



ERCOT Monthly Operational Overview (**December 2013**)

ERCOT Public
January 15, 2014

Grid Operations & Planning

Summary – December 2013

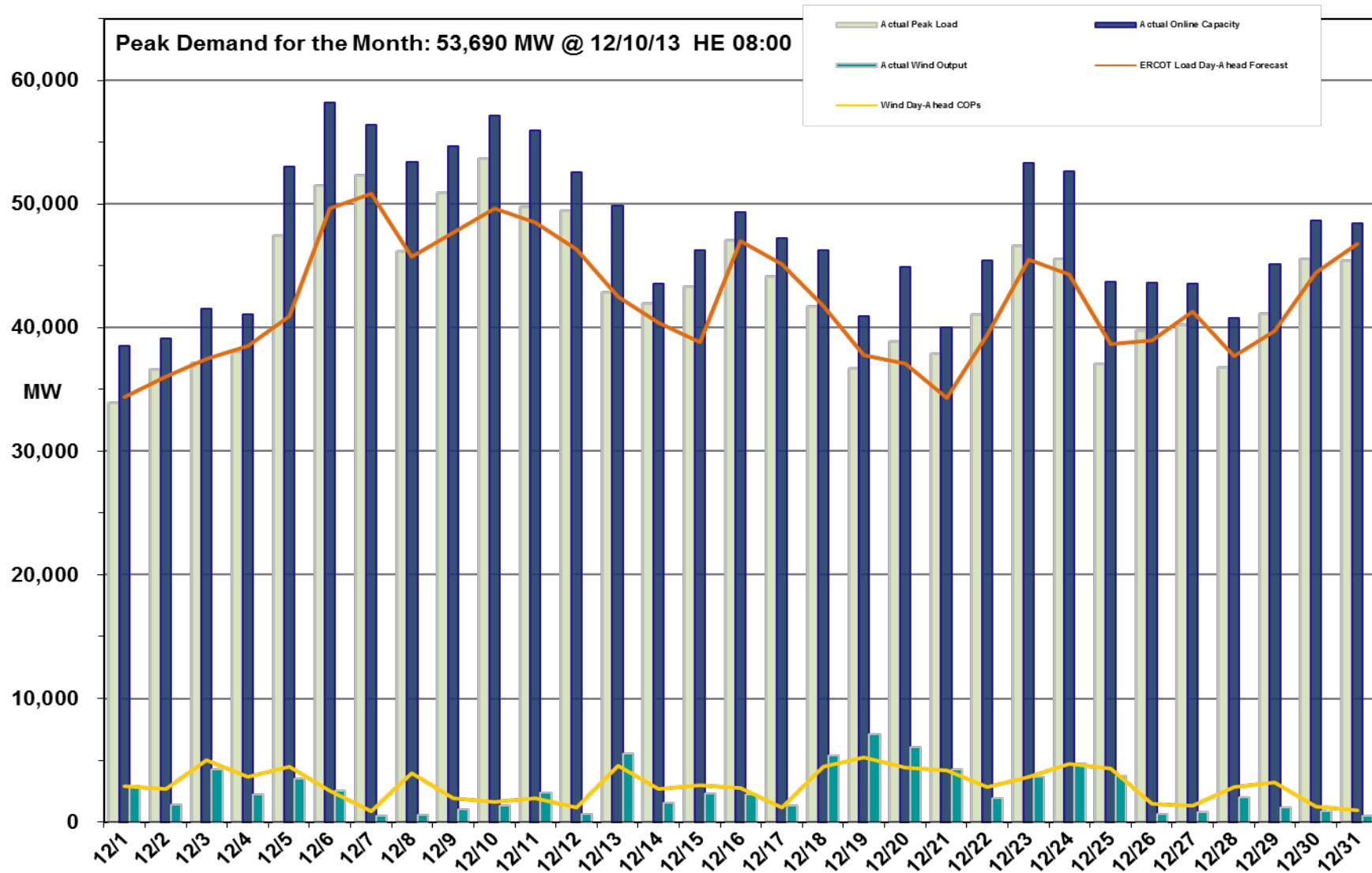
- **Operations**

- The peak demand of 53,690 MW on December 10th was more than the mid-term forecast peak of 49,673 MW as well as the December 2012 actual peak demand of 45,545 MW. The instantaneous load on December 10th was 54,326 MW.
- Day-ahead load forecast error for December was 3.37%
- ERCOT issued two advisories for Voltage Security Assessment Tool (VSAT) not solving for 30 minutes.
- No Watches were issued
- No Emergency Notices were issued
- No Energy Emergency Alert (EEA) events

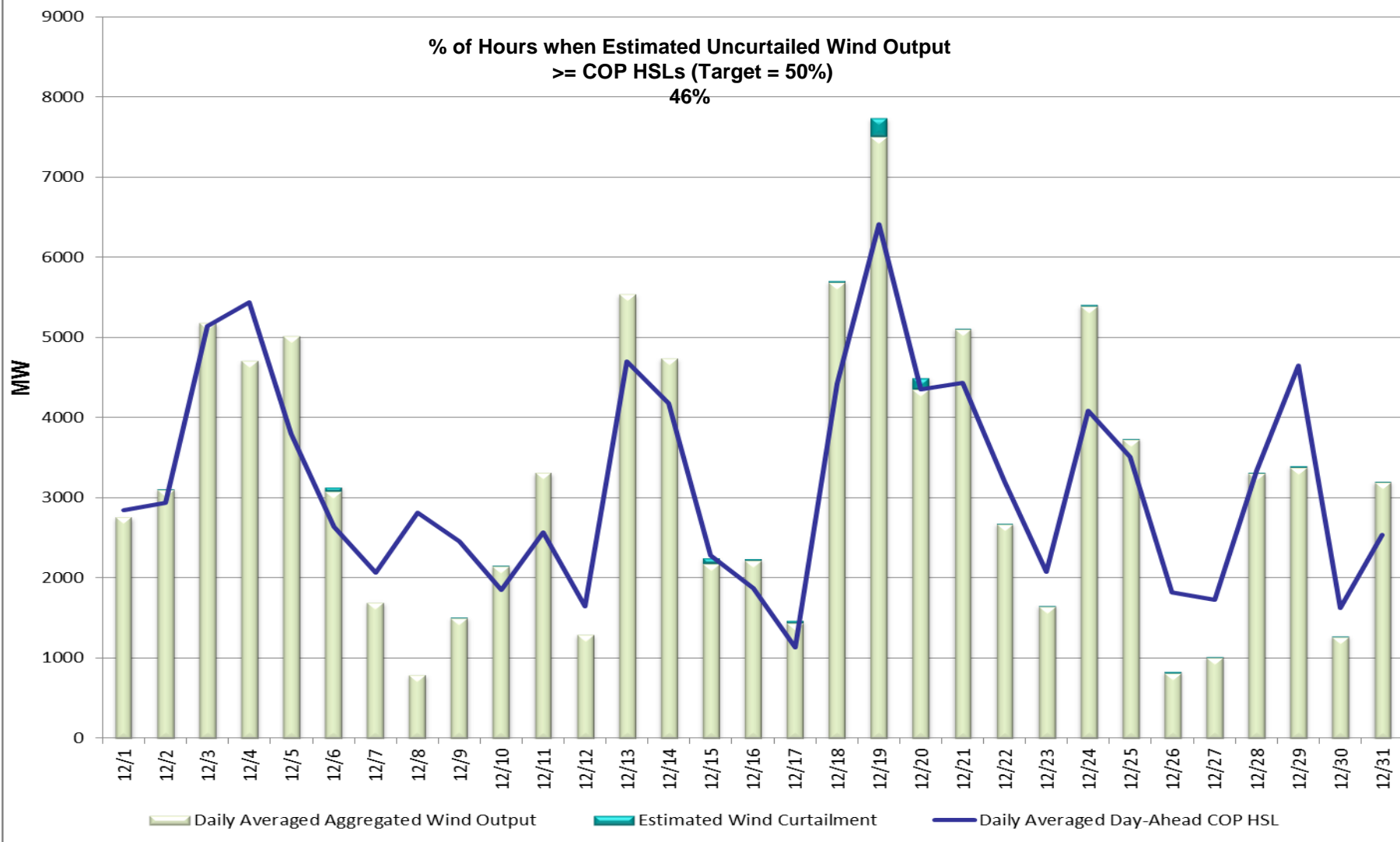
- **Planning Activities**

- 205 active generation interconnection requests totaling over 51,100 MW, including 24,200 MW of wind generation as of December 31, 2013. Eleven more requests and 1,600 more MW from November 30, 2013.
- 11,255 MW wind capacity in commercial operation December 31, 2013; 285 more MW than November 30, 2013.

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

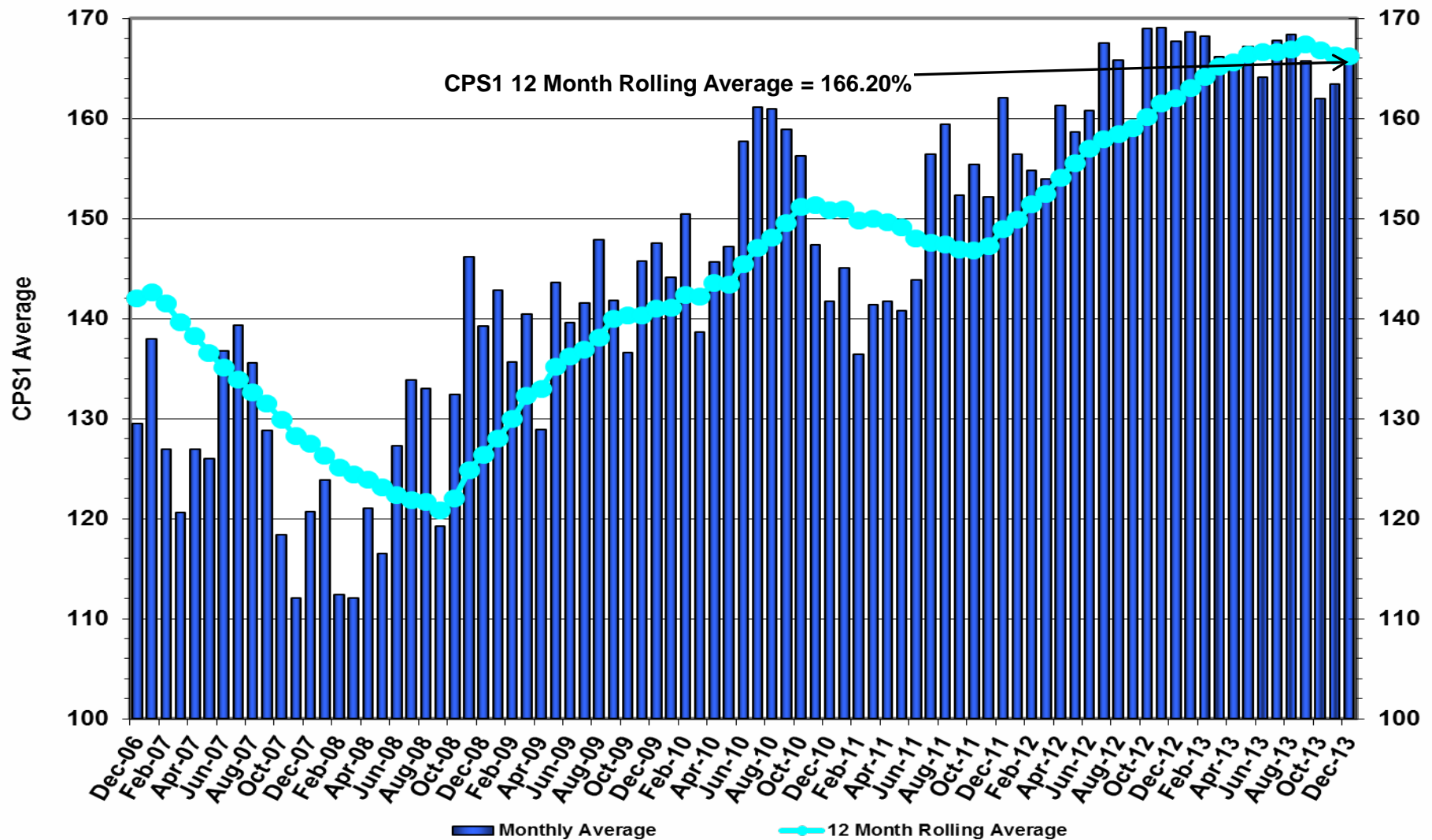


Actual Wind Output plus Curtailments vs. Wind Day-Ahead COPs for All Hours – December 2013

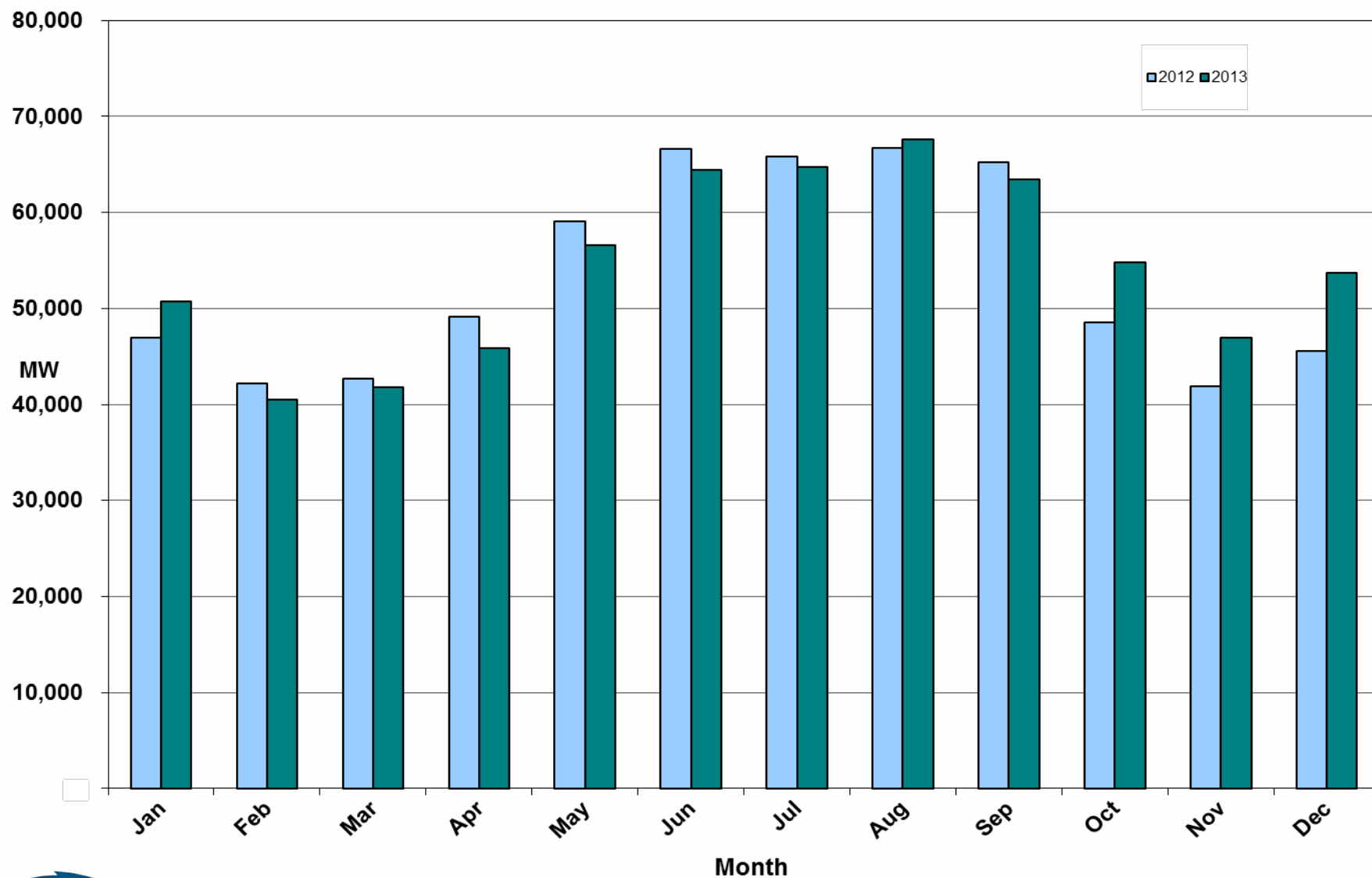


Note: QSEs must use the AWST 50% probability of exceedance forecast as the HSL in their COPs

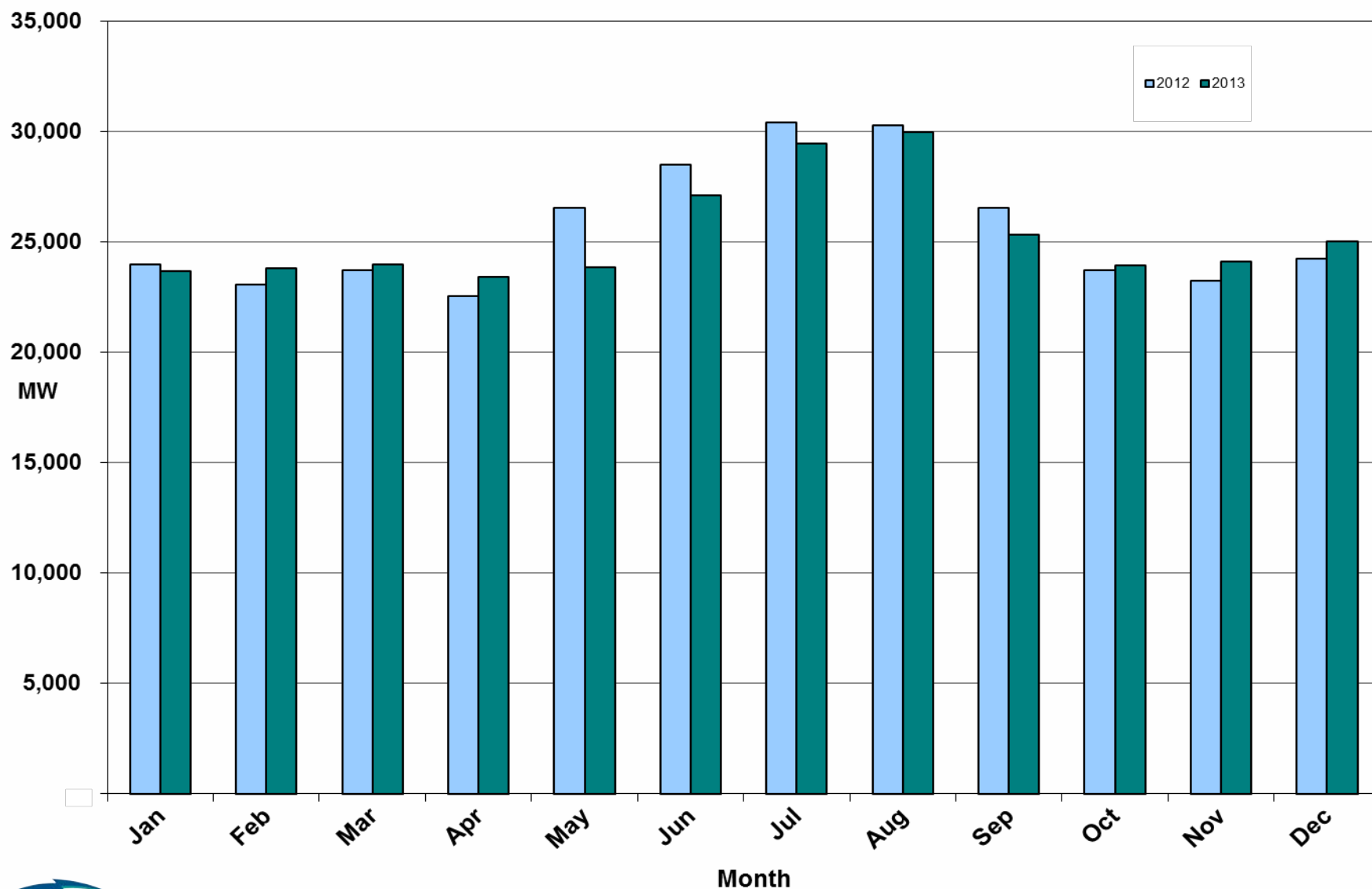
ERCOT's CPS1 Monthly Performance – December 2013



Monthly Peak Actual Demand – December 2013



Monthly Minimum Actual Demand – December 2013

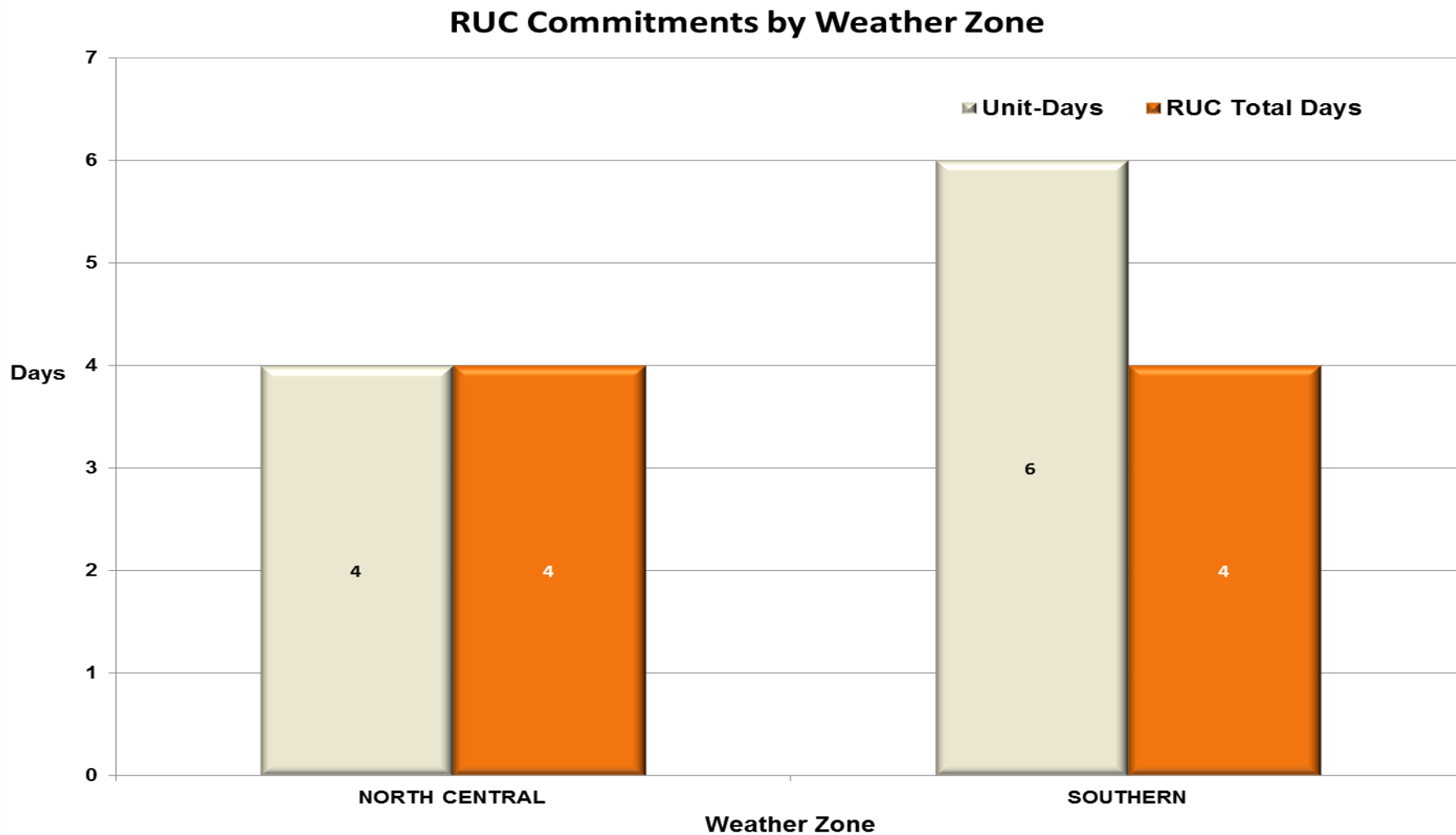


Day-Ahead Load Forecast Performance - December 2013

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

	2010 MAPE	2011 MAPE	2012 MAPE	2013 MAPE	Dec 2013 MAPE	
Average Annual MAPE	2.83	2.83	3.02	2.86	3.37	
Lowest Monthly MAPE	2.24	1.63	2.51	2.07	Lowest Daily MAPE	0.75 December – 04
Highest Monthly MAPE	3.79	3.55	3.49	3.50	Highest Daily MAPE	7.66 December – 05

Reliability Unit Commitment (RUC) Capacity by Weather Zone – Dec. 2013



Generic Transmission Limits (GTLs) – December 2013

GTLs	Dec 12 Days GTLs	Oct 13 Days GTLs	Nov 13 Days GTLs	Dec 13 Days GTLs	Last 12 Months Total Days (Jan13 – Dec13)
North – Houston	0	0	0	0	0
West – North	19	1	0	1	37
Valley Import	0	0	1	0	1
SOP110	0	0	0	1	1

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 – December 2013

- Advisories issued for application issues.
 - Issued twice (12/09 and 12/12) for Voltage Security Assessment Tool (VSAT) not solved for 30 minutes.
- Advisories issued for Physical Responsive Capability (PRC) below 3000 MW.
 - None
- Transmission Watches
 - None
- Emergency Notice
 - None
- Energy Emergency Alerts
 - None
- OCNs
 - None

Significant Events – December 2013

- No significant events to report

Lake Levels Update – January 1, 2014

Surface Water & (MW)	*Level @ Full Conservation Pool	*Level on Jan 1, 2011	*Level on Oct 7, 2011	*Level on Jan 1, 2014
Lake Texana (56)	44.50	41.00	32.81	41.22
Bardwell Lake (312)	421.00	420.71	416.23	417.95
Lake Colorado City (407)	2,070.20	2057.33	2052.4	2049.71
Lake Ray Hubbard (916)	435.50	432.37	429.22	429.00
Lake Granbury (983)	693.00	691.90	686.27	684.43
Lake Houston (1016)	41.73	42.10	36.76	42.28
Twin Oaks Reservoir (1616)	400	398.87	398.27	400.12
Lake Limestone (1689)	363	359.03	354	363.24
Martin Lake (2425)	306	300.48	295.06	306.04

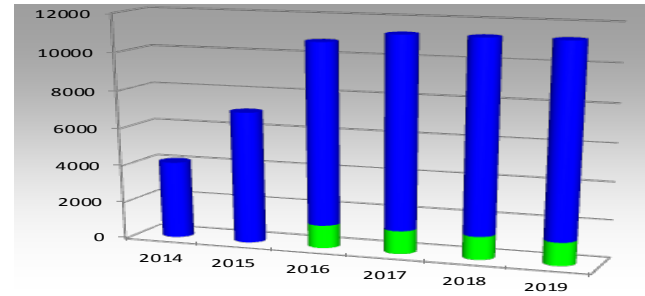
* In Feet above Mean Sea Level



Planning Summary – **December 2013**

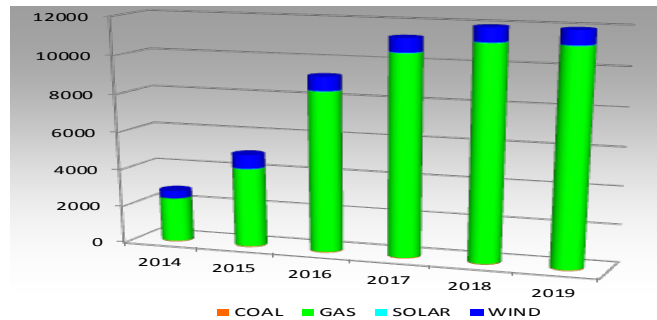
- **ERCOT is currently tracking 205 active generation interconnection requests totaling over 51,100 MW. This includes over 24,200 of wind generation.**
- **ERCOT is currently reviewing proposed transmission improvements with a total cost of \$849.7 Million**
- **Transmission Projects endorsed in 2013 total \$349.8 Million**
- **All projects (in engineering, routing, licensing and construction) total approximately \$6.23 Billion.**
- **Transmission Projects energized in 2013 total about \$3.17 Billion.**

Cumulative Installed MW Capacity of Interconnection Requests by Zone – December 2013



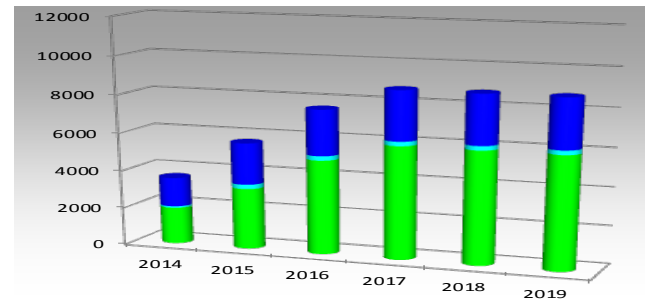
Panhandle Zone

■ GAS ■ WIND



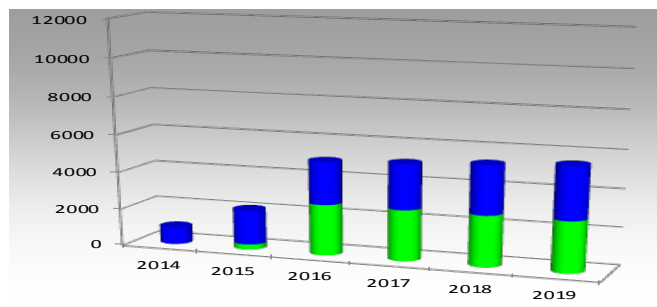
North Zone

■ COAL ■ GAS ■ SOLAR ■ WIND



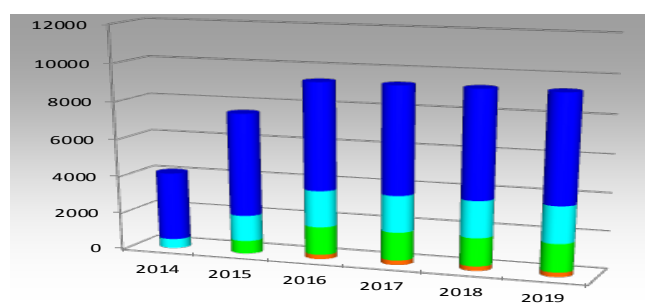
South Zone

■ GAS ■ SOLAR ■ WIND



Coastal Zone

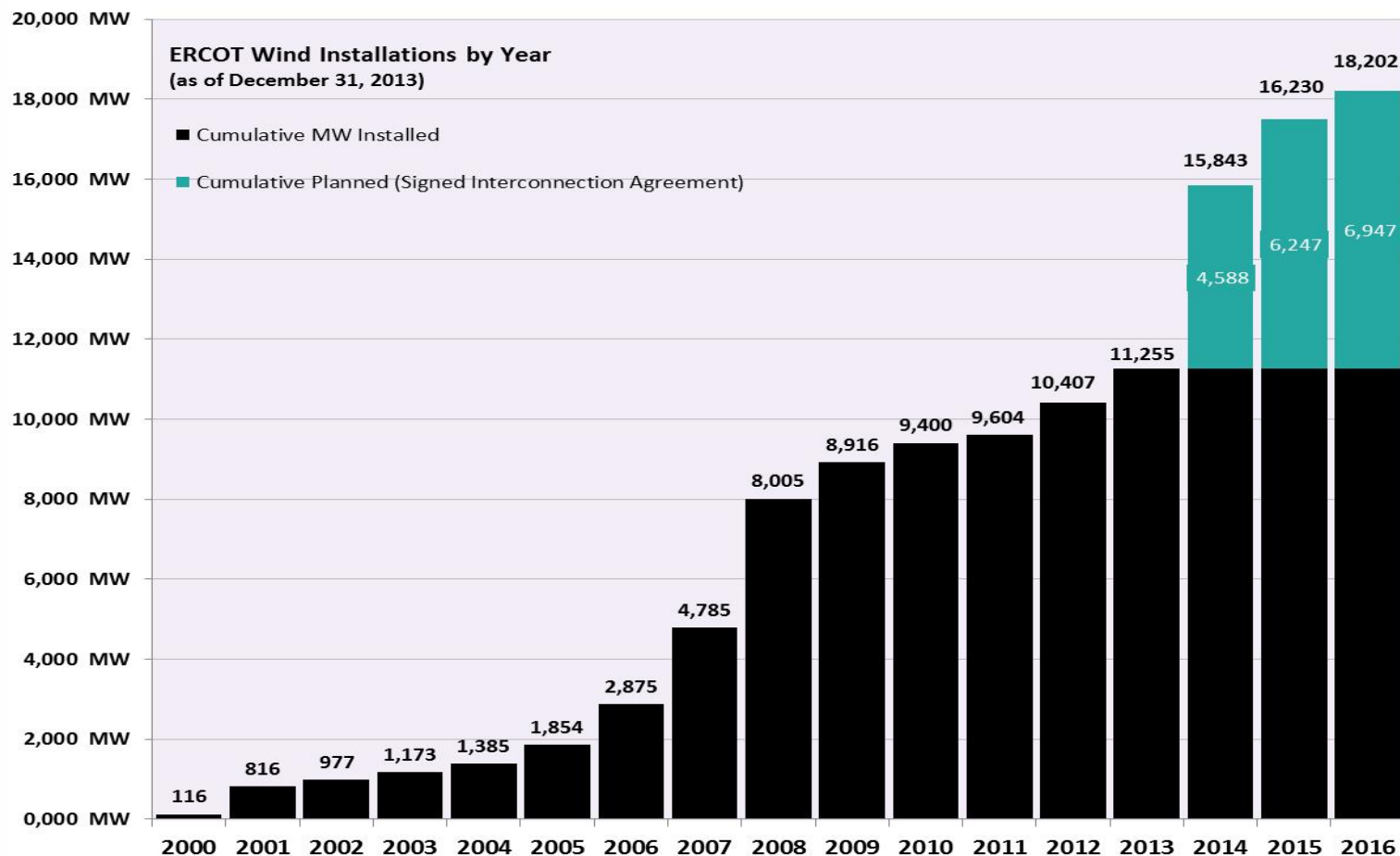
■ GAS ■ WIND



West Zone

■ COAL ■ GAS ■ SOLAR ■ WIND

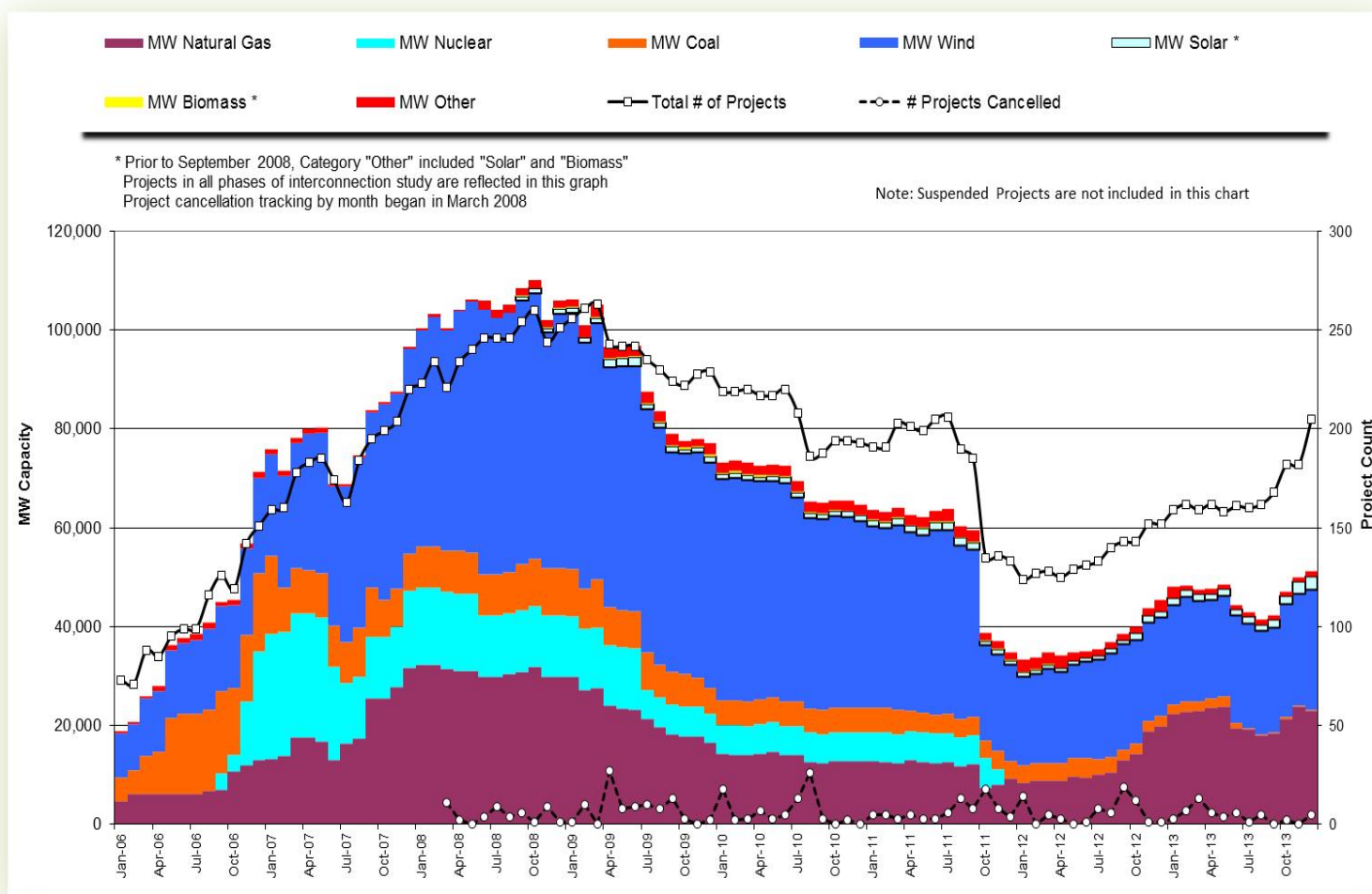
Wind Generation – December 2013



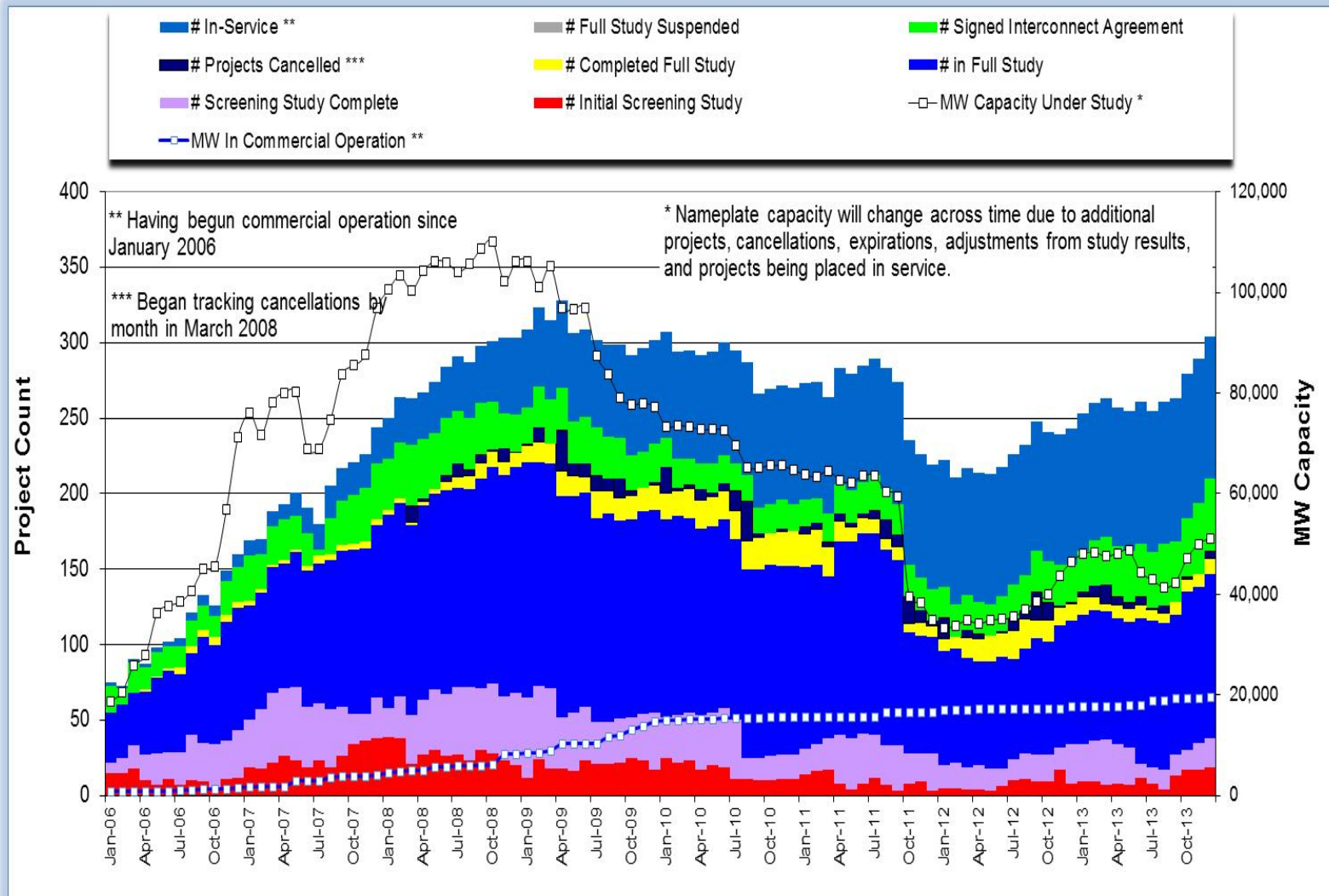
The data presented here is based upon the latest registration data provided to ERCOT by the resource owners and can change without notice. Any capacity changes will be reflected in current and subsequent years' totals. Scheduling delays will also be reflected in the planned projects as that information is received.

This chart reflects planned units in the calendar year of submission rather than installations by peak of year shown.

Generation Interconnection Activity by Fuel – December 2013

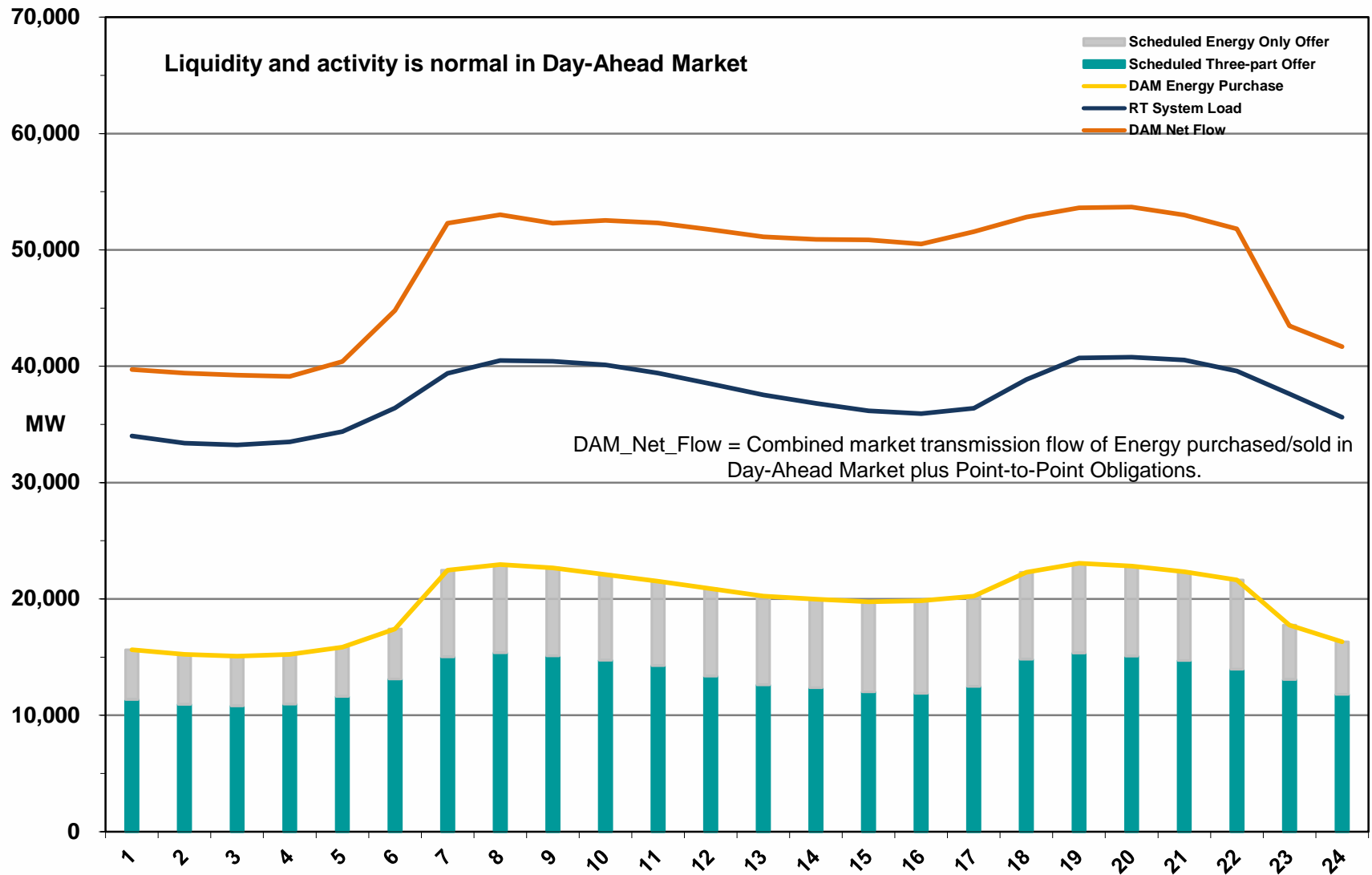


Generation Interconnection Activity by Project Phase – December 2013

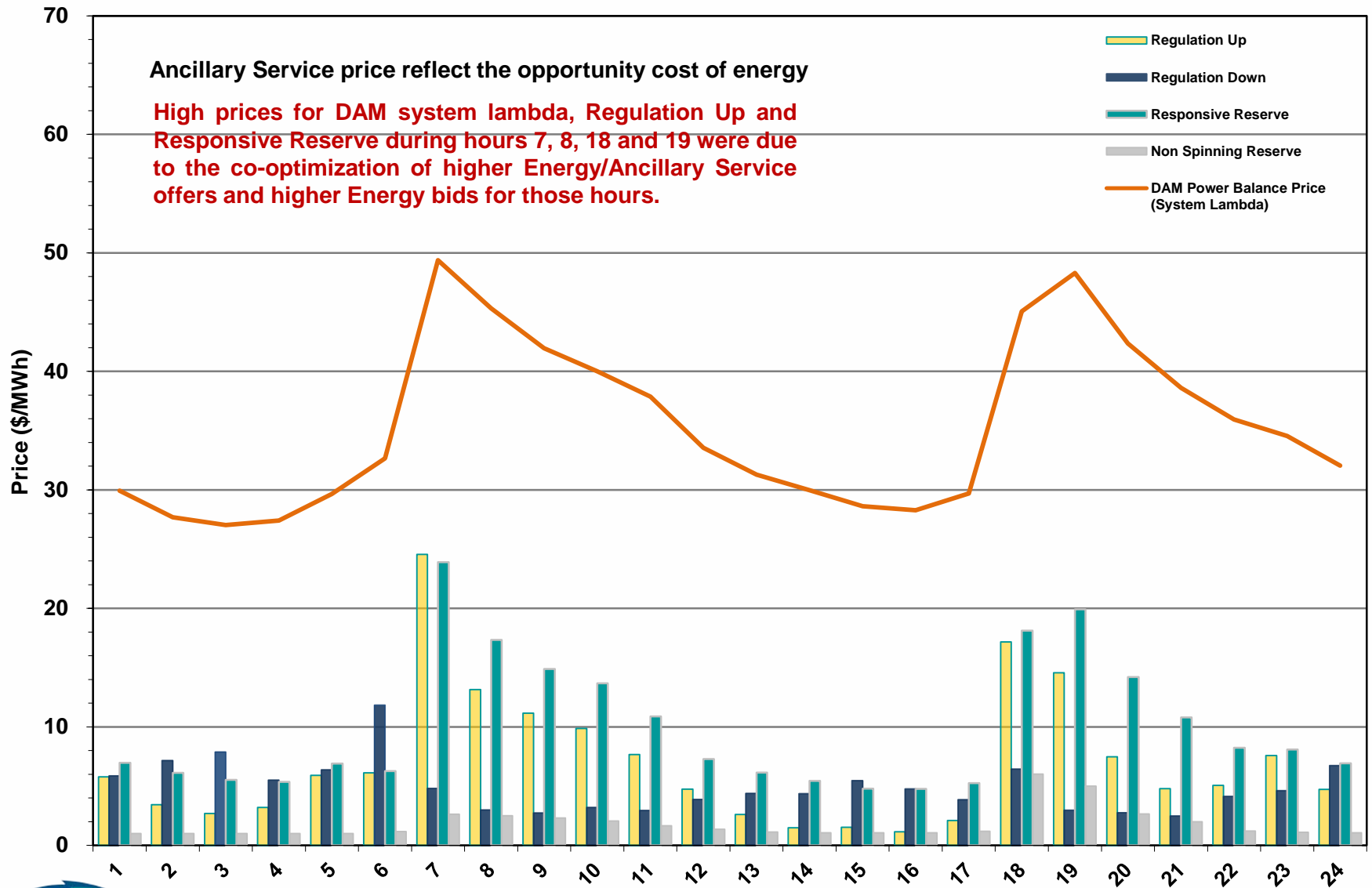


Market Operations

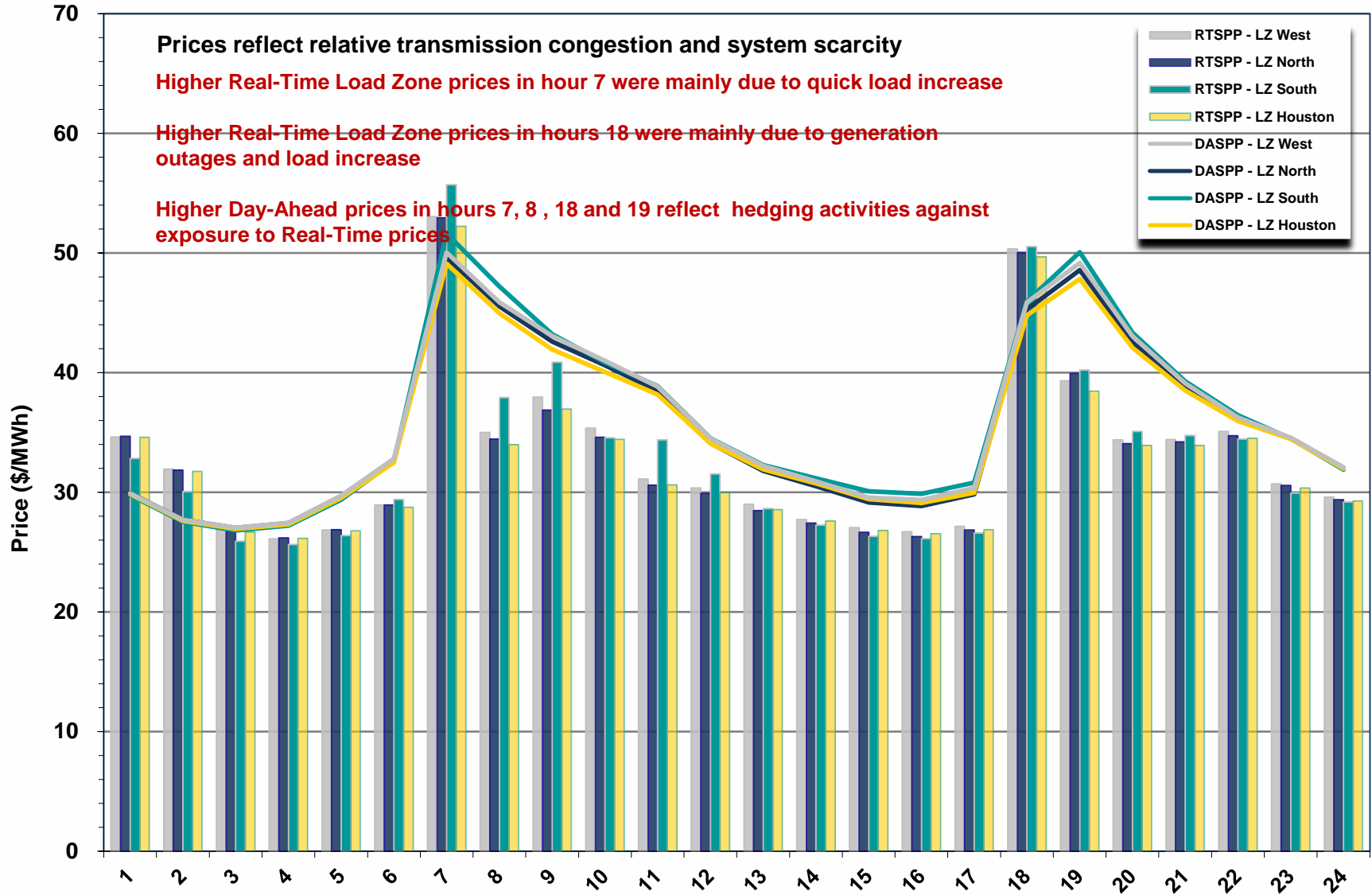
Day-Ahead Schedule (Hourly Average) – December 2013



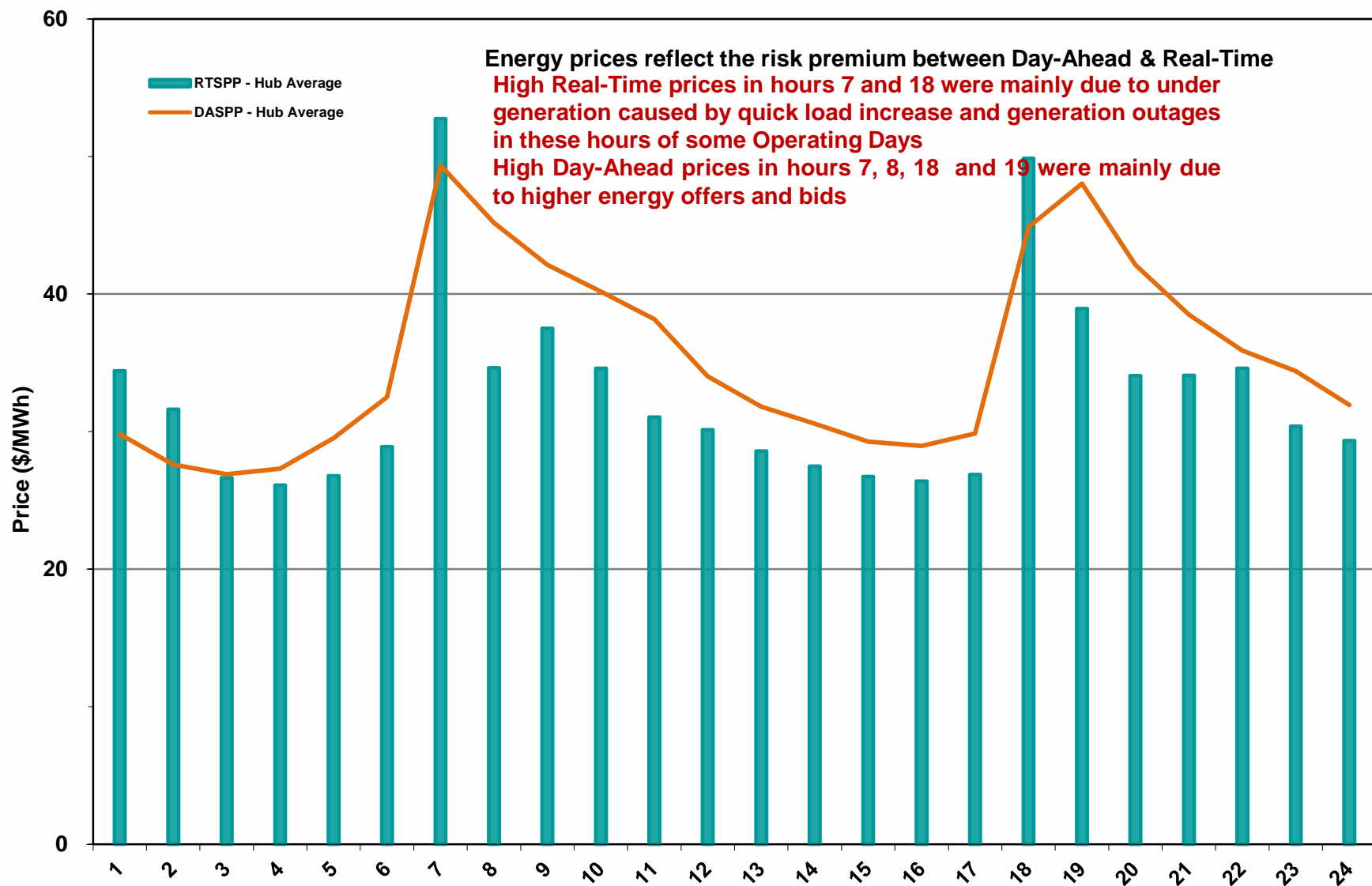
Day-Ahead Electricity And Ancillary Service Hourly Average Prices – December 2013



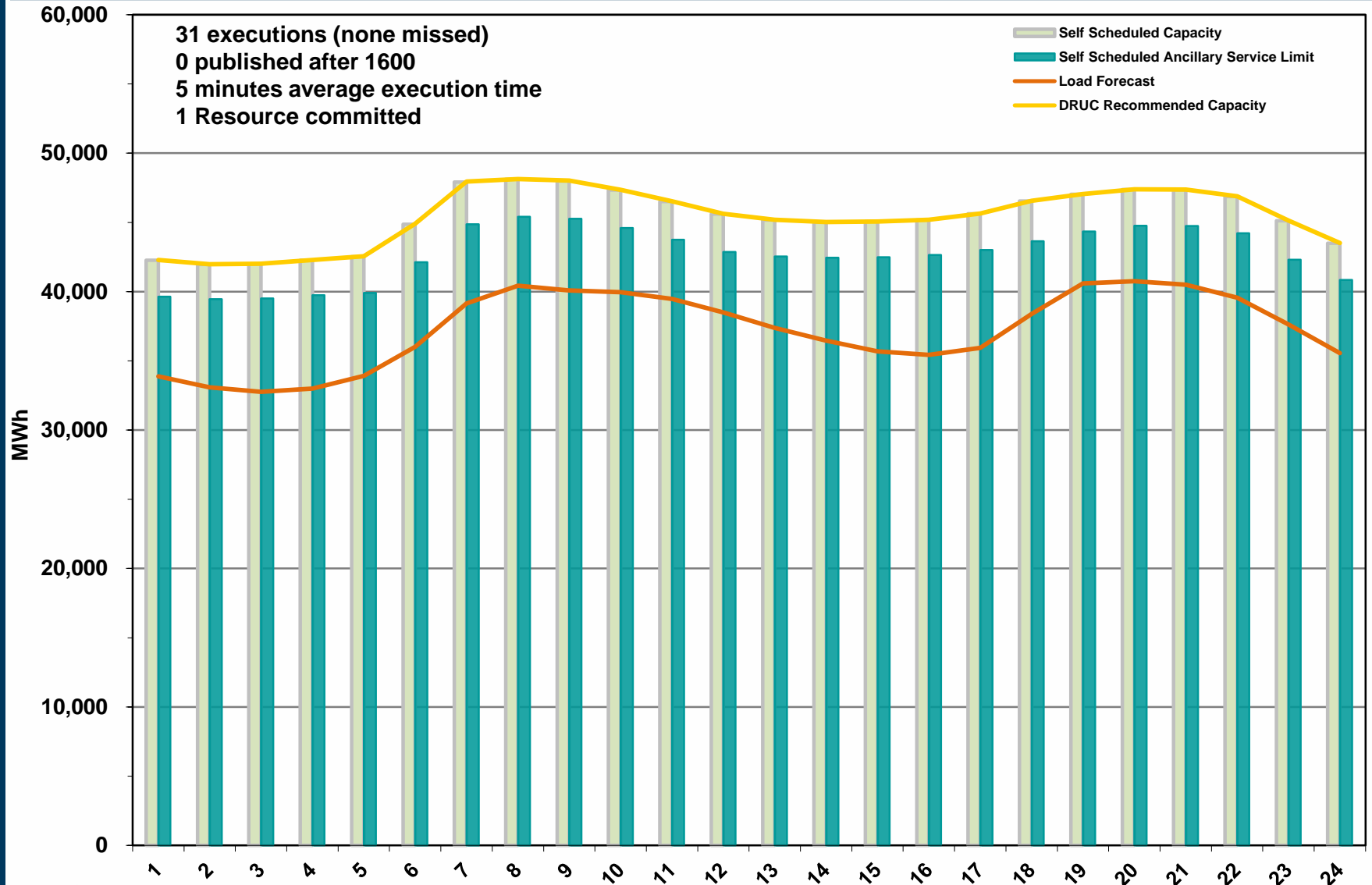
Day-Ahead Vs Real-Time Load Zone SPP (Hourly Average) – December 2013



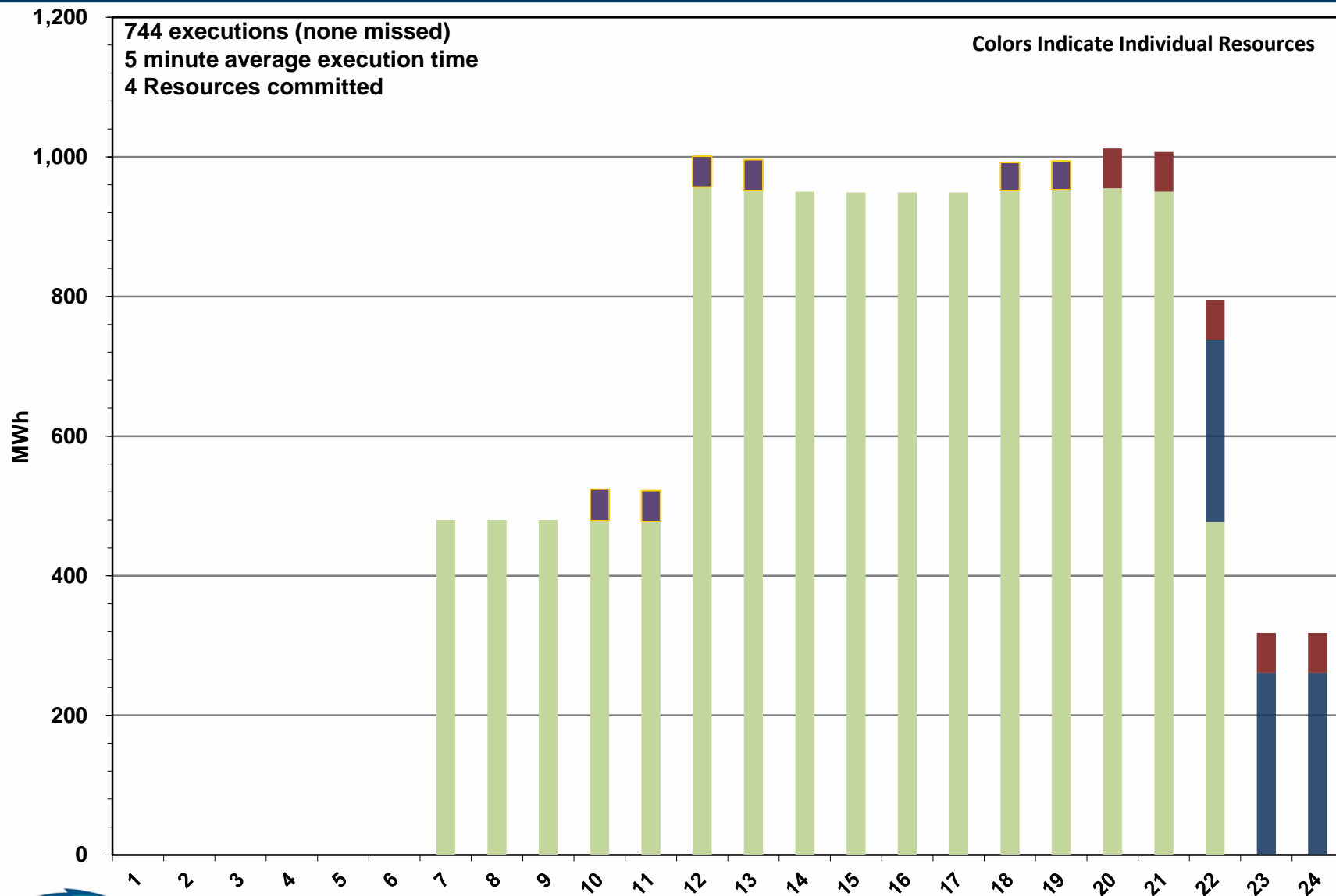
Day-Ahead Vs Real-Time Hub Average SPP (Hourly Average) – December 2013



DRUC Monthly Summary (Hourly Average) – December 2013



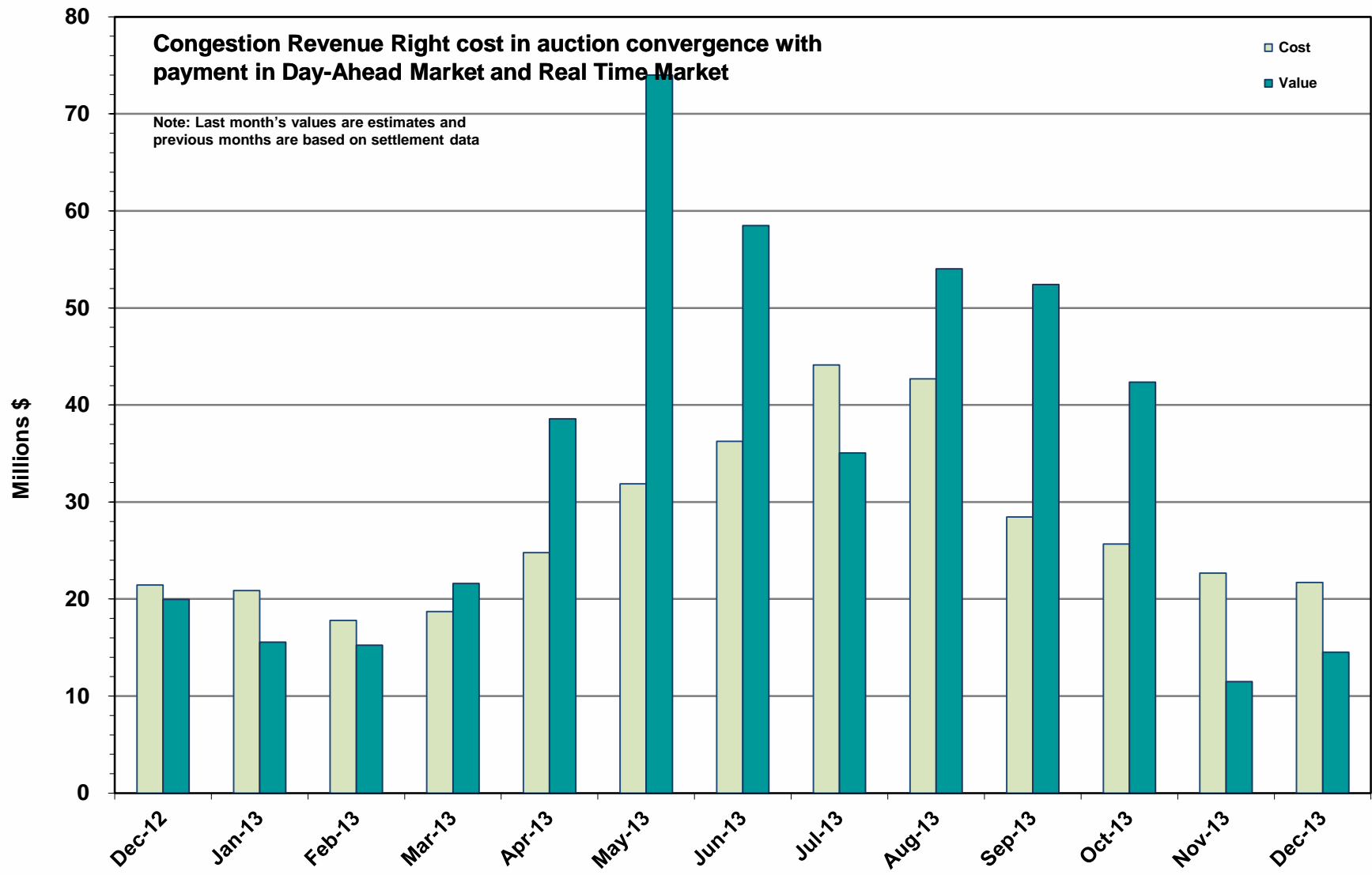
HRUC Monthly Summary – December 2013



Non-Spinning Reserve Service Deployment – December 2013

Deployment Start Time	Deployment End Time	Deployment Duration (Hours)	Max Deployment (MW)	Reason
None				

CRR Price Convergence – December 2013



ERS Procurement for **October 2013 – January 2014**

10-Minute ERS

	BH1	BH2	BH3	NBH
MW Procured	589.095	582.995	568.470	510.320
Average Price Per MW per Hour	\$8.01	\$8.37	\$8.44	\$7.98

30-Minute ERS Pilot

MW Procured	134.252	136.348	122.565	111.671
Clearing Price	\$8.00	\$8.50	\$8.80	\$8.00

BH1 - Business Hours 1
 BH2 - Business Hours 2
 BH3 - Business Hours 3
 NBH - Non-Business Hours

HE 0900 through 1300, Monday thru Friday except ERCOT Holidays
 HE 1400 through 1600, Monday thru Friday except ERCOT Holidays
 HE 1700 through 2000, Monday thru Friday except ERCOT Holidays
 All other hours



Market Enhancements to Address IMM Recommendations – December 2013

Enhancement	Further Information
Adequate scarcity pricing in SCED using Operating Reserve Demand Curve: Hogan solution	<ul style="list-style-type: none">• ERCOT BOD approved NPRR 568 and corresponding Other Binding Document (OBD) on 11/19/2013• ERCOT is in the Planning Phase of Implementing the NPRR by 6/1/2014• Update given to TAC on 12/3/2013 on Implementation Status
“Over-mitigation” in SCED	<ul style="list-style-type: none">• NPRR 520 – Real-Time Mitigation Rules and Creation of a Real-Time Constraint Competitiveness was approved by BOD 3-19-13• MMS functionality was implemented on 6-12-13• The last remaining part of the NPRR which provides additional informational telemetry to QSEs has been migrated in Release 4 (7-31-13)• ERCOT is analyzing the results with stakeholders to identify any need for further improvements.

Reliability Services – December 2013

Reliability Unit Commitment (RUC)

\$ in Millions

RUC Make-Whole Payments (\$1.97)

RUC Clawback Charges \$0.02

RUC Commitment Settlement (\$1.95)

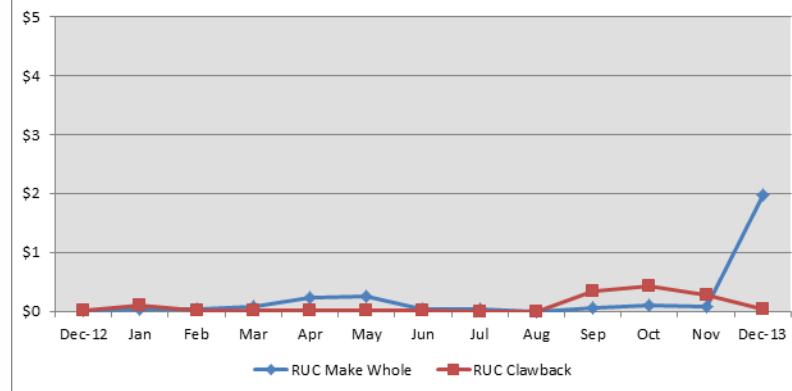
RUC Capacity Short Charges \$1.97

RUC Make-Whole Uplift \$0.00

RUC Commitment Cost Allocation \$1.97

RUC Decommitment Payments \$0.00

Reliability Unit Commitment (\$Mil)



RUC Costs trended higher in December.

RUC Costs where a charge of \$1.97M in December 2013, compared to:

- A charge of \$0.07M in November 2013
- A charge of \$0.01M in December 2012

Ancillary Services – December 2013

Capacity Services	\$ in Millions
Regulation Up Service	\$2.50
Regulation Down Service	\$1.45
Responsive Reserve Service	\$17.31
Non-Spinning Reserve Service	\$1.98
Black Start Service	\$0.53
Voltage Services - Reactive Power	\$0.00
Voltage Services - Lost Opportunity	\$0.00
Total Capacity Service	\$23.78

Capacity Services costs were down from last month and up from December 2012.

December 2013 cost was \$23.78M, compared to:

- A charge of \$26.26M in November 2013
- A charge of \$15.27M in December 2012

Energy Settlement – December 2013

Day-Ahead Market Energy Settlement \$ in Millions

Energy Purchases	\$547.50
Point to Point Obligation Purchases	\$10.89
RMR Day-Ahead Revenue	\$0.00
Energy Sales	(\$542.09)
Day-Ahead Congestion Rent	\$16.30
Day-Ahead Market Make-Whole Payments	(\$0.13)

Day-Ahead and Real-Time energy settlement increased from last month and from December 2012.

Real-Time Market Energy Settlement \$ in Millions

Energy Imbalance at a Resource Node	(\$540.96)
Energy Imbalance at a Load Zone	\$739.41
Energy Imbalance at a Hub	(\$180.61)
Real Time Congestion from Self Schedules	\$0.16
Block Load Transfers and DC Ties	(\$7.66)
Impact to Revenue Neutrality	\$10.34
Emergency Energy Payments	(\$0.34)
Base Point Deviation Charges	\$0.29
Real-Time Metered Generation (MWh in millions)	27.83

Congestion Revenue Rights (CRR) – December 2013

Auction Disbursements	\$ in Millions
Annual Auction	(\$15.54)
Monthly Auction	(\$3.80)
Total Auction Revenue	(\$19.34)
Day-Ahead CRR Settlement	(\$14.29)
Day-Ahead CRR Short-Charges	\$0.21
Day-Ahead CRR Short-Charges Refunded	(\$0.21)
Real-Time CRR Settlement	(\$0.00)
Real-Time CRR Short-Charges	\$0.00
Real-Time CRR Short-Charges Refunded	(\$0.00)
Total CRR Proceeds	(\$14.29)
Day-Ahead Point to Point Obligations Settlement	\$10.89
Real-Time Point to Point Obligation Settlement	(\$12.07)
Net Point to Point Obligation Settlement	(\$1.18)

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

Distribution of Balancing Account funds to load for December 2013 was \$2.05M, compared to:

- \$0.66M in November 2013
- \$0 M in December 2012

Point to Point Obligations settled with a net payment of \$1.18M compared to a net payment of \$3.14M last month.

Revenue Neutrality – December 2013

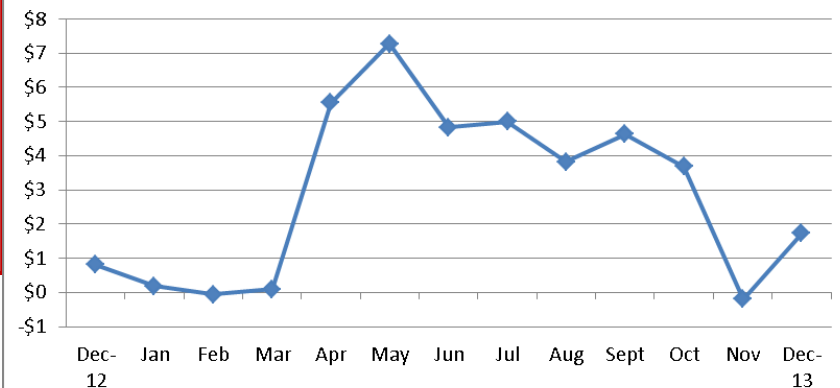
Revenue Neutrality Settlement	\$ in Millions
Real-Time Point to Point Obligation Settlement	(\$12.07)
Real-Time Point to Point Options and Options with Refund Settlement	(\$0.00)
Real-Time Energy Imbalance Settlement	\$17.84
Real-Time Congestion from Self-Schedules Settlement	\$0.16
DC Tie & Block Load Transfer Settlement	(\$7.66)
Charge to Load	\$1.73

Revenue Neutrality charges to load increased compared to last month and to December 2012.

December 2013 was a charge of \$1.73M, compared to:

- \$0.19M credit in November 2013
- \$0.81M charge in December 2012

Revenue Neutrality Uplift (\$Mil)



Net Uplift to Load – December 2013

Market-Based Uplifts

\$ in Millions

CRR Auction Revenue Disbursement Settlement (\$19.34)

Balancing Account Proceeds Settlement (\$2.05)

Net Reliability Unit Commitment Settlement \$1.95

Ancillary Services Settlement \$23.78

Reliability Must Run Services Settlement \$0.00

Reliability Must Run for Capacity \$0.00

Real-Time Revenue Neutrality Settlement \$1.73

Emergency Energy Settlement \$0.34

Base Point Deviation Settlement (\$0.29)

Total \$6.11

Fee Uplifts

ERCOT Administrative Fee Settlement \$11.72

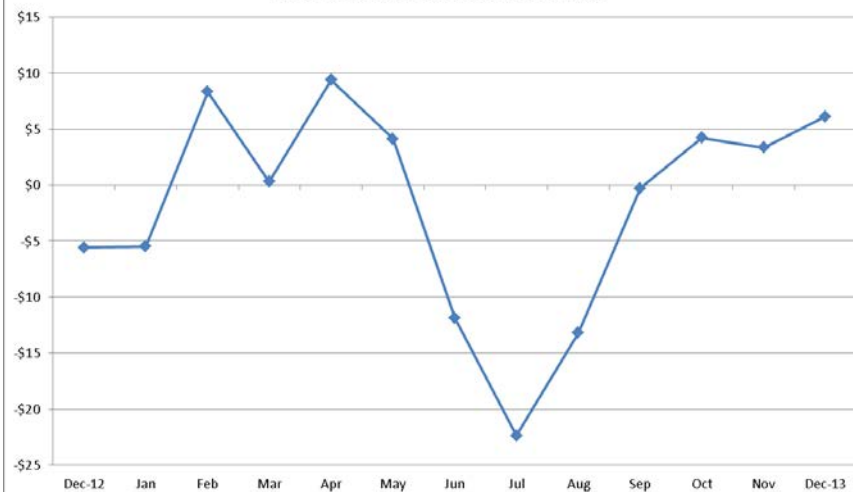
Net Uplift Charge to Load \$17.83

Net uplift to Load increased from last month and from December of 2012

December 2013 was a charge of \$17.83M, compared to:

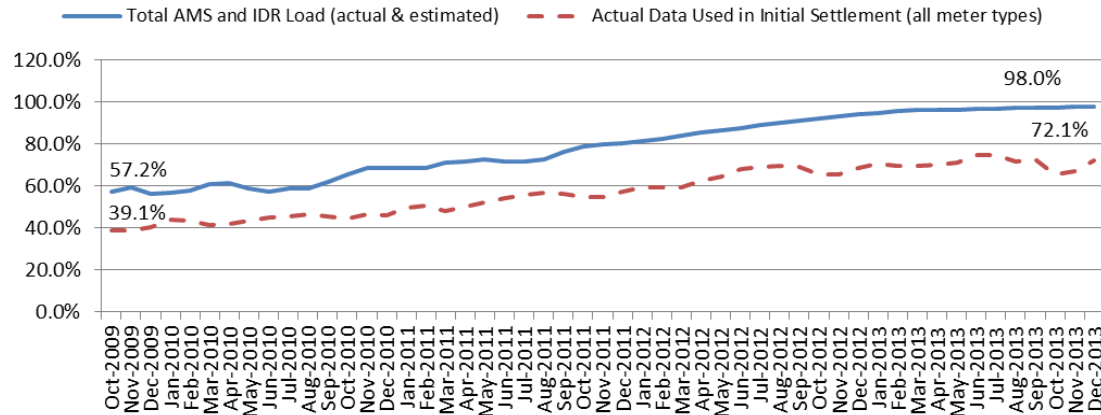
- A charge of \$13.47M in November 2013
- A charge of \$4.83M in December 2012

Market Based Fees Net Impact to Load



Advanced Meter Settlement Impacts – December 2013

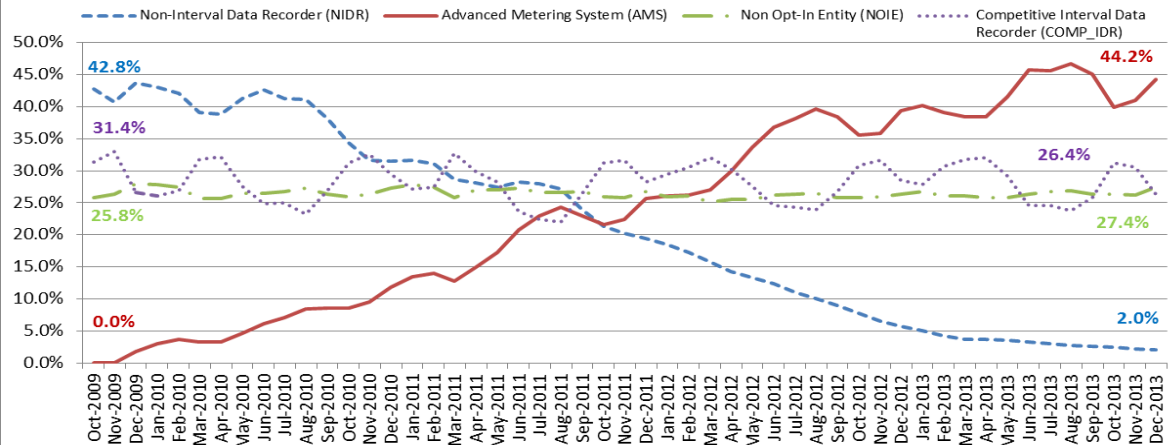
Percent Actual/Percent Interval Data Recorder (IDR)



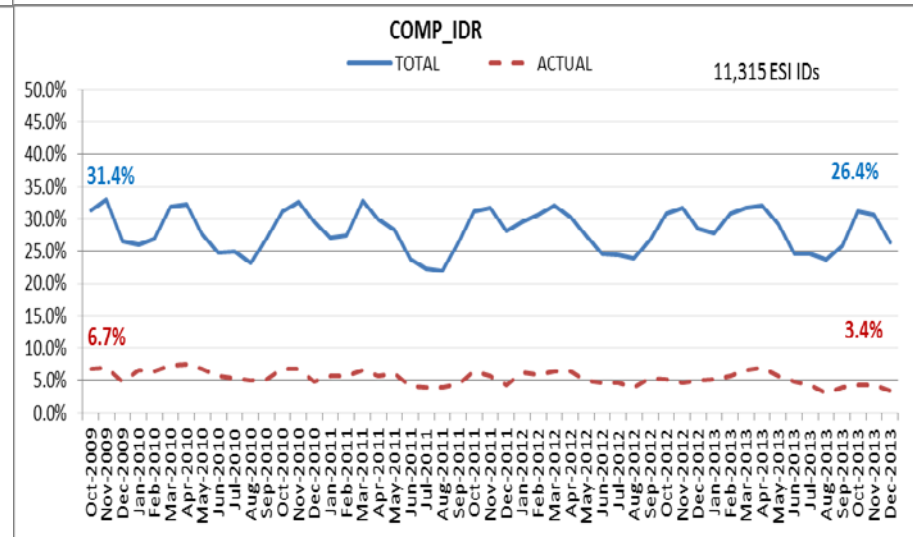
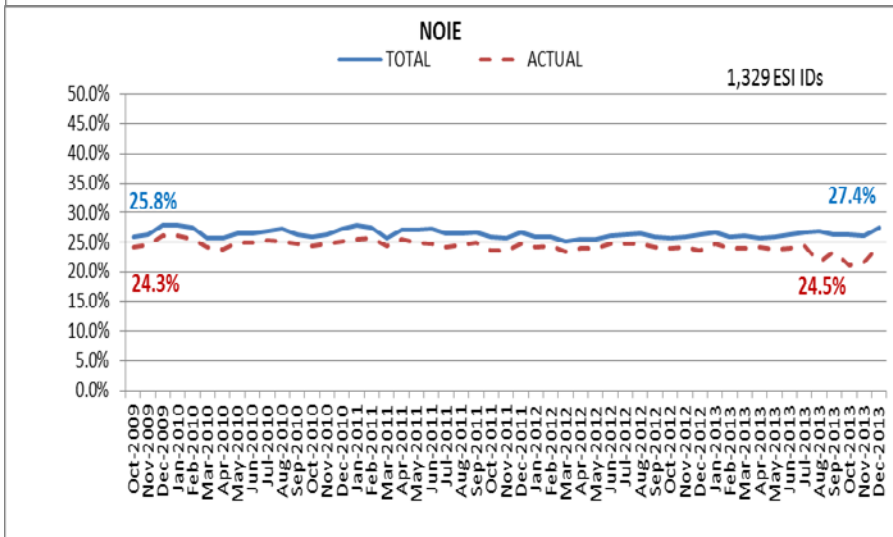
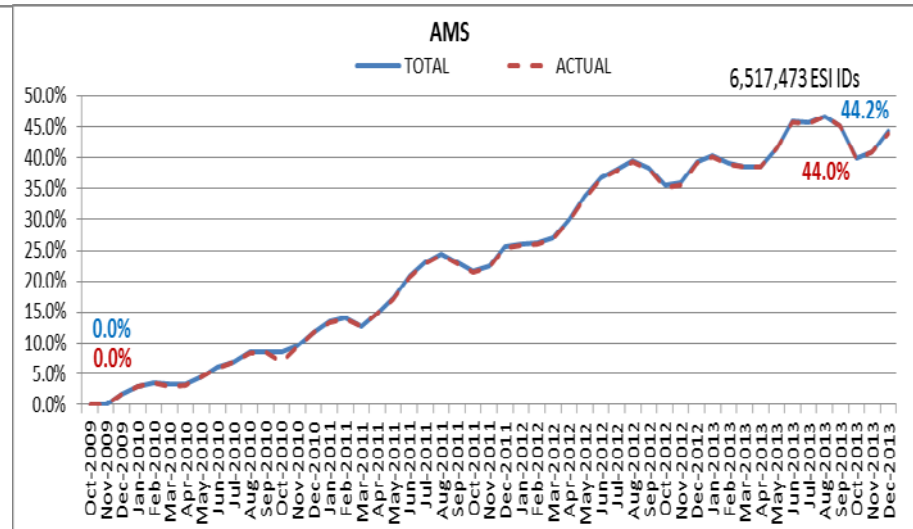
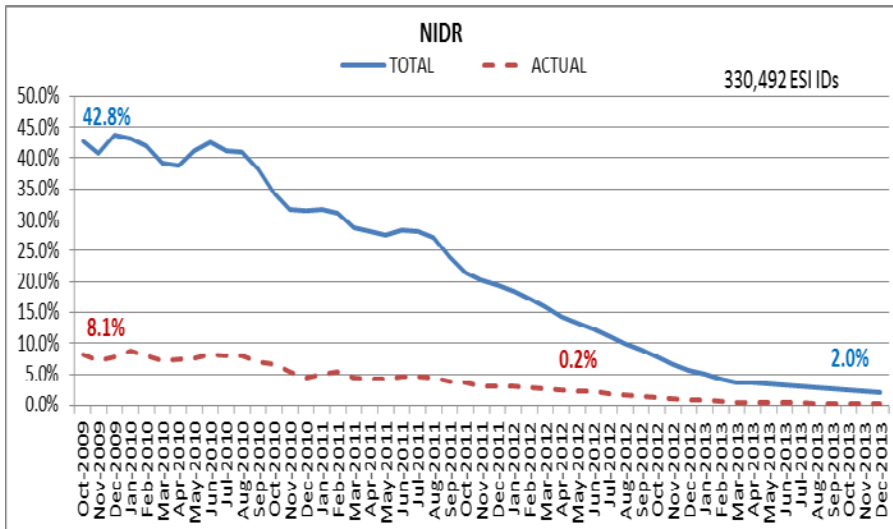
December 2013: At month end, settling 6.5M ESIIDs using Advanced Meter data.

December 2013: 98.0% 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 – December 2013

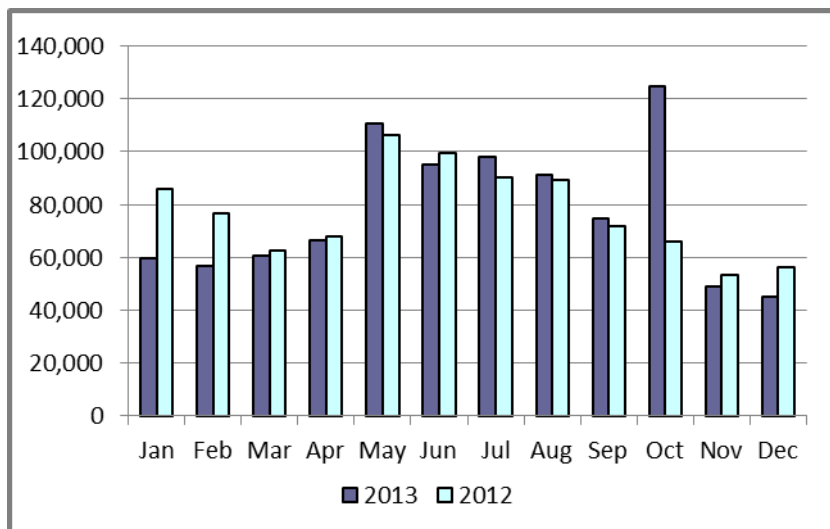


Retail Transaction Volumes – Summary – December 2013

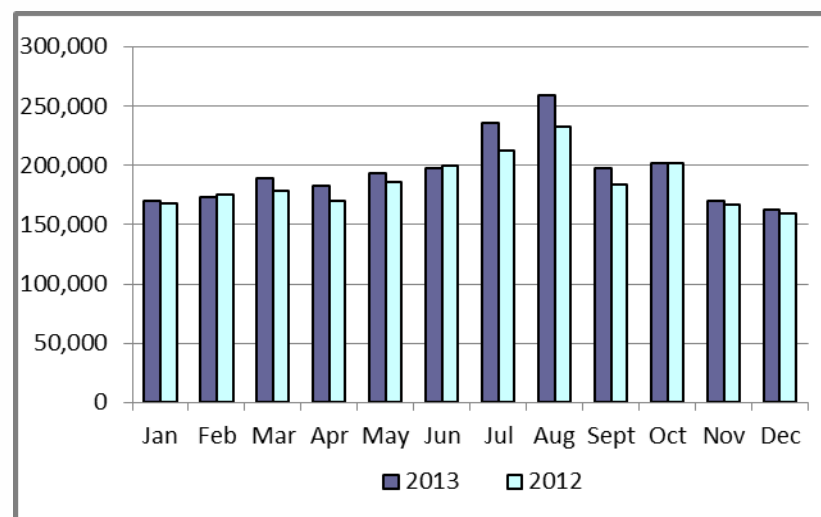
Transaction Type	Year-To-Date		Transactions Completed	
	December 2013	December 2012	December 2013	December 2012
Switches	930,885	914,568	44,903	45,913
Acquisition	134	15,354	0	9,836
Move - Ins	2,333,620	2,235,478	162,378	159,140
Move - Outs	1,137,704	1,110,142	81,381	80,655
Continuous Service Agreements (CSA)	592,625	691,140	40,639	37,242
Mass Transitions	0	0	0	0
Total	4,994,968	4,966,682	329,301	332,786
Total since June 1, 2001	54,886,494			

Retail Transaction Volumes – Summary – December 2013

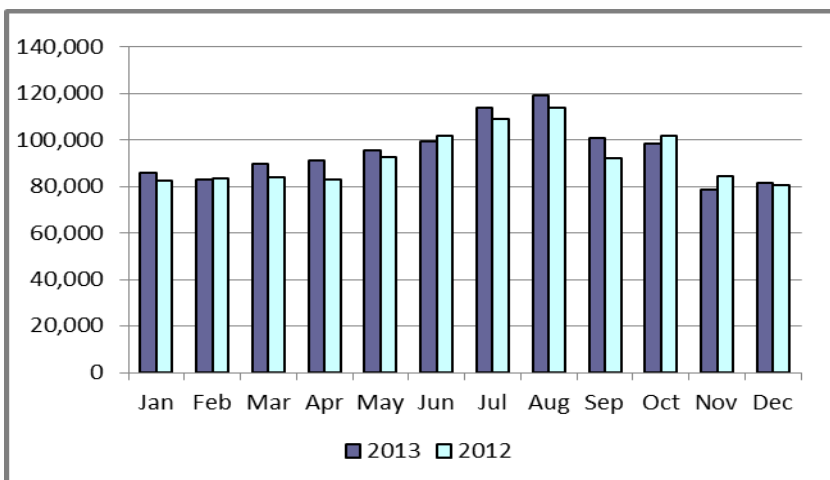
Switches/Acquisitions



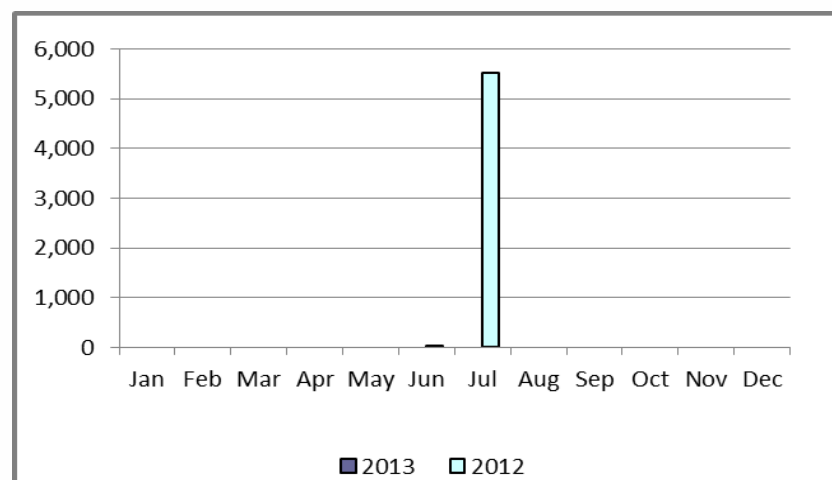
Move-Ins



Move-Outs

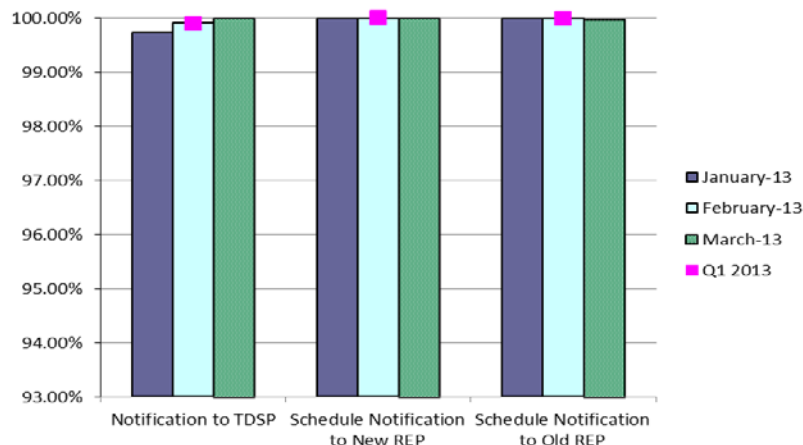


Mass Transition

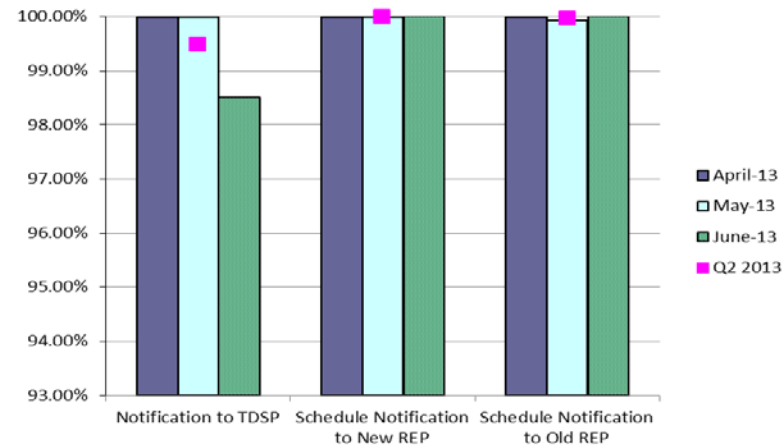


Retail Performance Measures – Switch – December 2013

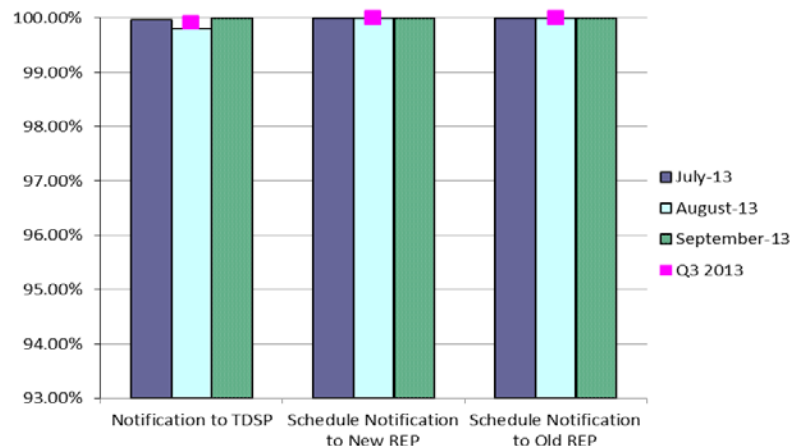
1st Quarter



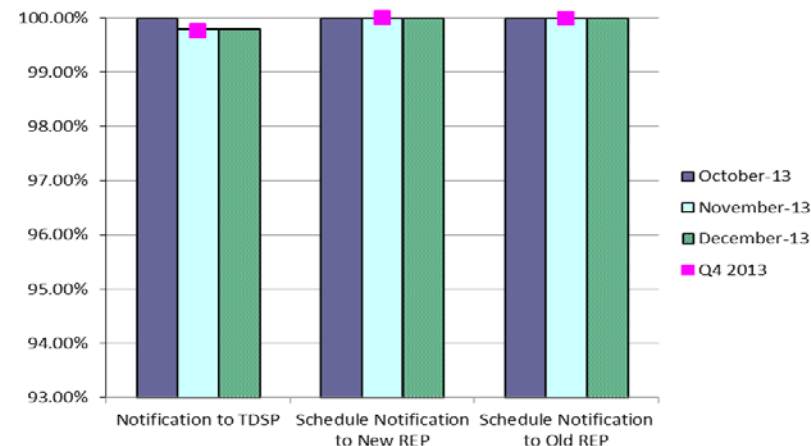
2nd Quarter



3rd Quarter

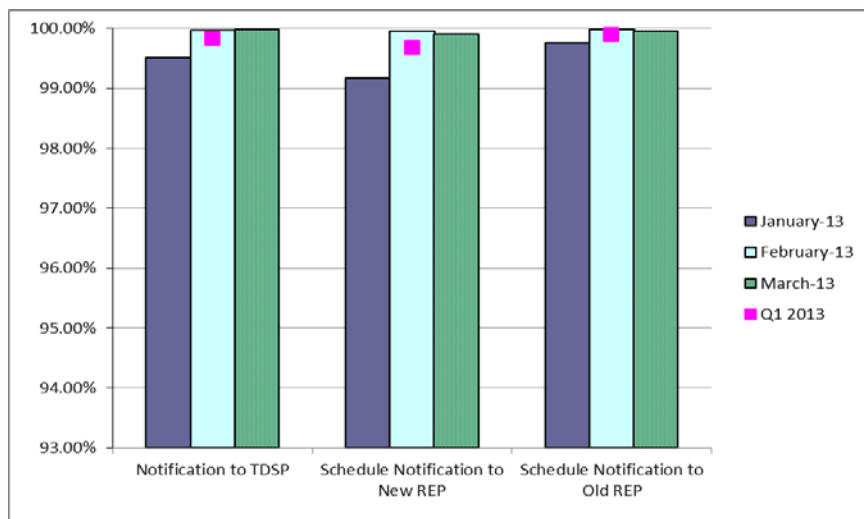


4th Quarter

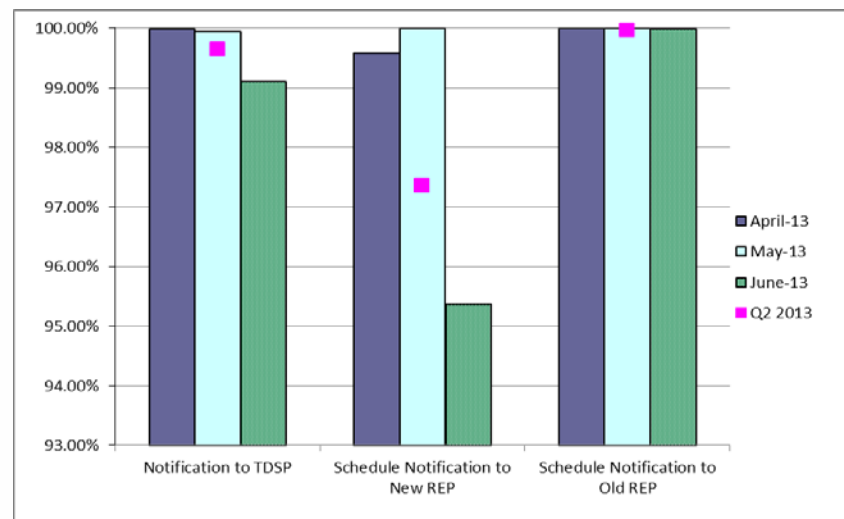


Retail Performance Measures (Same Day Move-In) – December 2013

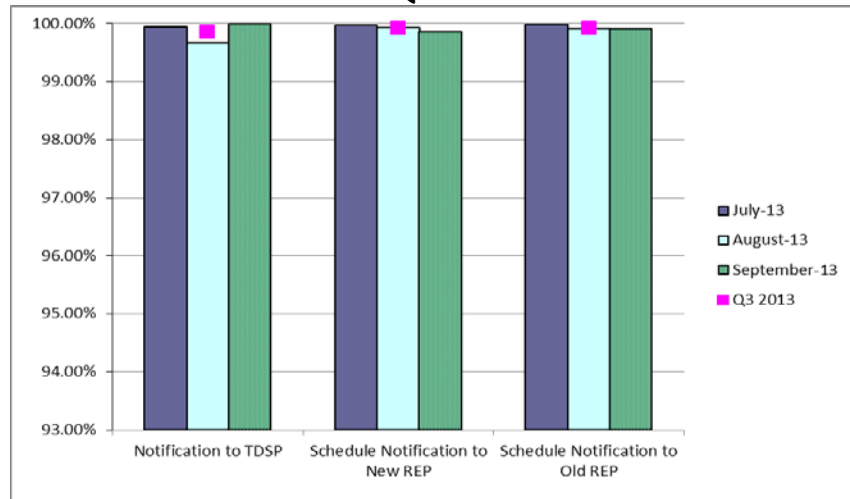
1st Quarter



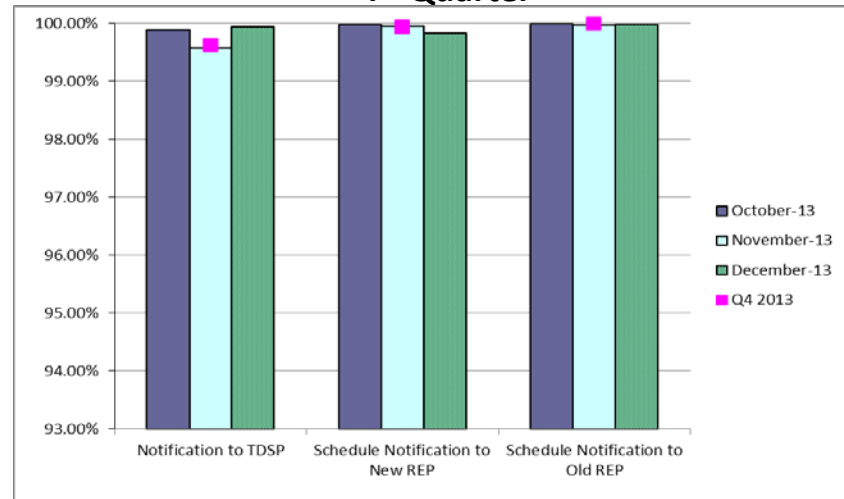
2nd Quarter



3rd Quarter

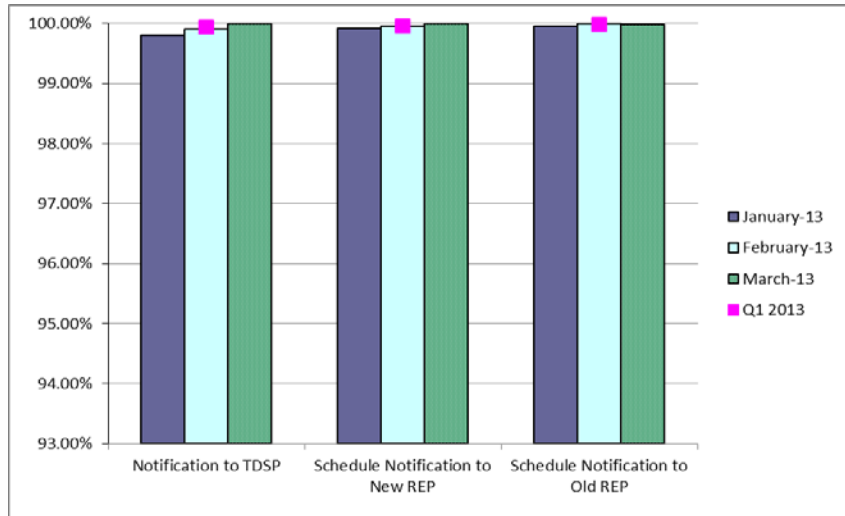


4th Quarter

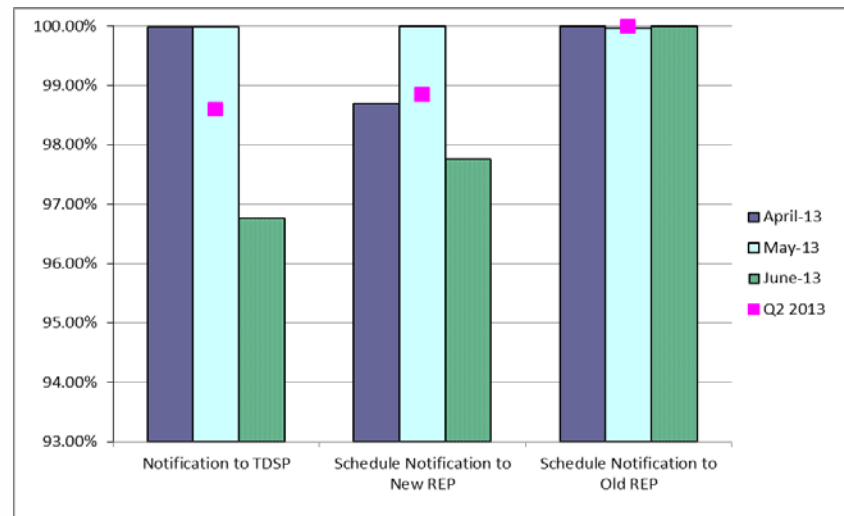


Retail Performance Measures (Standard Move-In) – December 2013

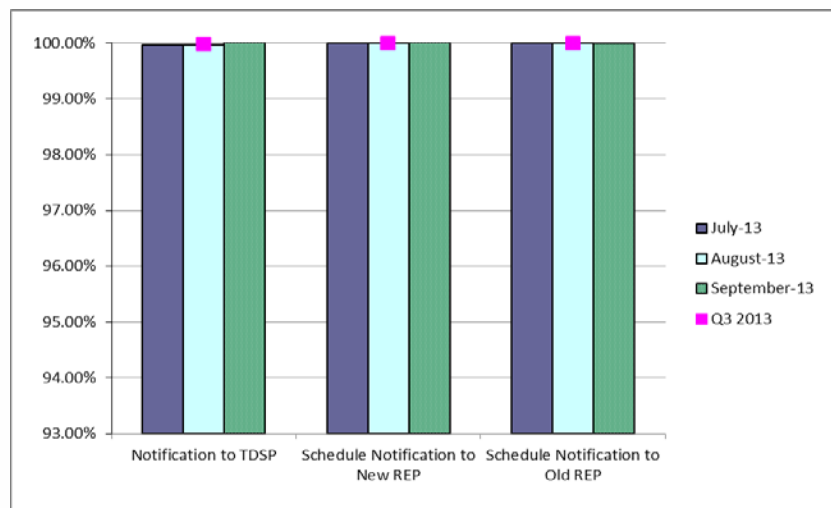
1st Quarter



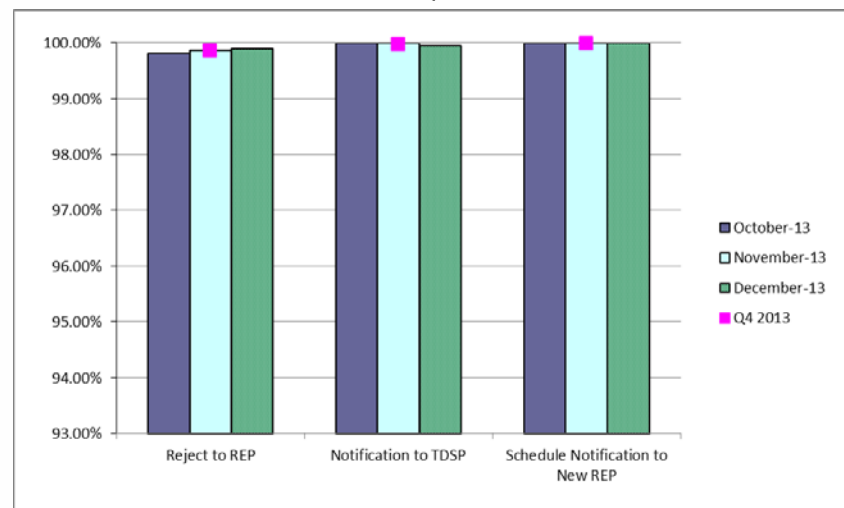
2nd Quarter



3rd Quarter



4th Quarter



Projects Report

ERCOT Portfolio Stoplight Report (as of 1/14/2014)

PROJECTS IN FLIGHT (Count = 52) Sorted by Phase / Project Num

\$ 13,392,437 \$ 12,161,883 9% \$ 41,808,527 \$ 40,342,412 3%

Project Number	Projects in Initiation Phase	Phase	Schedule dates as of 1/6/2013							2013 Variance			Total Variance
120-01	IT Production Hardening	Initiation								19%			0%
121-01	2013/2014 Network Refresh	Initiation								8%			0%
125-01	VSAT/TSAT Upgrade	Initiation								0%			0%
SCR769	CRRRAH Digital Certificate New Role for Read Only Access	Initiation								99%			0%
SCR772	New Extract for Five Minute Interval Settlement Data	Initiation								75%			0%
Project Number	Projects in Planning Phase	Phase	Baseline Phase Start	Baseline Phase Finish	Scheduled Go-Live Date	Scheduled Phase Finish	Schedule Status			2013 Variance			Total Variance
052-01	EMS Upgrade	Planning Ph2	8/7/2013	10/30/2014	TBD	5/30/2014	34%			16%			3%
065-01	NMMS Upgrade	Planning	5/1/2013	3/1/2014	TBD	3/7/2014	-1%			8%			10%
074-02	Cyber Security Project #9	Planning	12/17/2013	3/26/2014	TBD	3/25/2014	1%			0%			40%
089-01	Information Technology Change Management	Planning	4/10/2013	4/2/2014	TBD	4/1/2014	0%		3	-21%			6%
097-01	ABB MMS OS Technology Refresh	Planning	5/29/2013	2/4/2014	TBD	2/4/2014	0%			53%			30%
104-01	Disaster Recovery: S&B, RTL, MDT	Planning	5/15/2013	11/15/2013	TBD	1/21/2014	3 -36%			-1%			-3%
106-01	MP Online Data Entry - Ph 1	Planning	10/9/2013	3/5/2014	TBD	3/24/2014	8 -12%			0%			0%
107-01	IBM AIX Operating System Upgrades	Planning	10/16/2013	11/20/2013	TBD	1/29/2014	8 -200%			10%		3	-33%
110-01	Taylor Control Room Upgrade	Planning	10/9/2013	2/19/2014	TBD	2/19/2014	0%			22%			1%
114-01	Lawson Security	Planning	10/16/2013	1/29/2014	TBD	1/29/2014	0%			13%			6%
115-01	Cyber Security Project #14	Planning	11/13/2013	3/26/2014	TBD	3/26/2014	0%			33%			1%
116-01	Collage Replacement	Planning	10/23/2013	2/5/2014	TBD	2/5/2014	0%			25%			27%
Various	2014 Market System Enhancements	Planning	12/4/2013	12/31/2013	TBD	12/31/2013	0%			65%			15%
118-01	Mitigation Plan RTCA Enhancements	Planning	11/20/2013	2/5/2014	TBD	2/5/2014	0%			49%			35%
119-01	CREZ Voltage Control and Coordination	Planning	11/20/2013	3/5/2014	TBD	3/5/2014	0%		3	-19%			23%
122-01	Infoblox DNS/DHCP	Planning	12/11/2013	2/19/2014	TBD	2/19/2014	0%			12%		3	-8%
123-01	ERCOT Native Load Calculation	Planning	12/17/2013	2/19/2014	TBD	2/12/2014	10%			24%			10%
NPRR240	Proxy Energy Offer Curve	Planning	12/4/2013	12/31/2013	TBD	12/31/2013	0%			0%			0%
NPRR532	Performance Measurement and Verification and Telemetry Requirements for Load Resources Providing Non-Spin	Planning	12/4/2013	12/31/2013	TBD	12/31/2013	0%			0%			0%
NPRR555	Load Resource Participation in Security-Constrained Economic Dispatch	Planning	12/4/2013	12/31/2013	TBD	12/31/2013	0%			0%			0%
NPRR564	Thirty-Minute Emergency Response Service (ERS) and Other ERS Services	Planning	12/4/2013	12/31/2013	TBD	12/31/2013	0%			0%			0%
NPRR568	Real-Time Reserve Price Adder Based on Operating Reserve Demand Curve	Planning	12/4/2013	12/31/2013	TBD	12/31/2013	0%			0%			0%
OBD	Setting the Shadow Price Caps and Power Balance Penalties in Security-Constrained Economic Dispatch	Planning	12/4/2013	12/31/2013	TBD	12/31/2013	0%			0%			0%
SCR756	MarkeTrak Enhancements - Remaining SCR756 Items	Planning	10/16/2013	1/15/2014	TBD	1/15/2014	0%			34%			16%



ERCOT Public

ERCOT Portfolio Stoplight Report (as of 1/14/2014)

Project Number	Projects in Execution Phase	Phase	Baseline Phase Start	Baseline Go-Live Target	Scheduled Go-Live Date	Scheduled Phase Finish	Schedule Status			2013 Variance			Total Variance
016-01	ADP-IDM Interface	Execution	11/6/2013	3/13/2014	3/13/2014	4/23/2014	0%			29%			7%
017-01	Oracle 11g Upgrade	Execution	10/10/2012	4/2/2014	3/31/2014	4/28/2014	0%			3%			1%
047-01	CMSDK/MIR Replacement	Execution	4/24/2013	12/8/2013	3/31/2014	5/21/2014	3 -49%			3 -17%		3 -38%	
057-01	EPS Metering DB Redesign	Execution	4/17/2013	9/6/2013	7/28/2014	8/7/2014	3 -228%			3 -37%		3 -141%	
066-01	Planning Site Transition to MIS	Execution	10/16/2013	5/2/2014	5/2/2014	7/2/2014	0%			10%			13%
077-01	Contract Lifecycle Management	Execution	9/11/2013	5/5/2014	5/5/2014	7/23/2014	0%			0%			1%
083-01	Centralized Application Log Management	Execution	8/28/2013	5/7/2014	5/7/2014	10/3/2014	0%			0%			-1%
088-0x	Capital Efficiencies and Enhancements - 2013	Execution	8/16/2012	12/31/2013	12/31/2013	12/31/2013	0%			-4%			-4%
TBD	Capital Efficiencies and Enhancements - 2014	Execution	1/1/2014	12/31/2014	12/31/2014	12/31/2014	0%			0%			0%
108-01	Alstom Load Forecasting Upgrade	Execution	11/20/2013	2/11/2014	2/11/2014	4/3/2014	0%			4%			-1%
113-01	Dev Hardware Refresh and Virtualization Expansion	Execution	11/13/2013	1/24/2014	1/9/2014	2/28/2014	20%			2 -13%			-3%
10052_01	Settlement System Upgrade	Execution	1/25/2012	10/10/2014	10/10/2014	3/3/2015	0%			3 -7%			-4%
2013 PC	Program Control - 2013	Execution	8/16/2012	12/31/2013	12/31/2013	12/31/2013	0%			4%			4%
99913	Minor Cap - 2013	Execution	1/1/2013	12/31/2013	12/31/2013	12/31/2013	0%			1%			1%
99914	Minor Cap - 2014	Execution	1/1/2014	12/31/2014	12/31/2014	12/31/2014	0%			0%			10%
NPRR425	Creation of a WGR Group for GREDD and Base Point Deviation Evaluation	Execution	8/21/2013	2/28/2014	3/3/2014	3/3/2014	-1%			48%			42%
NPRR484	Revisions to Congestion Revenue Rights Credit Calculations and Payments	Execution	7/17/2013	10/21/2013	10/21/2013	12/31/2013	0%			-1%			0%
NPRR485	Clarification for Fuel Adder Provisions	Execution	10/23/2013	2/28/2014	2/28/2014	3/31/2014	0%			0%			0%
NOGRR105	Generation Resource Frequency Response Test Procedure	Execution	12/4/2013	2/7/2014	2/7/2014	3/26/2014	0%			18%			10%
Project Number	Projects in Stabilization	Phase	Baseline Execution Phase Start	Baseline Go-Live Target	Actual Go-Live Date	Scheduled Execution Phase Finish	Schedule Status			2013 Variance			Total Variance
059-01	Cyber Security Project #7	Execution	5/8/2013	11/15/2013	11/15/2013	1/29/2014	0%			54%			37%
095-01	Mobile Application Enhancement	Execution	5/8/2013	9/5/2013	8/16/2013	10/21/2013	16%			3 -20%		3 -20%	
101-01	Emergency Notification System Hardware Refresh	Execution	11/13/2013	1/24/2014	12/20/2013	1/24/2014	48%			-3%			0%
NPRR476	Market Submitted Energy Offer Curves Disclosures	Execution	8/28/2013	12/11/2013	12/11/2013	1/8/2014	0%			6%			7%
Project Number	Projects On Hold	Phase	Forecast Start Date	Baseline Phase Finish	Scheduled Go-Live Date	Scheduled Phase Finish	Schedule Status	Sum of 2013 Budgets	2013 Actual Spend	2013 Variance	Sum of Total Budgets	Total Forecast Spend	Total Variance
PROJECTS ON HOLD (Count = 1) Sorted by Project Number								\$ 75,258	\$ 502		\$ 155,843	\$ 155,823	
NPRR327	State Estimator Data Redaction Methodology	On Hold	12/5/2012	2/12/2013	TBD	TBD	4	\$75,258	\$502	99%	\$155,843	\$155,823	0%



ERCOT Portfolio Stoplight Report (as of 1/14/2014)

Project Number	Projects Not Yet Started	Phase	Forecast Start Date					Sum of 2013 Budgets	2013 Actual Spend	2013 Variance	Sum of Total Budgets	Total Forecast Spend	Total Variance
PROJECTS NOT YET STARTED (Count = 51)				Sorted by Start Date				\$ -	\$ -		\$ 20,870,850	\$ 20,790,169	
NPRR439	Updating a Counter-Party's Available Credit Limit for Current Day DAM	Not Started	Jan 2014										
TBD	SQL Server 2012 Upgrade / Cluster Consolidation	Not Started	Jan 2014										
RRs	Revision Request Funding - 2014	Not Started	Jan 2014										
2014 PC	Program Control - 2014	Not Started	Jan 2014										
TBD	Common Infrastructure	Not Started	Jan 2014										
TBD	Replace Sun IDM	Not Started	Jan 2014										
NPRR491	Updated Distribution Generation and Demand Response Information for ERCOT	Not Started	Feb 2014										
TBD	Voice Over IP (VOIP) Replacement for PBX	Not Started	Feb 2014										
TBD	Cyber Security Project #10	Not Started	Feb 2014										
TBD	MP Communications Tool	Not Started	Feb 2014										
TBD	Production Virtualization Expansion	Not Started	Feb 2014										
TBD	EIF Database Utilization	Not Started	Feb 2014										
TBD	Move iTron LF Application to High Availability Environment	Not Started	Mar 2014										
TBD	On-Site Storage	Not Started	Mar 2014										
TBD	AV Upgrades to TCC1 Conference Rooms	Not Started	Mar 2014										
NPRR495	Changes to Ancillary Services Capacity Monitor	Not Started	Apr 2014										
NPRR500	Posting of Generation that is Off but Available	Not Started	Apr 2014										
TBD	EIS Reporting and Control Systems Upgrade	Not Started	Apr 2014										
TBD	Replace N2N System	Not Started	Apr 2014										
NPRR487	QSGR Dispatch Adjustment	Not Started	May 2014										
NPRR543	Message for Confirmed E-Tags	Not Started	May 2014										
NPRR553	Monthly BLT Payment and Charge for Presidio Exception	Not Started	May 2014										
NPRR559	Revisions to MCE Calculation	Not Started	May 2014										
TBD	Cyber Security Project #11	Not Started	May 2014										
TBD	Upgrade TCC1 Safety Equipment	Not Started	May 2014										
TBD	Symposium Call Center Replacement	Not Started	May 2014										
TBD	Email Redundancy	Not Started	Jun 2014										
TBD	Blackstart Facilities Enhancements	Not Started	Jun 2014										
NPRR272	Definition and Participation of Quick Start Generation Resources	Not Started	Jul 2014										
NPRR519	Exemption of ERS-Only QSEs from Collateral and Capitalization Requirements	Not Started	Jul 2014										
NPRR524	Resource Limits in Providing Ancillary Service	Not Started	Jul 2014										
SCR771	ERCOT System Change Allowing Independent Master QSE to Represent Split Generation Resources	Not Started	Jul 2014										
TBD	External TCC Enhancements	Not Started	Jul 2014										
TBD	OSI PI Ace	Not Started	Jul 2014										
TBD	Red Hat Jboss Operations Network	Not Started	Jul 2014										
TBD	Enterprise Vault Upgrade	Not Started	Jul 2014										
TBD	SOTE/MOTE Upgrade	Not Started	Jul 2014										
NPRR256	Sync with PRR787, Add Non-Compliance Language to QSE Performance Standards	Not Started	Aug 2014										
NOGRR084	Daily Grid Operations Summary Report	Not Started	Sep 2014										
TBD	EDW Platform Transition Phase 2	Not Started	Sep 2014										
TBD	REC Rewrite & Refresh	Not Started	Sep 2014										
TBD	VSAT/TSAT Upgrade Phase 2	Not Started	Sep 2014										



ERCOT Portfolio Stoplight Report (as of 1/14/2014)

Project Number	Projects Not Yet Started	Phase	Forecast Start Date						Sum of 2013 Budgets	2013 Actual Spend	2013 Variance	Sum of Total Budgets	Total Forecast Spend	Total Variance
NPRR210	Wind Forecasting Change to P50, Sync with PRR841	Not Started	Oct 2014											
TBD	MP Online Data Entry - Ph 2	Not Started	Oct 2014											
TBD	Appworx Replaces TIBCO Code in CSI Framework	Not Started	Oct 2014											
TBD	Replace Paperfree	Not Started	Oct 2014											
TBD	Replace Actional Policy Manager	Not Started	Oct 2014											
NPRR455	CRR Shift Factors Report	Not Started	Nov 2014											
NPRR419	Revise Real Time Energy Imbalance and RMR Adjustment Charge	Not Started	Jan 2015											
NPRR467	Balancing Account Resettlement Due to DAM Resettlement	Not Started	Jan 2015											
NPRR493	Half-Hour RUC Clawback	Not Started	Jan 2015											
Project Number	Projects Completed in the Current Year	Phase	Baseline Execution Phase Start	Baseline Go-Live Target	Actual Go-Live Date	Actual Execution Phase Finish	Schedule Status		Sum of 2013 Budgets	2013 Actual Spend	2013 Variance	Sum of Total Budgets	Total Actual Spend	Total Variance
PROJECTS COMPLETED IN 2013 (Count = 53) Sorted by Project									\$ 5,665,918	\$ 4,226,218	25%	\$ 12,775,405	\$ 10,807,011	15%
NPRR416	Removal of the RUC Clawback Charge for Resources Other than RMR Units	Closing	4/10/2013	9/27/2013	9/26/2013	10/24/2013	0%				21%			21%
038-01	Macomber Map NERC SA/Compliance Enhancements	Closing	9/19/2012	12/7/2012	12/4/2013	12/17/2014	1 -458%				1 -31%		1 -10%	
072-01	OSI PI Upgrades - EMS Production	Closing	4/17/2013	10/1/2013	10/2/2013	11/1/2013	0%				27%			27%
098-01	EPG Synchrophasor Upgrade	Closing	5/8/2013	9/16/2013	9/16/2013	10/2/2013	0%				0%			0%
109-01	OTS Forum Hotline	Closing	10/2/2013	11/4/2013	11/4/2013	12/5/2013	0%				0%			0%
111-01	Quality Center Upgrade	Closing	10/30/2013	11/21/2013	11/20/2013	12/11/2013	4%				10%			10%
NPRR207	Unit Deselection	Complete	5/22/2013	9/26/2013	9/26/2013	10/16/2013	0%				16%			16%
NPRR260	Providing Access to MIS Secure Area to MIS Registered Users	Complete	10/3/2012	2/15/2013	2/15/2013	3/13/2013	0%				3 -62%			19%
NPRR313	Updating the Term Resource Plan to Current Operating Plan / Availability Plan	Complete	8/22/2012	2/15/2013	2/15/2013	3/27/2013	0%				42%			30%
NPRR322	Real-Time PTP Option Modeling	Complete	8/1/2012	2/15/2013	2/15/2013	3/27/2013	0%				27%			1%
NPRR347 NPRR400	Implementation of NPRR347 and NPRR400	Complete	3/29/2012	2/15/2013	2/15/2013	3/27/2013	0%				55%		3 -13%	
NPRR377	Alternate Inputs to Base Point Deviation Charge	Complete	9/26/2012	2/15/2013	2/15/2013	3/13/2013	0%				74%			28%
NPRR385	Negative Price Floor	Complete	5/22/2013	9/26/2013	9/26/2013	10/25/2013	0%				40%			40%
NPRR393	SCED Constraint Management Transparency	Complete	3/13/2013	8/8/2013	8/8/2013	10/11/2013	0%				3 -9%		3 -8%	
NPRR397	Balance of the Day Ancillary Service Market	Complete	9/19/2012	2/15/2013	2/15/2013	3/27/2013	0%				41%			35%
NPRR407	Credit Monitoring Posting Requirements - MMS/CDR Portion	Complete	9/19/2012	2/15/2013	2/15/2013	3/27/2013	0%				42%			20%
NPRR407	Credit Monitoring Posting Requirements - CRR Portion	Complete	10/23/2013	12/13/2013	12/13/2013	12/31/2013	0%				0%			0%
NPRR456	Clarification of Definition of Electrically Similar Settlement Points and Heuristic Pricing Posting	Complete	2/14/2013	4/25/2013	4/25/2013	6/19/2013	0%				20%			21%
NPRR457	Daily Update of New ESI IDs and AMS Meter and Switch Hold Indicators Changes	Complete	4/10/2013	9/29/2013	9/26/2013	10/16/2013	1%				57%			57%
NPRR461	Energy Storage Settlements Consistent with PUCT Project 39917	Complete	3/13/2013	7/30/2013	7/30/2013	8/20/2013	0%				0%			1%
NPRR463	CRR Auction Structure Enhancements	Complete	12/20/2012	4/5/2013	4/1/2013	6/5/2013	3%				43%			35%
NPRR469	Modifications to CCTs	Complete	9/19/2012	2/15/2013	2/15/2013	3/27/2013	0%				49%			21%



ERCOT Portfolio Stoplight Report (as of 1/14/2014)

Project Number	Projects Completed in the Current Year	Phase	Baseline Execution Phase Start	Baseline Go-Live Target	Actual Go-Live Date	Actual Execution Phase Finish	Schedule Status	Sum of 2013 Budgets	2013 Actual Spend	2013 Variance	Sum of Total Budgets	Total Actual Spend	Total Variance
NPRR479	Daily Net Outage MW	Complete	4/10/2013	9/29/2013	9/30/2013	10/24/2013	0%			23%			23%
NPRR481	Report of Hourly Actual System Load by Weather Zone	Complete	4/10/2013	6/13/2013	6/13/2013	7/10/2013	0%			58%			58%
NPRR492	Addition of System Lambda Information	Complete	7/24/2013	12/13/2013	12/13/2013	12/20/2013	0%			0%			0%
NPRR514	Seasonal Generation Resource	Complete	6/5/2013	9/29/2013	9/29/2013	10/29/2013	0%			2%			2%
NPRR520	Real-Time Mitigation Rules and Creation of a Real-Time Constraint Competitiveness Test	Complete	5/1/2013	8/1/2013	8/1/2013	8/22/2013	0%			4%			4%
NOGRR093	Synchronization with NPRR365	Complete	3/27/2013	6/14/2013	6/14/2013	7/10/2013	0%			64%			64%
NOGRR101	Market Notice for DC-TIE Outage Information	Complete	7/24/2013	9/27/2013	9/27/2013	10/30/2013	0%			0%			0%
SCR760	Recommended Changes Needed for Information Model Mgr and Topology Processor for Planning Models	Complete	8/25/2011	7/31/2013	7/31/2013	8/7/2013	0%			42%			21%
SCR768	Automatic Non-Spin Redeployment and Deployment Based on Resource Availability	Complete	9/19/2012	2/15/2013	2/15/2013	3/27/2013	0%			49%			2%
SCR770	Revision to Outage Scheduling Entry for Resource Maintenance Outage Level Designation	Complete	3/14/2013	9/27/2013	9/24/2013	11/16/2013	1%			61%			62%
SCR773	Addition of Regulation Feedback to Generation to be Dispatched Calculation	Complete	5/3/2013	5/23/2013	5/23/2013	6/26/2013	0%			8%			8%
90006_02	Information Lifecycle Mgmt – Mkt Systems, Archive, Reporting	Complete	4/22/2011	6/26/2014	5/13/2013	5/15/2013	35%			5%			37%
006-01	Cyber Security Project #1	Complete	5/31/2012	12/19/2012	1/3/2013	1/3/2013	1			-7%			0%
009-01	Compliance Software Tool	Complete	12/1/2011	11/30/2012	12/19/2012	12/19/2012	1			-5%			20%
010-02	MarketTrak Upgrade	Complete	12/12/2012	6/22/2013	6/22/2013	8/28/2013	0%			4%			4%
019-01	ERCOT Website Enhancements - 2012	Complete	3/8/2012	12/26/2012	5/1/2013	4/24/2013	3			-43%			-40%
020-01	CIM Upgrade for NMMS	Complete	6/14/2012	2/15/2013	2/15/2013	3/13/2013	0%			12%			22%
021-01	Incremental Update Capability - Phase 1	Complete	3/23/2012	2/6/2013	2/13/2013	2/13/2013	-2%			0%			63%
030-01	ITRON Load Forecast	Complete	6/27/2012	2/15/2013	2/15/2013	3/20/2013	0%			5%			-2%
042-01	CRR Upgrade to v12.3	Complete	5/16/2012	4/1/2013	4/1/2013	8/21/2013	0%			69%			37%
043-01	Met Center Lease Reconfiguration	Complete	9/12/2012	12/19/2012	12/19/2012	12/19/2012	0%			87%			10%
046-01	MAI Conversion to IGRID	Complete	8/2/2012	2/15/2013	2/15/2013	3/20/2013	0%			3			0%
048-01	TSAT Wind Model	Complete	8/16/2012	4/25/2013	4/25/2013	6/5/2013	0%			3			7%
055-01	Siebel Upgrade 8.x	Complete	3/13/2013	7/28/2013	9/29/2013	10/30/2013	3			-45%			-22%
067-01	Physical Security Project #1	Complete	2/13/2013	7/26/2013	7/26/2013	7/17/2013	0%			70%			68%
074-01	Cyber Security Project #6	Complete	3/13/2013	10/2/2013	9/25/2013	9/25/2013	3%			4%			6%
075-01	Operator Data Display	Complete	4/10/2013	12/8/2013	12/8/2013	12/12/2013	0%			36%			40%
081-01	Additional Resource Data for Outage Scheduler	Complete	5/29/2013	9/26/2013	9/24/2013	11/6/2013	1%			41%			41%
096-01	Backup Software Strategy and Proposed License Cost Reduction	Complete	5/22/2013	7/12/2013	7/12/2013	8/14/2013	0%			12%			12%
099-01	Moody's Analytics	Complete	5/15/2013	10/14/2013	9/14/2013	10/24/2013	19%			37%			37%
103-01	NAS Data Storage / File Synchronization - EMMS System and Applications	Complete	5/8/2013	9/6/2013	9/9/2013	9/10/2013	-2%			39%			39%
NPRR153	Generation Resource Fixed Quantity Block Offer	Canceled	4/10/2013	5/24/2013	n/a	n/a				85%			85%
070-01	Linux Configuration Management Tool	Canceled	1/24/2013	6/26/2013	n/a	n/a				87%			87%
071-01	Windows Server Systems Management	Canceled	1/23/2013	6/26/2013	n/a	n/a				94%			93%

SUMMARY

		Sum of 2013 Budgets	2013 Forecast Spend	Sum of Total Budgets	Total Forecast Spend
4%	KPI Budget Measure - Execution/Completed Projects	\$ 13,392,437	\$ 12,161,883	\$ 41,808,527	\$ 40,342,412
		\$ -	TBD	\$ 20,870,850	TBD
6%	KPI Schedule Measure - Execution/Completed Project	\$ 5,665,918	\$ 4,226,218	\$ 12,775,405	\$ 10,807,011
		\$ 19,058,355	\$ 16,388,101	\$ 75,454,782	\$ 51,149,423
	Project Funding	\$ 16,000,000			

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 2014 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 Loss of resource and transition to replacement resulted in phase delay
- 8 Resource constraints resulted in delay to current phase

