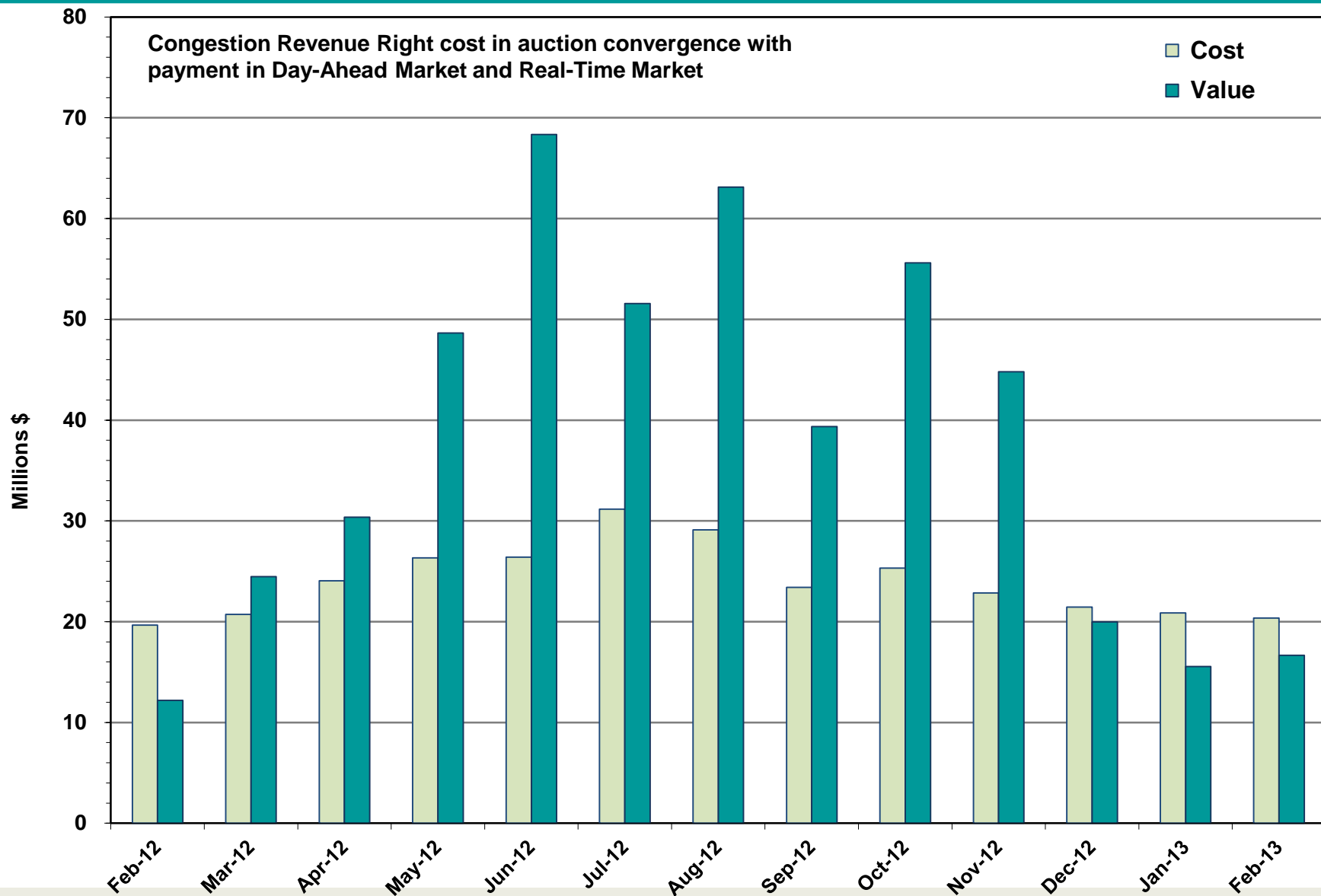
# HRUC Monthly Summary – February 2013



# Non-Spinning Reserve Service Deployment – February 2013

Deployment Start Time	Deployment End Time	Deployment Duration (Hours)	Max Deployment (MW)	Reason
2/8/13 10:45AM	2/8/13 10:52AM	0.1	10	Test Deployment

# CRR Price Convergence – February 2013



# ERS Procurement for February 2013 – May 2013

## 10-Minute ERS

	BH1	BH2	BH3	NBH
MW Procured	457.70	456.48	440.83	383.61
Average Price Per MW per Hour <sup>1</sup>	\$8.10	\$8.71	\$8.82	\$8.04

Note: One Generator procured with an average of 1.0 MW

## 30-Minute ERS Pilot

MW Procured	72.96	72.90	58.98	40.51
Clearing Price <sup>2</sup>	\$7.81	\$8.60	\$8.90	\$7.80

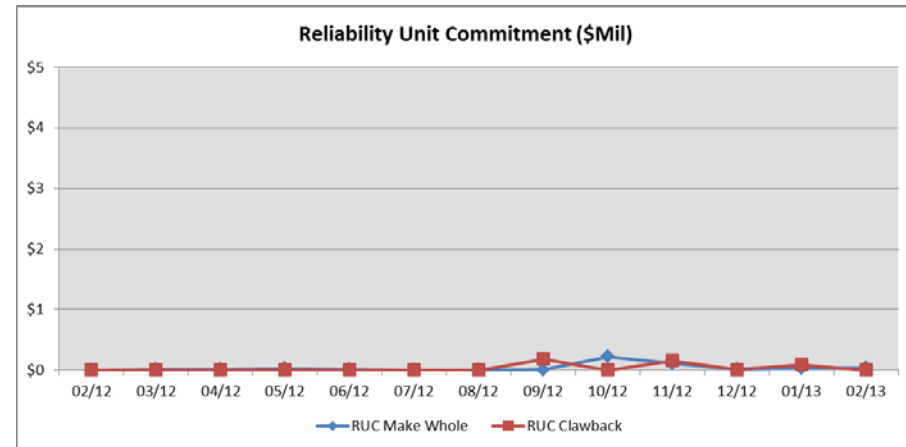
BH1 - Business Hours 1      HE 0900 through 1300, Monday thru Friday except ERCOT Holidays  
 BH2 - Business Hours 2      HE 1400 through 1600, Monday thru Friday except ERCOT Holidays  
 BH3 - Business Hours 3      HE 1700 through 2000, Monday thru Friday except ERCOT Holidays  
 NBH - Non-Business Hours    All other hours

<sup>1</sup> Procured on a Pay-As-Offer basis

<sup>2</sup> Procured using a Clearing Price Mechanism

# Reliability Services – February 2013

Reliability Unit Commitment (RUC)	\$ in Millions
RUC Make-Whole Payments	(\$0.04)
RUC Clawback Charges	\$0.00
<b>RUC Commitment Settlement</b>	<b>(\$0.04)</b>
RUC Capacity Short Charges	\$0.04
RUC Make-Whole Uplift	\$0.00
<b>RUC Commitment Cost Allocation</b>	<b>\$0.04</b>
RUC Decommitment Payments	\$0.00



RUC Cost continues to trend low.

RUC Costs for February 2013 were a charge of \$0.04M, compared to:

- A credit of \$0.06M January 2013
- No Charges in February 2012

# Ancillary Services – February 2013

<b>Capacity Services</b>	<b>\$ in Millions</b>
Regulation Up Service	\$3.15
Regulation Down Service	\$1.39
Responsive Reserve Service	\$16.3
Non-Spinning Reserve Service	\$5.26
Black Start Service	\$0.53
Voltage Services - Reactive Power	\$0.0
Voltage Services - Lost Opportunity	\$0.0
<b>Total Capacity Service</b>	<b>\$26.66</b>

Capacity Services costs were much higher than last month and than February 2012. High costs are due to high AS prices on Operating Day February 6<sup>th</sup>.

February 2013 cost was \$26.66M, compared to:

- A charge of \$ 15.39M in January 2013
- A charge of \$14.87M in February 2012

# Energy Settlement – February 2013

## Day-Ahead Market Energy Settlement

\$ in Millions

Energy Purchases	\$254.19
Point to Point Obligation Purchases	\$10.67
RMR Day-Ahead Revenue	\$0.00
Energy Sales	(\$249.51)
<b>Day-Ahead Congestion Rent</b>	\$15.35
Day-Ahead Market Make-Whole Payments	(\$0.69)

Day-Ahead Market and Real-Time energy settlement decreased from last month and are higher than February 2012.

## Real-Time Market Energy Settlement

\$ in Millions

Energy Imbalance at a Resource Node	(\$327.71)
Energy Imbalance at a Load Zone	\$420.99
Energy Imbalance at a Hub	(\$82.52)
Real Time Congestion from Self Schedules	\$0.11
Block Load Transfers and DC Ties	(\$3.33)
<b>Impact to Revenue Neutrality</b>	\$7.55
Emergency Energy Payments	(\$0.05)
Base Point Deviation Charges	\$0.16
Real-Time Metered Generation (MWh in millions)	21.11



# Congestion Revenue Rights (CRR) – February 2013

<b>Auction Disbursements</b>	<b>\$ in Millions</b>
Annual Auction	(\$13.06)
Monthly Auction	(\$4.73)
<b>Total Auction Revenue</b>	<b>(\$17.79)</b>
Day-Ahead CRR Settlement	(\$14.99)
Day-Ahead CRR Short-Charges	\$1.06
Day-Ahead CRR Short-Charges Refunded	(\$1.06)
Real-Time CRR Settlement	(\$0.26)
Real-Time CRR Short-Charges	\$0.01
Real-Time CRR Short-Charges Refunded	(\$0.01)
<b>Total CRR Proceeds</b>	<b>(\$15.25)</b>
Day-Ahead Point to Point Obligations Settlement	\$10.67
Real-Time Point to Point Obligation Settlement	(\$7.22)
<b>Net Point to Point Obligation Settlement</b>	<b>\$3.45</b>

Congestion Revenue Rights were fully funded. Excess funds were available for distribution to load.

Distribution of balancing account funds to load for February 2013 was \$.40M, compared to:

- \$0 in January 2013
- \$1.99M in February 2012

Point to Point Obligations settled with a net loss of \$3.45M which can be attributed to lower prices in Real-Time.

# Revenue Neutrality – February 2013

## Revenue Neutrality Settlement

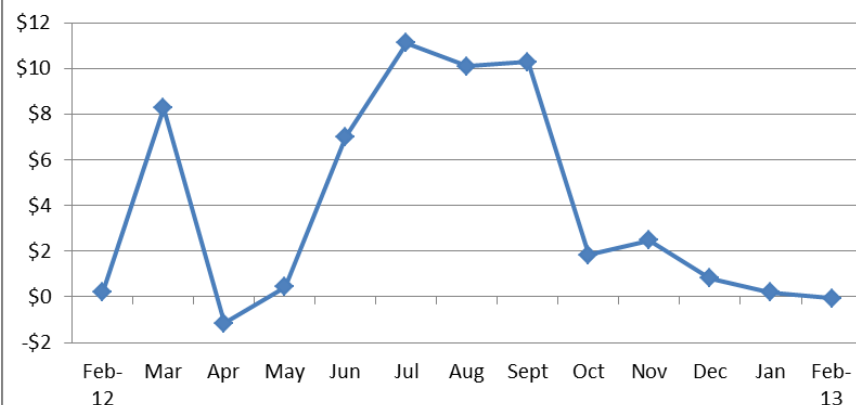
	\$ in Millions
Real-Time Point to Point Obligation Settlement	(\$7.22)
Real-Time Point to Point Options and Options with Refund Settlement	(\$0.26)
Real-Time Energy Imbalance Settlement	\$10.77
Real-Time Congestion from Self-Schedules Settlement	\$0.11
DC Tie & Block Load Transfer Settlement	(\$3.33)
<b>Credit to Load</b>	<b>\$0.07</b>

Revenue Neutrality charges to load decreased slightly compared to January 2013.

February 2013 was a credit of \$0.07M, compared to:

- \$0.19M charge in January 2013
- \$0.23M charge in February 2012

Revenue Neutrality Uplift (\$Mil)



# Net Uplift to Load – February 2013

## Market-Based Uplifts

\$ in Millions

CRR Auction Revenue Disbursement Settlement (\$17.79)

Balancing Account Proceeds Settlement (\$0.40)

Net Reliability Unit Commitment Settlement \$0.04

Ancillary Services Settlement \$26.66

Reliability Must Run Services Settlement \$0.0

Reliability Must Run for Capacity \$0.0

Real-Time Revenue Neutrality Settlement (\$0.07)

Emergency Energy Settlement \$0.05

Base Point Deviation Settlement (\$0.16)

**Total \$8.32**

## Fee Uplifts

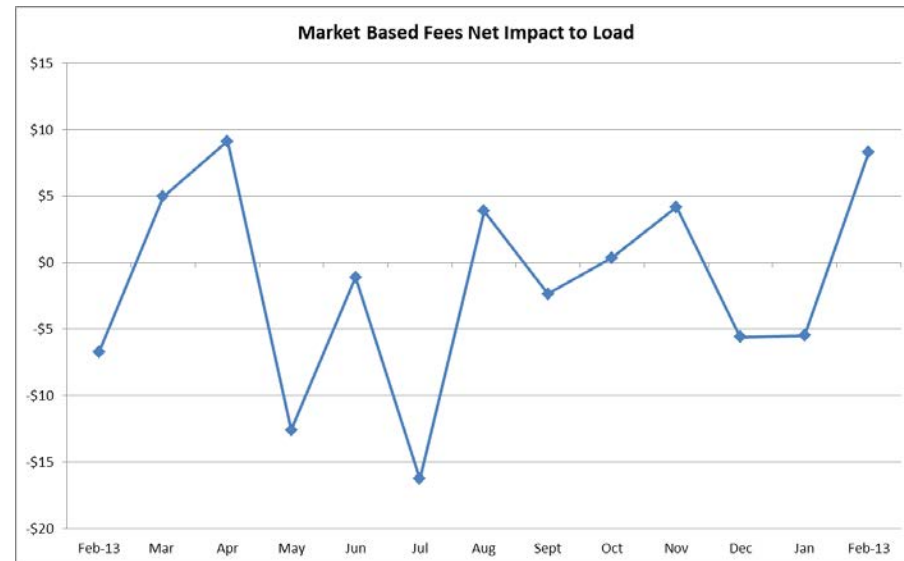
ERCOT Administrative Fee Settlement \$8.88

**Net Uplift Charge to Load \$17.20**

Net uplift to Load increased from last month and increased from February of 2012. Most of the increase is attributed to the high AS costs of February 6<sup>th</sup>.

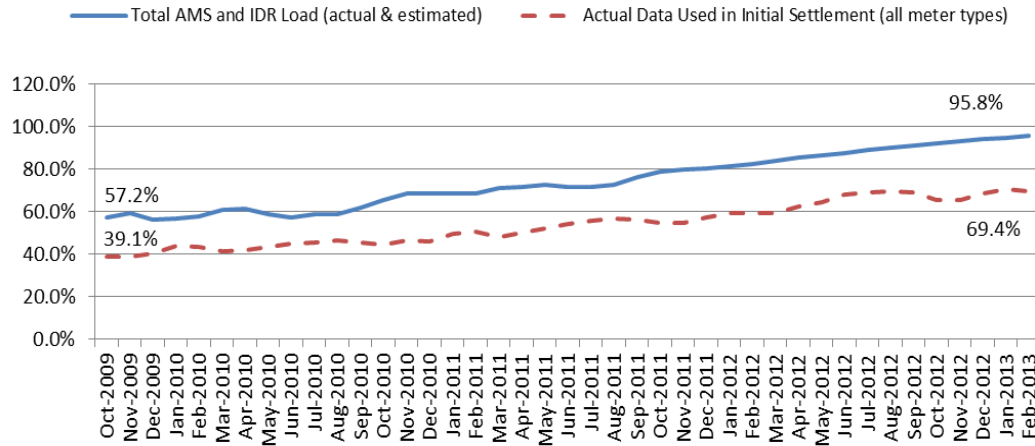
February 2013 was a charge of \$17.20M, compared to:

- A charge of \$5.25M in January 2013
- A charge of \$2.54M in February 2012



# Advanced Meter Settlement Impacts – February 2013

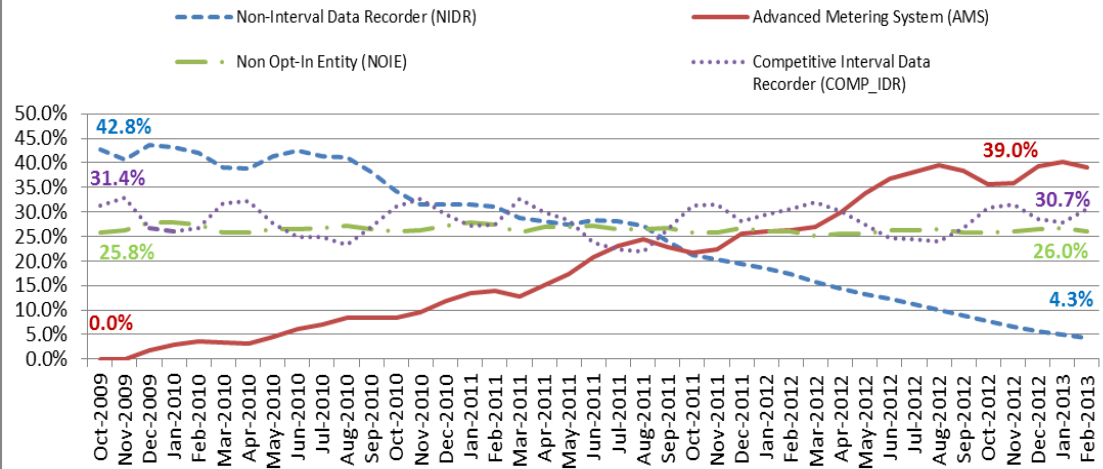
Percent Actual/Percent Interval Data Recorder (IDR)



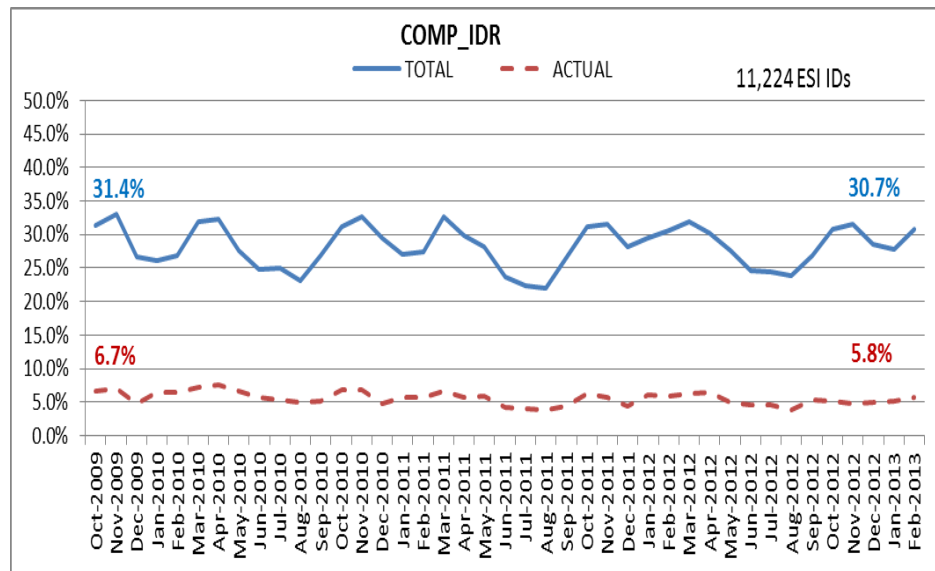
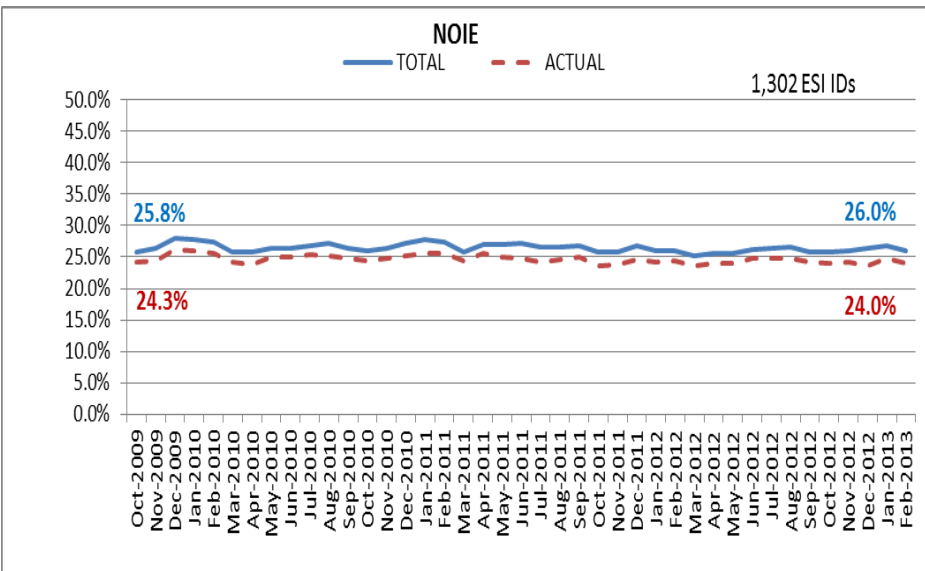
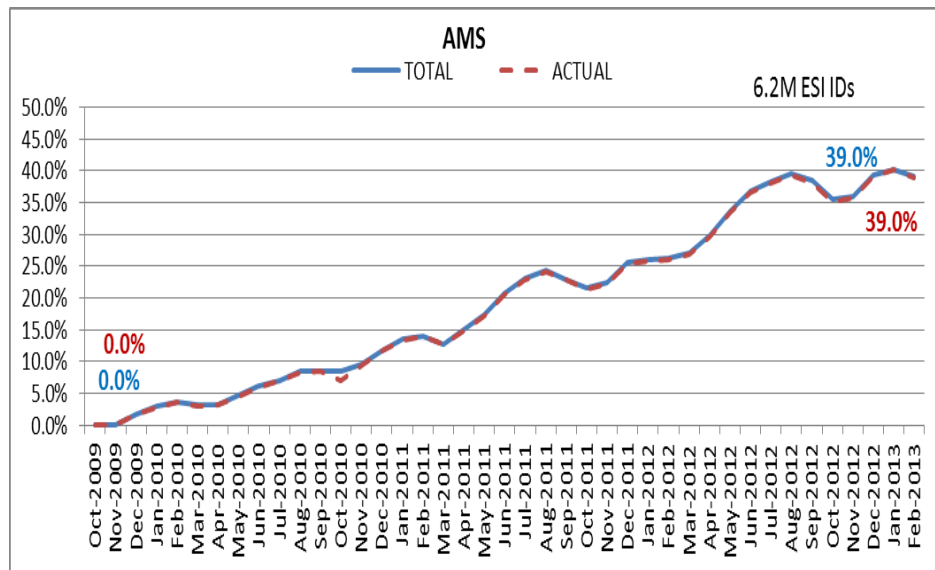
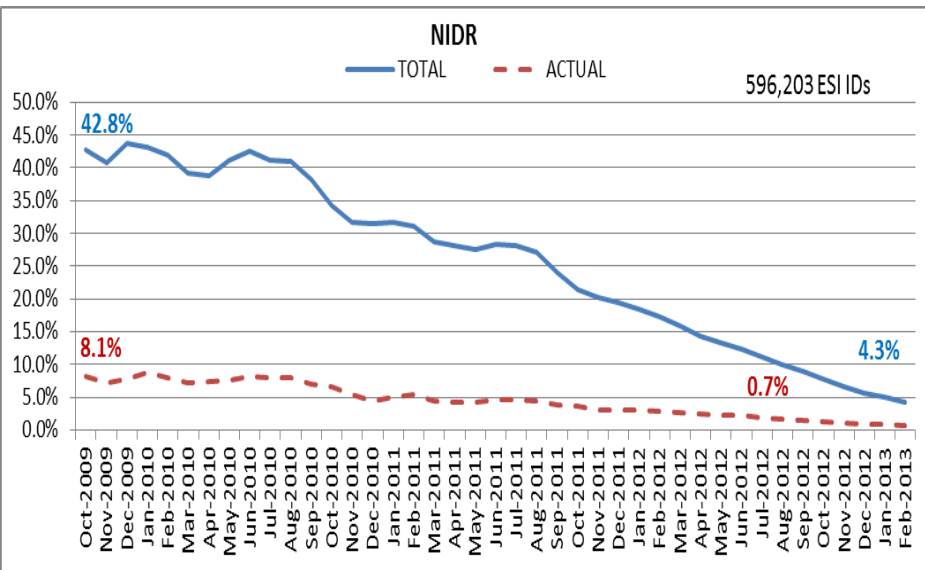
*February 2013: At month end, settling 6.2M ESIIDs using Advanced Meter data.*

*February 2013: 95.8% of the load in ERCOT is settled with 15-min interval data (AMS, Competitive IDR, and NOIE IDR).*

Percent of Load by Meter Type



# ERCOT Wide Load Volumes by Meter Type – INITIAL Settlement – February 2013

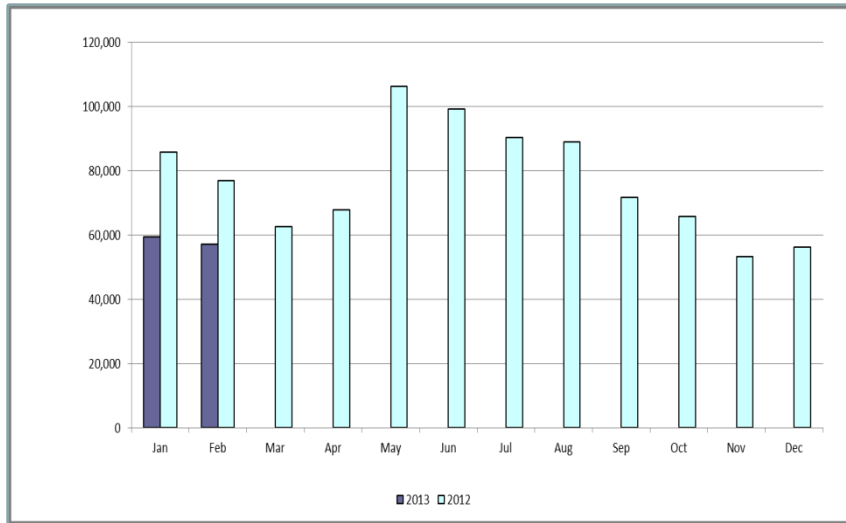


# Retail Transaction Volumes – Summary – February 2013

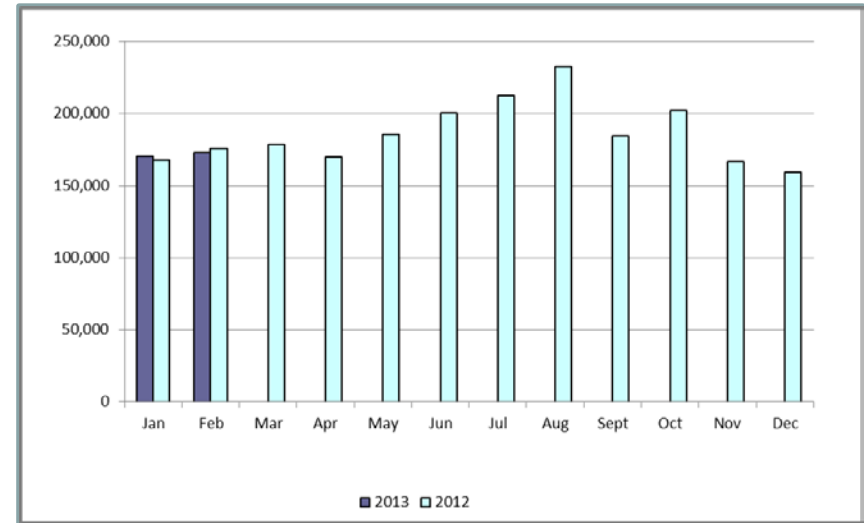
Transaction Type	Year-To-Date		Transactions Completed	
	Feb 2013	Feb 2012	Feb 2013	Feb 2012
Switches	116,024	162,677	56,697	76,815
Acquisition	55	0	1	0
Move - Ins	343,372	343,206	172,909	175,595
Move - Outs	168,916	165,892	82,778	83,355
Continuous Service Agreements (CSA)	73,646	76,101	35,351	36,809
Mass Transitions	0	0	0	0
<b>Total</b>	<b>702,013</b>	<b>747,876</b>	<b>347,736</b>	<b>372,574</b>
<b>Total since June 1, 2001</b>	<b>50,593,539</b>			

# Retail Transaction Volumes – Summary – February 2013

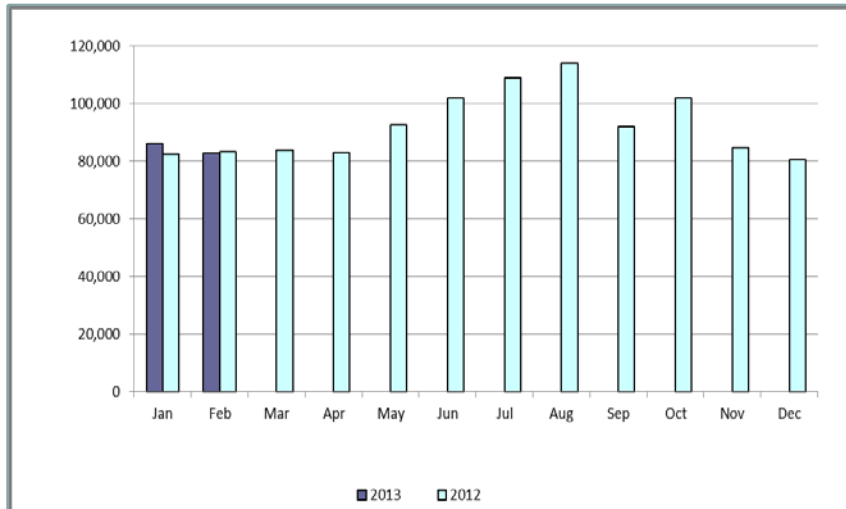
## Switches/Acquisitions



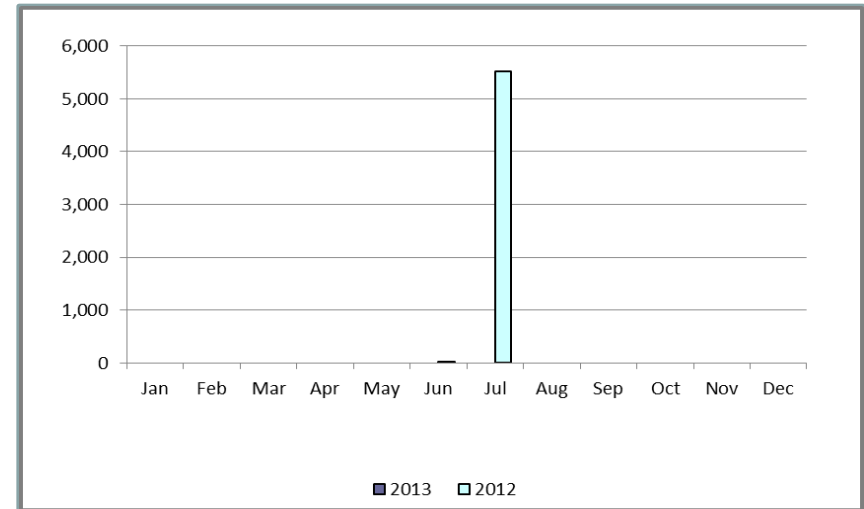
## Move-Ins



## Move-Outs

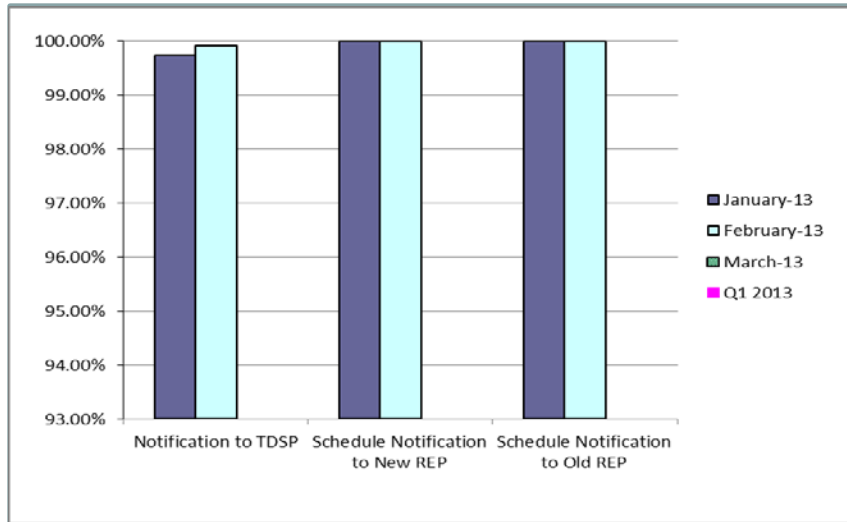


## Mass Transition

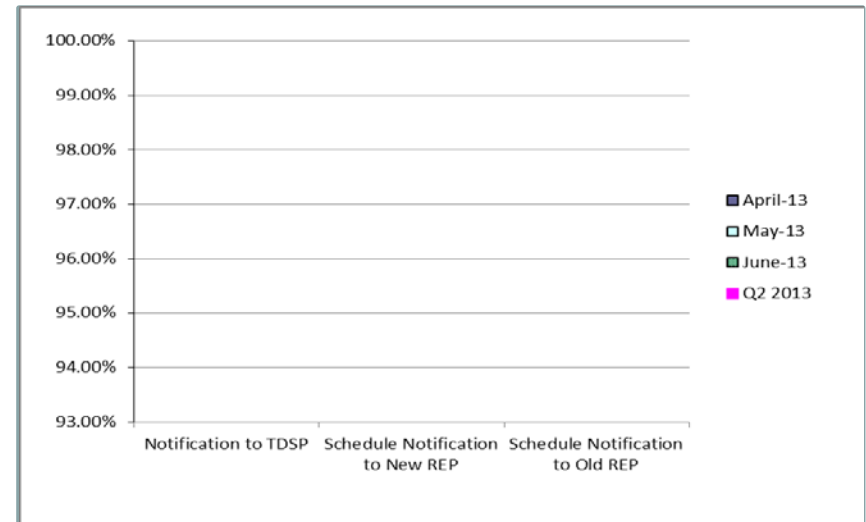


# Retail Performance Measures – Switch – February 2013

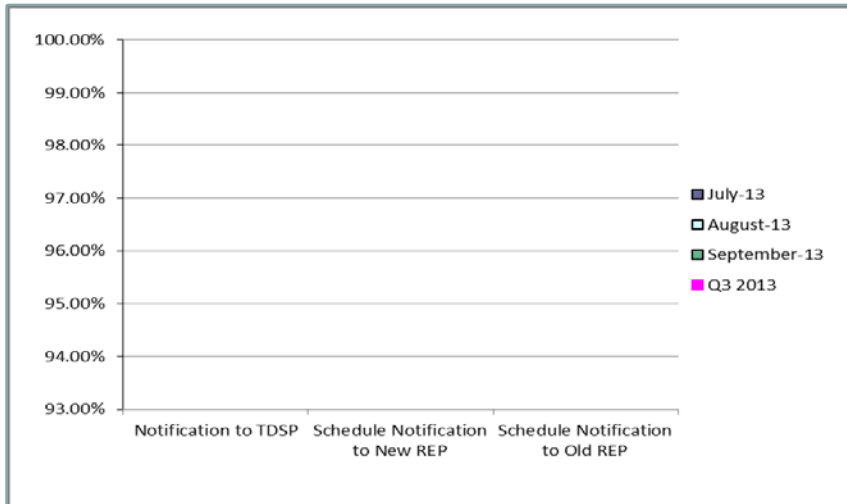
## 1<sup>st</sup> Quarter



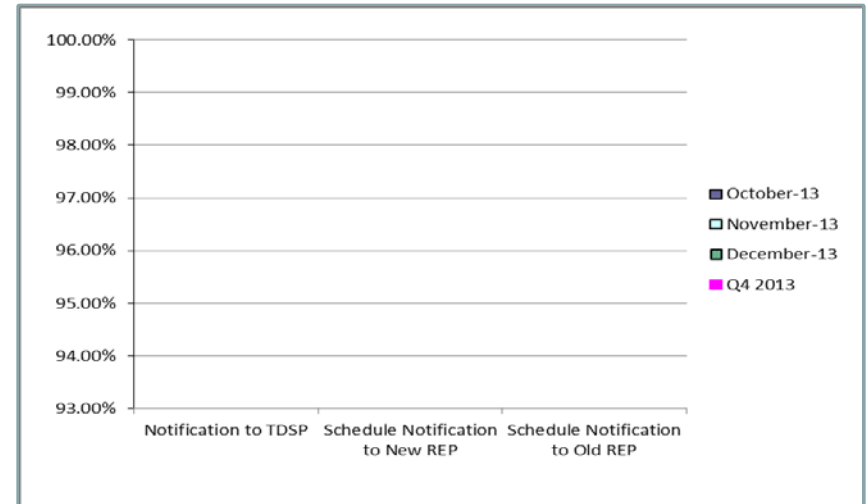
## 2<sup>nd</sup> Quarter



## 3<sup>rd</sup> Quarter



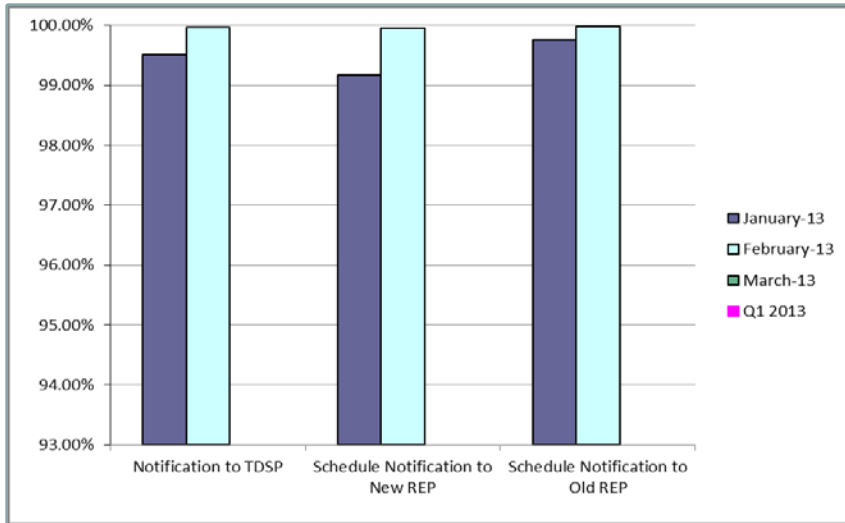
## 4<sup>th</sup> Quarter



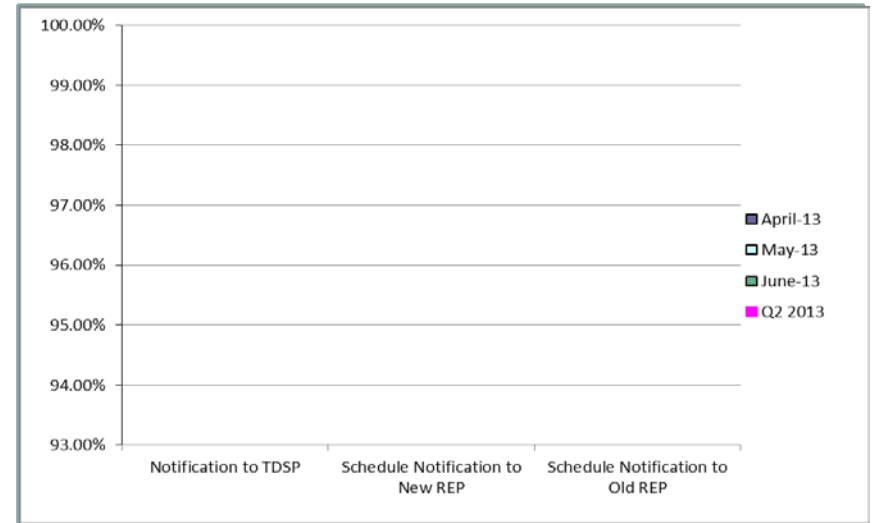


# Retail Performance Measures (Priority Move-In) – February 2013

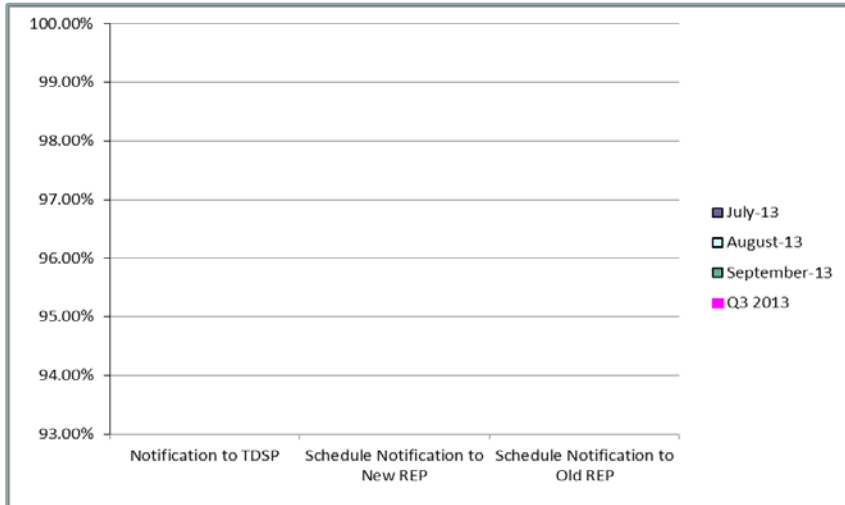
## 1<sup>st</sup> Quarter



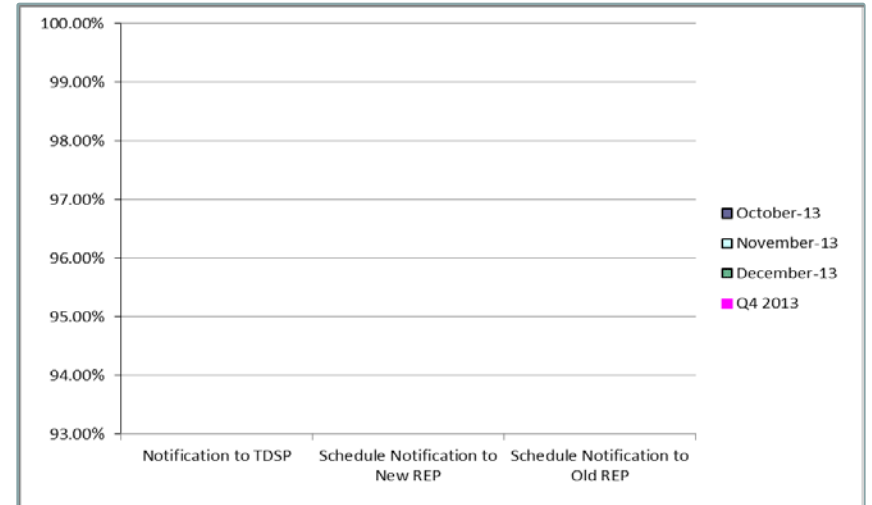
## 2<sup>nd</sup> Quarter



## 3<sup>rd</sup> Quarter

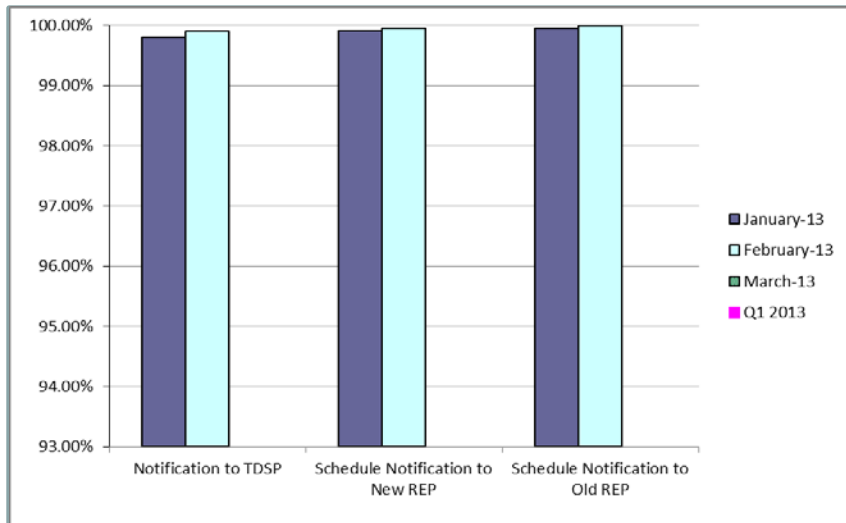


## 4<sup>th</sup> Quarter

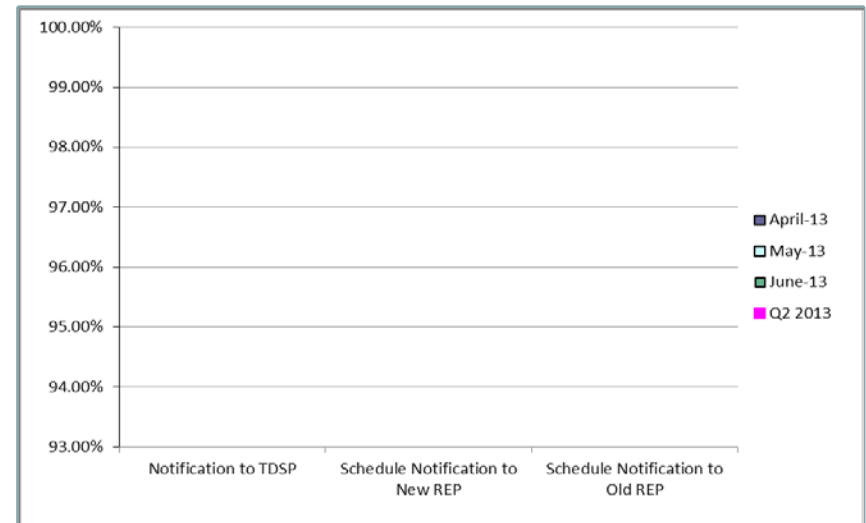


# Retail Performance Measures (Standard Move-In) – February 2013

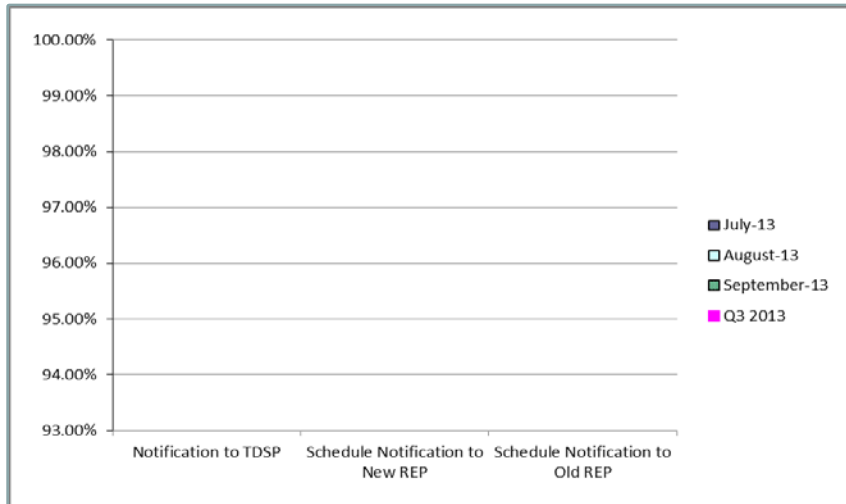
## 1<sup>st</sup> Quarter



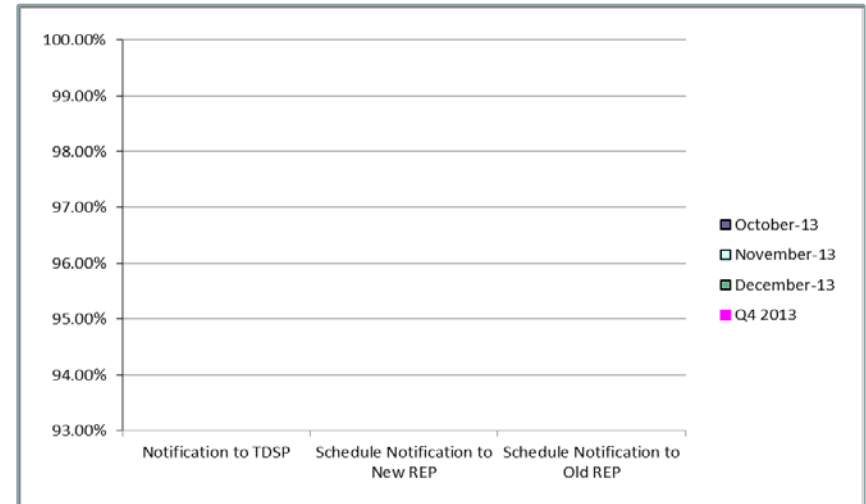
## 2<sup>nd</sup> Quarter



## 3<sup>rd</sup> Quarter



## 4<sup>th</sup> Quarter





# Projects Report

# ERCOT Portfolio Stoplight Report (as of 2/28/2013)

Project Number	Project Name	Phase	Baseline Phase Start	Baseline Phase Finish	Scheduled Phase Finish	Schedule Status	Sum of 2013 Budgets	2013 Forecast Spend	2013 Variance	Sum of Total Budgets	Total Forecast Spend	Total Variance
<b>PROJECTS IN FLIGHT (Count = 56) Sorted by Phase / Project Num</b>							<b>\$ 14,960,554</b>	<b>\$ 13,777,871</b>	<b>7%</b>	<b>\$ 35,081,961</b>	<b>\$ 33,708,173</b>	<b>3%</b>
065-01	NMMS Upgrade	Initiation							0%			2%
089-01	Information Technology Change Management	Initiation							0%			0%
TBD	ABB MMS OS Technology Refresh	Initiation							0%			0%
NPRR272	Definition and Participation of Quick Start Generation Resources	Initiation							31%			31%
NPRR385	Negative Price Floor	Initiation							35%			35%
NPRR425	Creation of a WGR Group for GREDP and Base Point Deviation Evaluation	Initiation							0%			0%
NOGRR093	Synchronization with NPRR365	Initiation							7%			7%
047-01	CMS and MIR Replacement	Planning	5/31/2012	12/19/2012	4/24/2013	1	-62%		2%			0%
052-01	EMS Upgrade	Planning	7/25/2012	3/27/2013	3/27/2013		0%		26%			7%
057-01	EPS Metering DB Redesign	Planning	7/5/2012	2/27/2013	3/27/2013	1	-11%		9%			8%
059-01	Security Information and Event Management (SIEM) Upgrade	Planning	11/21/2012	5/8/2013	5/8/2013		0%		-2%			0%
066-01	Planning Site Transition to MIS	Planning	1/9/2013	3/25/2013	6/19/2013	3	-114%		-1%			0%
070-01	Linux Configuration Management Tool	Planning	1/24/2013	6/26/2013	6/19/2013		4%		0%			0%
071-01	Windows Server Systems Management	Planning	1/23/2013	6/26/2013	6/27/2013		0%		0%			0%
072-01	OSI PI Upgrades - EMS Production	Planning	1/23/2013	4/10/2013	4/11/2013		-1%		6%			6%
074-01	Mobile Device Management - POC	Planning	1/23/2013	3/13/2013	3/13/2013		0%		4%			5%
075-01	Operator Data Display	Planning	2/13/2013	3/20/2013	3/20/2013		0%		1%			4%
077-01	Contract Lifecycle Management	Planning	2/13/2013	6/12/2013	6/12/2013		0%		0%			0%
081-01	Additional Resource Data for Outage Scheduler	Planning	3/4/2013	5/22/2013	5/22/2013		0%		12%			11%
083-01	Centralized Application Log Management	Planning	3/6/2013	5/15/2013	5/15/2013		0%		0%			0%
NPRR327	State Estimator Data Reduction Methodology	On Hold	12/5/2012	2/12/2013		4			3%			8%
NPRR393	SCED Constraint Management Transparency	Planning	1/23/2013	3/20/2013	3/13/2013		12%		35%			36%
NPRR416	Removal of the RUC Clawback Charge for Resources Other than RMR Units	Planning	1/30/2013	3/27/2013	3/27/2013		0%		18%			17%
NPRR479	Daily Net Outage MW	Planning	3/6/2013	4/10/2013	4/10/2013		0%		-4%			-4%
NPRR481	Report of Hourly Actual System Load by Weather Zone	Planning	3/6/2013	4/10/2013	4/10/2013		0%		5%			4%
SCR770	Revision to Outage Scheduling Entry for Resource Maintenance Outage Level Designation	Planning	1/24/2013	4/17/2013	4/17/2013		0%		12%			14%
010-02	MarkeTrak Upgrade	Execution	12/12/2012	7/31/2013	7/30/2013		0%		3%			3%
NPRR347	Implementation of NPRR347 and NPRR400	Execution	3/29/2012	3/13/2013	3/13/2013		0%		55%			-12%
NPRR400	ADP-IDM Interface	On Hold	5/23/2012	11/7/2012		4						0%
016-01	Oracle 11g Upgrade	Execution	10/10/2012	8/21/2013	8/20/2013		0%		3%			13%
017-01	ERCOT Website Enhancements - 2012	On Hold	3/8/2012	12/26/2012		4						-96%
019-01	CIM Upgrade for NMMS	Execution	6/14/2012	3/13/2013	3/13/2013		0%		0%			18%
020-01	ITRON Load Forecast	Execution	6/27/2012	3/13/2013	3/19/2013		-2%		-37%			-1%
030-01	Macomber Map NERC SA/Compliance Enhancements	Execution	9/19/2012	2/28/2013	7/15/2013	3	-84%		3%			-1%
042-01	CRR Upgrade to v12.3	Execution	5/16/2012	8/14/2013	8/14/2013		0%		35%			19%
046-01	MAI Conversion to IGRID	Execution	8/2/2012	3/13/2013	3/18/2013		-2%		3	-312%		2%
048-01	TSAT Wind Model	Execution	8/16/2012	5/31/2013	5/24/2013		2%		3	-8%		10%
055-01	Siebel Upgrade 8.x	Execution	3/13/2013	8/31/2013	8/31/2013		0%		19%			12%
067-01	Physical Security Upgrade	Execution	2/13/2013	9/11/2013	9/11/2013		0%		-1%			-1%
2013 PC	Program Control - 2013	Execution	8/16/2012	5/31/2013	5/28/2013		1%		-3%			-3%
088-0x	Capital Efficiencies and Enhancements - 2013	Execution	8/16/2012	5/31/2013	5/28/2013		1%		2%			2%
10052_01	Settlement System Upgrade	Execution	1/25/2012	12/30/2014	12/30/2014		0%		0%			-5%
90006_02	Information Lifecycle Mgmt - Mkt Systems, Archive, Reporting	Execution	4/22/2011	5/1/2013	5/13/2013		-1%		3%			13%
99913	Minor Cap - 2013	Execution	1/1/2013	12/31/2013	12/31/2013		0%		6	-11%		-11%
NPRR260	Providing Access to MIS Secure Area to MIS Registered Users	Execution	10/3/2012	3/13/2013	3/13/2013		0%		3	-64%		19%
NPRR313	Updating the Term Resource Plan to Current Operating Plan / Availability Plan	Execution	8/22/2012	3/13/2013	3/14/2013		0%		43%			30%
NPRR322	Real-Time PTP Option Modeling	Execution	8/1/2012	3/13/2013	3/14/2013		0%		30%			1%
NPRR377	Alternate Inputs to Base Point Deviation Charge	Execution	9/26/2012	3/13/2013	3/15/2013		-1%		74%			28%
NPRR397	Balance of the Day Ancillary Service Market	Execution	9/19/2012	3/13/2013	3/15/2013		-1%		30%			33%
NPRR407	Credit Monitoring Posting Requirements - MMS/CDR Portion	Execution	9/19/2012	3/13/2013	3/15/2013		-1%		37%			19%
NPRR456	Clarification of Definition of Electrically Similar Settlement Points and Heuristic Pricing Posting	Execution	2/14/2013	5/15/2013	5/15/2013		0%		31%			31%
NPRR461	Energy Storage Settlements Consistent with PUCT Project 39917	Execution	3/13/2013	8/30/2013	8/30/2013		0%		14%			14%
NPRR463	CRR Auction Structure Enhancements	Execution	12/20/2012	6/5/2013	6/5/2013		0%		11%			5%
NPRR469	Modifications to CCTs	Execution	9/19/2012	3/13/2013	3/15/2013		-1%		47%			21%
SCR760	Recommended Changes Needed for Information Model Mgr and Topology Processor for Planning Models	Execution	8/25/2011	7/31/2013	7/31/2013		0%		48%			31%
SCR768	Automatic Non-Spin Redeployment and Deployment Based on Resource Availability	Execution	9/19/2012	3/13/2013	3/15/2013		-1%		57%			4%

# ERCOT Portfolio Spotlight Report (as of 2/28/2013)

Project Number	Project Name	Phase	Baseline Phase Start	Baseline Phase Finish	Scheduled Phase Finish	Schedule Status	Sum of 2013 Budgets	2013 Forecast Spend	2013 Variance	Sum of Total Budgets	Total Forecast Spend	Total Variance
<b>PROJECTS NOT YET STARTED (Count = 41)</b>			<b>Sorted by P</b>	<b>Forecast Start Date</b>				<b>\$ 5,290,011</b>	<b>\$ 4,736,768</b>		<b>\$ 9,930,150</b>	<b>\$ 9,376,907</b>
NPRR520	Real-Time Mitigation Rules and Creation of a Real-Time Constraint Competitiveness Test	Not Started	Mar 2013									
TBD	Backup Software Strategy and Proposed License Cost Reduction	Not Started	Mar 2013									
TBD	EPG Synchrophasor Upgrade	Not Started	Mar 2013									
TBD	MP Online Data Entry - Ph 1	Not Started	Mar 2013									
TBD	NAS Data Storage / File Synchronization - EMMS System and Applications	Not Started	Mar 2013									
NPRR153	Generation Resource Fixed Quantity Block Offer	Not Started	Mar 2013									
NPRR256	Sync with PRR787, Add Non-Compliance Language to QSE Performance Standards	Not Started	Mar 2013									
NPRR207	Unit Deselection	Not Started	Apr 2013									
NPRR407	Credit Monitoring Posting Requirements - CRR Portion	Not Started	Apr 2013									
NPRR439	Updating a Counter-Party's Available Credit Limit for Current Day DAM	Not Started	Apr 2013									
NPRR476	Market Submitted Energy Offer Curves Disclosures	Not Started	Apr 2013									
TBD	Email Redundancy	Not Started	Apr 2013									
TBD	Emergency Notification System Hardware Refresh	Not Started	Apr 2013									
TBD	Quality Center Upgrade	Not Started	Apr 2013									
NPRR340	Introduction and Definition of Duration-Limited Resources	Not Started	Jun 2013									
NPRR457	Daily Update of New ESI IDs and AMS Meter and Switch Hold Indicators Changes	Not Started	Jun 2013									
NPRR484	Revisions to Congestion Revenue Rights Credit Calculations and Payments	Not Started	Jun 2013									
SCR756	MarkeTrak Enhancements - Remaining SCR756 Items	Not Started	Jun 2013									
TBD	IBM AIX Operating System Upgrades	Not Started	Jun 2013									
TBD	Mobile Device Management	Not Started	Jun 2013									
TBD	Net Backup Architecture Redesign	Not Started	Jun 2013									
NPRR210	Wind Forecasting Change to P50, Sync with PRR841	Not Started	Jul 2013									
NPRR419	Revise Real Time Energy Imbalance and RMR Adjustment Charge	Not Started	Jul 2013									
TBD	Dev Hardware Refresh and Virtualization Expansion	Not Started	Jul 2013									
TBD	SQL Server 2012 Upgrade / Cluster Consolidation	Not Started	Jul 2013									
TBD	Symposium Call Center Replacement	Not Started	Jul 2013									
TBD	Red Hat Jboss Operations Network	Not Started	Aug 2013									
TBD	Taylor Control Room Upgrade	Not Started	Aug 2013									
TBD	Windows 2003 Retirement - Phase 1	Not Started	Aug 2013									
NOGRR084	Daily Grid Operations Summary Report	Not Started	Sep 2013									
SCR771	ERCOT System Change Allowing Independent Master QSE to Represent Split Generation Resources	Not Started	Sep 2013									
TBD	Intrusion Prevention System	Not Started	Sep 2013									
TBD	Voice Over IP (VOIP) Replacement for PBX	Not Started	Oct 2013									
SCR769	CRRAH Digital Certificate New Role for Read Only Access	Not Started	Nov 2013									
NPRR240	Proxy Energy Offer Curve	Not Started	TBD									
NPRR492	Addition of System Lambda Information	Not Started	TBD									
NPRR493	Half-Hour RUC Clawback	Not Started	TBD									
NPRR495	Changes to Ancillary Services Capacity Monitor	Not Started	TBD									
NOGRR101	Market Notice for DC-TIE Outage Information	Not Started	TBD									
NOGRR105	Generation Resource Frequency Response Test Procedure	Not Started	TBD									
SCR773	Addition of Regulation Feedback to Generation to be Dispatched Calculation	Not Started	TBD									

# ERCOT Portfolio Stoplight Report (as of 2/28/2013)

Project Number	Project Name	Phase	Baseline Phase Start	Baseline Phase Finish	Scheduled Phase Finish	Schedule Status	Sum of 2013 Budgets	2013 Forecast Spend	2013 Variance	Sum of Total Budgets	Total Forecast Spend	Total Variance
<b>PROJECTS COMPLETED IN 2013 (Count = 4) Sorted by Project Name</b>			Dates below are final Execution phase dates				\$ 25,175	\$ 18,722	25%	\$ 1,915,580	\$ 1,636,778	14%
006-01	SAGE (System Administrator Gateway Environment)	Closing	5/31/2012	12/19/2012	12/28/2012	-4%			49%			5%
021-01	Incremental Update Capability - Phase 1	Closing	3/23/2012	2/6/2013	2/13/2013	-2%			2 -18%			62%
043-01	Met Center Lease Reconfiguration	Complete	9/12/2012	12/19/2012	12/19/2012	0%			87%			10%
009-01	Compliance Software Tool	Complete	12/1/2011	11/30/2012	12/13/2012	-3%			2 -100%			20%

## SUMMARY

		Sum of 2013 Budgets	2013 Forecast Spend	Sum of Total Budgets	Total Forecast Spend
3%	KPI Budget Measure - Execution/Completed Projects	Projects In Flight \$ 14,960,554	\$ 13,777,871	\$ 35,081,961	\$ 33,708,173
		Projects Not Yet Started \$ 5,290,011	TBD	\$ 9,930,150	TBD
3%	KPI Schedule Measure - Execution/Completed Project	Projects Completed \$ 25,175	\$ 18,722	\$ 1,915,580	\$ 1,636,778
		<b>TOTAL \$ 20,275,739</b>	<b>\$ 13,796,593</b>	<b>\$ 46,927,691</b>	<b>\$ 35,344,951</b>
		<b>Project Funding \$ 15,000,000</b>			

### Stoplight Calculation Definitions

Schedule: Count of Execution and Completed Projects with Variance >= 10%  
/ Count of Execution and Completed Projects

Budget: (Total Budget of Execution and Completed Projects  
- Total Forecast Spend of Execution and Completed Projects)  
/ Total Budget of Execution and Completed Projects

### Footnotes

- 1 Current phase took longer than expected, resulting in additional funding and/or time required
- 2 Labor hours planned for 2012 occurred in 2013
- 3 Current phase requiring more labor than expected, resulting in additional funding and/or time required
- 4 Project temporarily placed on hold
- 5 Delay in vendor payment shifted cost from 2012 to 2013
- 6 Current demand exceeds budget
- 7
- 8
- 9