

# ERCOT Monthly Operational Overview (March 2014)

ERCOT Public April 15, 2014

## **Grid Operations & Planning**

#### Summary - March 2014

#### Operations

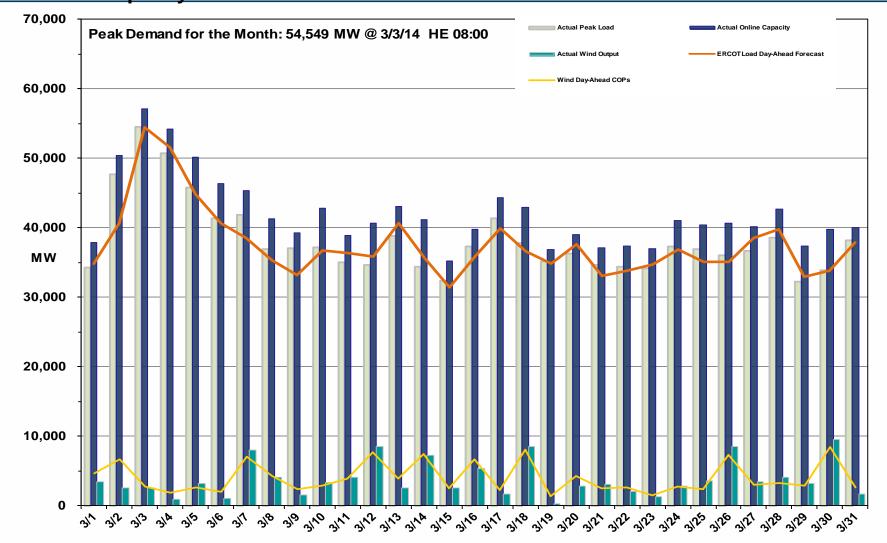
- The peak demand of 54,549 MW on March 3<sup>rd</sup> was greater than the mid-term forecast peak of 54,426 MW as well as the March 2013 actual peak demand of 41,710 MW. The instantaneous load on March 3<sup>rd</sup> was 54,669 MW.
- Day-ahead load forecast error for March was 3.36%
- ERCOT issued five notifications
  - Two advisories for delayed posting of DAM related information
  - A single watch due to extreme weather affecting the ERCOT region
  - Two watches due to SCED failure

#### Planning Activities

- 230 active generation interconnection requests totaling over 58,100 MW, including 26,700 MW of wind generation as of March 31, 2014. Eleven more requests and 2,800 more MW from February 28, 2014.
- 11,065 MW wind capacity in commercial operations March 31, 2014; no change from February 2014.

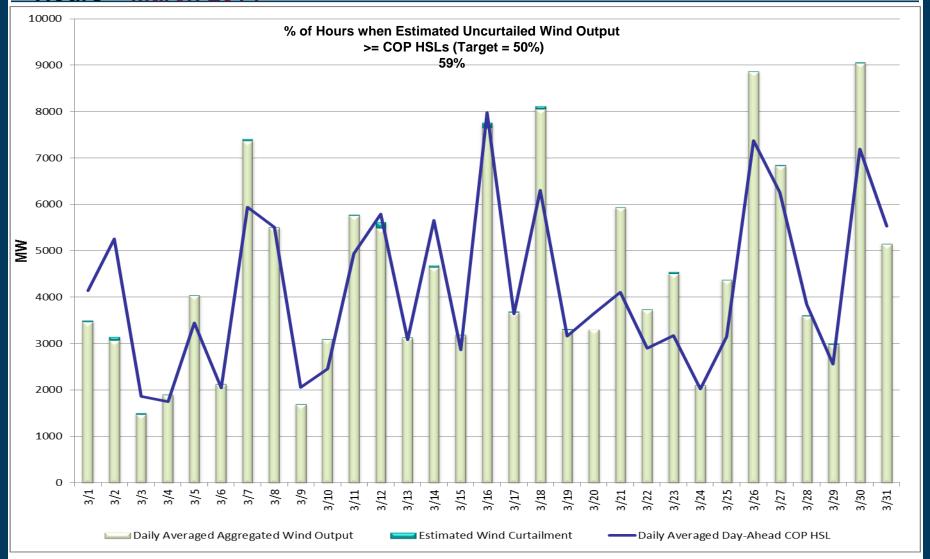


## Daily Peak Demand: Hourly Average Actual vs. Forecast, Wind Day-Ahead COPs & On-line Capacity at Peak – March 2014





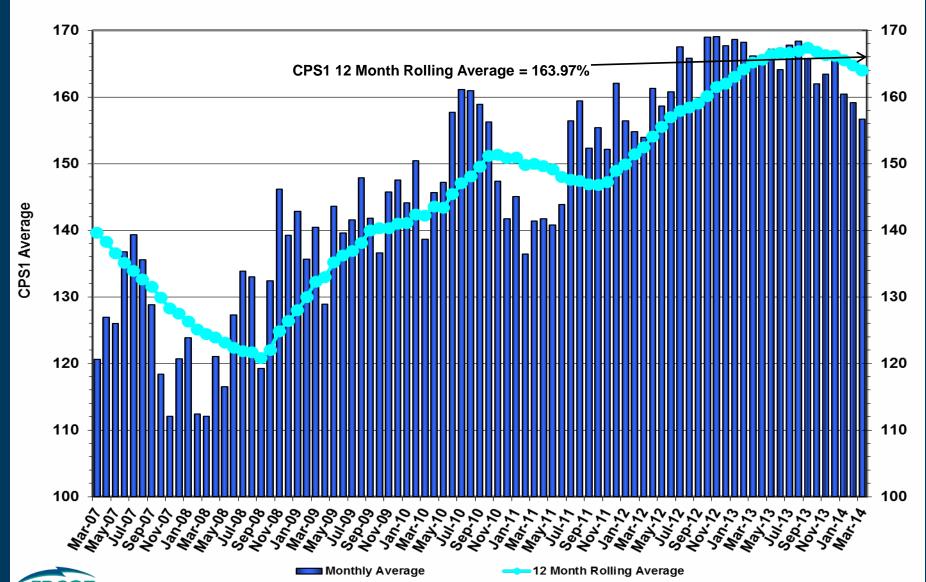
## Actual Wind Output plus Curtailments vs. Wind Day-Ahead COPs for All Hours – March 2014



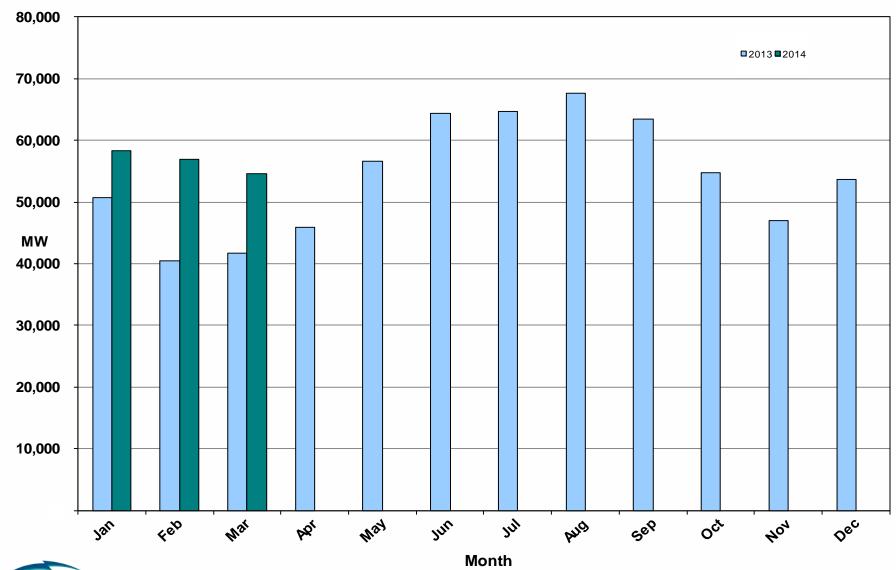


Note: QSEs must use the AWST 50% probability of exceedance forecast as the HSL in their COPs

#### **ERCOT's CPS1 Monthly Performance – March 2014**

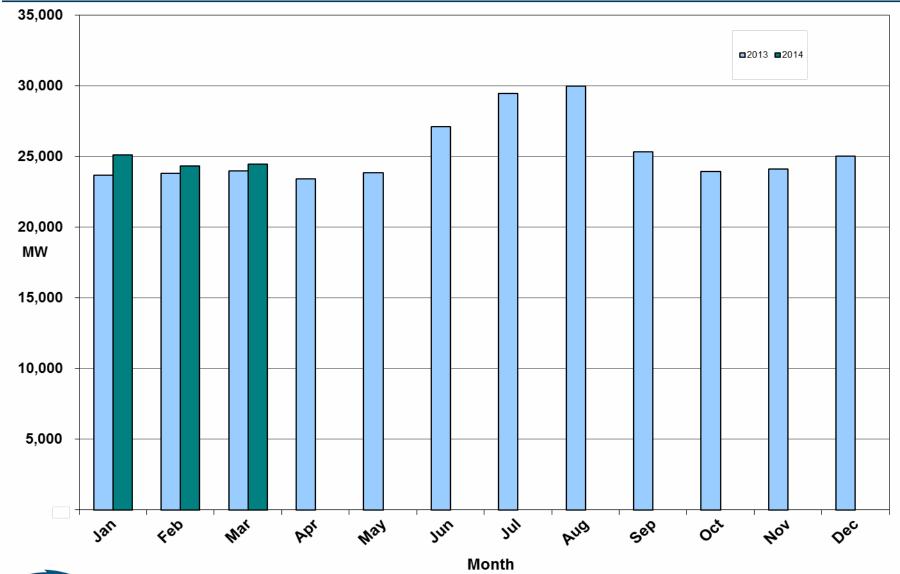


### **Monthly Peak Actual Demand – March 2014**





### **Monthly Minimum Actual Demand – March 2014**





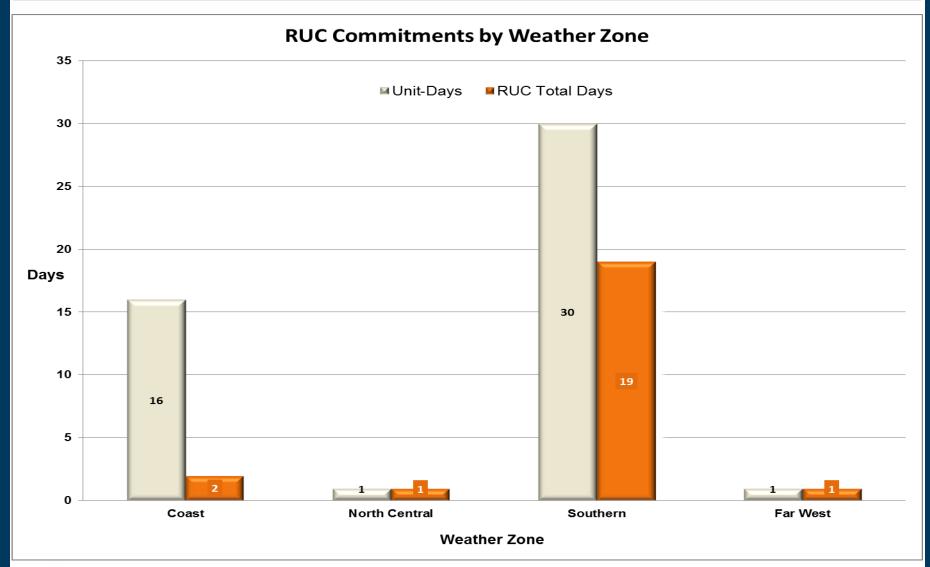
### **Day-Ahead Load Forecast Performance – March 2014**

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

	2011 MAPE	2012 MAPE	2013 MAPE	2014 MAPE		2014 .PE
Average Annual MAPE	2.83	3.02	2.86	3.42	3.	36
Lowest Monthly MAPE	1.63	2.51	2.07	3.19	Lowest Daily MAPE	1.03 March – 01
Highest Monthly MAPE	3.55	3.49	3.50	3.70	Highest Daily MAPE	<b>10.40</b> March – 02



#### Reliability Unit Commitment (RUC) Capacity by Weather Zone – March 2014





#### **Generic Transmission Limits (GTLs) – March 2014**

GTLs	Mar 13 Days GTLs	Jan 14 Days GTLs	Feb 14 Days GTLs	Mar 14 Days GTLs	Last 12 Months Total Days (Apr13 - Mar14)
North – Houston	0	0	0	0	0
West – North	9	3	0	5	25
Valley Import	0	0	2	4	7
SOP110	0	0	0	0	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 – March 2014

- OCNs issued for extreme cold temperatures
  - None
- Advisories issued for DAM related issues.
  - Issued 3/11 for operating day 3/12 for delayed posting of DAM solutions
  - Issued 3/22 for delayed posting of DAM De-Energized Settlement Points in Base Case report
- Watches issued for extreme cold temperatures
  - Issued 3/2
- Watches issued for SCED process failures
  - Issued twice on 3/14

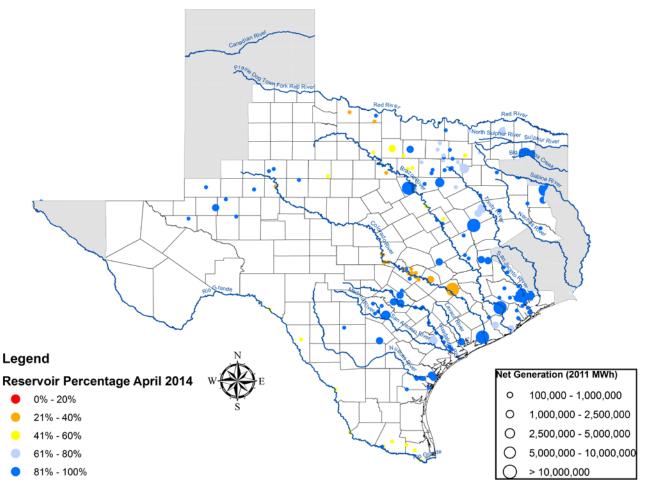


### **Significant Events – March 2014**

• No significant events to report



## Net Generation & Reservoir Levels – April 1, 2014





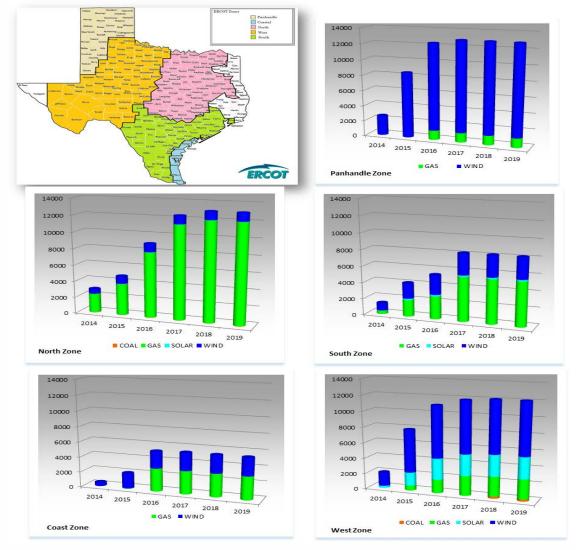
#### Planning Summary – March 2014

- ERCOT is currently tracking 230 active generation interconnection requests totaling over 58,100 MW. This includes over 26,700 MW of wind generation.
- ERCOT is currently reviewing proposed transmission improvements with a total cost of \$962.5 Million.
- Transmission Projects endorsed in 2013 total \$349.8 Million. No transmission projects endorsed in 2014 (January through March 2014).
- All projects (in engineering, routing, licensing and construction) total approximately \$4.4 Billion.
- Transmission Projects energized in 2014 total about \$123.3 Million.



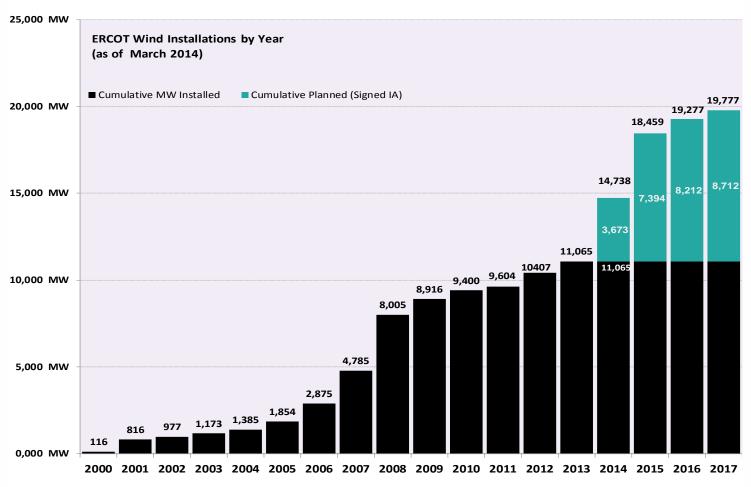
### Cumulative Installed MW Capacity of Interconnection Requests by Zone –

#### **March 2014**





#### Wind Generation - March 2014

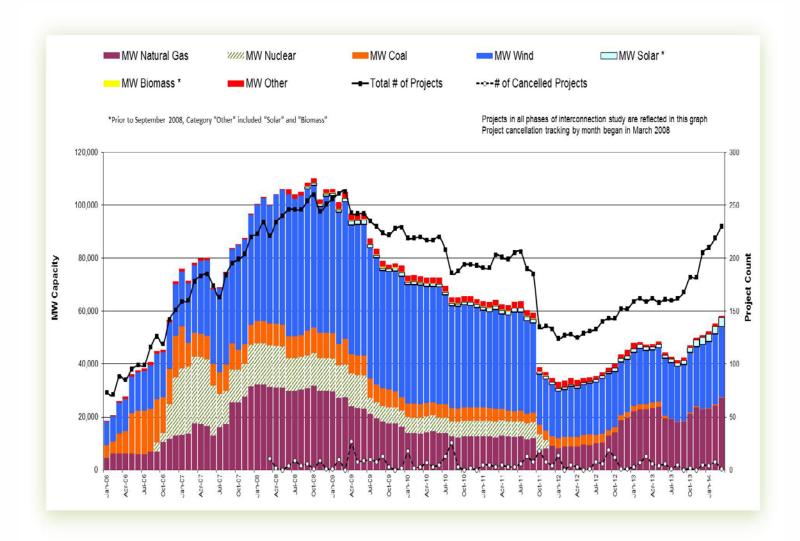


The data presented here is based upon the latest registration data provided to ERCOT by the resource owners and can change without notice. Any capacity changes will be reflected in current and subsequent years' totals. Scheduling delays will also be reflected in the planned projects as that information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

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

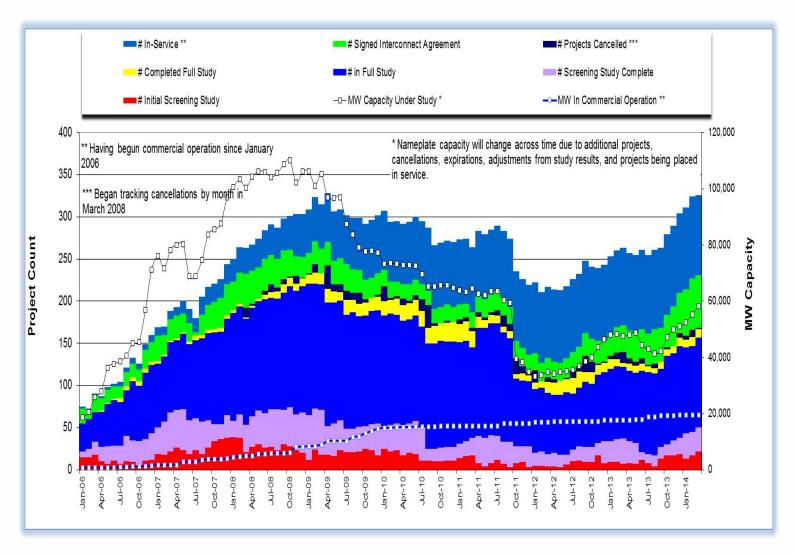


#### **Generation Interconnection Activity by Fuel – March 2014**





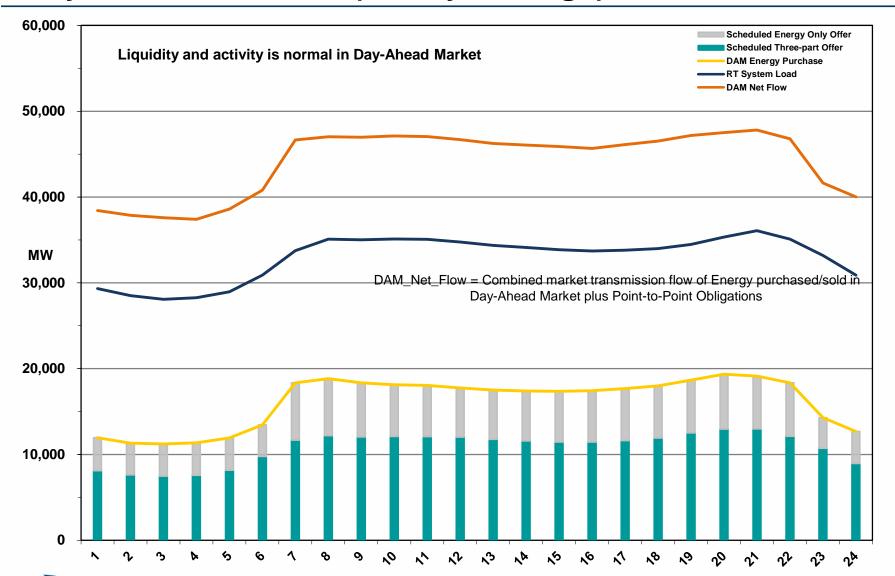
#### **Generation Interconnection Activity by Project Phase – March 2014**





## **Market Operations**

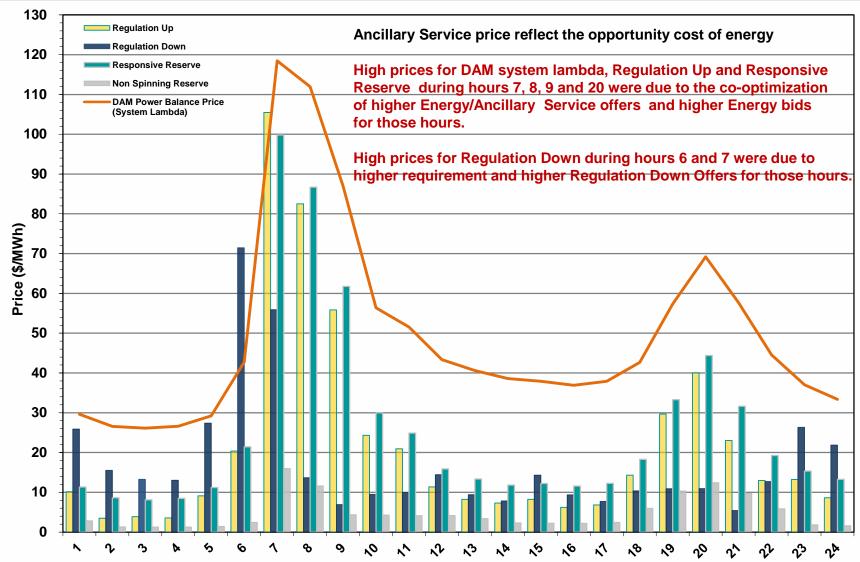
## Day-Ahead Schedule (Hourly Average) - March 2014





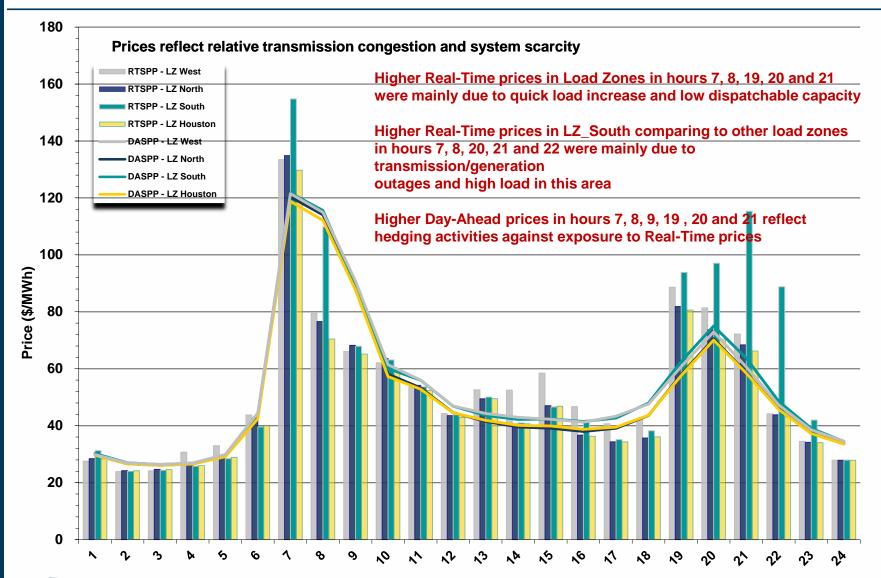
#### Day-Ahead Electricity And Ancillary Service Hourly Average Prices –

**March 2014** 



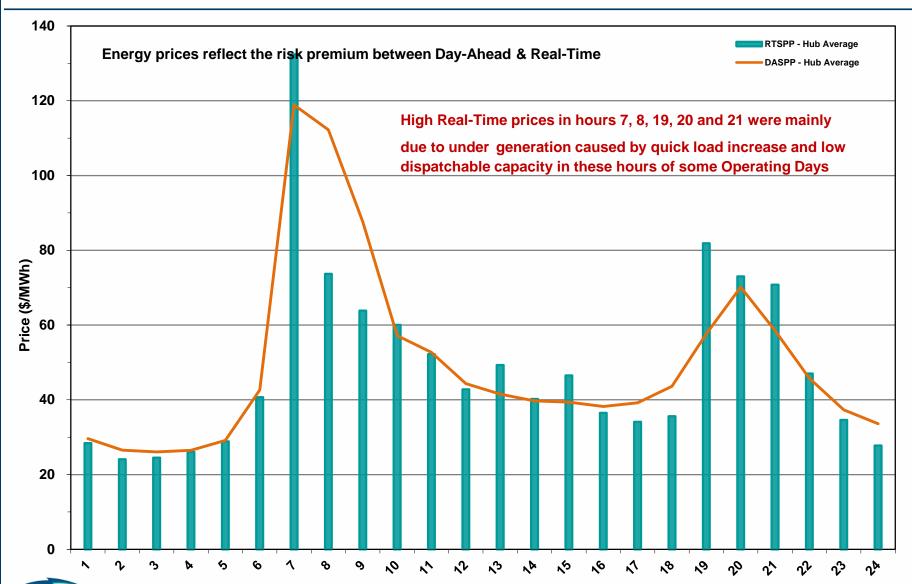


#### Day-Ahead Vs Real-Time Load Zone SPP (Hourly Average) - March 2014

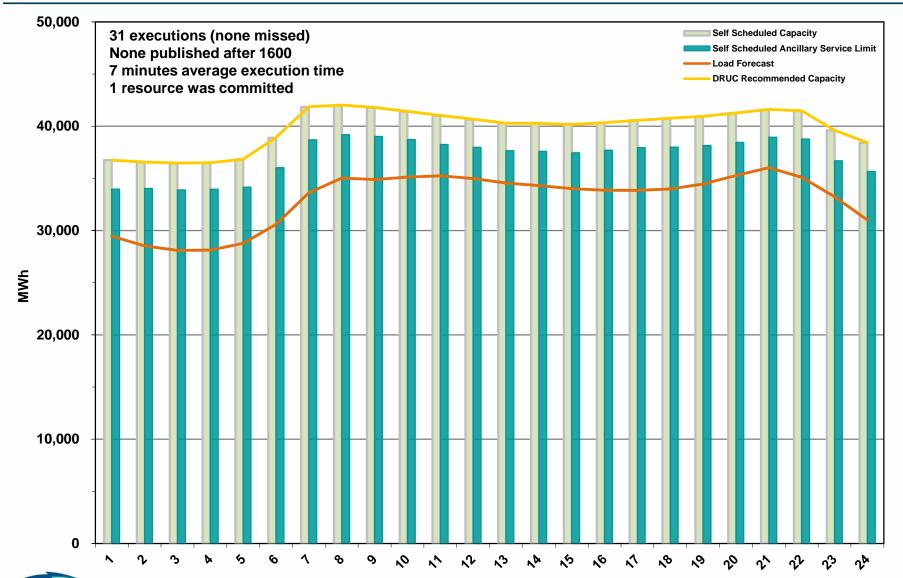




#### Day-Ahead Vs Real-Time Hub Average SPP (Hourly Average) – March 2014

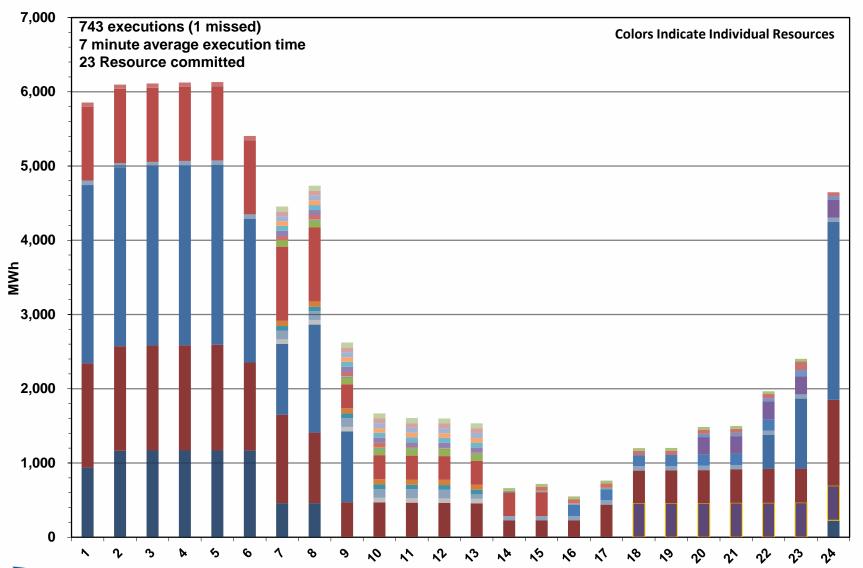


### **DRUC Monthly Summary (Hourly Average) – March 2014**





## **HRUC Monthly Summary – March 2014**

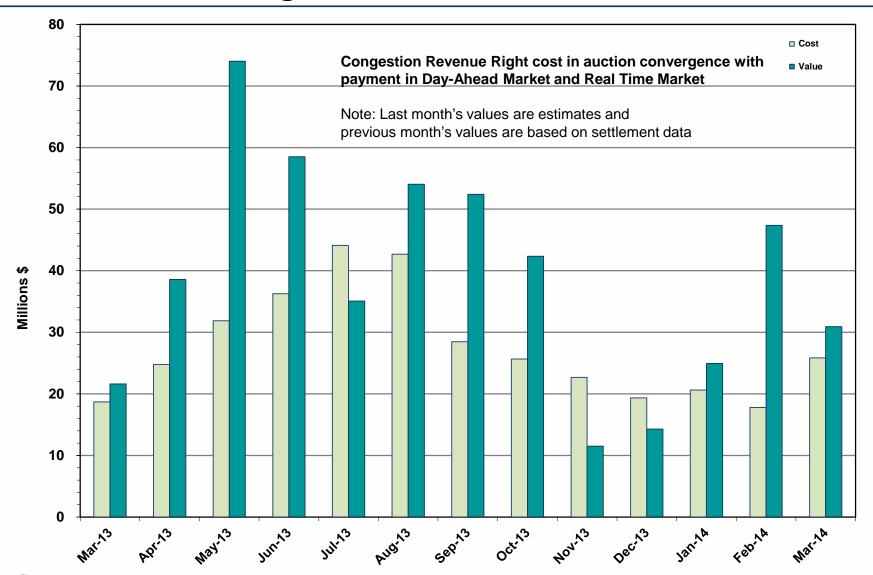




### Non-Spinning Reserve Service Deployment – March 2014

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

## **CRR Price Convergence – March 2014**





## ERS Procurement for February 2014 – May 2014

Feb – May 2014 is the first Standard Contract Term with a common Clearing Price for both ERS-10 and ERS-30.

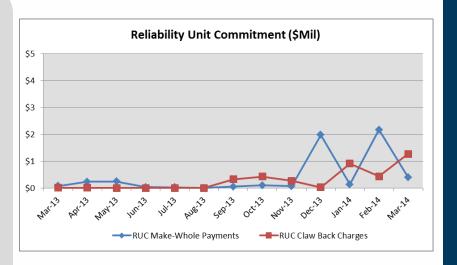
	ВН1	BH2	ВН3	NBH
ERS-10 MW Procured	622.92	607.035	598.36	518.14
ERS-30 MW Procured	149.31	125.935	118.27	97.295
Clearing Price	\$16.70	\$10.71	\$10.71	\$3.90

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



## Reliability Services – March 2014

Reliability Unit Commitment (RUC)	\$ in Millions
RUC Make-Whole Payments	(\$0.40)
RUC Clawback Charges	\$1.27
RUC Commitment Settlement	\$0.87
RUC Capacity Short Charges	\$0.40
RUC Make-Whole Uplift	\$0.00
RUC Commitment Cost Allocation	\$0.40
RUC Decommitment Payments	\$0.00



RUC Make-Whole Payments reduced to a more typical level in March. However, RUC Clawback Charges increased compared to prior months.

RUC settlement allocated directly to load was a credit of \$1.27M in March 2014, compared to:

- A credit of \$0.41M in February 2014
- A credit of \$0.01M in March 2013



## **Capacity Services – March 2014**

Capacity Services	\$ in Millions
Regulation Up Service	\$8.69
Regulation Down Service	\$6.09
Responsive Reserve Service	\$46.90
Non-Spinning Reserve Service	\$5.02
Black Start Service	\$0.63
Voltage Services - Reactive Power	\$0.00
Voltage Services - Lost Opportunity	\$0.00
Total Charges	\$67.33

Capacity Services charges remained high, up from last month and up from March 2013.

March 2014 charges were \$67.33M, compared to:

- A charge of \$60.89M in February 2014
- A charge of \$21.99M in March 2013

## **Energy Settlement – March 2014**

Day-Ahead Market Energy Settlement	\$ in Millions
Energy Purchases	\$706.11
Point to Point Obligation Purchases	\$28.20
RMR Day-Ahead Revenue	\$0.00
Energy Sales	(\$698.02)
Day-Ahead Congestion Rent	\$36.29
Day-Ahead Market Make-Whole Payments	(\$0.20)

Day-Ahead Market and Real-Time Market energy settlement activity increased from last month and from March 2013.

Real-Time Market Energy Settlement	\$ in Millions
Energy Imbalance at a Resource Node	(\$826.28)
Energy Imbalance at a Load Zone	\$1,170.35
Energy Imbalance at a Hub	(\$274.76)
Real Time Congestion from Self Schedules	\$5.74
Block Load Transfers and DC Ties	(\$14.20)
Impact to Revenue Neutrality	\$60.85
Emergency Energy Payments	(\$0.20)
Base Point Deviation Charges	\$0.25
Real-Time Metered Generation (MWh in millions)	24.46

## Congestion Revenue Rights (CRR) – March 2014

	\$ in Millions
Annual Auctions	(\$19.08)
Monthly Auction	(\$6.76)
Total Auction Revenue	(\$25.84)
Day-Ahead CRR Settlement Value	(\$30.91)
Day-Ahead CRR Short-Charges	\$0.38
Day-Ahead CRR Short-Charges Refunded	(\$0.38)
Real-Time CRR Settlement Value	(\$0.00)
Real-Time CRR Short-Charges	\$0.00
Real-Time CRR Short-Charges Refunded	(\$0.00)
Total CRR Funding	(\$30.91)
Day-Ahead Point to Point Obligations Settlement	\$28.20
Real-Time Point to Point Obligation Settlement	(\$73.47)
Net Point to Point Obligation Settlement	(\$45.27)

Congestion Revenue Rights were fully funded and excess funds were available for distribution to load. After refunding CRR Short-Charges, the distribution of Balancing Account funds to load for March 2014 was \$5.42M, compared to:

- \$9.06M in February 2014
- \$2.93M in March 2013

Point to Point Obligations settled with a net payment of \$45.27M compared to a net payment of \$15.01M last month.



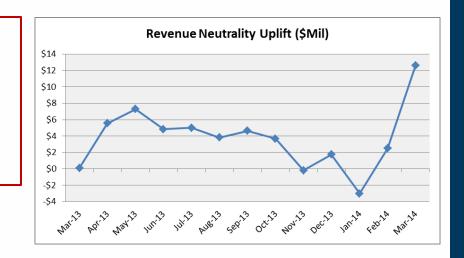
## **Revenue Neutrality – March 2014**

Revenue Neutrality Settlement	\$ in Millions
Real-Time Point to Point Obligation Settlement	(\$73.47)
Real-Time Point to Point Options and Options with Refund Settlement	\$0.00
Real-Time Energy Imbalance Settlement	\$69.32
Real-Time Congestion from Self-Schedules Settlement	\$5.74
DC Tie & Block Load Transfer Settlement	(\$14.20)
Charge to Load	\$12.61

Revenue Neutrality charges to load increased significantly compared to last month and to March 2013.

March 2014 was a charge of \$12.61M, compared to:

- \$2.49M charge in February 2014
- \$0.10M charge in March 2013





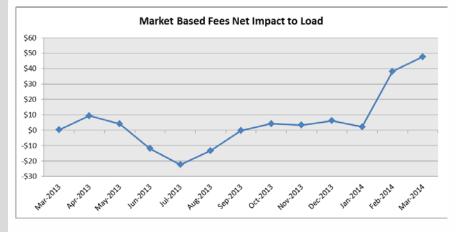
#### **Net Allocation to Load – March 2014**

Market-Based Allocation	\$ in Millions
CRR Auction Revenue Disbursement Settlement	(\$25.84)
Balancing Account Proceeds Settlement	(\$5.42)
Net Reliability Unit Commitment Settlement	(\$0.87)
Ancillary Services Settlement	\$67.33
Reliability Must Run Services Settlement	\$0.00
Reliability Must Run for Capacity	\$0.00
Real-Time Revenue Neutrality Settlement	\$12.61
Emergency Energy Settlement	\$0.20
Base Point Deviation Settlement	(\$0.25)
Total	\$47.76
Fee Allocation	
ERCOT Administrative Fee Settlement	\$11.51
Net Allocated to Load	\$59.27

The charge for the net allocation to Load increased from last month and from March of 2013

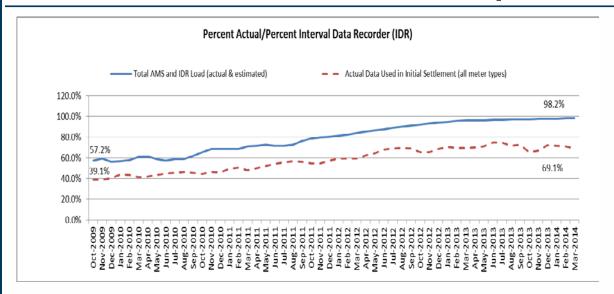
March 2014 was a charge of \$59.27M, compared to:

- A charge of \$49.76M in February 2014
- A charge of \$10.03M in March 2013



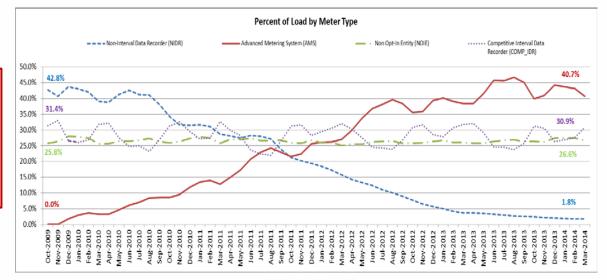


## **Advanced Meter Settlement Impacts – March 2014**



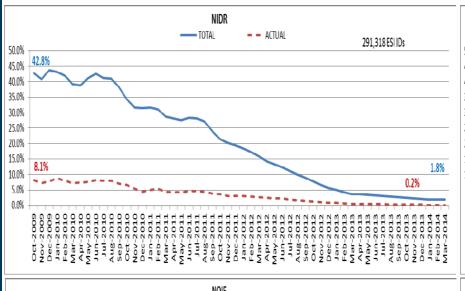
March 2014: At month end, settling 6.5M ESIIDs using Advanced Meter data.

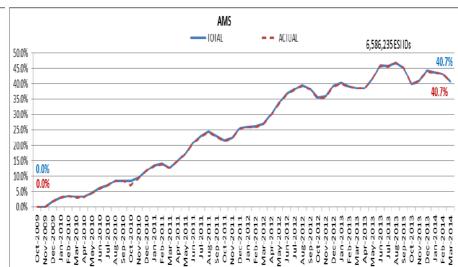
March 2014: 98.2% of the load in ERCOT is settled with 15-min interval data (AMS, Competitive IDR, and NOIE IDR).

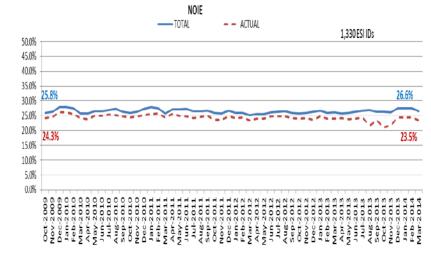


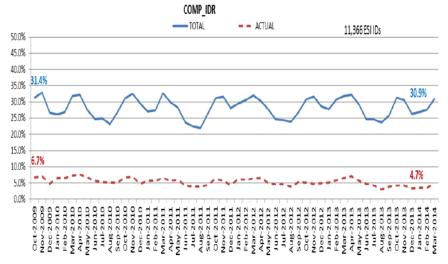


## ERCOT Wide Load Volumes by Meter Type – INITIAL Settlement – March 2014











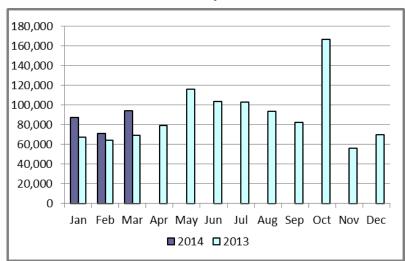
## **Retail Transaction Volumes – Summary – March 2014**

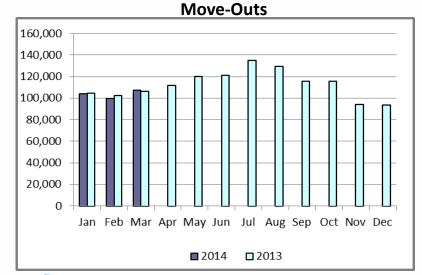
	Year-To-Date		Transactions Received		
Transaction Type	March 2014	March 2013	March 2014	March 2013	
Switches	251,970	200,395	93,887	68,950	
Acquisition	0	0	0	0	
Move - Ins	629,943	583,662	214,724	197,200	
Move - Outs	310,967	313,295	107,266	106,467	
Continuous Service Agreements (CSA)	146,277	122,593	70,310	40,977	
Mass Transitions	0	0	0	0	
Total	1,339,157	1,219,945	486,187	413,594	



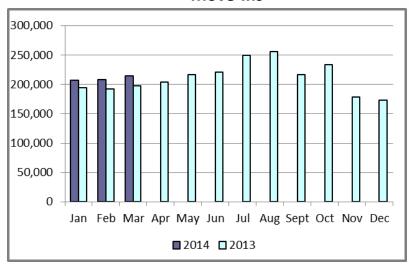
### Retail Transaction Volumes – Summary – March 2014



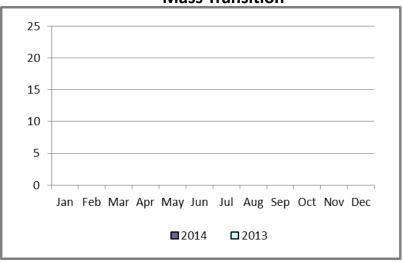




#### **Move-Ins**



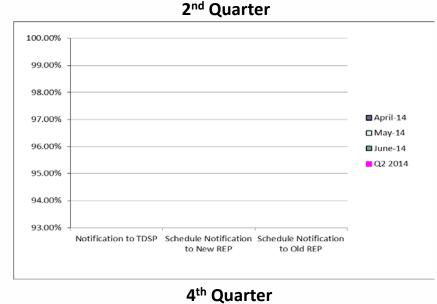
#### **Mass Transition**

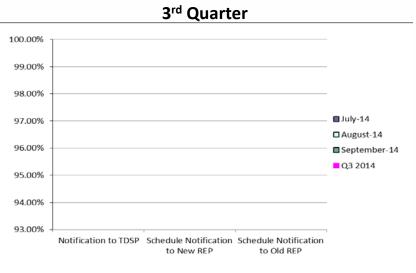


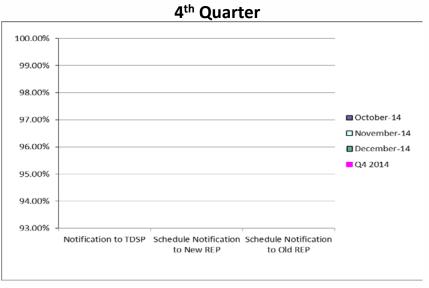


#### Retail Performance Measures – Switch – March 2014



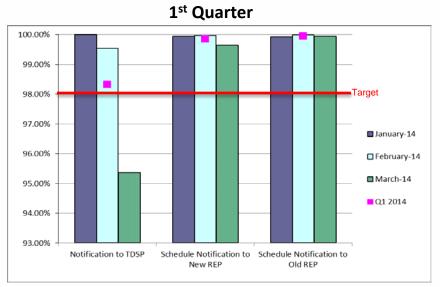


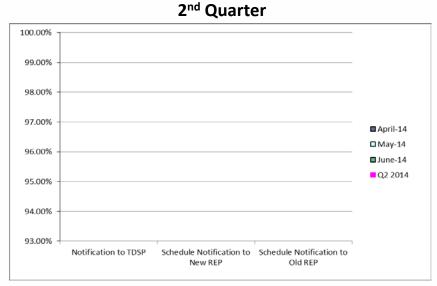


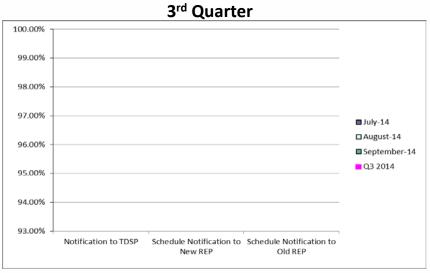


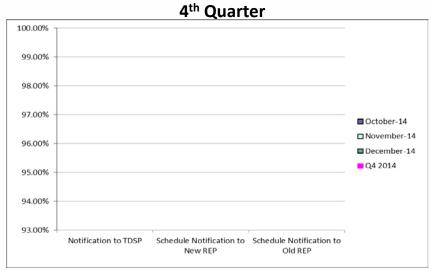


#### Retail Performance Measures (Same Day Move-In) - March 2014



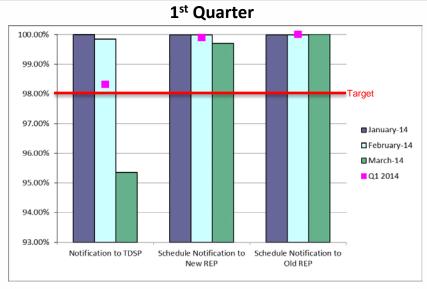


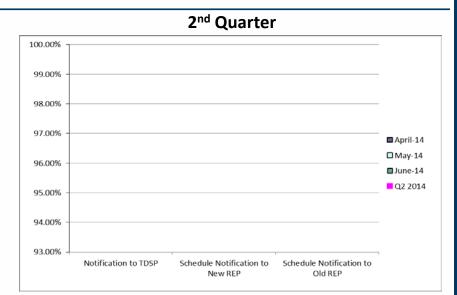


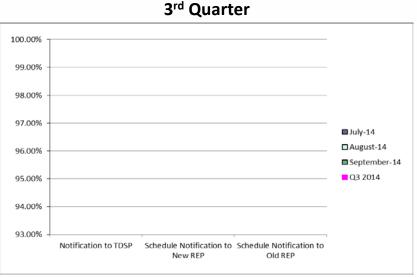


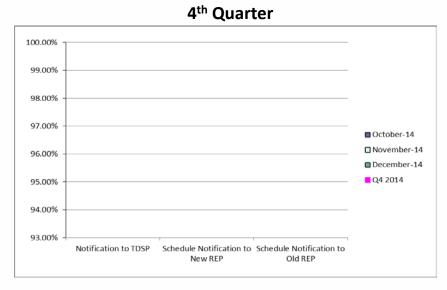


### Retail Performance Measures (Standard Move-In) - March 2014









## **Projects Report**

		2014 Project Funding				25,000,000						
Impact Metric Tolerances				2	2014 Portfolio Demand	2014 Portfolio Managed to Project Funding		Total Portfolio Demand				
	the report Green = No more than 4.9% unfavorable variance		t/On Hold (Count = 49)	\$	21,035,874	\$	23,671,142	\$	42,654,931			
			Started (Count = 46)	\$	9,189,288	\$	1,238,166	\$	19,020,204			
					3,103,200	Υ	1,230,100	Υ	15,020,204			
- Yellow = Unfavorable variance between 4.9% and 9.9% - Red = Unfavorable variance more than 9.9%		Projects Completed (Count = 4)		\$	102,919	\$	90,692	\$	435,325			
- Keu - 01	- Red = Unravorable variance more than 9.9%			\$	30,328,081	\$	25,000,000	\$	62,110,460			
Project Number	Projects in Initiation Phase (Count = 4)											
130-01	Electronic Crisis Communications Enhancements											
TBD	Privileged Account Management											
129-01	Access and Roles Management											
131-01	Email Gateway Refresh											
Project Number	Projects in Planning Phase (Count = 13)	Baseline Phase Start	Baseline Phase Finish		Scheduled Go-Live Date	Sc	heduled Phase Finish	Sc	Schedule Impact		Budget Impact	
052-01	EMS Upgrade	8/7/2013	10/30/2014		TBD		10/30/2014		0%		0%	
065-01	NMMS Upgrade	5/1/2013	3/1/2014		TBD		5/30/2014	1	-29%	1	-11%	
074-02	Cyber Security Project #9	12/17/2013	3/26/2014		TBD		6/11/2014	2	-77%		0%	
089-01	Information Technology Change Management	4/10/2013	4/2/2014		TBD		8/6/2014	4	-35%		1%	
097-01	ABB MMS OS Technology Refresh	5/29/2013	5/30/2014		TBD		5/30/2014		0%		0%	
104-01	Disaster Recovery: S&B, RTL, MDT	5/15/2013	11/15/2013		TBD		4/2/2014	1	-75%	1	-7%	
106-01	MP Online Data Entry - Ph 1	10/9/2013	3/5/2014		TBD		6/17/2014	4	-70%		12%	
115-01	Cyber Security Project #14	11/13/2013	3/26/2014		TBD		5/19/2014	2	-40%		-1%	
120-01	IT Production Hardening	2/12/2014	9/24/2014		TBD		9/25/2014		0%		19%	
121-01	2013/2014 Network Refresh	1/15/2014	4/16/2014		TBD		4/16/2014		0%		10%	
122-01	Infoblox DNS/DHCP	12/11/2013	2/19/2014		TBD		3/26/2014	1	-50%		-4%	
125-01	VSAT/TSAT Upgrade	2/12/2014	3/26/2014		TBD		3/26/2014		0%		3%	
127-01	SQL Server 2012 Upgrade / Cluster Consolidation	3/6/2014	8/27/2014		TBD		8/27/2014		0%		2%	



Project Number	Projects in Execution Phase (Count = 25)	Baseline Phase Start	Baseline Go-Live Target	Scheduled Go-Live Date	Scheduled Phase Finish	Sched	ule Impact	Budget Impact	
99914	Minor Cap - 2014	1/1/2014	12/31/2014	12/31/2014	12/31/2014		0%		0%
017-01	Oracle 11g Upgrade	10/10/2012	5/14/2014	5/14/2014	5/30/2014		0%		6%
077-01	Contract Lifecycle Management	9/11/2013	5/5/2014	7/8/2014	9/4/2014	2	-27%		1%
083-01	Centralized Application Log Management	8/28/2013	5/7/2014	5/7/2014	10/3/2014		0%		4%
10052_01	Settlement System Upgrade	1/25/2012	10/10/2014	10/10/2014	3/3/2015		0%	2	-9%
107-01	IBM AIX Operating System Upgrades	1/29/2014	5/2/2014	5/2/2014	7/16/2014		0%		13%
108-01	Alstom Load Forecasting Upgrade	11/20/2013	4/23/2014	4/23/2014	5/14/2014		0%		17%
110-01	Taylor Control Room Upgrade	2/19/2014	7/7/2014	7/8/2014	8/13/2014		0%		-2%
116-01	Collage Replacement	2/6/2014	9/22/2014	8/5/2014	9/5/2014		21%		8%
118-01	Mitigation Plan RTCA Enhancements	2/5/2014	4/18/2014	4/17/2014	5/8/2014		1%		0%
119-01	CREZ Voltage Control and Coordination	3/6/2014	4/18/2014	4/18/2014	8/20/2014		0%		6%
128-01	Capital Efficiencies and Enhancements - 2014	1/1/2014	12/31/2014	12/31/2014	12/31/2014		0%		0%
SCR756	MarkeTrak Enhancements - Remaining SCR756 Items	2/5/2014	7/23/2014	7/27/2014	8/22/2014		-2%		11%
SCR769	CRRAH Digital Certificate New Role for Read Only Access	3/20/2014	8/1/2014	8/1/2014	9/10/2014		0%		25%
Various	2014 Market System Enhancements	1/8/2014	6/1/2014	6/1/2014	6/30/2014		0%		16%
047-01	CMSDK/MIR Replacement	4/24/2013	12/8/2013	4/15/2014	6/4/2014	2	-56%	2	-59%
057-01	EPS Metering DB Redesign	4/17/2013	9/6/2013	7/28/2014	8/6/2014	2	-228%	2	-140%
2014 PC	Program Control - 2014	1/1/2014	12/31/2014	12/31/2014	12/31/2014	NA	0%	NA	1%
NPRR485	Clarification for Fuel Adder Provisions	10/23/2013	9/30/2014	9/30/2014	10/31/2014		0%	NA	See #128- 01
NPRR491	Updated Distribution Generation and Demand Response Information for ERCOT	2/26/2014	8/1/2014	8/1/2014	8/31/2014		0%	NA	See #117- 01
NPRR532	Performance Measurement and Verification and Telemetry Requirements for Load Resources Providing Non-Spin	1/8/2014	6/1/2014	6/1/2014	7/1/2014		0%	NA	See #117- 01
NPRR555	Load Resource Participation in Security-Constrained Economic Dispatch	1/8/2014	6/1/2014	6/1/2014	7/1/2014		0%	NA	See #117- 01
NPRR564	Thirty-Minute Emergency Response Service (ERS) and Other ERS Services	1/8/2014	4/27/2014	4/27/2014	7/1/2014		0%	NA	See #117- 01
NPRR568	Real-Time Reserve Price Adder Based on Operating Reserve Demand Curve	1/8/2014	6/1/2014	6/1/2014	7/1/2014		0%	NA	See #117- 01
SCR774	Enhancement to Outage Scheduler and Reports	2/26/2014	8/1/2014	8/1/2014	8/31/2014		0%	NA	See #128- 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		
NPRR240	Proxy Energy Offer Curve	1/8/2014	2/7/2014	2/7/2014	7/1/2014	0%	N/	See #117- 01		
NOGRR105	Generation Resource Frequency Response Test Procedure	12/4/2013	2/7/2014	2/7/2014	3/26/2014	0%		29%		
016-01	ADP-IDM Interface	11/6/2013	3/26/2014	3/26/2014	5/6/2014	0%		10%		
Project Number	Projects On Hold (Count = 4)	Forecast Start Date	Baseline Phase Finish	Scheduled Go-Live Date	Scheduled Phase Finish	Schedule Impa	ct B	Budget Impact		
PROJECT	TS ON HOLD (Count = 4) Sorted by Project N	lumber								
NPRR327	State Estimator Data Redaction Methodology	12/5/2012	2/12/2013	TBD	TBD	3	3			
OBD	Setting the Shadow Price Caps and Power Balance Penalties in Security-Constrained Economic Dispatch	1/8/2014	6/1/2014	TBD	TBD	3	3	i		
SCR772	New Extract for Five Minute Interval Settlement Data	2/12/2014	4/19/2014	TBD	TBD	3	3	i		
066-01	Planning Site Transition to MIS	10/16/2013	5/2/2014	TBD	TBD	3	3	,		
Project Number	Projects Completed in the Current Year (Count =4)	Baseline Execution Phase Start	Baseline Go-Live Target	Actual Go-Live Date	Actual Execution Phase Finish	Schedule Statu	s T	Total Variance		
PROJECT	TS COMPLETED IN 2014 (Count = 4) Sorted by Proje	•						20%		
NPRR425	Creation of a WGR Group for GREDP and Base Point Deviation Evaluation	8/21/2013	3/26/2014	3/3/2014	3/31/2014	10%		46%		
114-01	Lawson Security	1/29/2014	2/17/2014	2/17/2014	3/5/2014	0%	2	-22%		
101-01	Emergency Notification System Hardware Refresh	11/13/2013	1/24/2014	12/20/2013	1/24/2014	48%		-2%		
113-01	Dev Hardware Refresh and Virtualization Expansion	11/13/2013	1/24/2014	1/9/2014	2/28/2014	20%		0%		
			Footnotes							
			1 - Current phase took longer than expected, resulting in additional funding and/or time required							
			Current phase requiring more labor than expected, resulting in additional funding and/or time required							
			3 - Project placed on hold 4 - Resource constraints resulted in delay to current phase							
			NA - Metric not calculated because:  - it is reported at the parent project level, or - it is an administrative project							



Project Number	Projects Not Yet Started (Count = 46)	Forecast Star Date					
PROJECT	PROJECTS NOT YET STARTED (Count = 46) Sorted by Start Date						
TBD	Blue Building AC Upgrade	Apr 2014					
132-01	Client Digital Certificate Upgrade	Apr 2014					
TBD	Common Infrastructure - 2014	Apr 2014					
TBD	EIS Reporting and Control Systems Upgrade	Apr 2014					
TBD	Testing Environment Management	Apr 2014					
NPRR487	QSGR Dispatch Adjustment	May 2014					
NPRR495	Changes to Ancillary Services Capacity Monitor	May 2014					
NPRR500	Posting of Generation that is Off but Available	May 2014					
NPRR543	Message for Confirmed E-Tags	May 2014					
NPRR559	Revisions to MCE Calculation	May 2014					
TBD	Cyber Security Project #11	May 2014					
TBD	EIF Database Utilization	May 2014					
TBD	MP Communications Tool	May 2014					
TBD	Production Virtualization Expansion	May 2014					
TBD	Reactive Test Forms Revision	May 2014					
NPRR484	Revisions to Congestion Revenue Rights Credit Calculations and	Jun 2014					
NPRR527	Payments - Phase 1b Required Combined Cycle Telemetry for Operational Awareness and PDCWG Analysis	Jun 2014					
TBD	Cyber Security Project #10	Jun 2014					
TBD	Move iTron LF Application to High Availability Environment	Jun 2014					
TBD	On-Site Storage	Jun 2014					
NPRR272	Definition and Participation of Quick Start Generation Resources	Jul 2014					
NPRR519	Exemption of ERS-Only QSEs from Collateral and Capitalization Requirements	Jul 2014					
NPRR524	Resource Limits in Providing Ancillary Service	Jul 2014					
SCR771	ERCOT System Change Allowing Independent Master QSE to	Jul 2014					
TBD	Represent Split Generation Resources Enterprise Vault Upgrade	Jul 2014					
TBD	Red Hat Jboss Operations Network	Jul 2014					
TBD		Jul 2014					
	Replace N2N System						
TBD	SOTE/MOTE Upgrade	Jul 2014					
RRs NPRR256	Revision Request Funding - 2014 Sync with PRR787, Add Non-Compliance Language to QSE	Jul 2014 Aug 2014					
	Performance Standards						
TBD	Blackstart Facilities Enhancements	Aug 2014					
NOGRR084	Daily Grid Operations Summary Report	Sep 2014					
TBD	EDW Platform Transition Phase 2	Sep 2014					
TBD	REC Rewrite & Refresh	Sep 2014					
TBD	VSAT/TSAT Upgrade Phase 2	Sep 2014					
NPRR210	Wind Forecasting Change to P50, Sync with PRR841	Oct 2014					
NPRR439	Updating a Counter-Party's Available Credit Limit for Current Day DAM	Oct 2014					
NPRR553	Monthly BLT Payment and Charge for Presidio Exception	Oct 2014					
TBD	Appworx Replaces TIBCO Code in CSI Framework	Oct 2014					
TBD	AV Upgrades to TCC1 Conference Rooms	Oct 2014					
TBD	CREZ Voltage Control and Coordination - Phase 2	Oct 2014					
TBD	MP Online Data Entry - Ph 2	Oct 2014					
TBD	Replace Actional Policy Manager	Oct 2014					
TBD	Replace Paperfree	Oct 2014					
TBD		Oct 2014					
IDD	Voice Over IP (VOIP) Replacement for PBX	OCT 2014					

