



ERCOT Monthly Operational Overview (**December 2015**)

ERCOT Public
January 15, 2016

Grid Planning & Operations

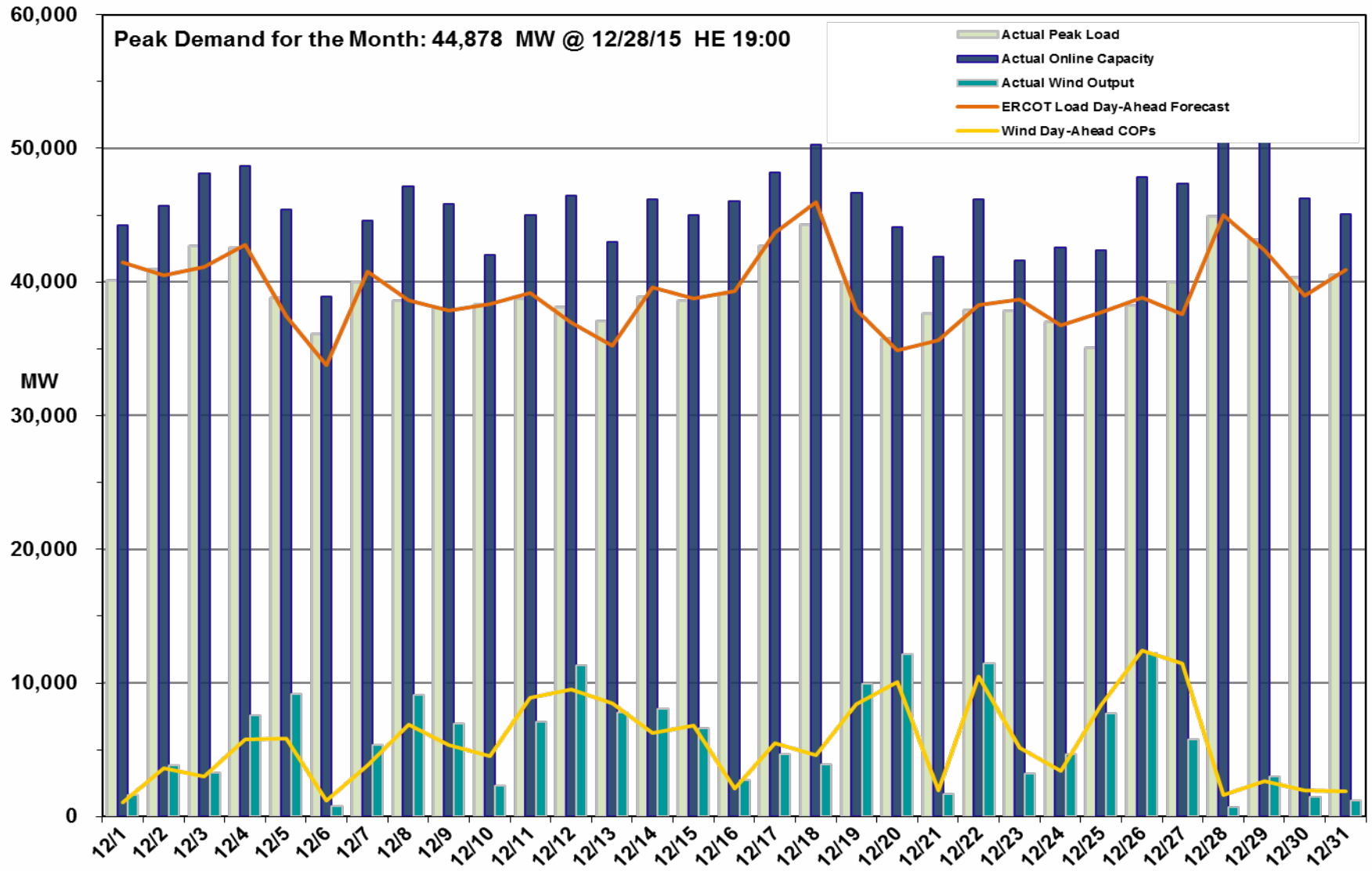
Operations

- The peak demand of 44,878 MW on December 28th was less than the day-ahead mid-term forecast peak of 45,002 MW of the same operating period. In addition, it was less than the December 2014 actual peak demand of 48,201 MW. The instantaneous peak load on December 28th was 45,021 MW.
- Day-ahead load forecast error for December was 2.39%
- ERCOT issued two notifications
 - One OCN due to ERCOT developing a new Generic Transmission Constraints near the Laredo area for the Molina voltage stability constraint.
 - One advisory due to ERCOT's Voltage Security Assessment Tool being unavailable.

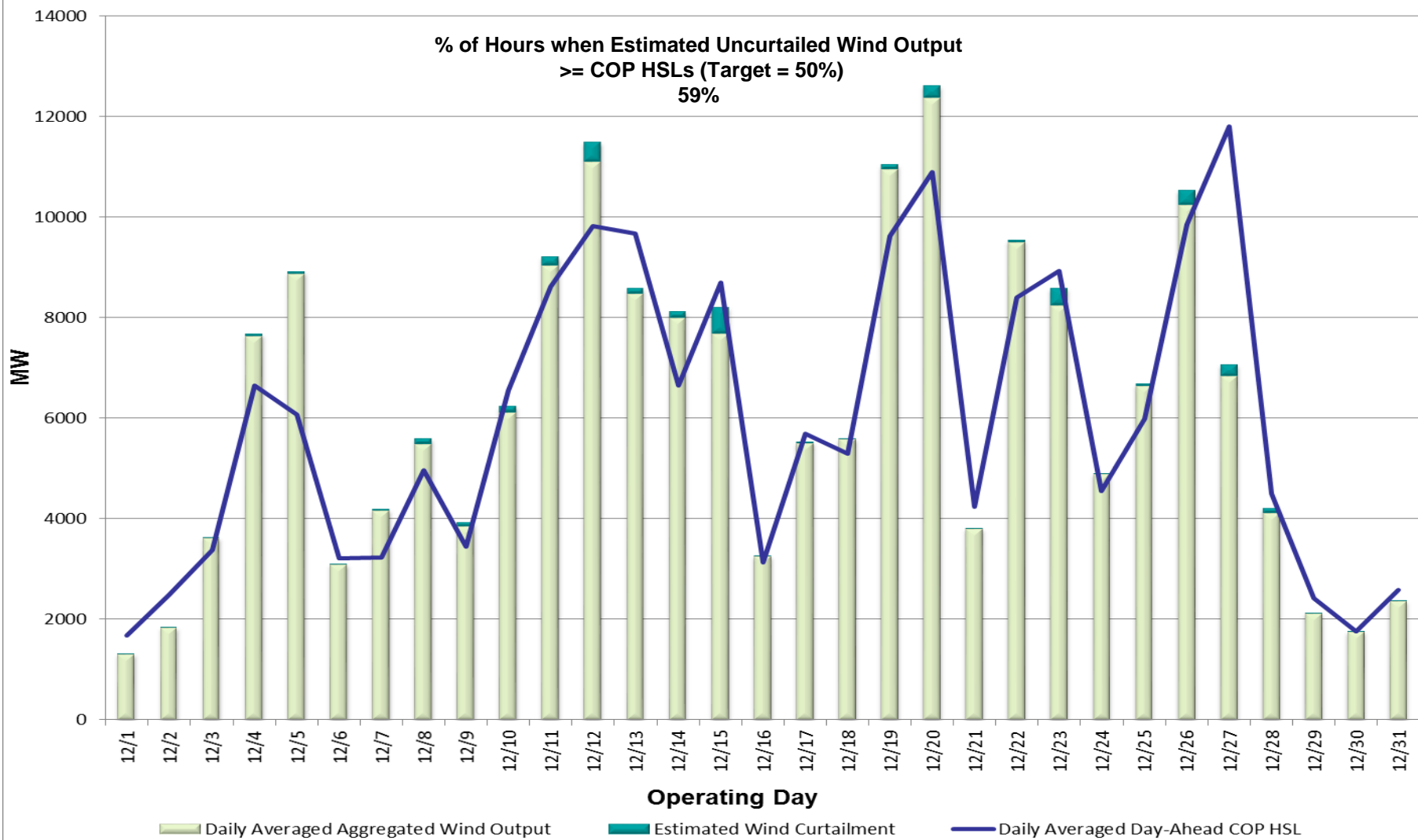
Planning Activities

- 255 active generation interconnection requests totaling 61,144 MW, including 24,095 MW of wind generation, as of December 31, 2015. Seven fewer requests and a decrease of 1,366 MW from November 30, 2015.
- 15,764 MW wind capacity in commercial operations on December 31, 2015.

Daily Peak Demand: Hourly Average Actual vs. Forecast, Wind Day-Ahead COPs & On-line Capacity at Peak – December 2015



Actual Wind Output plus Curtailments vs. Wind Day-Ahead COPs for All Hours – December 2015



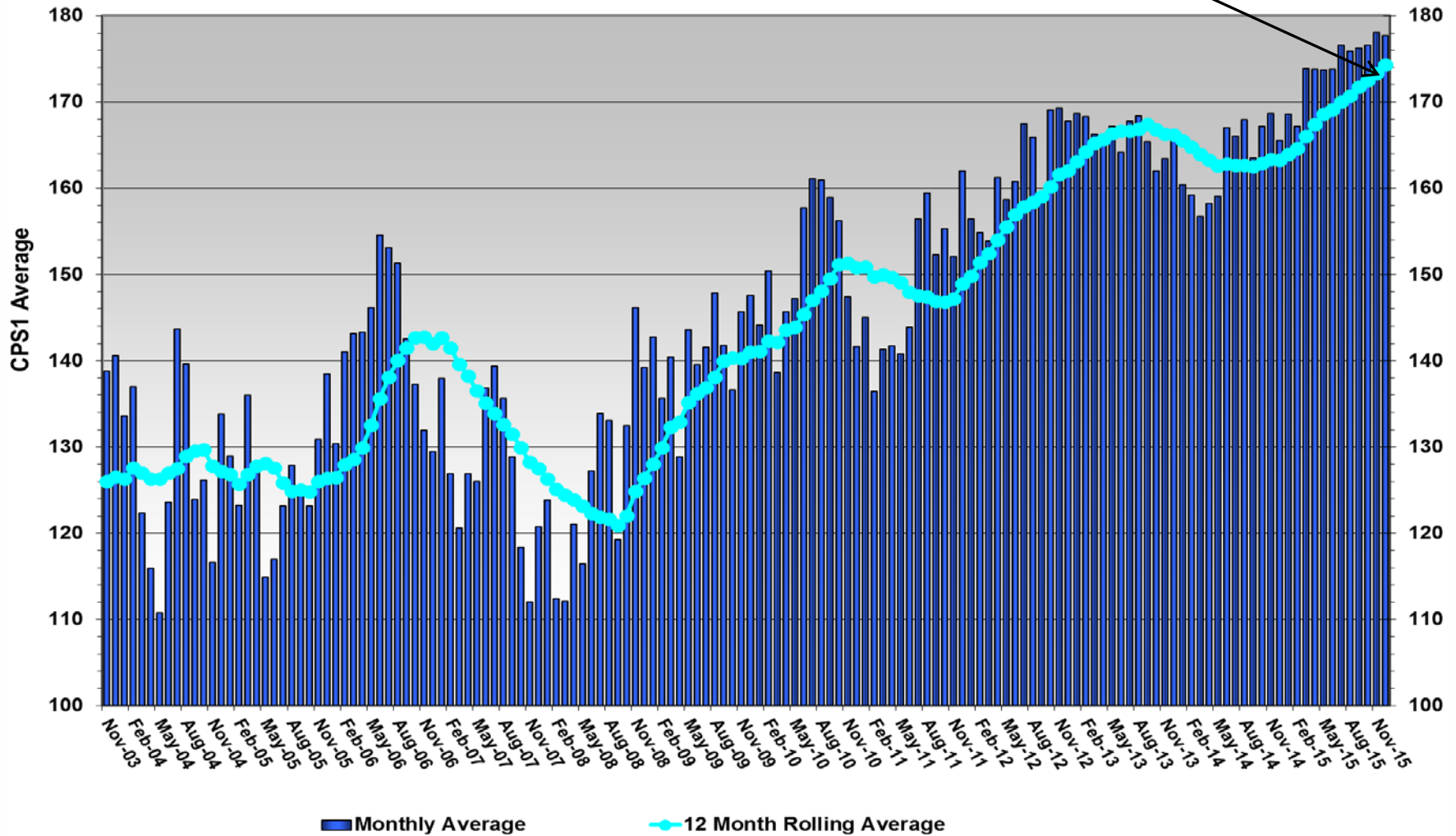
Note: QSEs must use the AWST 50% probability of exceedance forecast as the HSL in their COPs



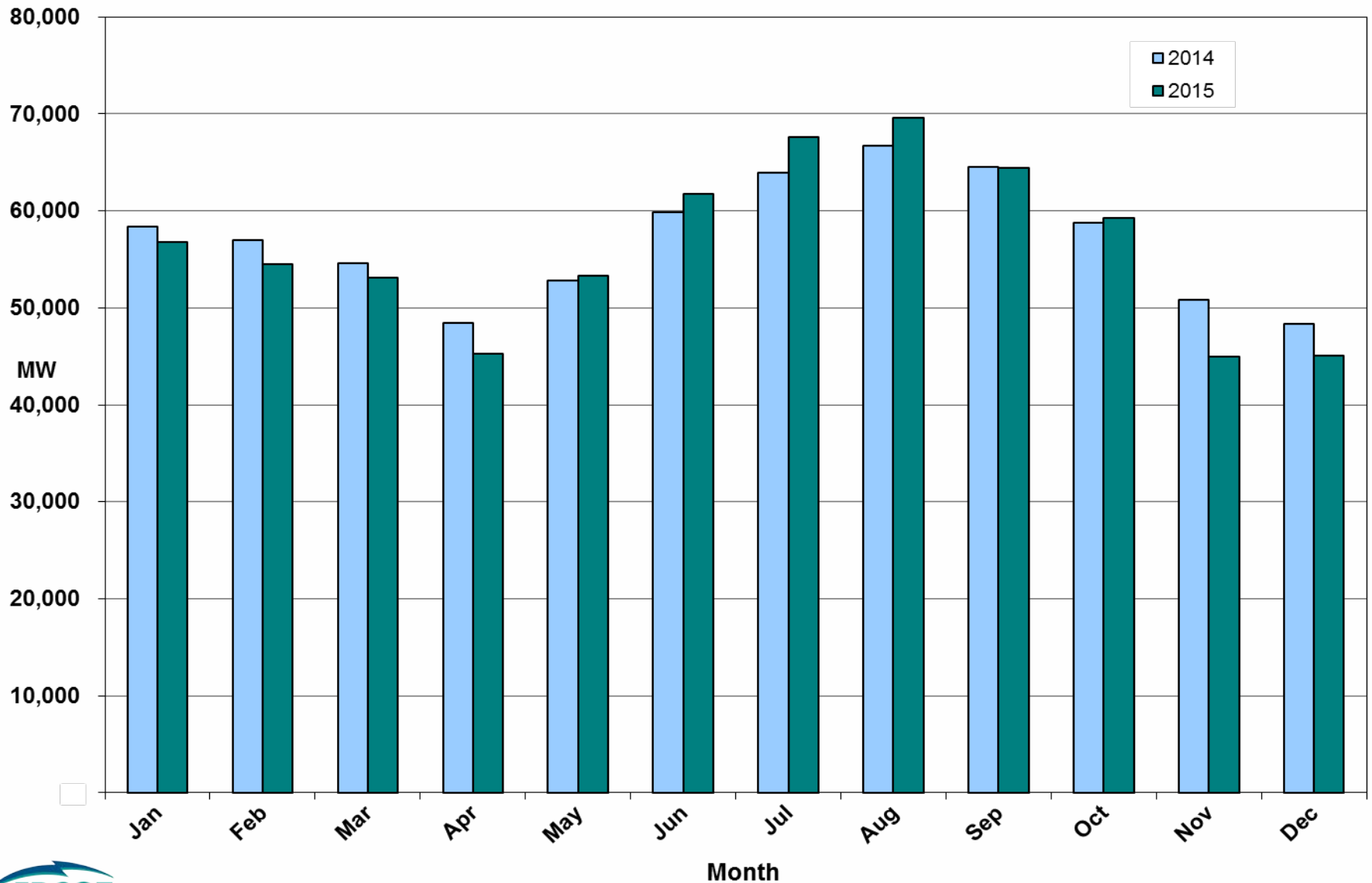
ERCOT's CPS1 Monthly Performance – December 2015

ERCOT CPS1

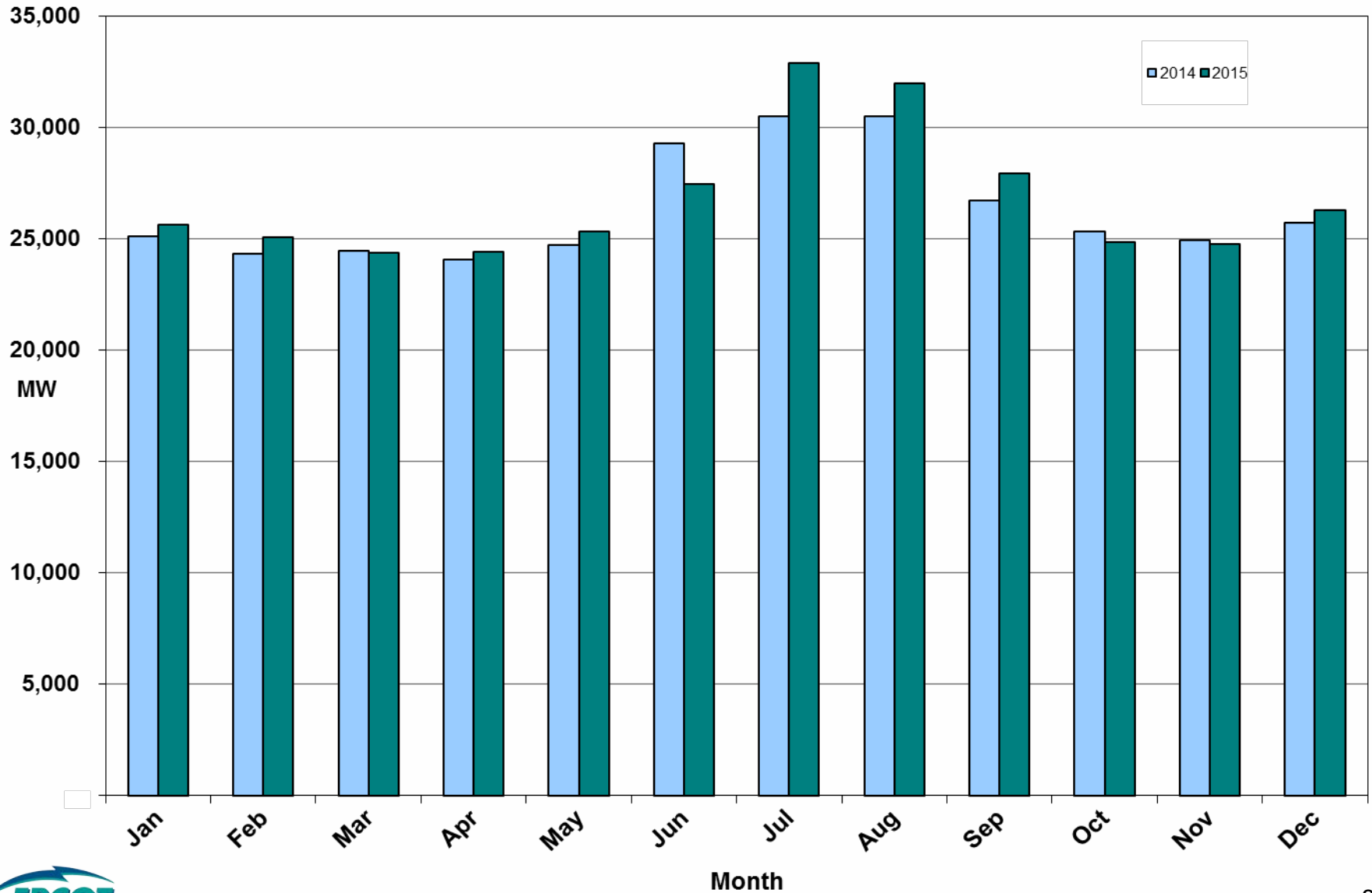
CPS1 12 Month Rolling Average = 174.34%



Monthly Peak Actual Demand – December 2015



Monthly Minimum Actual Demand – December 2015



Day-Ahead Load Forecast Performance – December 2015

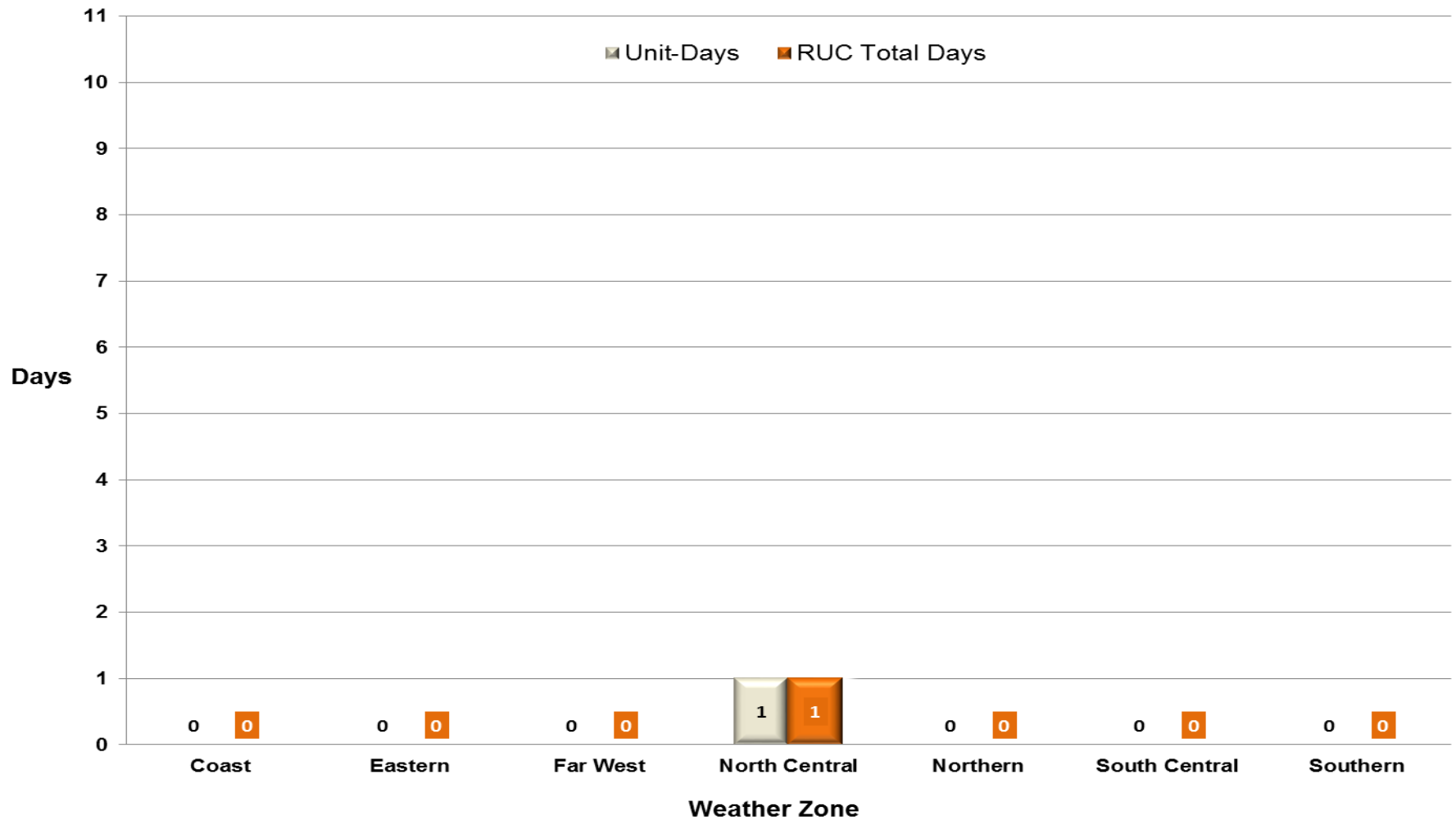
Mean Absolute Percent Error (MAPE) for ERCOT Mid-Term Load Forecast (MTLF)
Run at 14:00 Day Ahead

	2012 MAPE	2013 MAPE	2014 MAPE	2015 MAPE	December 2015 MAPE	
Average Annual MAPE	3.02	2.86	2.83	2.86	2.39	
Lowest Monthly MAPE	2.51	2.07	2.15	1.89	Lowest Daily MAPE	0.8 Dec – 8
Highest Monthly MAPE	3.49	3.50	3.70	3.81	Highest Daily MAPE	4.33 Dec – 27

Reliability Unit Commitment (RUC) Capacity by Weather Zone

December 2015

RUC Commitments by Weather Zone



Generic Transmission Constraints (GTCs) – December 2015

GTCs	Dec-14 Days GTCs	Oct-15 Days GTCs	Nov-15 Days GTCs	Dec-15 Days GTCs	Last 12 Months Total Days (Jan 15 – Dec 15)
North – Houston	0	0	0	0	3
Valley Import	0	3	0	0	5
Zorillo - Ajo	-	9	9	11	105
Panhandle	-	0	3	5	8
Laredo	-	1	1	0	4
Liston	-	-	0	9	9
Molina	-	-	-	19	19

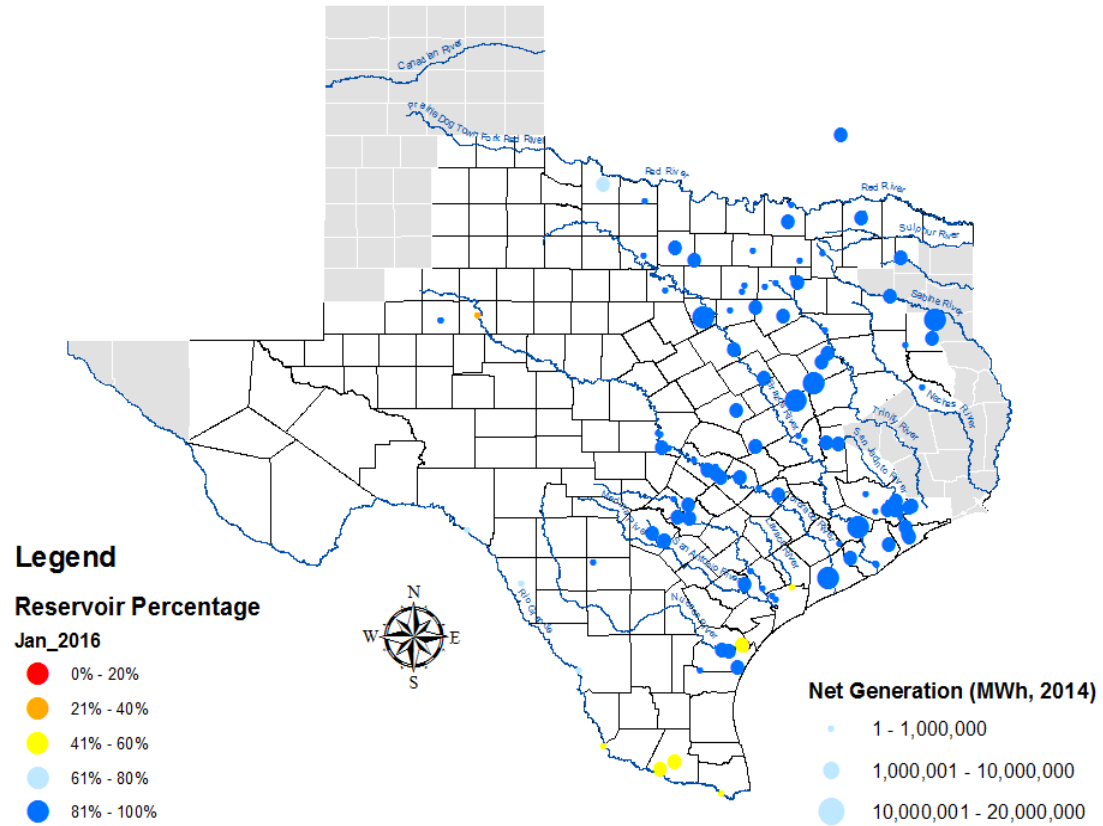
GTC: A transmission flow limit more constraining than a Transmission Element’s normal limit established to constrain flow between geographic areas of the ERCOT Transmission System that is used to enforce stability and voltage constraints that cannot be modeled directly in ERCOT’s transmission security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

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

Advisories and Watches – December 2015

- One OCN due to ERCOT developing a new Generic Transmission Constraint near the Laredo area for the Molina voltage stability constraint
 - Issued on 12/1/15
- One advisory due to ERCOT's Voltage Security Assessment Tool being unavailable.
 - Issued on 12/10/15

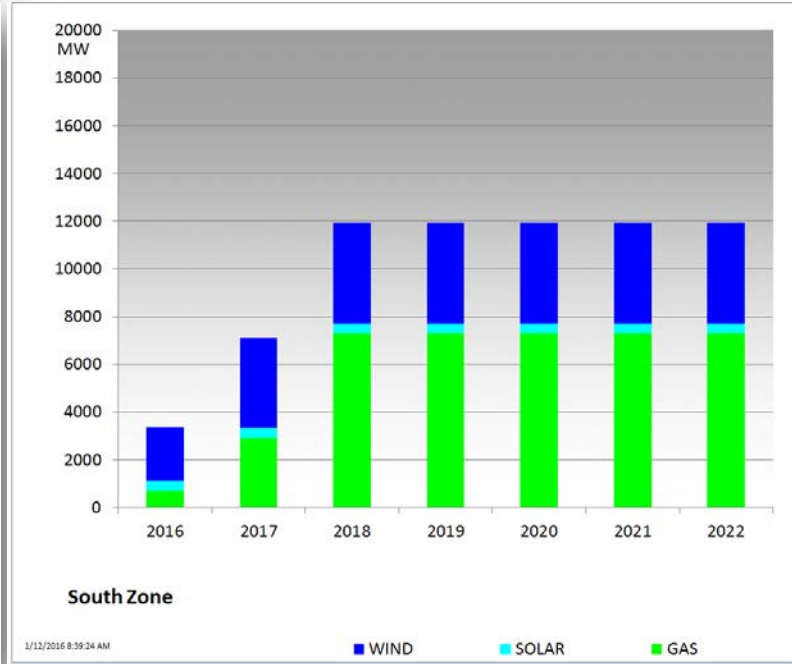
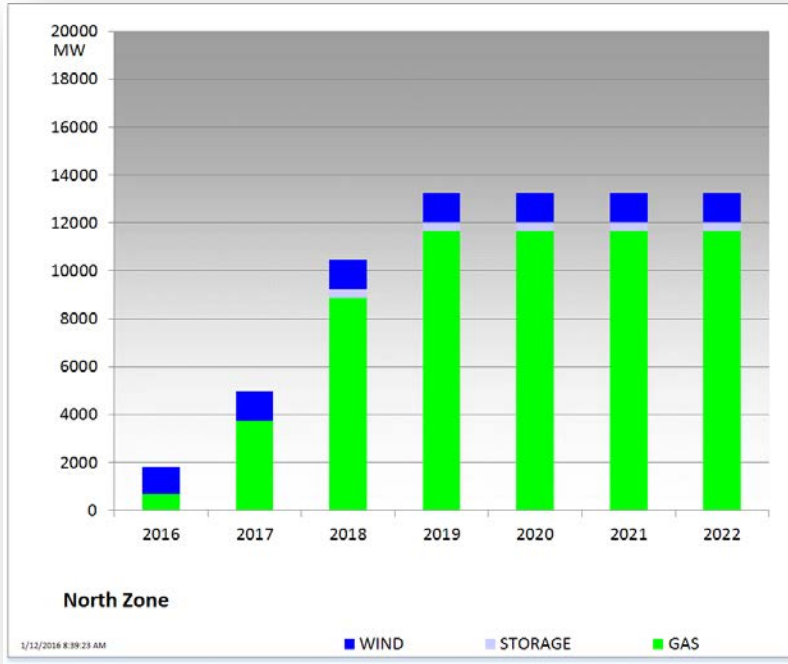
Lake Levels Update – January 1, 2015



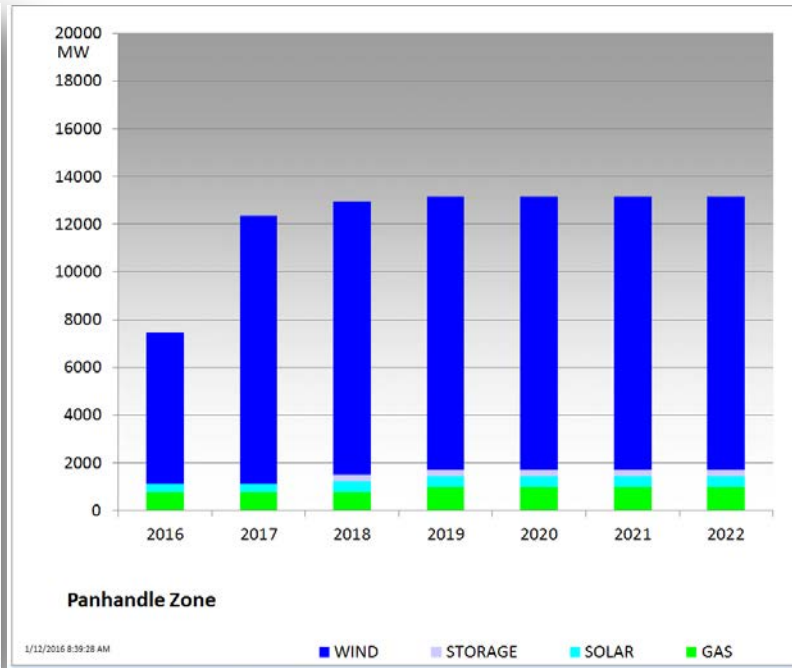
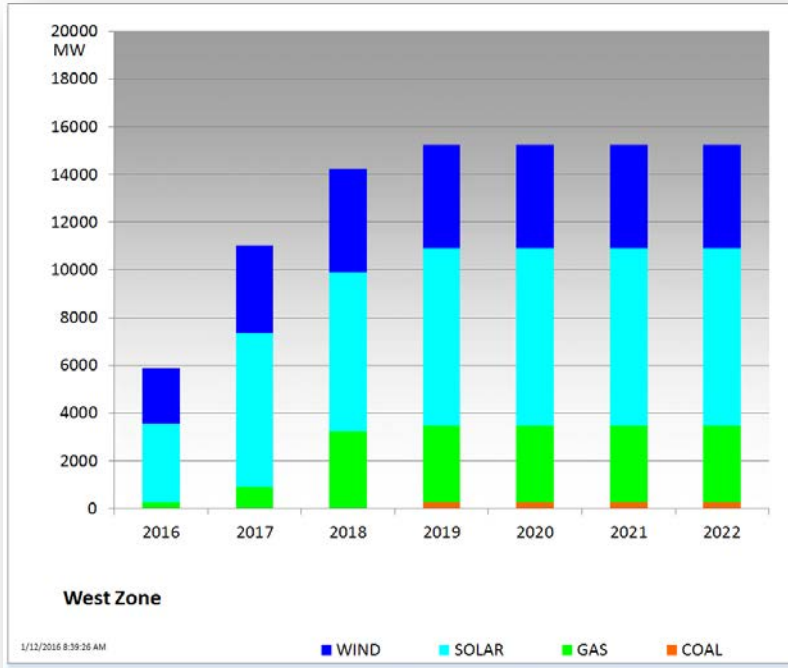
Planning Summary – December 2015

- ERCOT is currently tracking 255 active generation interconnection requests totaling 61,144 MW. This includes 24,095 MW of wind generation.
- ERCOT is currently reviewing proposed transmission improvements with a total cost of more than \$1.0 Billion.
- Transmission Projects endorsed in 2015 total \$477.6 Million.
- All projects (in engineering, routing, licensing, and construction) total approximately \$6.74 Billion.
- Transmission Projects energized in 2015 total about \$652.9 Million.

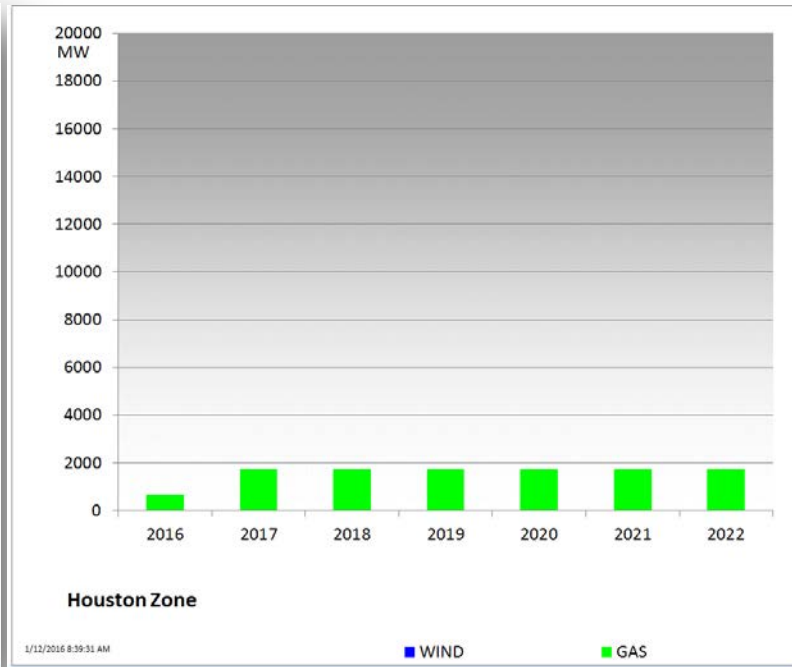
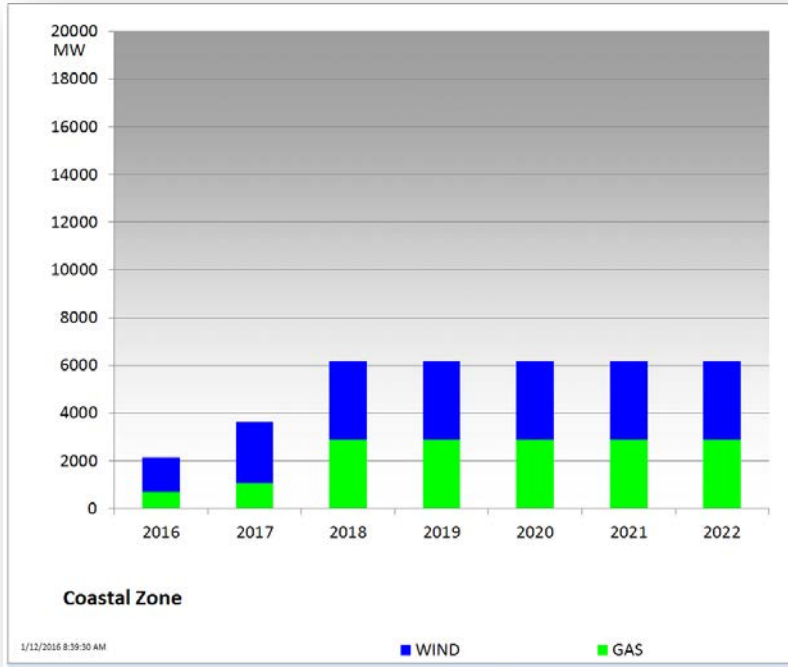
Cumulative MW Capacity of Interconnection Requests by Zone – December 2015



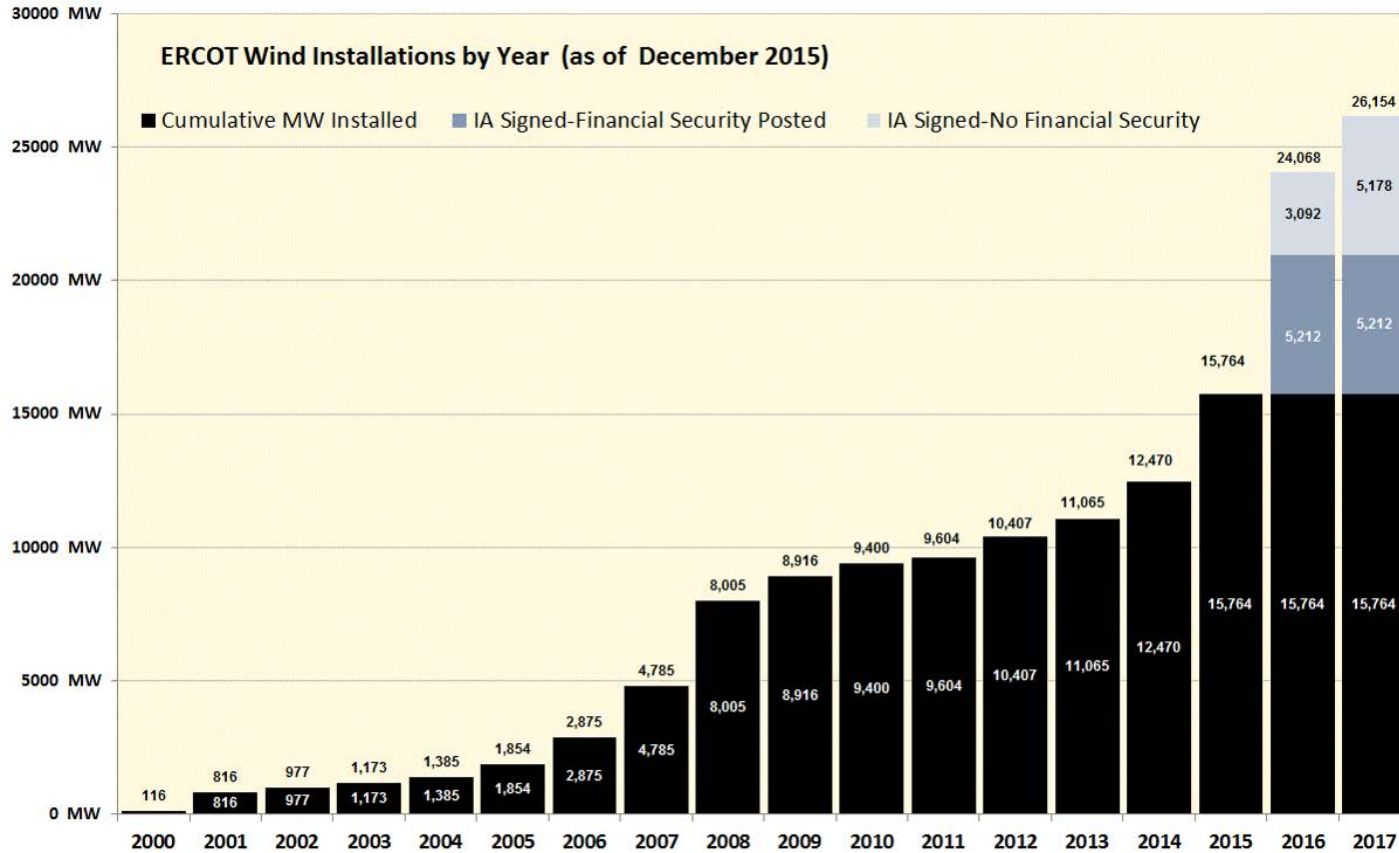
Cumulative MW Capacity of Interconnection Requests by Zone – December 2015



Cumulative MW Capacity of Interconnection Requests by Zone – December 2015



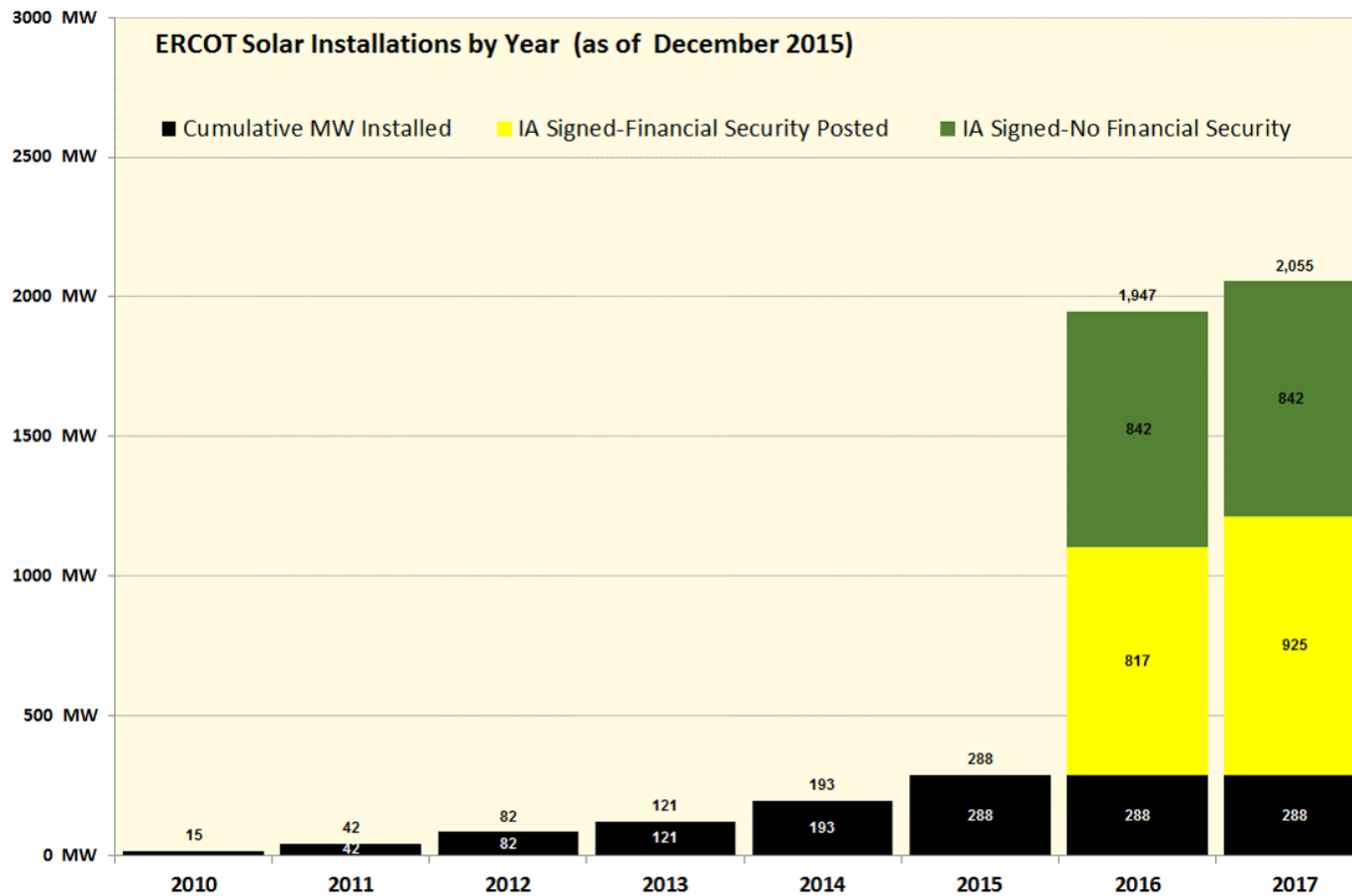
Wind Generation – December 2015



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.

Financial security posted for funding interconnection facilities does not include CREZ security deposits, which are refunded to the Interconnecting Entity when an IA is signed.

Solar Generation – December 2015



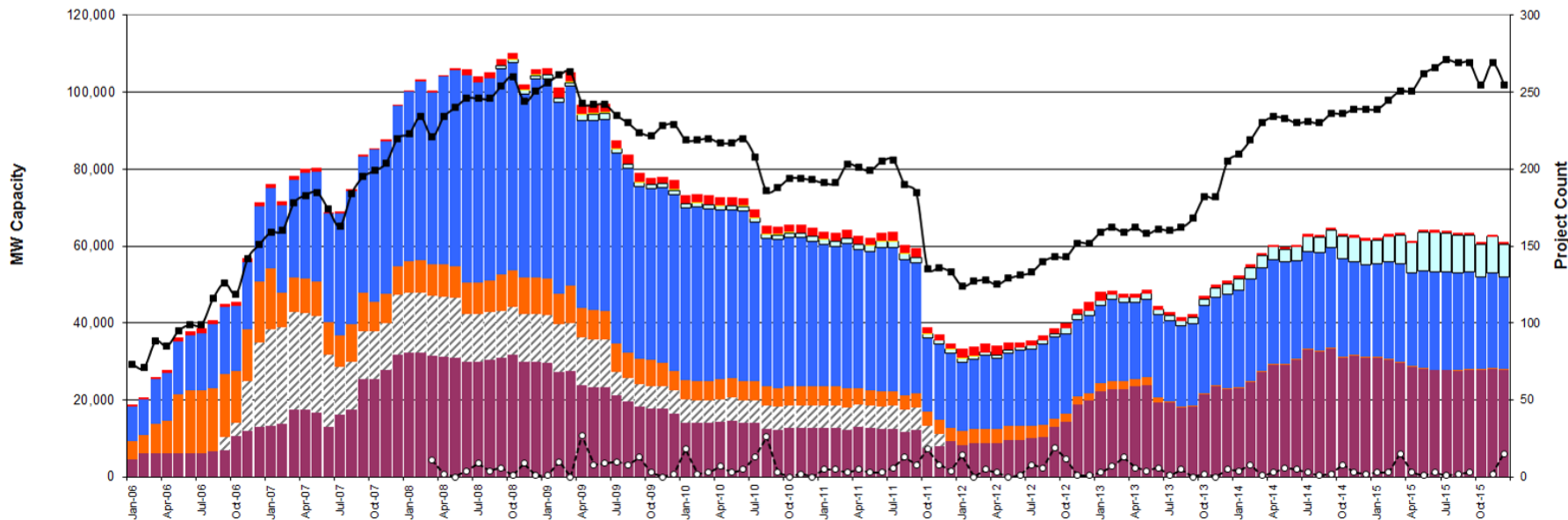
The data presented here is based upon the latest registration data provided to ERCOT by the resource owners and can change without notice. Any capacity changes will be reflected in current and subsequent years' totals. Scheduling delays will also be reflected in the planned projects as that information 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 2015

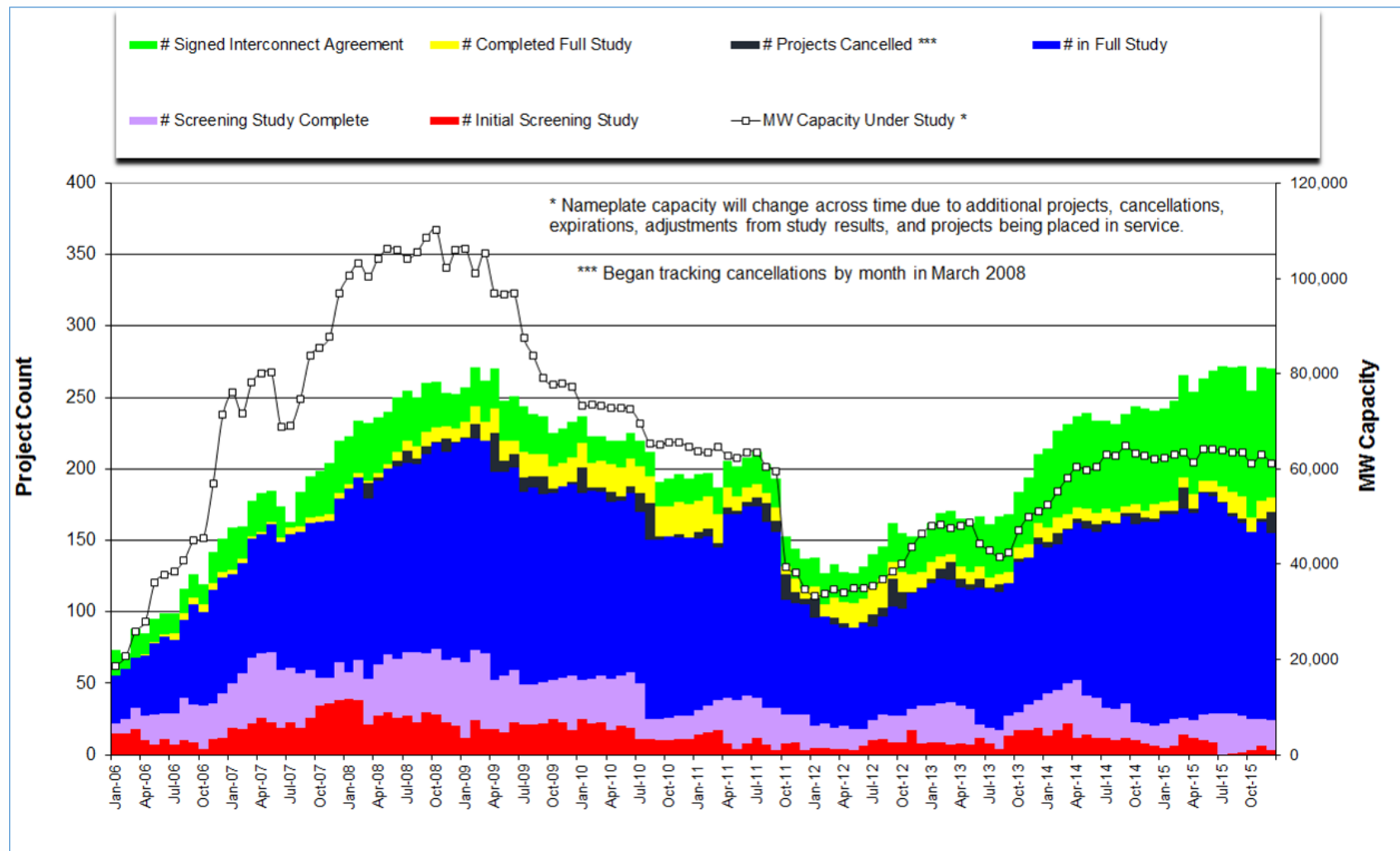


*Prior to September 2008, Category "Other" included "Solar" and "Biomass"

Projects in all phases of interconnection study are reflected in this graph
Project cancellation tracking by month began in March 2008

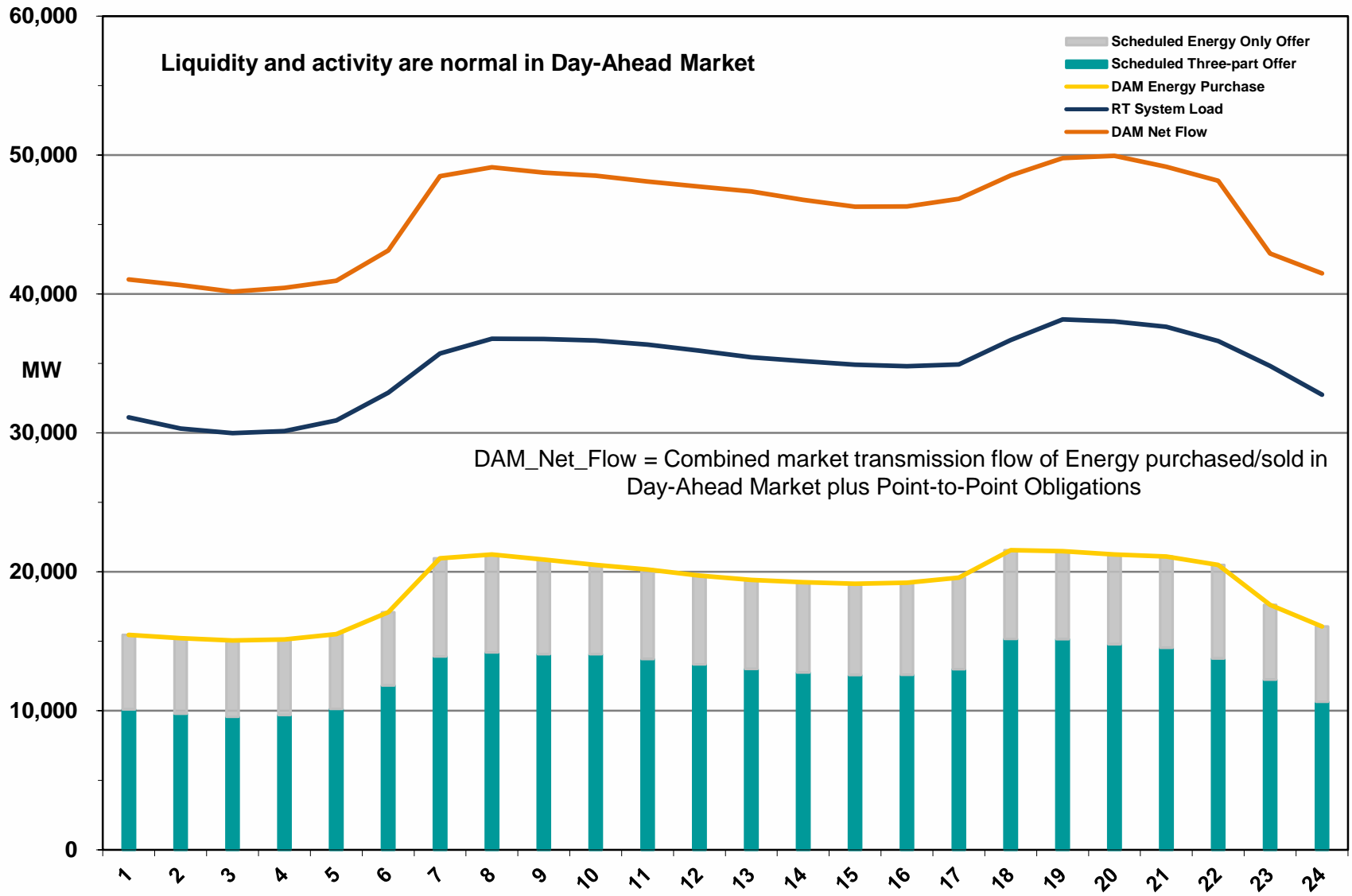


Generation Interconnection Activity by Project Phase – December 2015

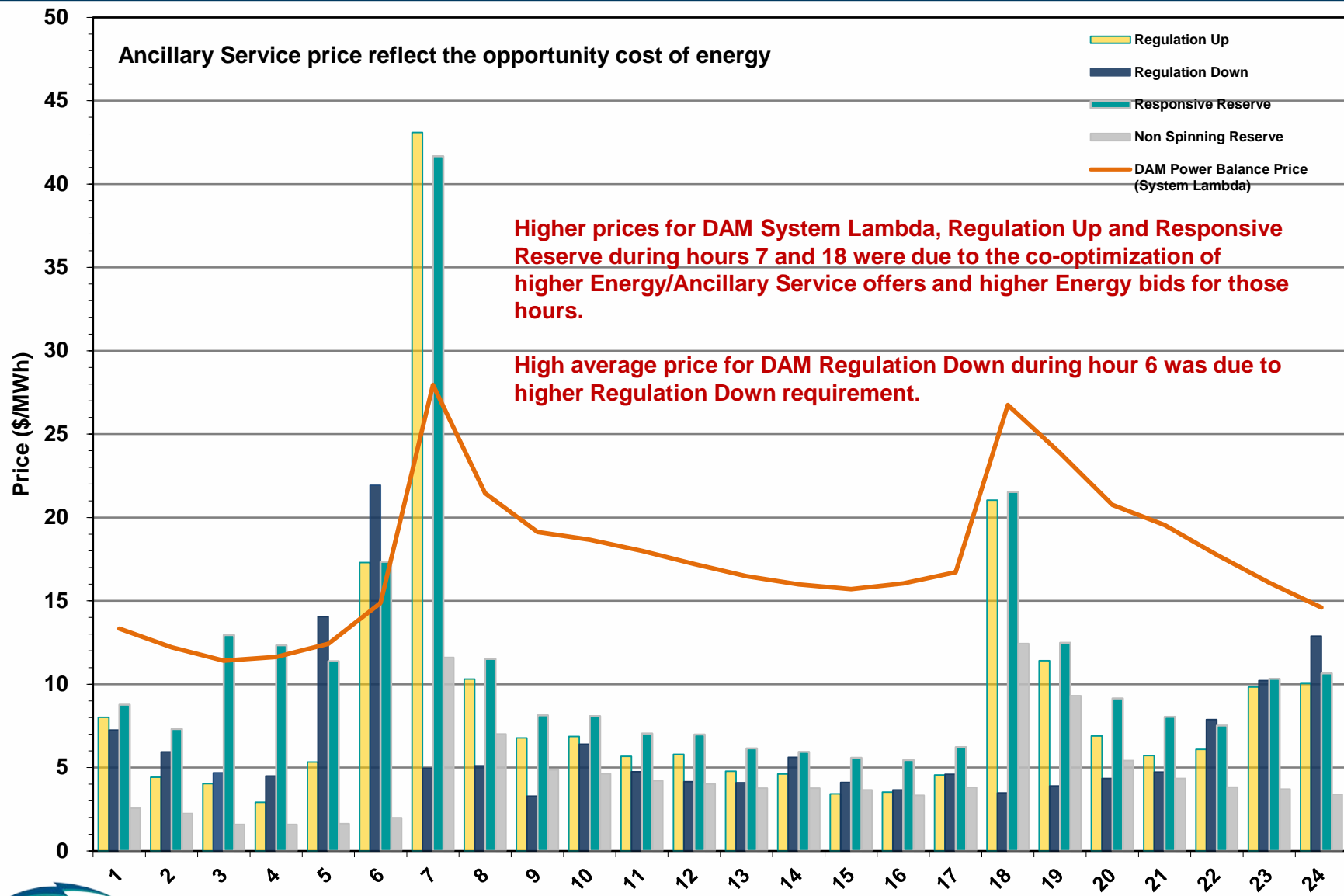


Market Operations

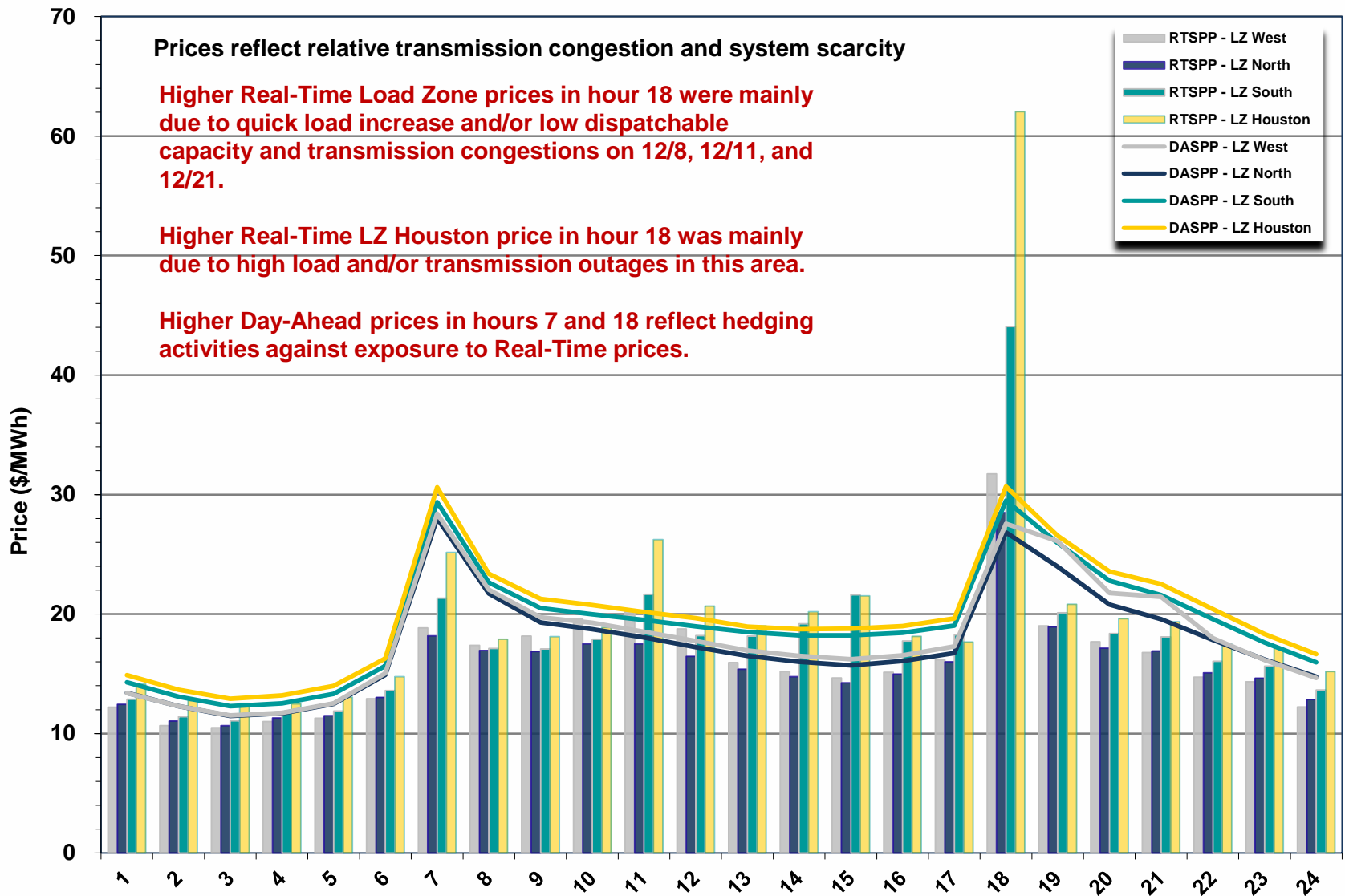
Day-Ahead Schedule (Hourly Average) – December 2015



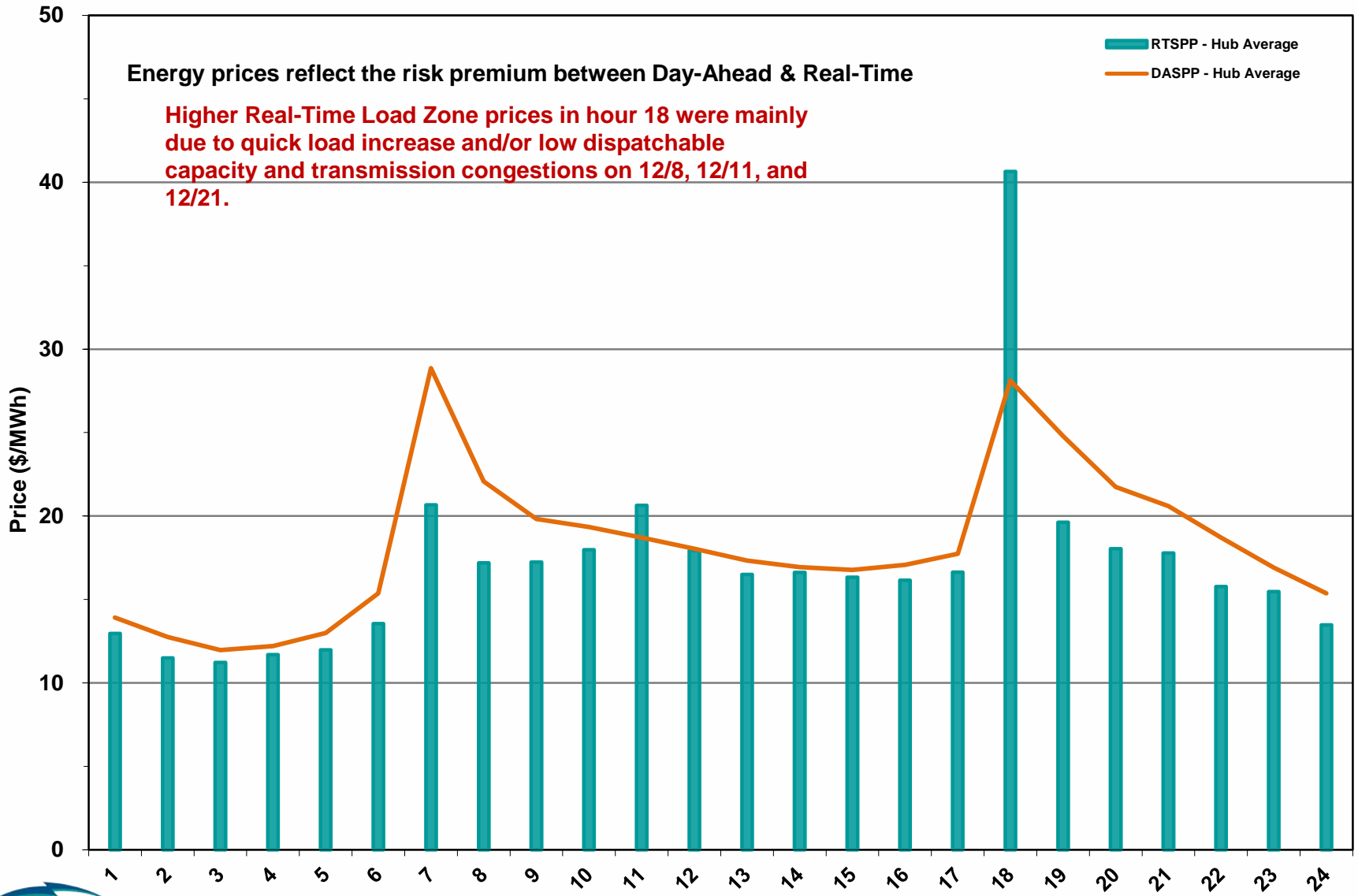
Day-Ahead Electricity And Ancillary Service Hourly Average Prices – December 2015



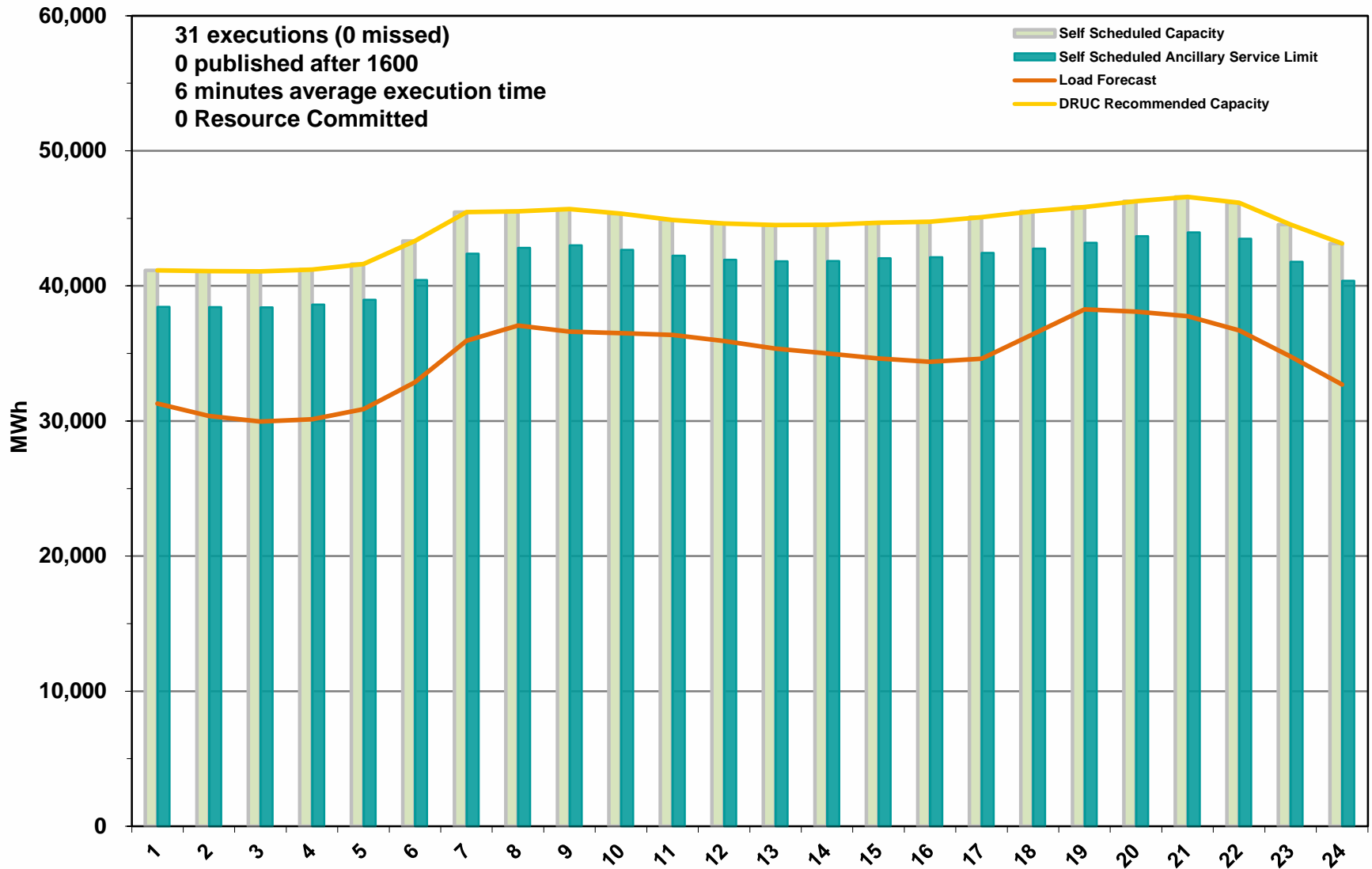
Day-Ahead Vs Real-Time Load Zone SPP (Hourly Average) – December 2015



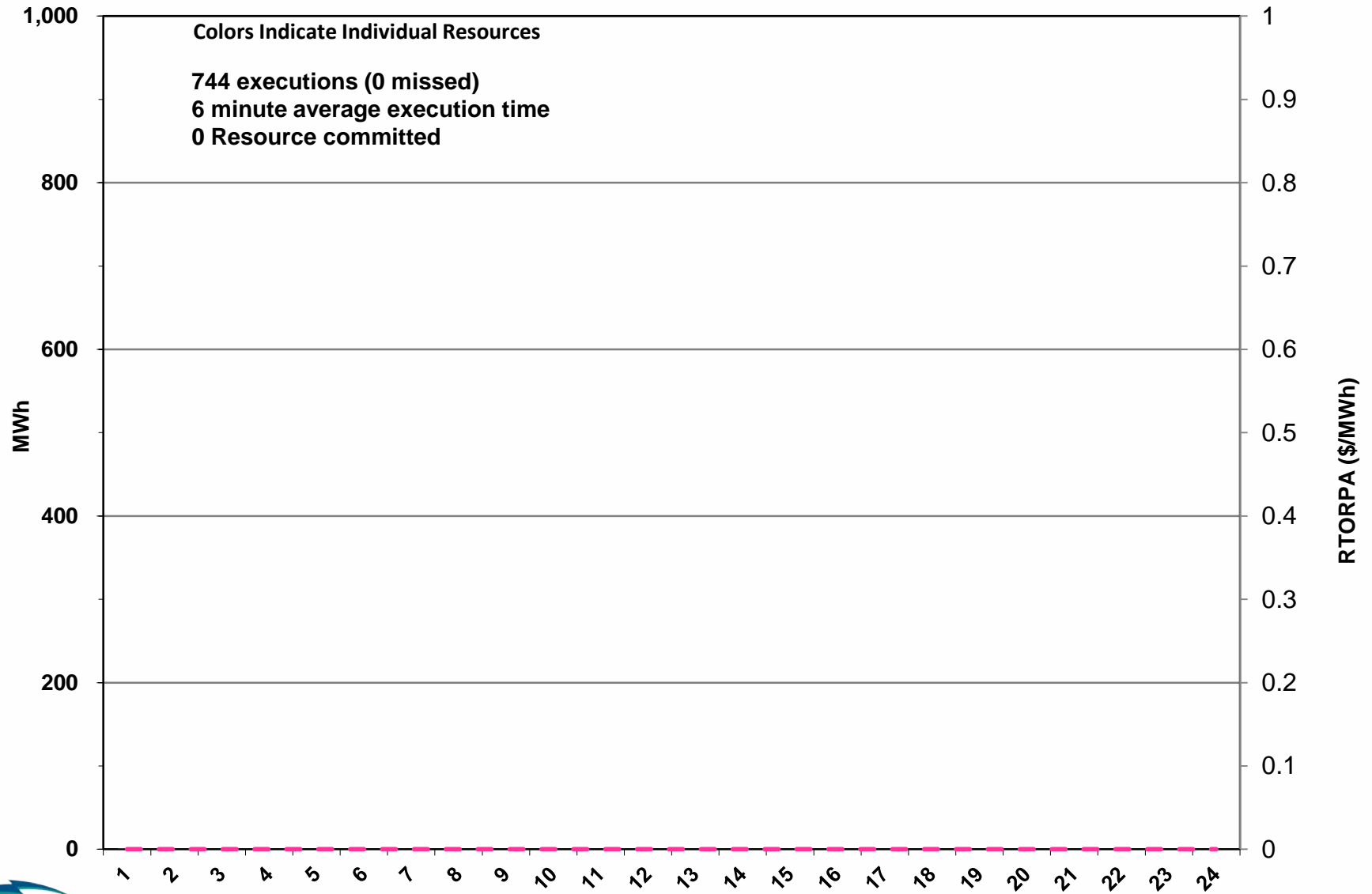
Day-Ahead Vs Real-Time Hub Average SPP (Hourly Average) – December 2015



DRUC Monthly Summary (Hourly Average) – December 2015



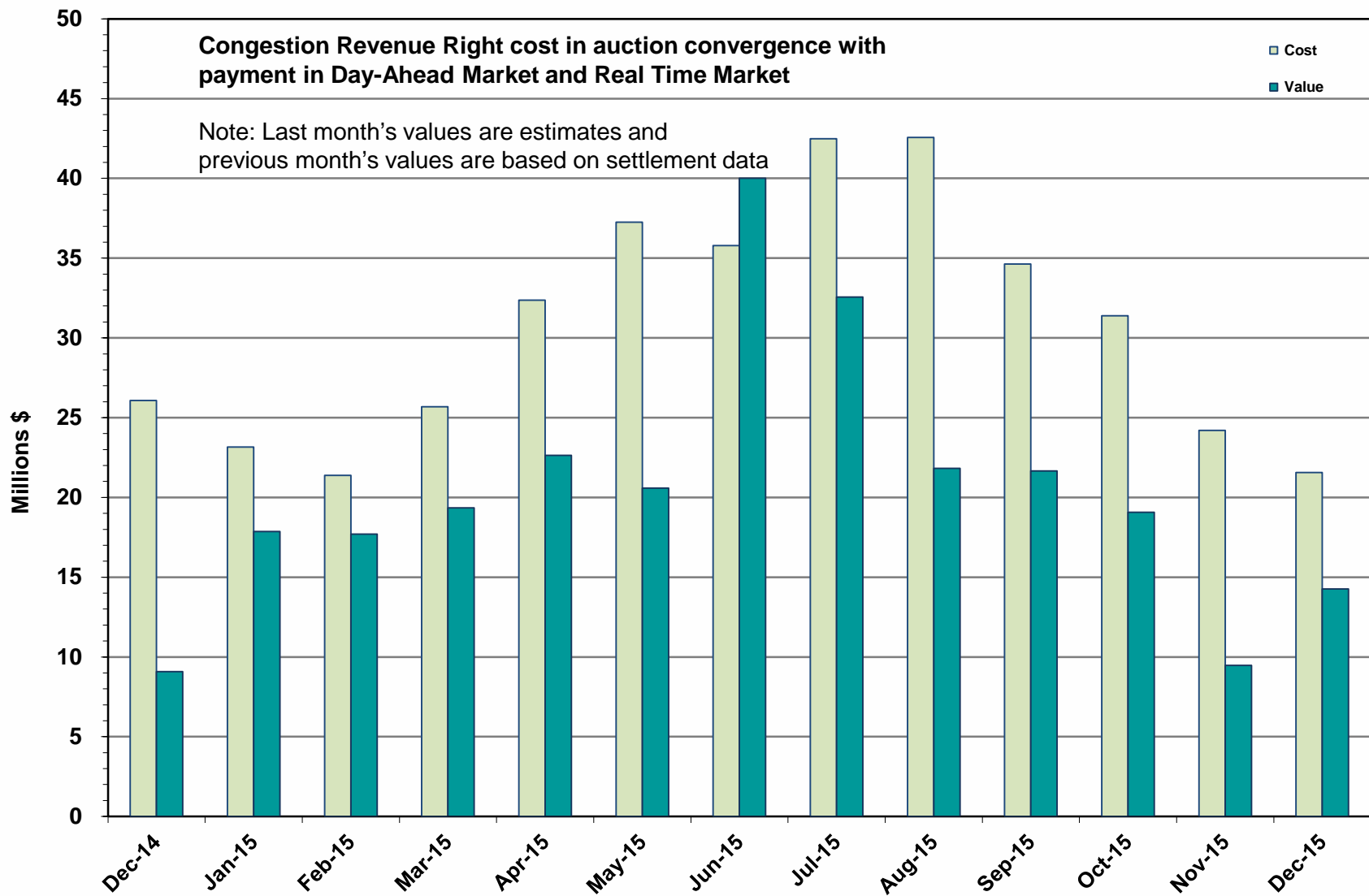
HRUC Monthly Summary and Real Time On-Line Reliability Deployment Price Adder (RTORDPA) – December 2015



Non-Spinning Reserve Service Deployment – December 2015

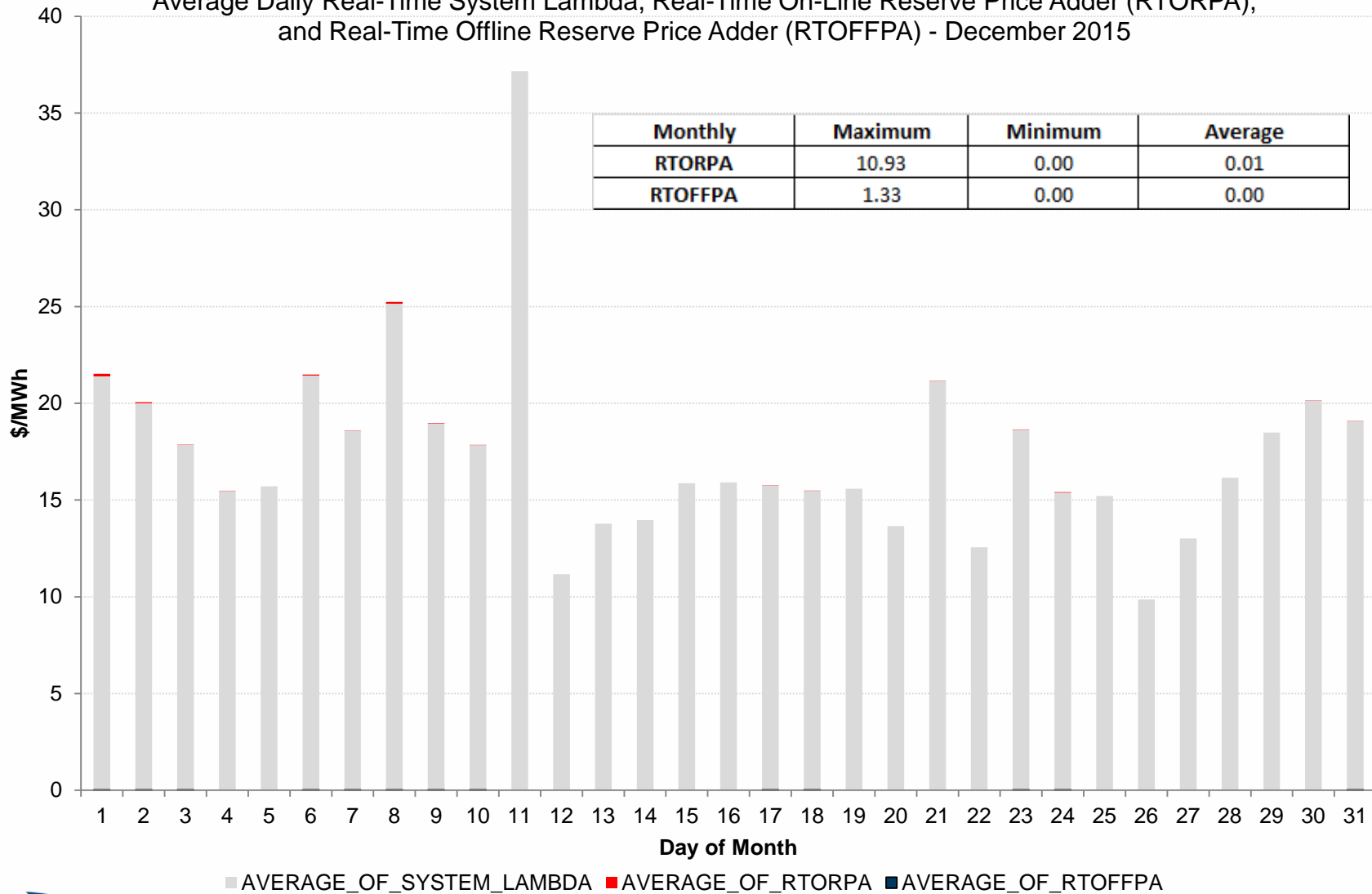
Deployment Start Time	Deployment End Time	Deployment Duration (Hours)	Max Deployment (MW)	Reason
None				

CRR Price Convergence – December 2015



ORDC Price Adder (Daily Average) – December 2015

Average Daily Real-Time System Lambda, Real-Time On-Line Reserve Price Adder (RTORPA), and Real-Time Offline Reserve Price Adder (RTOFFPA) - December 2015



ERS Procurement for **October 2015 – January 2016**

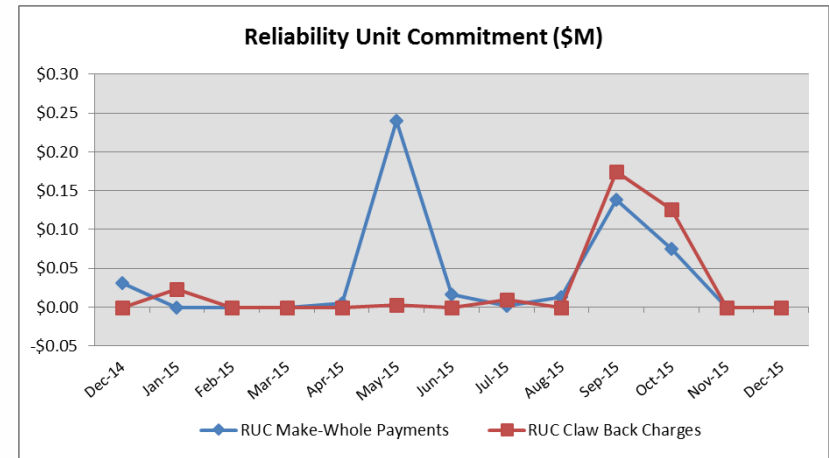
	BH1	BH2	BH3	NBH
Non Weather-Sensitive ERS-10 MW	372.082	416.611	390.329	349.300
Non Weather-Sensitive ERS-30 MW	546.023	563.297	550.152	433.297
Total MW Procured	918.105	979.908	940.481	782.597
Clearing Price	\$14.46	\$2.59	\$14.00	\$3.21

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

Reliability Services – December 2015

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



RUC Make-Whole Payments were \$0.00M in December 2015.
RUC Clawback Charges were \$0.00M.

There was \$0.00M allocated directly to load in December 2015, compared to:

- \$0.00M in November 2015
- \$0.00M in December 2014

Capacity Services – December 2015

Capacity Services	\$ in Millions
Regulation Up Service	\$3.30
Regulation Down Service	\$2.18
Responsive Reserve Service	\$20.73
Non-Spinning Reserve Service	\$6.40
Black Start Service	\$0.63
Voltage Services - Reactive Power	\$0.00
Voltage Services - Lost Opportunity	\$0.00
Total Charges	\$33.24

Capacity Services costs decreased from last month and increased from December 2014.

December 2015 cost was \$33.24M, compared to:

- A charge of \$33.80M in November 2015
- A charge of \$22.22M in December 2014

Energy Settlement – December 2015

Day-Ahead Market Energy Settlement	\$ in Millions
Energy Purchases	\$270.06
Point to Point Obligation Purchases	\$14.83
RMR Day-Ahead Revenue	\$0.00
Energy Sales	(\$268.53)
Day-Ahead Congestion Rent	\$16.36
Day-Ahead Market Make-Whole Payments	(\$0.10)

Real-Time Market Energy Settlement	\$ in Millions
Energy Imbalance at a Resource Node	(\$233.43)
Energy Imbalance at a Load Zone	\$366.42
Energy Imbalance at a Hub	(\$110.20)
Real Time Congestion from Self Schedules	\$0.31
Block Load Transfers and DC Ties	(\$0.49)
Impact to Revenue Neutrality	\$22.61
Emergency Energy Payments	(\$0.02)
Base Point Deviation Charges	\$0.23
Real-Time Metered Generation (MWh in millions)	25.76

Day-Ahead Market energy settlement activity increased from last month and decreased from December 2014. Real-Time Market energy settlement activity decreased from last month and from December 2014.

Congestion Revenue Rights (CRR) – December 2015

	\$ in Millions
Annual Auction	(\$16.09)
Monthly Auction	(\$2.88)
Total Auction Revenue	(\$18.97)
Day-Ahead CRR Settlement	(\$14.25)
Day-Ahead CRR Short-Charges	\$0.42
Day-Ahead CRR Short-Charges Refunded	(\$0.42)
Real-Time CRR Settlement	\$0.00
Real-Time CRR Short-Charges	\$0.00
Real-Time CRR Short-Charges Refunded	\$0.00
Total CRR Funding	(\$14.25)
Day-Ahead Point to Point Obligations Settlement	\$14.83
Real-Time Point to Point Obligation Settlement	(\$23.88)
Net Point to Point Obligation Settlement	(\$9.05)

Congestion Revenue Rights settlement payments were fully funded and excess funds were deposited into the CRR Balancing Account Fund.

Point to Point Obligations settled with a net credit of \$9.05M compared to a net credit of \$0.54M last month.

CRR Balancing Account Fund – December 2015

CRR Balancing Account Fund	\$ in Millions
Beginning Balance for the Month	\$10.00
CRR Balancing Account Credit Total	\$2.53
CRR PTP Option Award Charges	\$0.06
Day-Ahead CRR Short-Charges Refunded	(\$0.42)
Load Allocated CRR Amount	(\$2.17)
Total Fund Amount	\$10.00

ERCOT implemented the rolling CRR Balancing Account Fund beginning with Operating Month December 2014.

In the month of December 2015, the fund cap remained at \$10M and excess funds of \$2.17M were allocated to Load.

Revenue Neutrality – December 2015

Revenue Neutrality Settlement

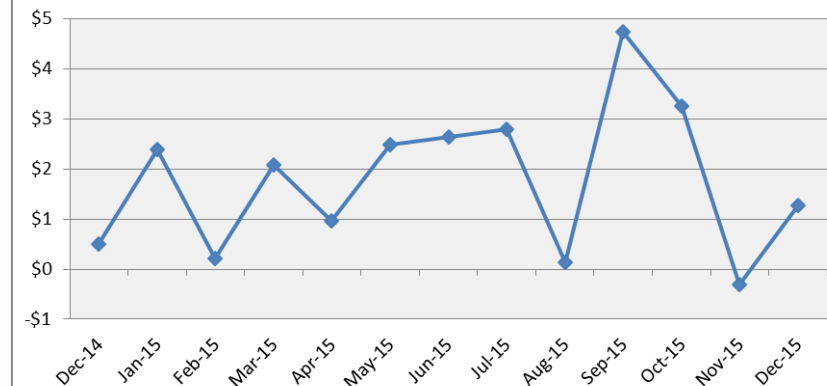
	\$ in Millions
Real-Time Point to Point Obligation Settlement	(\$23.88)
Real-Time Point to Point Options and Options with Refund Settlement	\$0.00
Real-Time Energy Imbalance Settlement	\$22.79
Real-Time Congestion from Self-Schedules Settlement	\$0.31
DC Tie & Block Load Transfer Settlement	(\$0.49)
Charge to Load	\$1.27

Revenue Neutrality charges to load increased compared to last month and to December 2014.

December 2015 was a charge of \$1.27M, compared to:

- \$0.31M credit in November 2015
- \$0.51M charge in December 2014

Revenue Neutrality Uplift (\$M)



Real-Time Ancillary Service Imbalance (ORDC) – December 2015

Real-Time Ancillary Service Imbalance	\$ in Thousands
Real-Time AS Imbalance Payment Amount	(\$14.84)
Load Allocated AS Imbalance Revenue Neutrality Amount	\$14.83
Total Charges	\$14.83

In December 2015, total credits to QSEs w/an Ancillary Service Imbalance were \$14,837, while total charges in November 2015 were \$55,284.

19 of the 31 days in December had settlement dollars equal to \$0 for the day.

All of the 31 days were settled as a net credit to QSEs w/ an Ancillary Service Imbalance and as a charge to QSEs representing load.

The highest payment to QSEs w/an Ancillary Service Imbalance occurred on December 1st in the amount of \$5,220.

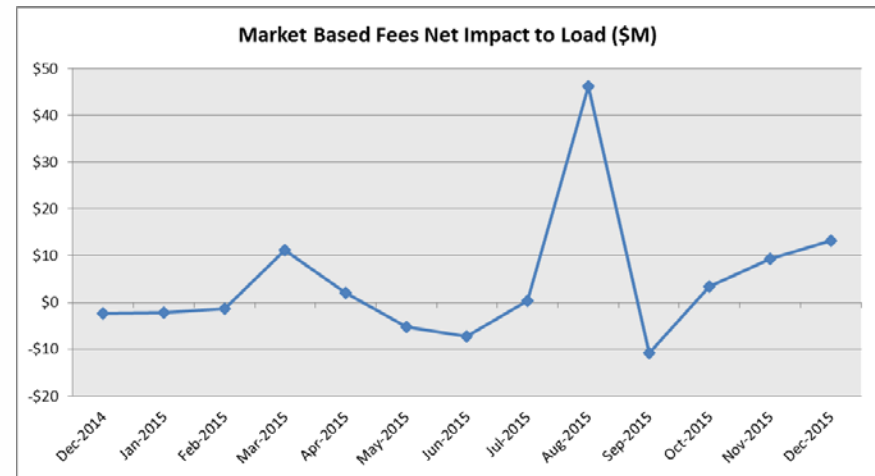
Net Allocation to Load – December 2015

Market-Based Allocation	\$ in Millions
CRR Auction Revenue Disbursement Settlement	(\$18.97)
Balancing Account Proceeds Settlement	(\$2.17)
Net Reliability Unit Commitment Settlement	\$0.00
Ancillary Services Settlement	\$33.24
Reliability Must Run Settlement (incl. RMR for Capacity)	\$0.00
Real-Time Revenue Neutrality Settlement	\$1.27
Emergency Energy Settlement	\$0.02
Base Point Deviation Settlement	(\$0.23)
ORDC Settlement	\$0.01
Total	\$13.17
Fee Allocation	
ERCOT Administrative Fee Settlement	\$12.03
Net Allocated to Load	\$25.20

The charge for the net allocation to Load increased from last month and from December 2014.

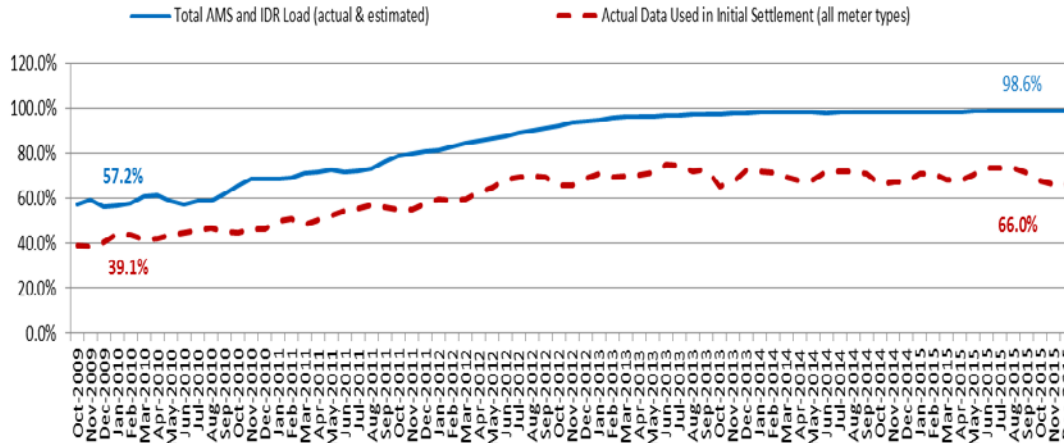
December 2015 was a charge of \$25.20M, compared to:

- A charge of \$20.40M in November 2015
- A charge of \$9.69M in December 2014



Advanced Meter Settlement Impacts – December 2015

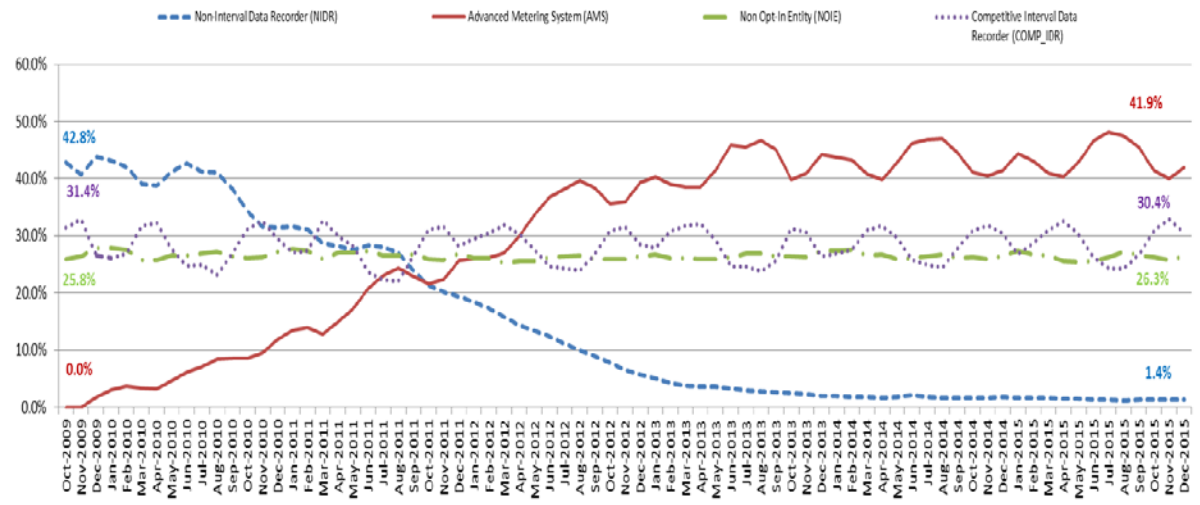
Percent Actual/Percent Interval Data Recorder (IDR)



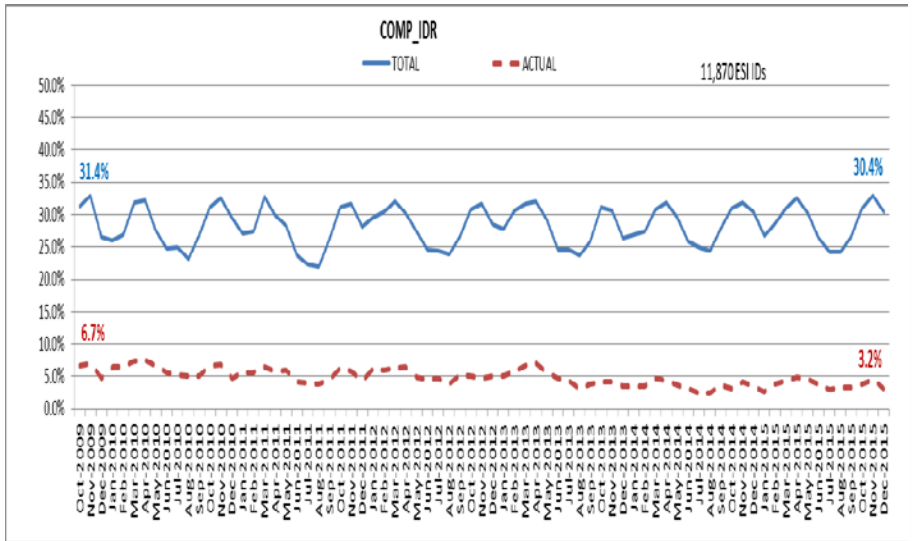
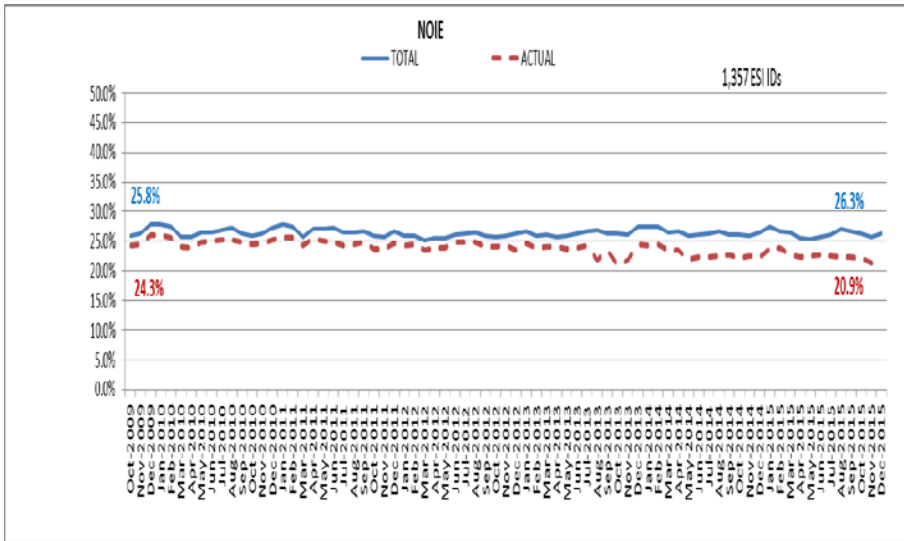
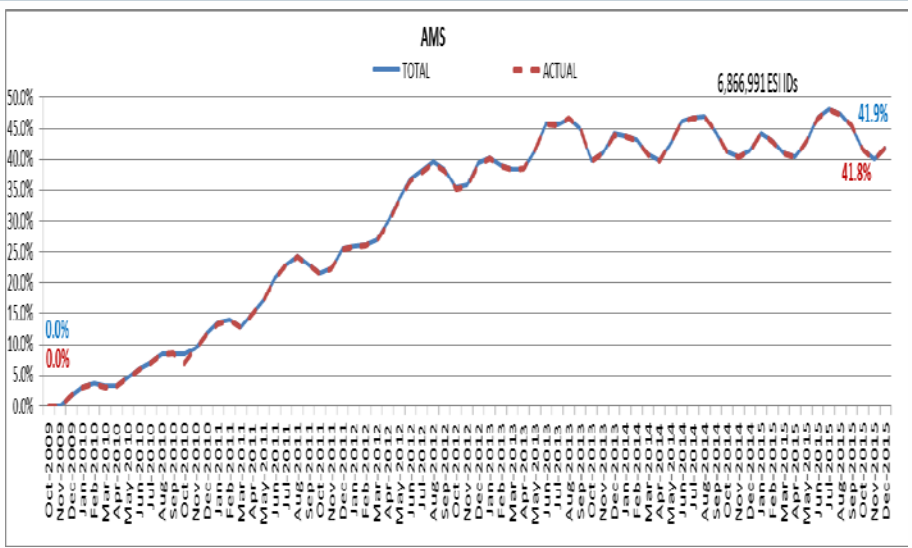
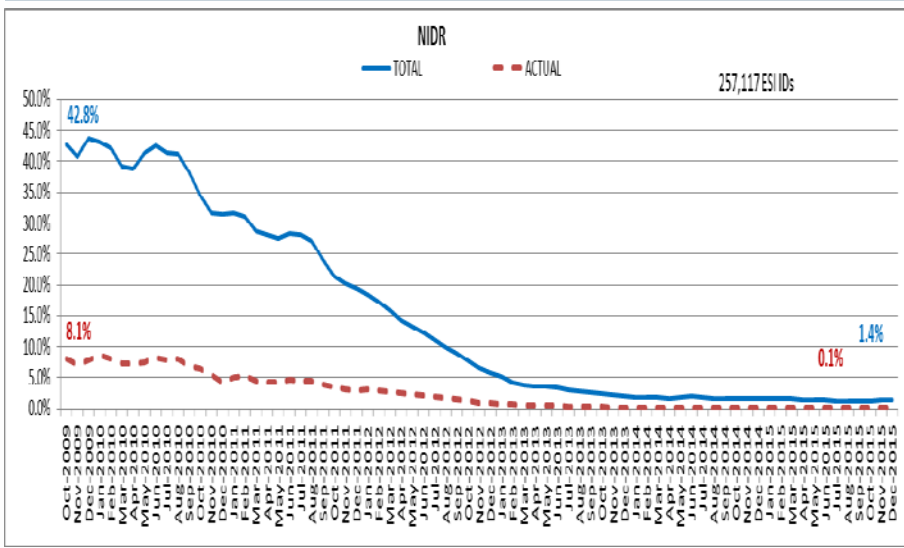
December 2015: At month end, settling 6.8M ESIIDs using Advanced Meter data.

December 2015: 98.6% 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 2015

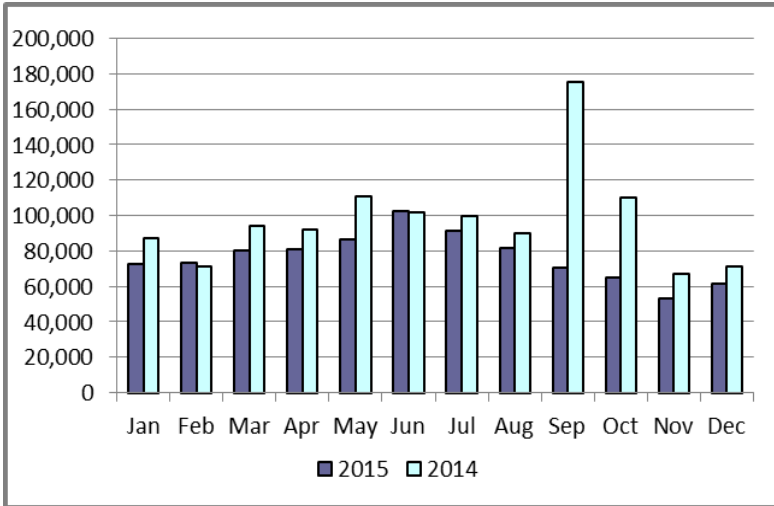


Retail Transaction Volumes – Summary – December 2015

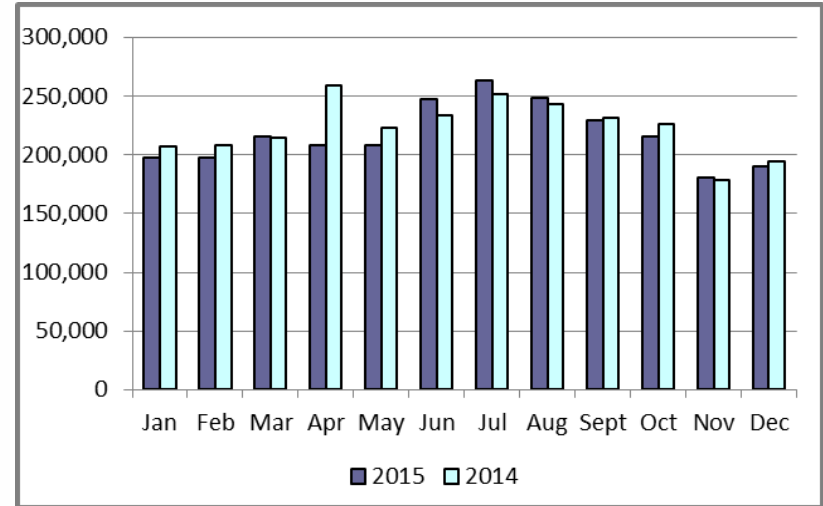
Transaction Type	Year-To-Date		Transactions Received	
	December 2015	December 2014	December 2015	December 2014
Switches	919,297	1,169,546	61,486	71,072
Acquisition	0	0	0	0
Move - Ins	2,602,557	2,671,209	189,862	193,973
Move - Outs	1,339,853	1,333,338	99,552	97,901
Continuous Service Agreements (CSA)	512,436	641,948	40,351	54,831
Mass Transitions	0	5,614	0	0
Total	5,374,143	5,821,655	391,251	417,777

Retail Transaction Volumes – Summary – December 2015

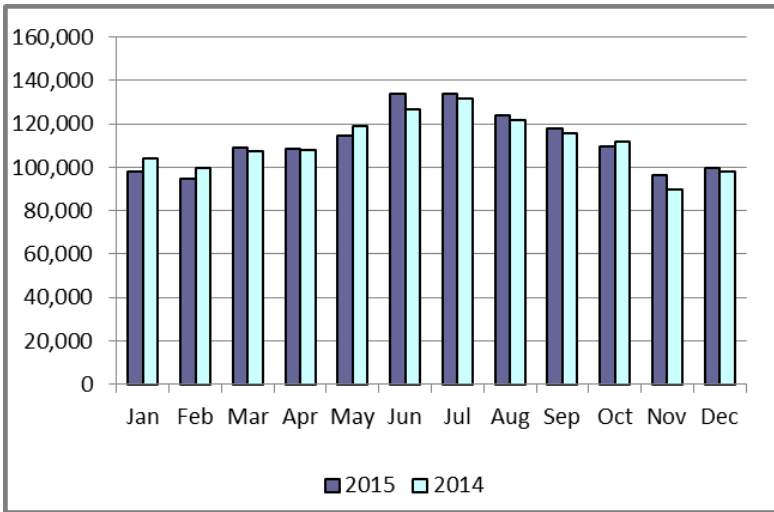
Switches/Acquisitions



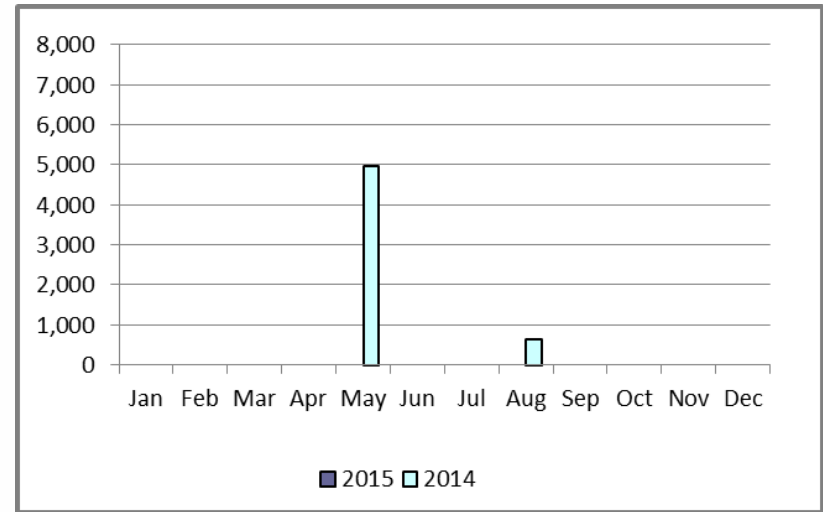
Move-Ins



Move-Outs

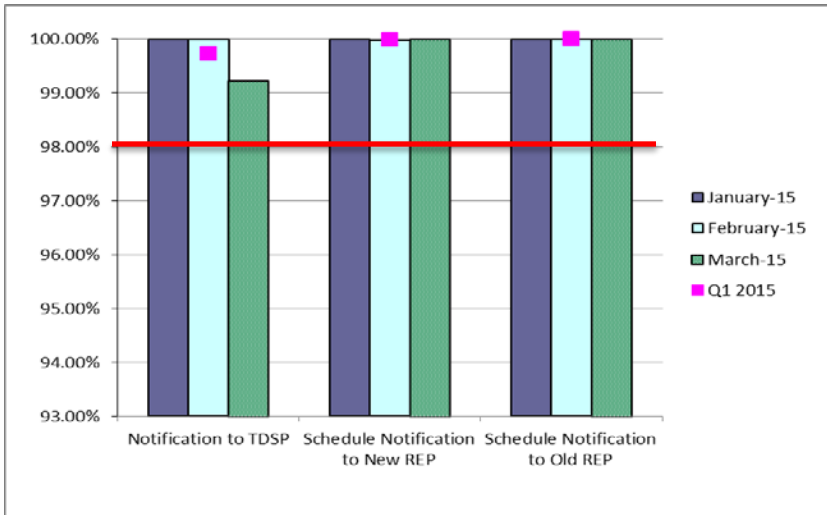


Mass Transition

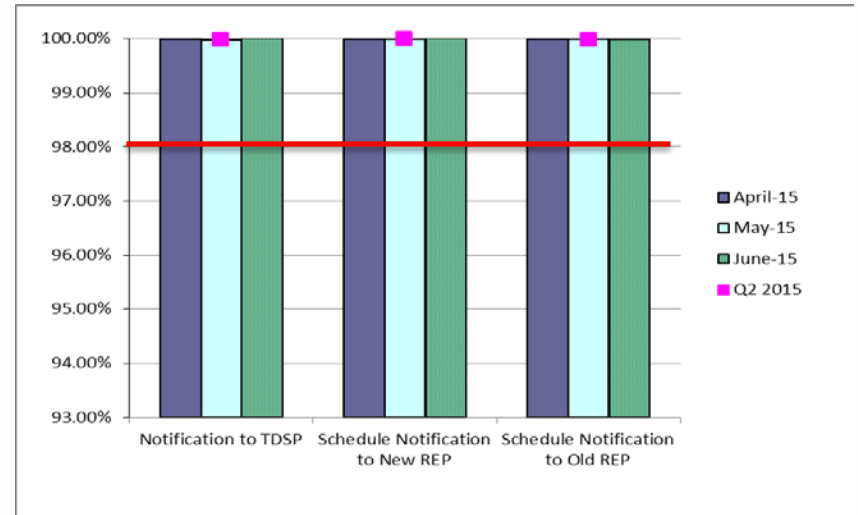


Retail Performance Measures – Switch – December 2015

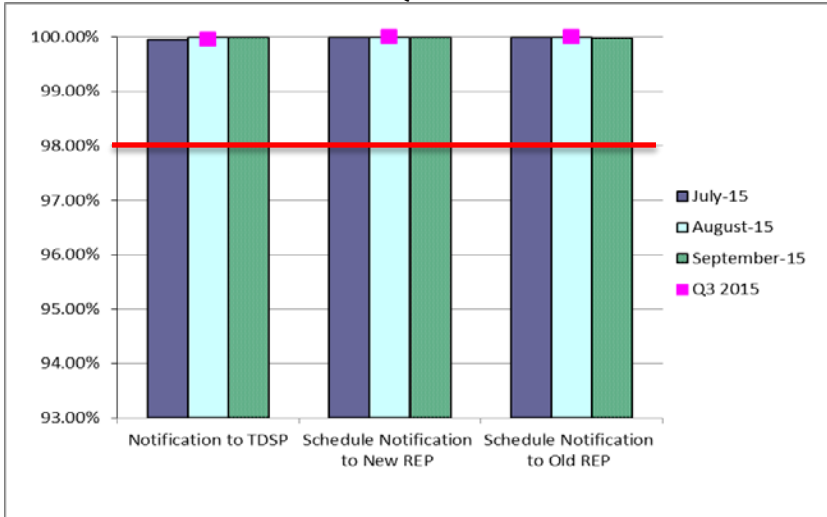
1st Quarter



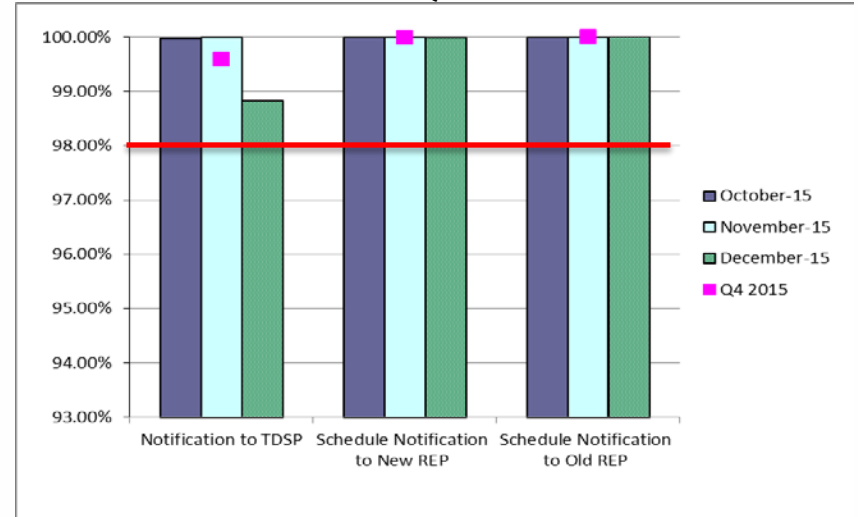
2nd Quarter



3rd Quarter

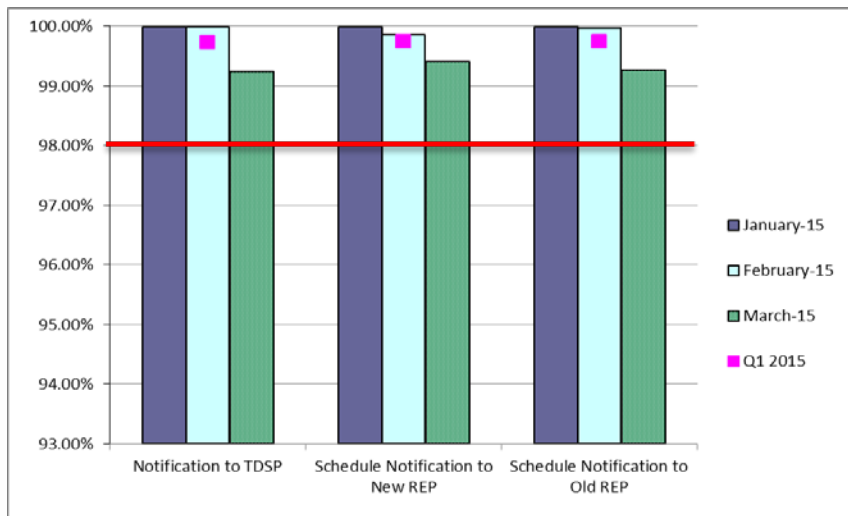


4th Quarter

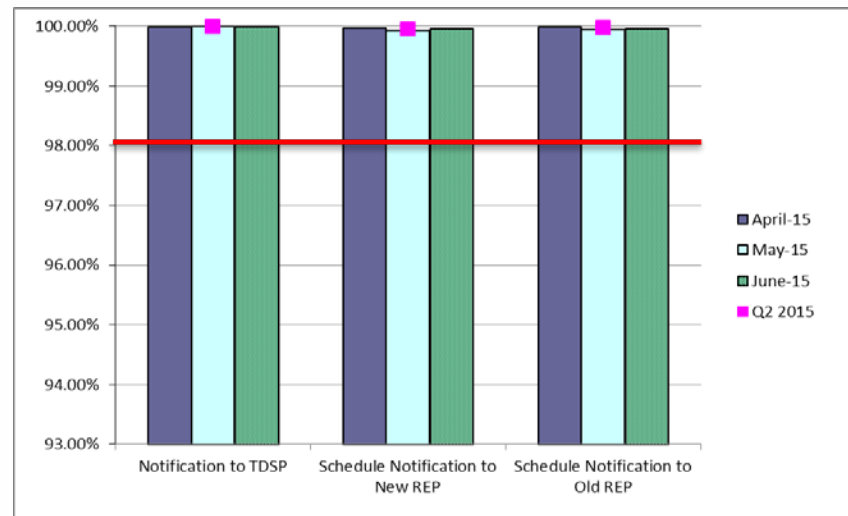


Retail Performance Measures (Same Day Move-In) – December 2015

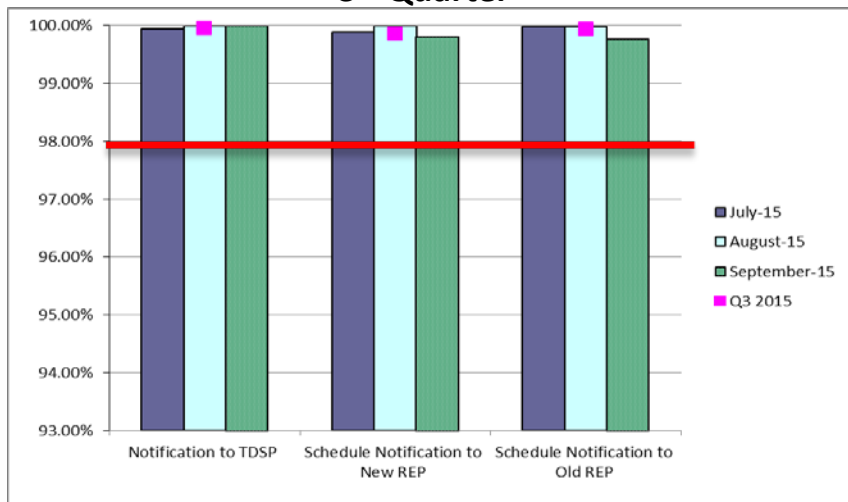
1st Quarter



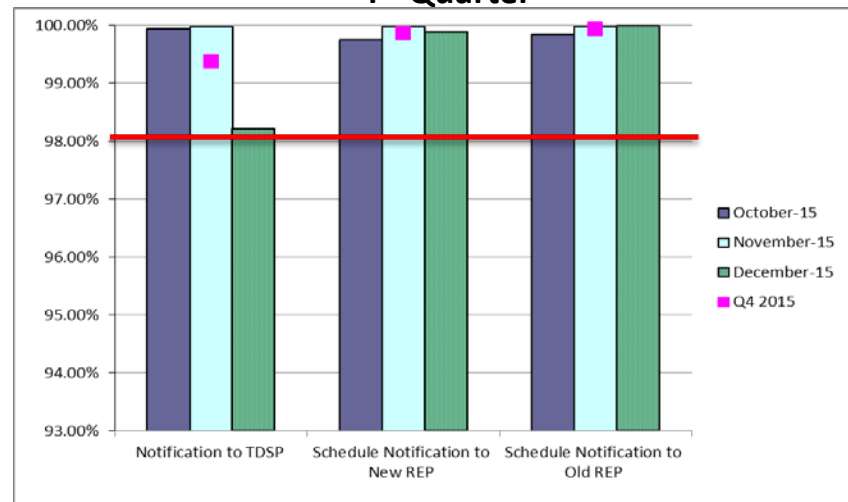
2nd Quarter



3rd Quarter

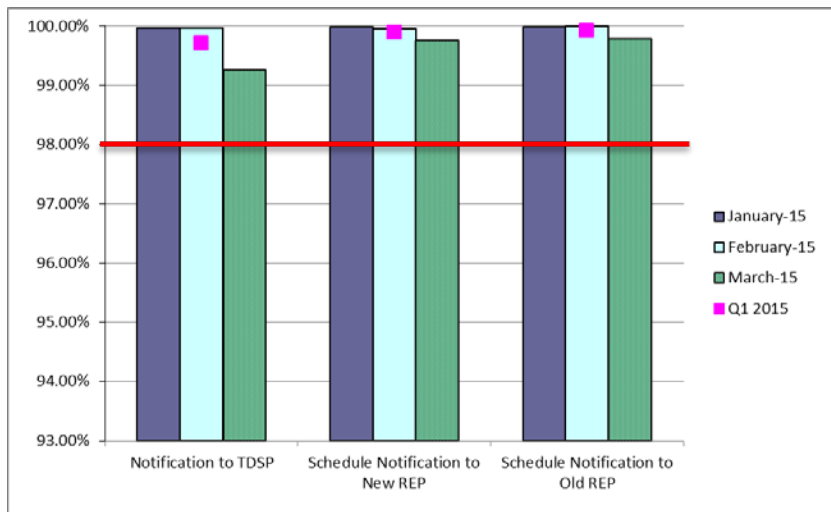


4th Quarter

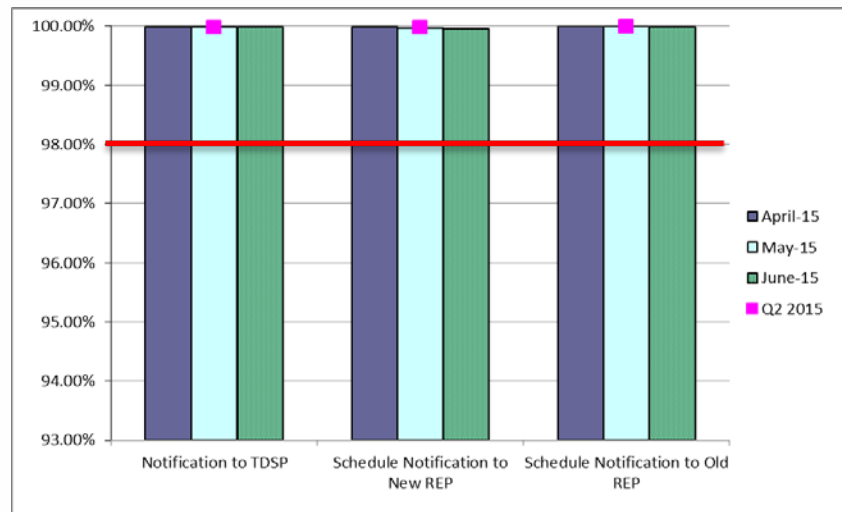


Retail Performance Measures (Standard Move-In) – December 2015

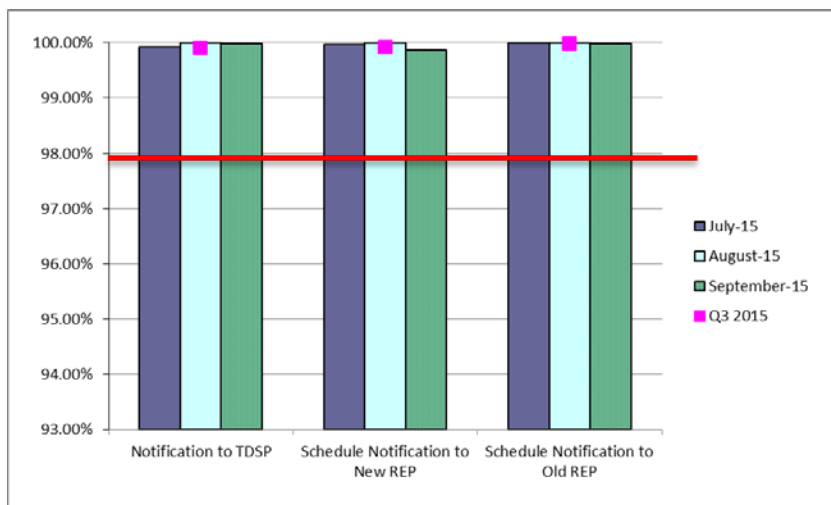
1st Quarter



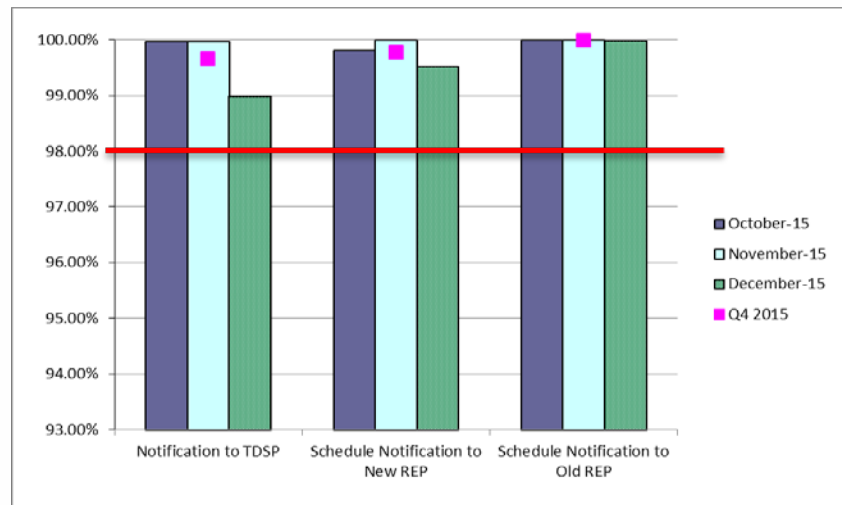
2nd Quarter



3rd Quarter



4th Quarter



Projects Report

ERCOT Portfolio Stoplight Report – December 2015

Impact Metric Tolerances	2015 Project Funding	\$ 21,650,000	2015 Portfolio Spending Estimate
Unfavorable variances are represented as negative numbers within the report. - Green = No more than 4.9% unfavorable variance - Yellow = Unfavorable variance between 4.9% and 9.9% - Red = Unfavorable variance more than 9.9%	Projects In Flight/On Hold (Count = 57)		\$ 23,107,809
	Projects Not Yet Started (Count = 0)		\$ -
	Projects Completed (Count = 45)		\$ 4,324,273
	Spending Reductions Required to Maintain Capital Budget		\$ (5,782,082)
	TOTAL		\$ 21,650,000

Note: Approximately \$5.4M in project spending was accelerated from 2016 to 2015

Project Number	Projects in Initiation Phase (Count = 5)	Footnotes
NPRR662	Proxy Energy Offer Curves	1 - One or more phases took longer than expected, resulting in additional funding and/or time required 2 - One or more phases required more labor than expected, resulting in additional funding and/or time required 3 - Project placed on hold 4 - Resource constraints resulted in delay to one or more phases 5 - Project was on an urgent timeline to meet a pre-defined target implementation date. Compressed project planning required budget estimation before full requirements were known. Additional effort needed, resulting in additional funding. NA - Metric not calculated because: - it is reported at the parent project level, or - it is an administrative project
ECAP	ECAP - Enterprise Content Management System (Proof of Concept)	
ECAP	ECAP - ERCOT Information Governance and Taxonomy	
ECAP	ECAP - ERCOT Identity Alignment	
185-01	Records Management and eDiscovery	

Project Number	Projects in Planning Phase (Count = 22)	Baseline Phase Start	Baseline Phase Finish	Scheduled Go-Live Date	Scheduled Phase Finish	Schedule Impact	Budget Impact
158-01	Load Forecast Enhancements	1/14/2015	6/19/2015	TBD	2/15/2016	4 -154%	0%
DC4	DC4 Program Control	9/9/2015	3/30/2016	TBD	3/30/2016	0%	12%
DC4	DC4 - Compute DB Inf Install and Migration	12/2/2015	2/10/2016	TBD	2/12/2016	-2%	-1%
DC4	DC4 - Compute DB Inf Install and Migration Stage 1	12/2/2015	2/10/2016	TBD	2/12/2016	-2%	NA See DC4 Compute DB
169-01	Short Circuit Ratio Functionality	4/6/2015	9/16/2015	TBD	1/20/2016	1 -77%	0%
172-01	Physical Security Project #2	8/27/2015	6/8/2016	TBD	6/8/2016	0%	0%
173-01	ERCOT Flight Certification Website	7/23/2015	3/30/2016	TBD	3/29/2016	0%	25%
177-01	Cyber Security Project #19	10/19/2015	3/9/2016	TBD	3/9/2016	0%	0%
179-01	Infoblox Hardware Refresh	10/14/2015	2/3/2016	TBD	2/3/2016	0%	0%
180-01	Mobile Device Management (MDM) – GEMS	11/25/2015	2/2/2016	TBD	3/30/2016	1 -82%	8%
181-01	CRR Framework Upgrade	12/16/2015	5/4/2016	TBD	5/4/2016	0%	-1%
183-01	CMM Tech Refresh	12/16/2015	5/4/2016	TBD	5/4/2016	0%	NA See 2015 CMM NPRRs
TBD	Enterprise Resource Planning	12/16/2015	2/10/2016	TBD	2/10/2016	0%	0%
Various	NPRR617 and 700 Implementation	12/7/2015	1/27/2016	TBD	1/27/2016	0%	0%
Various	2015 CMM NPRRs	12/16/2015	8/17/2016	TBD	8/15/2016	0%	77%
NPRR439	Updating a Counter-Party's Available Credit Limit for Current Day DAM	12/16/2015	8/17/2016	TBD	8/15/2016	0%	NA See 2015 CMM NPRRs
NPRR484	Revisions to Congestion Revenue Rights Credit Calculations and Payments - Phase 1b / 2	12/16/2015	8/17/2016	TBD	8/15/2016	0%	NA See 2015 CMM NPRRs
NPRR519	Exemption of ERS-Only QSEs from Collateral and Capitalization Requirements	12/16/2015	8/17/2016	TBD	8/15/2016	0%	NA See 2015 CMM NPRRs
NPRR617	Energy Offer Flexibility	12/7/2015	1/27/2016	TBD	1/27/2016	0%	NA See NPRR617 / NPRR700
NPRR683	Revision to Available Credit Limit Calculation	12/16/2015	8/17/2016	TBD	8/15/2016	0%	NA See 2015 CMM NPRRs
NPRR700	Utilizing Actual Fuel Costs in Startup Offer Caps	12/7/2015	1/27/2016	TBD	1/27/2016	0%	NA See NPRR617 / NPRR700
NPRR702	Flexible Accounts, Payment of Invoices, and Disposition of Interest on Cash Collateral	12/7/2015	1/27/2016	TBD	1/27/2016	0%	NA See 2015 CMM NPRRs



ERCOT Portfolio Stoplight Report – December 2015

Project Number	Projects in Execution Phase (Count = 19)	Baseline Phase Start	Baseline Go-Live Target	Scheduled Go-Live Date	Scheduled Phase Finish	Schedule Impact		Budget Impact	
052-01	EMS Upgrade	9/24/2014	5/25/2016	5/26/2016	11/1/2016		0%		7%
065-01	NMMS Upgrade	12/17/2014	9/22/2016	9/22/2016	10/31/2016		0%		-1%
116-01	Collage Replacement	2/6/2014	9/22/2014	4/7/2016	4/7/2016	4	-246%	2	-113%
120-01	IT Production Hardening	5/21/2015	4/1/2016	3/25/2016	4/25/2016		2%		26%
143-01	OSI Pi Visualization Enhancements	1/16/2015	6/19/2015	1/22/2016	1/22/2016	1	-140%		0%
144-01	OC-48 Replacement with DWDM	2/4/2015	12/22/2015	1/15/2016	2/24/2016	1	-7%		7%
161-01	NPRRs 588 and 615	9/16/2015	2/19/2016	2/10/2016	3/30/2016		5%		3%
165-00	Capital Efficiencies and Enhancements - 2015	1/1/2015	12/31/2015	12/31/2015	12/31/2015		0%		43%
170-01	Enterprise Content Alignment Program	8/26/2015	1/5/2016	1/5/2016	6/13/2016		0%		87%
171-01	CIP v5 Readiness Project	7/22/2015	4/29/2016	3/31/2016	3/31/2016		10%		1%
174-01	2015 Outage Scheduler Enhancements	12/2/2015	9/14/2016	9/22/2016	10/21/2016		-2%		18%
NPRR219	Resolution of Alignment Items A33, A92, A106, and A150 - TSPs Must Submit Outages for Resource Owned Equipment and Clarification of Changes in Status of Transmission Element Postings	12/2/2015	9/14/2016	9/14/2016	10/14/2016		0%	NA	See #174-01
NPRR419	Revise Real Time Energy Imbalance and RMR Adjustment Charge	1/13/2016	4/5/2016	4/5/2016	6/4/2016		0%		0%
NPRR515	Day-Ahead Market Self-Commitment of Generation Resources	10/5/2015	3/31/2016	3/8/2016	3/8/2016		12%		-1%
NPRR553	Monthly BLT Payment and Charge for Presidio Exception	4/9/2015	2/19/2016	2/19/2016	2/19/2016		0%	NA	See #165-00
NPRR588	Clarifications for PV Generation Resources	9/16/2015	2/19/2016	2/10/2016	3/30/2016		5%	NA	See #161-01
NPRR615	PVGR Forecasting	9/16/2015	2/19/2016	2/10/2016	3/30/2016		5%	NA	See #161-01
NPRR686	Changing the IRR Forecast from Next 48 Hours to Next 168 Hours	9/16/2015	2/19/2016	2/19/2016	3/30/2016		0%		0%
SCR783	Outage Scheduler Enhancements – Group 2, Usability and Filtering Enhancements	12/2/2015	9/14/2016	9/14/2016	10/14/2016		0%	NA	See #174-01
Project Number	Projects in Stabilization (Count = 3)	Baseline Execution Phase Start	Baseline Go-Live Target	Actual Go-Live Date	Scheduled Execution Phase Finish	Schedule Impact		Budget Impact	
134-01	Privileged Account Management	4/1/2015	9/30/2015	9/30/2015	1/27/2016		0%		13%
168-01	Configuration Management System Requirements for CIP v5 Readiness	7/6/2015	12/16/2015	12/16/2015	12/30/2015		0%		6%
NPRR680	Allow QSEs to Self-Arrange AS Quantities Greater Than Their AS Obligation	10/28/2015	12/11/2015	12/11/2015	12/18/2015		0%		19%



ERCOT Portfolio Stoplight Report – December 2015

Project Number	Projects On Hold (Count = 8)	Forecast Start Date	Baseline Phase Finish	Scheduled Go-Live Date	Scheduled Phase Finish	Schedule Impact		Budget Impact	
SCR777	Bilateral CRR Interface Enhancement	8/20/2014	11/28/2014	TBD	TBD	3		3	
SCR781	MP Online Data Entry - Market Requirements	8/20/2014	11/28/2014	TBD	TBD	3		3	See #106-01
NPRR327	State Estimator Data Redaction Methodology	12/5/2012	2/12/2013	TBD	TBD	3		3	
NPRR573	Alignment of PRC Calculation	TBD	TBD	TBD	TBD	3		3	
106-01	MP Online Data Entry - Ph 1	10/9/2013	3/5/2014	TBD	TBD	3		3	
129-01	Access and Roles Management	7/1/2014	10/1/2014	TBD	TBD	3		3	
141-01	Production Virtualization	11/6/2014	11/18/2015	TBD	TBD	3		3	
166-01	Jboss Application Monitoring & Management (JAMM)	TBD	TBD	TBD	TBD	3		3	
Project Number	Projects Completed (Count =45)	Baseline Execution Phase Start	Baseline Go-Live Target	Actual Go-Live Date	Actual Execution Phase Finish	Schedule Status		Total Variance	
NPRR467	Balancing Account Resettlement Due to DAM Resettlement	7/1/2014	12/6/2014	12/6/2014	6/12/2015		0%	NA	See #10052
NPRR500	Posting of Generation that is Off but Available	1/7/2015	2/6/2015	2/6/2015	3/27/2015		0%		48%
NPRR543	Message for Confirmed E-Tags	3/18/2015	6/23/2015	6/25/2015	7/9/2015		-2%		19%
NPRR556	Resource Adequacy During Transmission Equipment Outage	9/21/2015	10/23/2015	10/23/2015	12/10/2015		0%		18%
NPRR559	Revisions to MCE Calculation	1/29/2015	6/13/2015	6/13/2015	7/10/2015		0%	NA	See #154-01
NPRR580	Establishment of a Rolling CRR Balancing Account Fund	7/1/2014	12/6/2014	12/6/2014	6/12/2015		0%	NA	See #10052
NPRR586	Align Credit Lock for CRR Auctions with Transaction Submission Deadline	7/2/2014	9/26/2014	9/22/2014	10/28/2014		4%	2	-18%
NPRR589	Ancillary Service Offers in the Supplemental Ancillary Services Market	3/1/2015	9/25/2015	9/30/2015	9/30/2015		-2%		0%
NPRR595	RRS Load Resource Treatment in ORDC	8/5/2015	10/23/2015	10/22/2015	11/23/2015		1%	NA	See NPRR698
NPRR598	Clarify Inputs to PRC and ORDC	1/15/2015	6/28/2015	7/1/2015	7/31/2015		-1%	NA	See #149-01
NPRR597	Utilize Initial Estimated Liability (IEL) Only During Initial Market Activity	1/29/2015	6/13/2015	6/13/2015	7/10/2015		0%	NA	See #154-01
NPRR601	Inclusion of Incremental Exposure in Mass Transitions to Counter-Parties that are Registered as QSEs and LSEs and Provide POLR Service	1/29/2015	6/13/2015	6/13/2015	7/10/2015		0%	NA	See #154-01
NPRR626	Reliability Deployment Price Adder	1/15/2015	6/28/2015	6/26/2015	9/7/2015		1%	NA	See #149-01
NPRR639	Correction to Minimum Current Exposure	1/29/2015	6/13/2015	6/13/2015	7/10/2015		0%	NA	See #154-01
NPRR645	Real-Time On-Line Capacity Revisions	1/15/2015	6/28/2015	6/26/2015	9/7/2015		1%	NA	See #149-01
NPRR665	As-Built Clarification of Reliability Deployment Price Adder	1/15/2015	6/28/2015	6/26/2015	9/7/2015		1%	NA	See #149-01
NPRR698	Clarifications to NPRR595, RRS Load Resource Treatment In ORDC	8/5/2015	10/23/2015	10/22/2015	11/23/2015		1%		0%



ERCOT Portfolio Stoplight Report – December 2015

Project Number	Projects Completed (continued) (Count =45)	Baseline Execution Phase Start	Baseline Go-Live Target	Actual Go-Live Date	Actual Execution Phase Finish	Schedule Status	Total Variance
NPRR706	Restore the Ability to Use Physical Responsive Reserve Capability as an Indicator of Available Frequency-Responsive Capacity	8/5/2015	10/23/2015	10/22/2015	11/23/2015	1%	NA See NPRR698
NPRR710	Removal of ORDC Phase 2 Language and Modification to HASL Calculation	8/5/2015	10/23/2015	10/22/2015	11/23/2015	1%	NA See NPRR698
OBD	Setting the Shadow Price Caps and Power Balance Penalties in Security-Constrained Economic Dispatch	1/15/2015	6/28/2015	6/26/2015	9/7/2015	1%	NA See #149-01
SCR771	ERCOT System Change Allowing Independent Master QSE to Represent Split Generation Resources	4/23/2015	9/9/2015	9/9/2015	9/9/2015	0%	NA See #165-00
SCR772	New Extract for Five Minute Interval Settlement Data	11/5/2014	2/13/2015	2/12/2015	3/30/2015	1%	18%
SCR775	Posting Results of Real-Time Data in a Display Format	3/31/2015	6/22/2015	6/22/2015	7/20/2015	0%	40%
SCR778	Credit Exposure Calculations for NOIE Options Linked to RTM PTP Obligations	1/29/2015	3/28/2015	3/28/2015	7/10/2015	0%	NA See #154-01
SCR779	Increase to the CRR Auction Transaction Limit	9/29/2014	6/28/2015	5/27/2015	6/24/2015	11%	-2%
10052_01	Settlement System Upgrade	1/25/2012	12/23/2014	12/6/2014	6/12/2015	1%	-1%
057-01	EPS Metering DB Redesign	4/17/2013	9/6/2013	12/11/2014	1/14/2015	2	-324% 2 -216%
083-01	Centralized Application Log Management	8/28/2013	5/7/2014	3/27/2014	2/4/2015	16%	9%
089-01	Information Technology Change Management	10/29/2014	5/1/2015	5/27/2015	6/15/2015	2	-14% 2 -38%
097-01	ABB MMS OS Technology Refresh	8/15/2014	3/26/2015	3/26/2015	5/8/2015	0%	-1%
104-01	Disaster Recovery: S&B, RTL, MDT	10/9/2014	1/18/2015	1/18/2015	1/28/2015	0%	2%
115-01	Cyber Security Project #14	6/30/2014	1/15/2015	1/15/2015	3/6/2015	0%	13%
122-01	Infoblox DNS/DHCP	5/21/2014	11/5/2014	11/20/2014	11/8/2015	1	-8% 5%
127-01	SQL Server 2012 Upgrade / Cluster Consolidation	12/18/2014	7/19/2015	7/19/2015	9/9/2015	0%	14%
130-01	Electronic Crisis Communications Enhancements	6/19/2014	12/12/2014	2/16/2015	6/12/2015	1	-37% 2 -5%
137-01	EIS Reporting and Control Systems Upgrade	8/13/2014	1/15/2015	1/13/2015	2/25/2015	1%	9%
142-01	Implementation of NERC BAL-TRE-001 Regional Standard	1/14/2015	2/16/2015	2/6/2015	3/6/2015	30%	46%
149-01	Market System Enhancements 2015	1/15/2015	6/28/2015	6/26/2015	9/7/2015	1%	15%
150-01	Backup Resiliency	12/17/2014	2/6/2015	2/6/2015	3/2/2015	0%	-3%
153-01	Infrastructure Performance Management	12/22/2014	1/22/2015	2/19/2015	3/2/2015	1	-90% 0%
154-01	2014 CMM NPRRs and SCRs	1/29/2015	6/13/2015	6/13/2015	7/10/2015	0%	1 -5%
155-01	Replace N2N System	2/5/2015	5/14/2015	10/8/2015	11/16/2015	2	-150% 2 -20%
156-01	Symposium Call Center Replacement	2/5/2015	5/19/2015	8/21/2015	10/14/2015	2	-91% 2 -18%
163-01	Cyber Security Project #10	7/1/2015	9/15/2015	9/22/2015	12/16/2015	1	-9% 9%
164-01	Browser Compatibility Assessment	2/25/2015	9/30/2015	TBD	10/2/2015	0%	16%

Project Number	2015 Projects Not Yet Started (Count = 0)	Forecast Start Date
----------------	---	---------------------

