

ERCOT Monthly Operational Overview (June 2014)

ERCOT Public July 15, 2014

Grid Operations & Planning

Operations

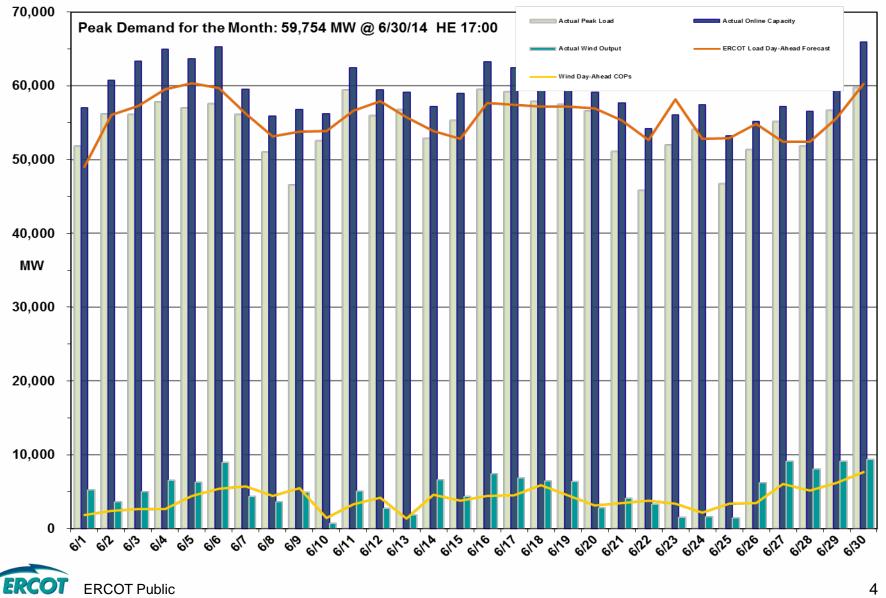
- The peak demand of 59,754 MW on June 30th was less than the mid-term forecast peak of 60,253 MW as well as the June 2013 actual peak demand of 64,418 MW. The instantaneous load on June 30th was 59,870 MW.
- Day-ahead load forecast error for June was 3.56%
- ERCOT issued 2 notifications
 - A single advisory for GMD at level K7.
 - A single transmission watch for congestion.

Planning Activities

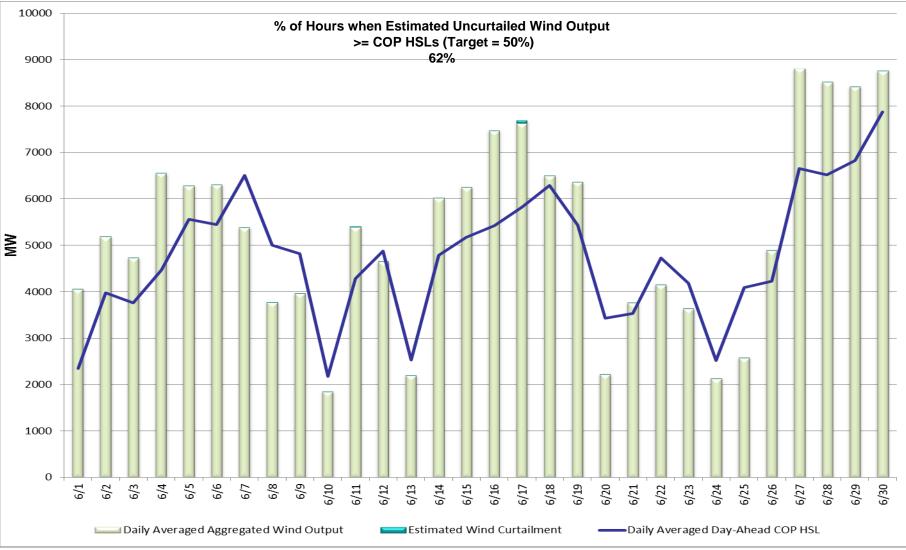
- 230 active generation interconnection requests totaling over 60,400 MW, including 25,400 MW of wind generation as of June 30, 2014. Three fewer requests and 700 more MW from May 31, 2014.
- 11,575 MW wind capacity in commercial operations on June 30, 2014.



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



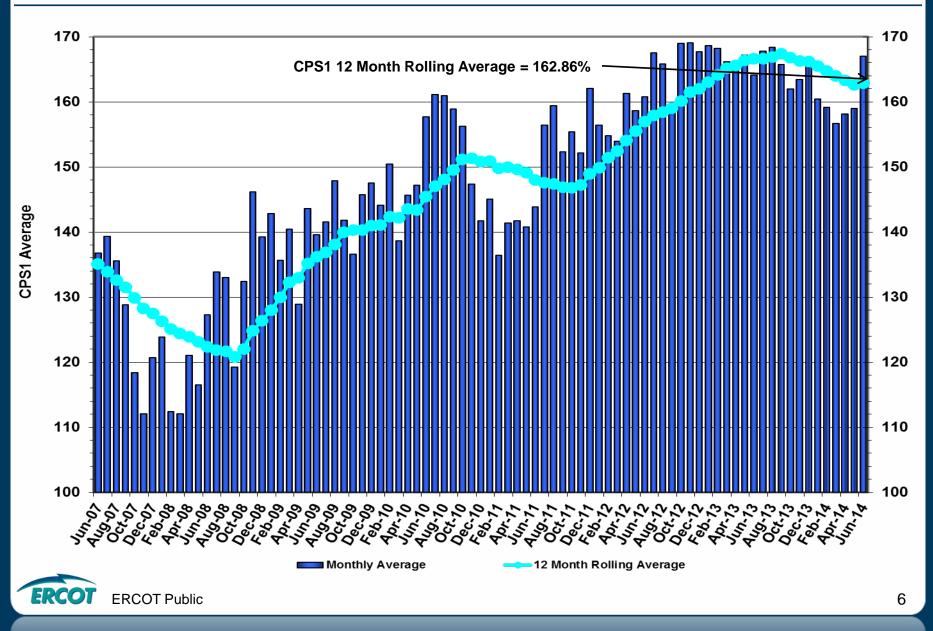
Actual Wind Output plus Curtailments vs. Wind Day-Ahead COPs for All Hours – June 2014



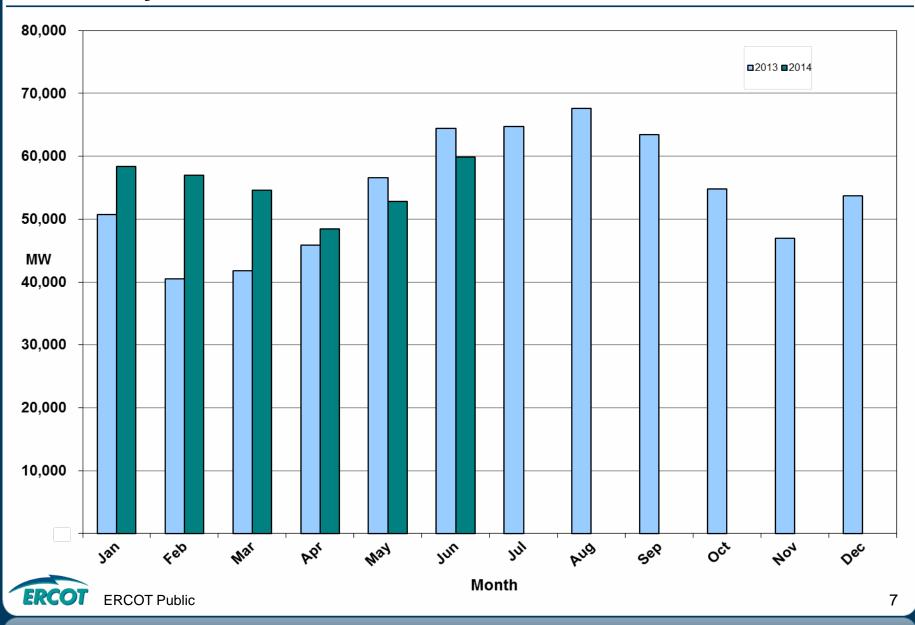
Note: QSEs must use the AWST 50% probability of exceedance forecast as the HSL in their COPs

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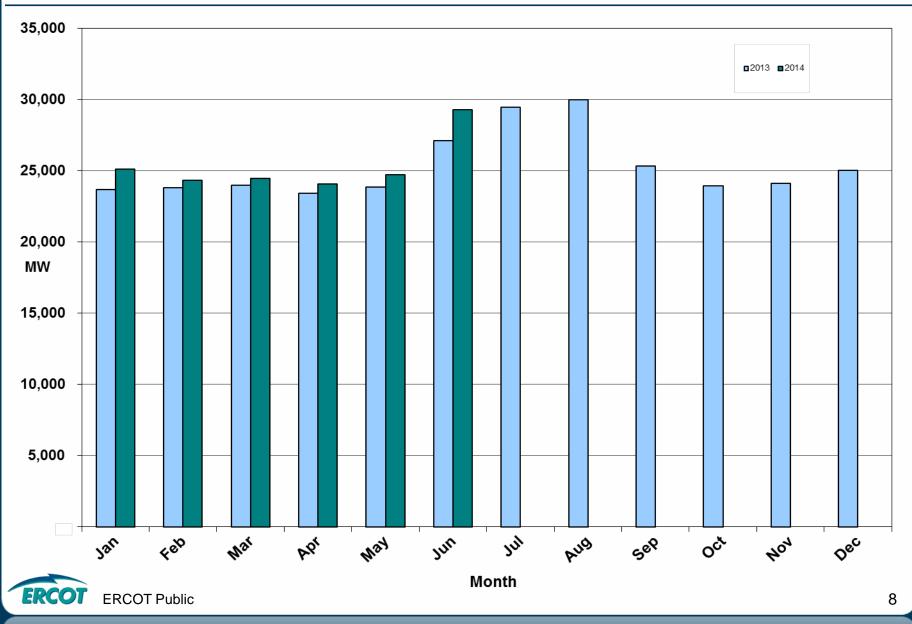
ERCOT's CPS1 Monthly Performance – June 2014



Monthly Peak Actual Demand – June 2014



Monthly Minimum Actual Demand – June 2014

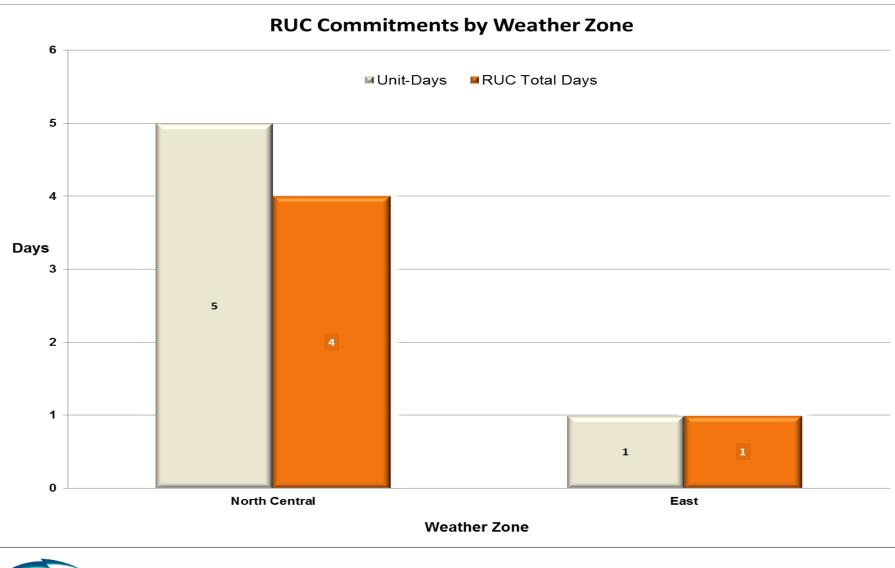


Mean Absolute Percent Error (MAPE) for ERCOT Mid-Term Load Forecast (MTLF)
Run at 14:00 Day Ahead

	2011 MAPE	2012 MAPE	2013 MAPE	2014 MAPE	June MA	2014 PE
Average Annual MAPE	2.83	3.02	2.86	3.20	3.	56
Lowest Monthly MAPE	1.63	2.51	2.07	2.38	Lowest Daily MAPE	0.77 Jun – 20
Highest Monthly MAPE	3.55	3.49	3.50	3.70	Highest Daily MAPE	11.41 Jun - 25



Reliability Unit Commitment (RUC) Capacity by Weather Zone - June 2014



Generic Transmission Limits (GTLs) – June 2014

GTLs	Jun 13 Days GTLs	Apr 14 Days GTLs	May 14 Days GTLs	Jun 14 Days GTLs	Last 12 Months Total Days (Jul13 – Jun14)
North – Houston	0	0	0	0	0
West – North	4	1	0	0	12
Valley Import	0	0	0	0	7
SOP110	0	9	0	0	10

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 - June 2014

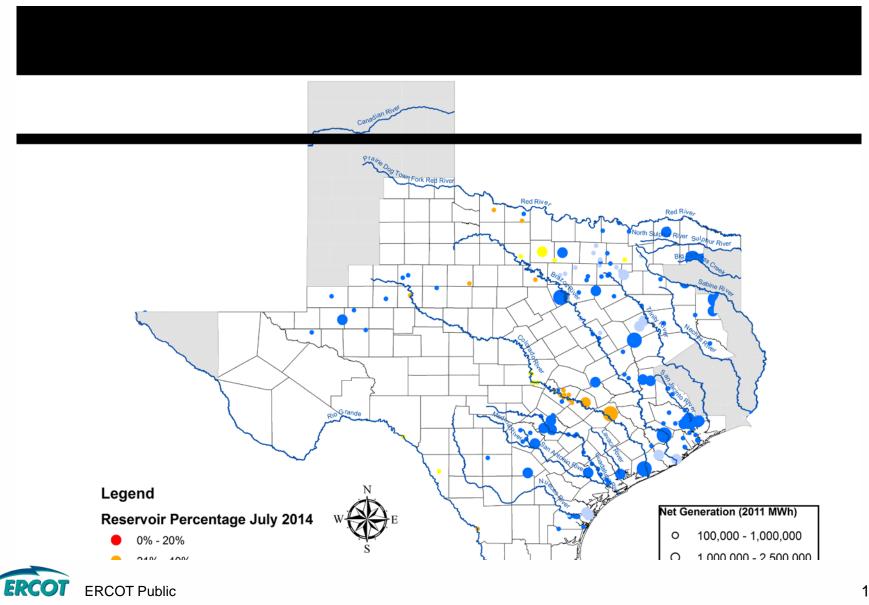
- Advisories issued for GMD at level K7
 - Issued once on 6/8
- Watches issued due to congestion
 - Issued once on 6/12



• No significant events to report



Lake Levels Update – July 1, 2014



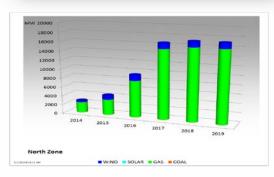
Planning Summary – June 2014

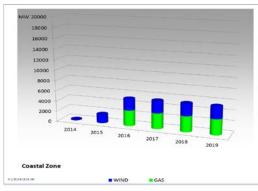
- ERCOT is currently tracking 230 active generation interconnection requests totaling over 60,400 MW. This includes over 25,400 MW of wind generation.
- ERCOT is currently reviewing proposed transmission improvements with a total cost of \$490.4 Million.
- Transmission Projects endorsed in 2014 total \$691.1 Million.
- All projects (in engineering, routing, licensing and construction) total approximately \$4.98 Billion.
- Transmission Projects energized in 2014 total about \$438.2 Million.



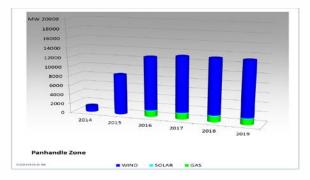
Cumulative Installed MW Capacity of Interconnection Requests by Zone – June 2014

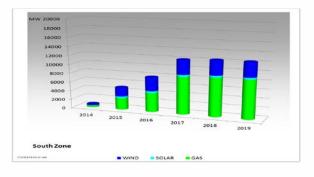


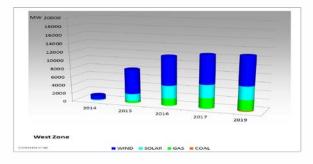




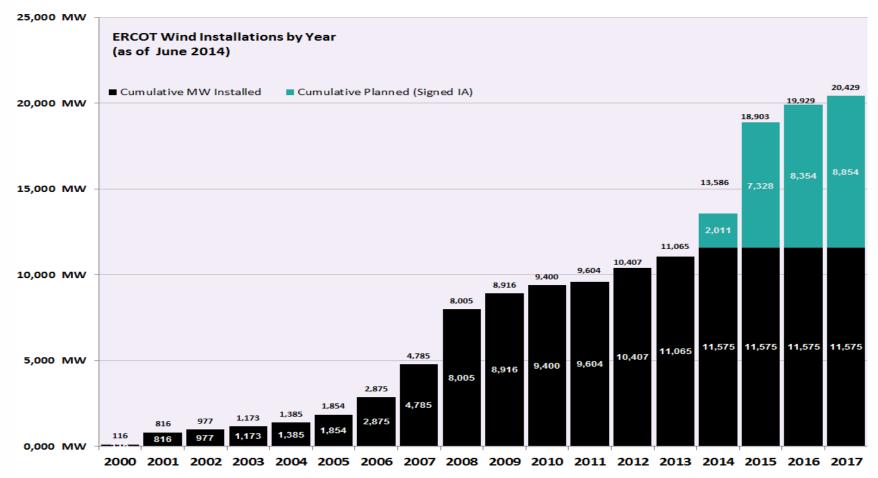








Wind Generation – June 2014

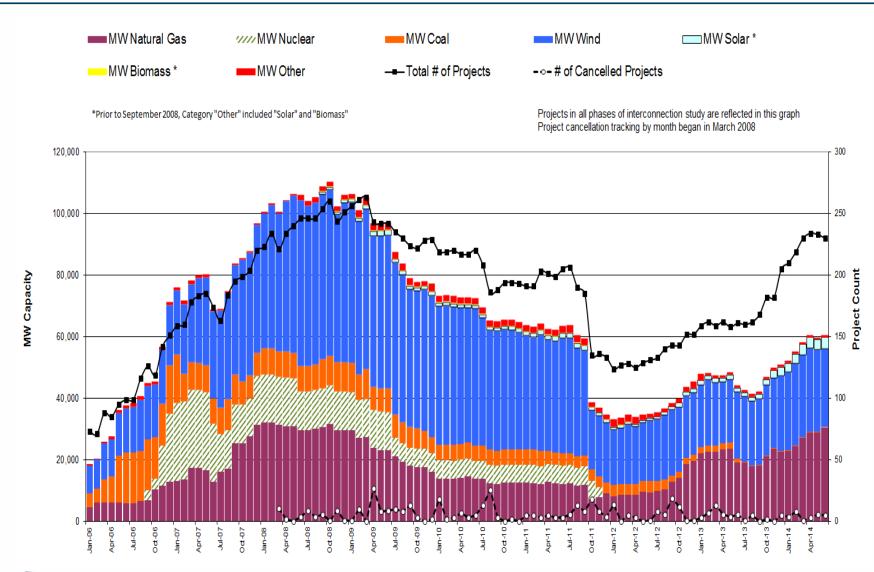


The data presented here is based upon the latest registration data provided to ERCOT by the resource owners and can change without notice. Any capacity changes will be reflected in current and subsequent years' totals. Scheduling delays will also be reflected in the planned projects as that information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

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

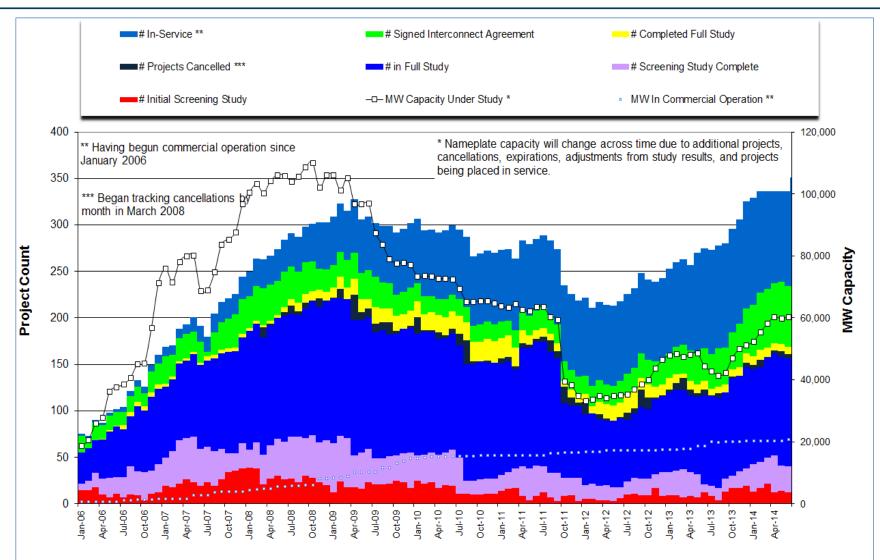


Generation Interconnection Activity by Fuel – June 2014



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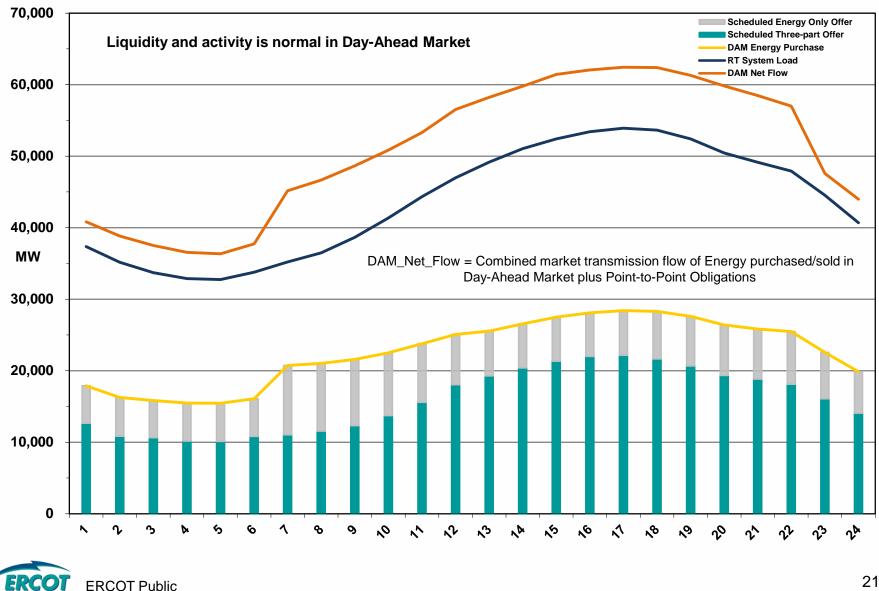
Generation Interconnection Activity by Project Phase – June 2014



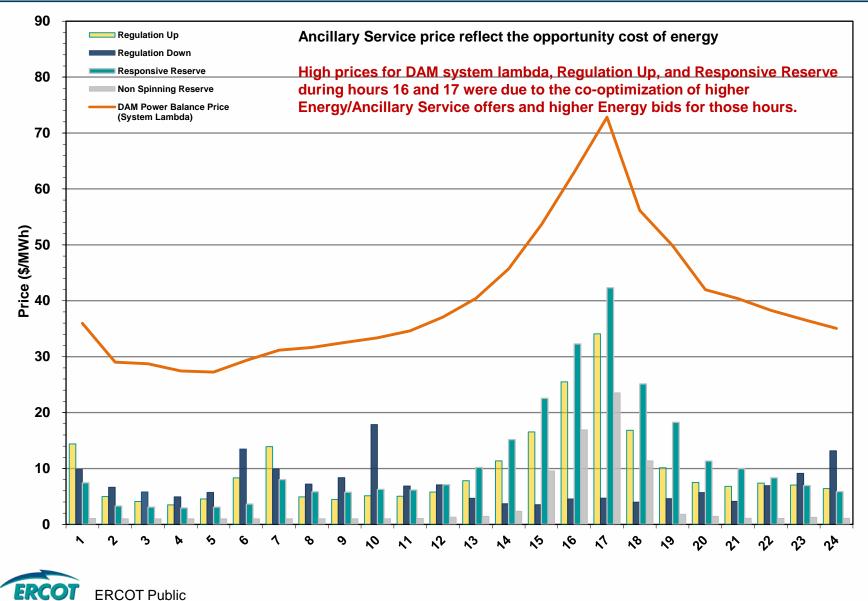


Market Operations

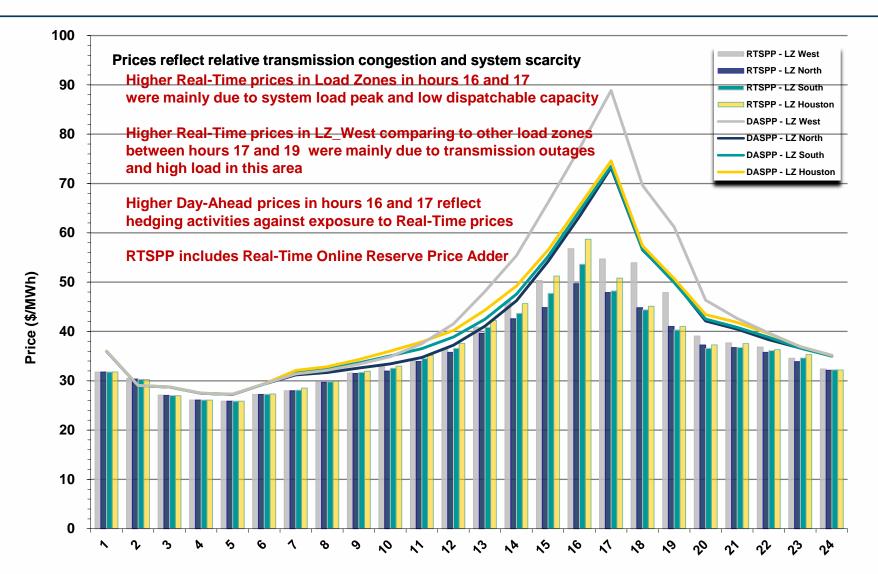
Day-Ahead Schedule (Hourly Average) – June 2014



Day-Ahead Electricity And Ancillary Service Hourly Average Prices – June 2014

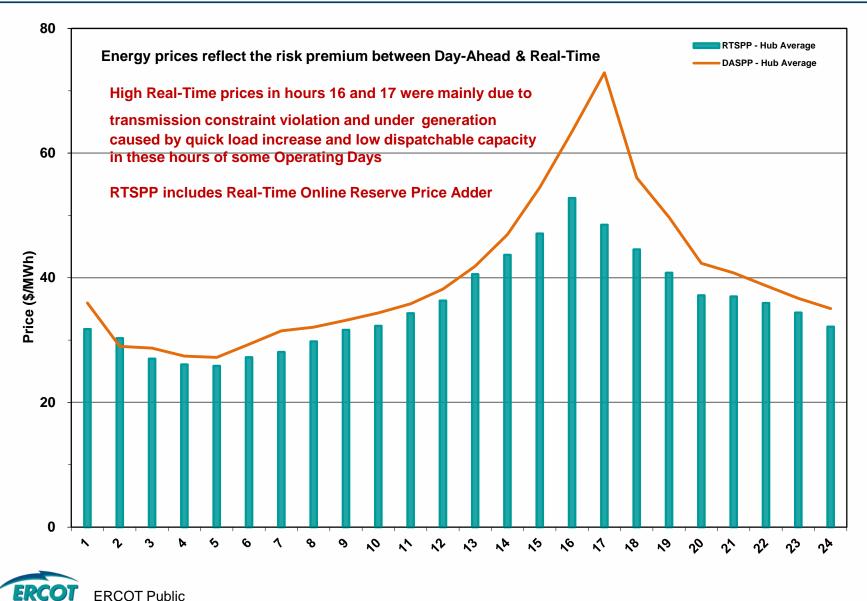


Day-Ahead Vs Real-Time Load Zone SPP (Hourly Average) – June 2014

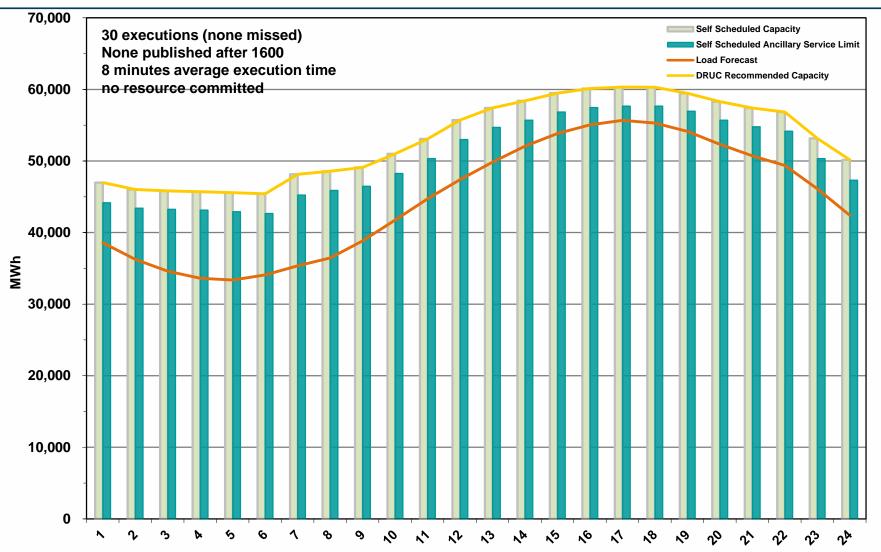




Day-Ahead Vs Real-Time Hub Average SPP (Hourly Average) – June 2014

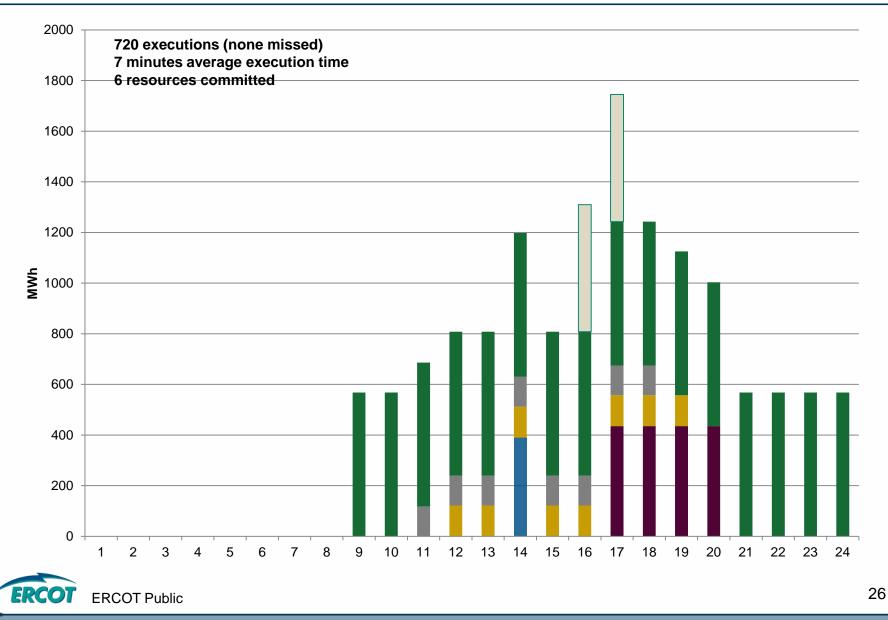


DRUC Monthly Summary (Hourly Average) – June 2014





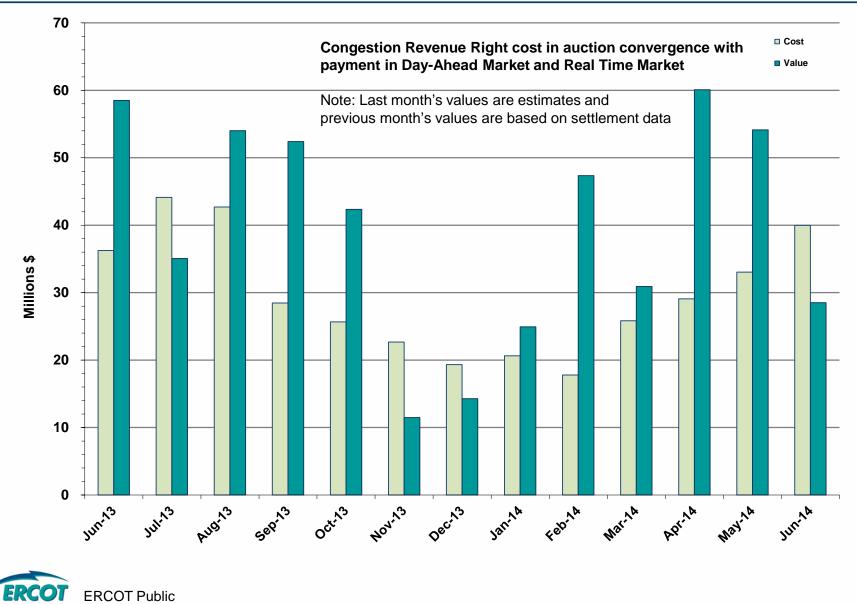
HRUC Monthly Summary – June 2014



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

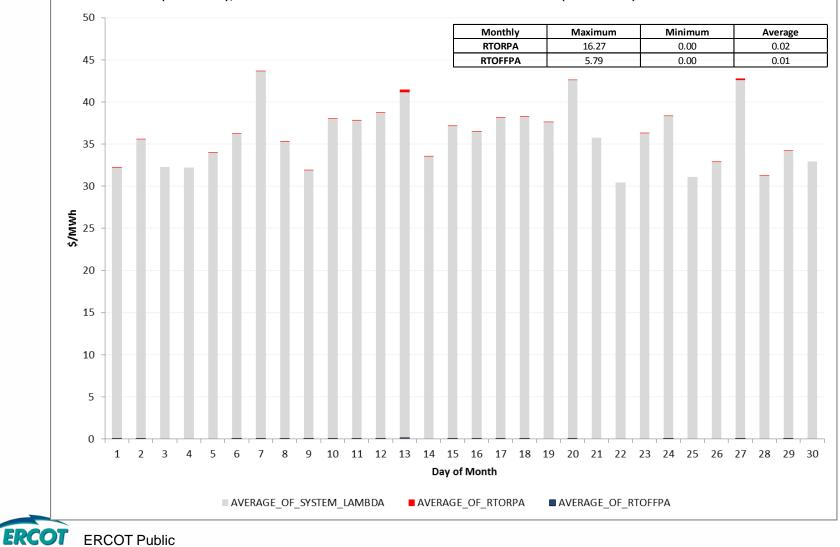


CRR Price Convergence – June 2014



ORDC Price Adder (Daily Average) – June 2014

Average Daily Real-Time System Lambda, Real-Time On-Line Reserve Price Adder (RTORPA), and Real-Time Offline Reserve Price Adder (RTOFFPA) - June 2014



ERS Procurement for June 2014 – September 2014

JunSep2014 has common Clearing Price for ERS-10, ERS-30, and ERS-WS.

630.614	454.03	451.533	574.559
200.874	166.954	152.467	163.905
N/A	21.6	21.6	N/A
\$3.00	\$38.53	\$39.43	\$3.35
\$	N/A 33.00	N/A 21.6 53.00 \$38.53	N/A 21.6 21.6

1 1300, Monday thru Friday except ERCOT Holidays

HE 1400 through 1600, Monday thru Friday except ERCOT Holidays BH2 - Business Hours 2 BH3 - Business Hours 3

HE 1700 through 2000, Monday thru Friday except ERCOT Holidays

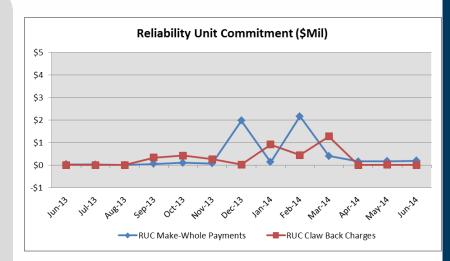
NBH - Non-Business Hours

All other hours



Reliability Services – June 2014

Reliability Unit Commitment (RUC)	\$ in Millions
RUC Make-Whole Payments	(\$0.19)
RUC Clawback Charges	\$0.00
RUC Commitment Settlement	(\$0.19)
RUC Capacity Short Charges	\$0.19
RUC Make-Whole Uplift	\$0.00
RUC Commitment Cost Allocation	\$0.19
RUC Decommitment Payments	\$0.00



In June, RUC Make-Whole Payments rose slightly and RUC Clawback Charges reduced to \$0.0M.

There was no RUC settlement allocated directly to load in June 2014, compared to:

- \$0.01M in May 2014
- No allocation in June 2013



Capacity Services – June 2014

Capacity Services	\$ in Millions
Regulation Up Service	\$3.18
Regulation Down Service	\$2.61
Responsive Reserve Service	\$19.44
Non-Spinning Reserve Service	\$3.55
Black Start Service	\$0.61
Voltage Services - Reactive Power	\$0.00
Voltage Services - Lost Opportunity	\$0.00
Total Charges	\$29.39

Capacity Services costs were down from last month and up from June 2013.

June 2014 cost was \$29.39M, compared to:

- A charge of \$32.40M in May 2014
- A charge of \$26.99M in June 2013



Energy Settlement – June 2014

Day-Ahead Market Energy Settlement	\$ in Millions
Energy Purchases	\$692.04
Point to Point Obligation Purchases	\$22.73
RMR Day-Ahead Revenue	\$0.00
Energy Sales	(\$684.30)
Day-Ahead Congestion Rent	\$30.47
Day-Ahead Market Make-Whole Payments	(\$0.10)

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

Real-Time Market Energy Settlement	\$ in Millions
Energy Imbalance at a Resource Node	(\$656.72)
Energy Imbalance at a Load Zone	\$940.94
Energy Imbalance at a Hub	(\$257.15)
Real Time Congestion from Self Schedules	(\$0.28)
Block Load Transfers and DC Ties	(\$14.76)
Impact to Revenue Neutrality	\$12.03
Emergency Energy Payments	(\$0.04)
Base Point Deviation Charges	\$0.39
Real-Time Metered Generation (MWh in millions)	31.35



Congestion Revenue Rights (CRR) – June 2014

	\$ in Millions
Annual Auction	(\$26.76)
Monthly Auction	(\$13.21)
Total Auction Revenue	(\$39.97)
Day-Ahead CRR Settlement	(\$28.52)
Day-Ahead CRR Short-Charges	\$1.15
Day-Ahead CRR Short-Charges Refunded	(\$1.15)
Real-Time CRR Settlement	(\$0.00)
Real-Time CRR Short-Charges	\$0.00
Real-Time CRR Short-Charges Refunded	(\$0.00)
Total CRR Funding	(\$28.52)
Day-Ahead Point to Point Obligations Settlement	\$22.73
Real-Time Point to Point Obligation Settlement	(\$13.23)
Net Point to Point Obligation Settlement	\$9.50

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

Distribution of Balancing Account funds to load for June 2014 was \$1.98M, compared to:

- \$0.13M Credit in May 2014
- \$7.22M Credit in June 2013

Point to Point Obligations settled with a net charge of \$9.50M compared to a net charge of \$9.92M last month.

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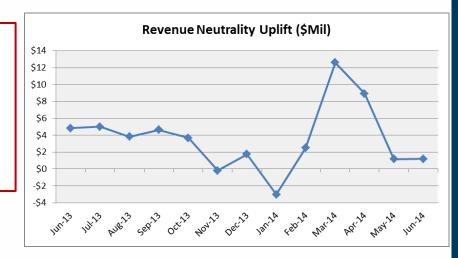
Revenue Neutrality – June 2014

Revenue Neutrality Settlement	\$ in Millions
Real-Time Point to Point Obligation Settlement	(\$13.23)
Real-Time Point to Point Options and Options with Refund Settlement	\$0.00
Real-Time Energy Imbalance Settlement	\$27.08
Real-Time Congestion from Self-Schedules Settlement	(\$0.28)
DC Tie & Block Load Transfer Settlement	(\$14.76)
Charge to Load	\$1.19

Revenue Neutrality charges to load increased slightly compared to last month and decreased compared to June 2013.

June 2014 was a charge of \$1.19M, compared to:

- \$1.16M charge in May 2014
- \$4.82M charge in June 2013





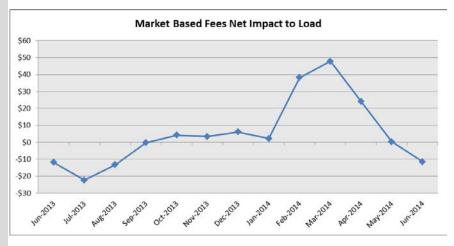
Net Allocation to Load – June 2014

Market-Based Allocation	\$ in Millions
CRR Auction Revenue Disbursement Settlement	(\$39.97)
Balancing Account Proceeds Settlement	(\$1.98)
Net Reliability Unit Commitment Settlement	\$0.19
Ancillary Services Settlement	\$29.39
Reliability Must Run Settlement (incl. RMR for Capacity)	\$0.00
Real-Time Revenue Neutrality Settlement	\$1.19
Emergency Energy Settlement	\$0.04
Base Point Deviation Settlement	(\$0.39)
ORDC Settlement ¹	\$0.02
Total	(\$11.51)
Fee Allocation	
ERCOT Administrative Fee Settlement	\$14.80
Net Allocated to Load	\$3.29

The charge for the net allocation to Load decreased from last month and increased from June of 2013.

June 2014 was a charge of \$3.29M, compared to:

- A charge of \$13.13M in May 2014
- A charge of \$1.59M in June 2013



Net Allocated to Load \$3.29



¹ New with the implementation of NPRR 568 Real-Time Reserve Price Adder Based on Operating Reserve Demand Curve

Real Time Ancillary Service Imbalance (ORDC)

	\$ in Thousands
Real-Time AS Imbalance Payment Amount	(\$17.86)
Load Allocated AS Imbalance Revenue Neutrality Amount	\$17.86

Real Time Ancillary Service Imbalance settlements were low for the month of June 2014. Total payments for the month were \$17,855.

12 of the 30 days in June had settlement dollars equal to \$0 for the day.

All days settled as a net credit to QSEs representing generation and as a charge to QSEs representing load.

The highest settlement occurred on June 13th. The total Real Time Ancillary Service Imbalance payments on that day were \$9,967.22.



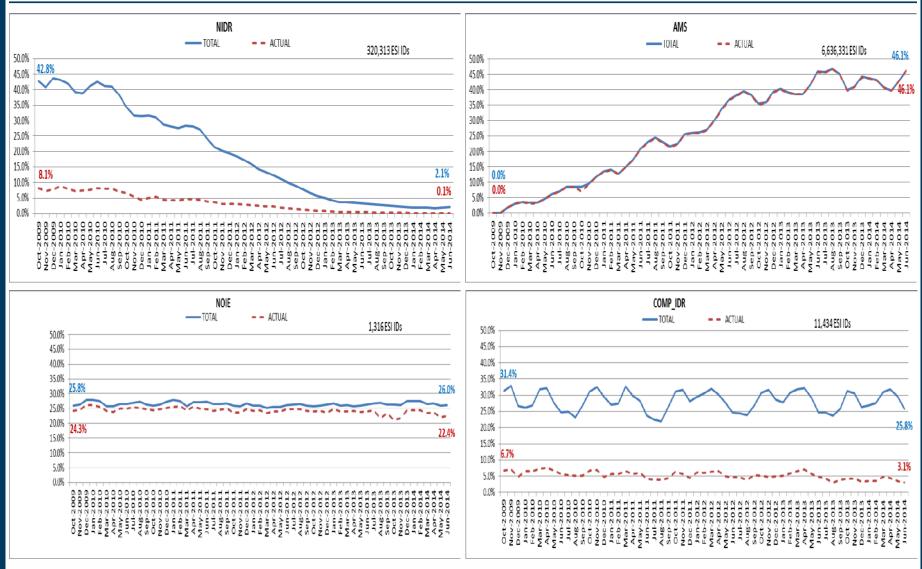
Advanced Meter Settlement Impacts – June 2014

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Percent Actual/Percent Interval Data Recorder (IDR) Total AMS and IDR Load (actual & estimated) Actual Data Used in Initial Settlement (all meter types) 120.0% June 2014: At month end, 97.9% 100.0% settling 6.6M ESIIDs using 80.0% Advanced Meter data. 57.2% 60.0% 71.6% 40.0% 20.0% 0.0% ŏźŏ Ap A Par ŏ Percent of Load by Meter Type ······ Competitive Interval Data — — — Non-Interval Data Recorder (NIDR) Advanced Metering System (AMS) Non Opt-In Entity (NOIE) Recorder (COMP IDR) 50.0% 46.1% 42.89 June 2014: 97.9% of the load 45.0% 40.0% in ERCOT is settled with 15-31.4% 35.0% 25.89 min interval data (AMS, 30.0% 25.0% Competitive IDR, and NOIE 26.0% 20.0% 15.0% IDR). 10.0% 2.1% 5.0% 0.0% Mar-2010 Jun-2010 Jun-2010 Jun-2010 Jun-2010 Aug-2010 Oct-2010 Jun-2011 Jun Sep-201 Apr-201 May-201



ERCOT Wide Load Volumes by Meter Type – INITIAL Settlement – June 2014



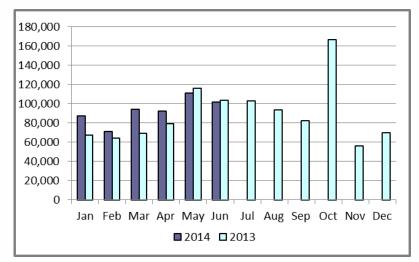


Retail Transaction Volumes – Summary – June 2014

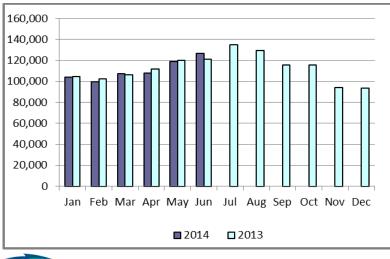
	Year-To-Date		Transactions Received			
Transaction Type	June 2014	June 2013	June 2014	June 2013		
Switches	556,520	499,156	101,490	103,756		
Acquisition	0	0	0	0		
Move - Ins	1,345,472	1,225,453	233,679	220,397		
Move - Outs	664,815	666,388	126,785	121,446		
Continuous Service Agreements (CSA)	355,901	280,028	64,408	62,747		
Mass Transitions	4,975	0	0	0		
Total	2,927,683	2,671,025	526,362	508,346		

Retail Transaction Volumes – Summary – June 2014

Switches/Acquisitions

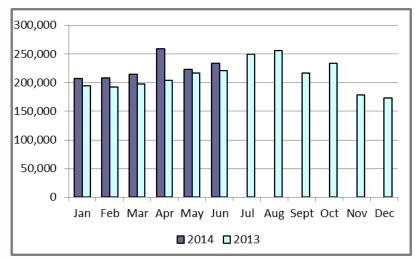


Move-Outs

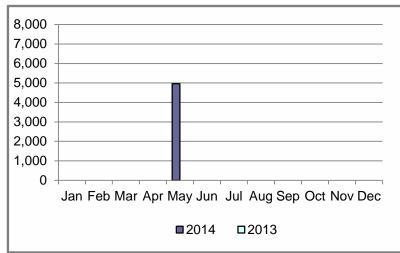


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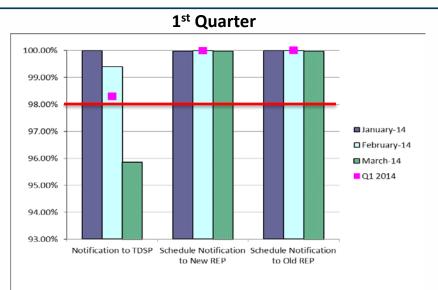


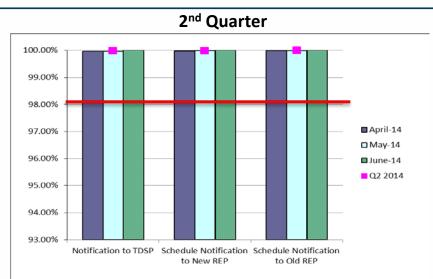
Mass Transition



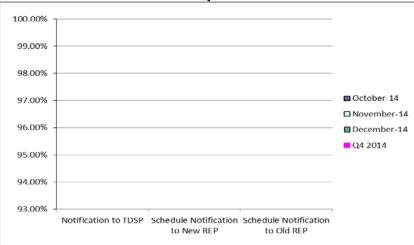
Move-Ins

Retail Performance Measures – Switch – June 2014

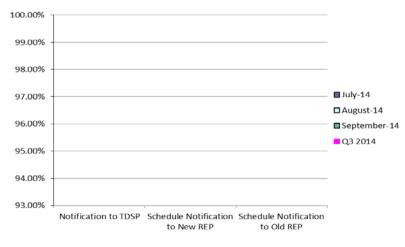




4th Quarter

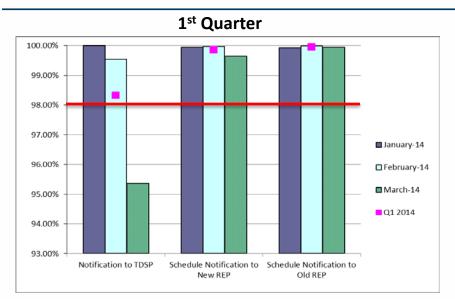


3rd Quarter

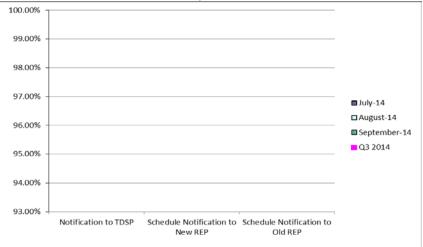




Retail Performance Measures (Same Day Move-In) – June 2014

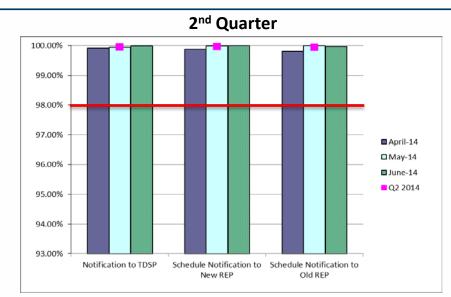


3rd Quarter

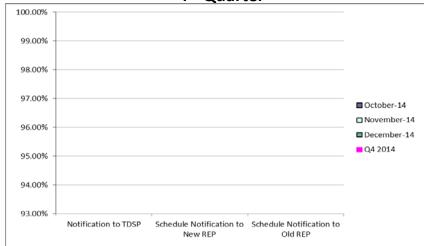


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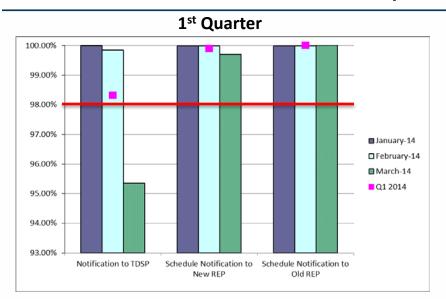
ERCOT Public



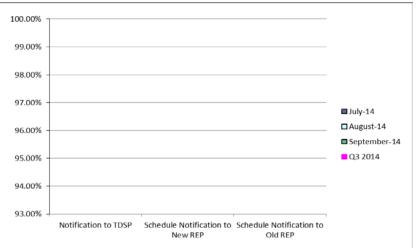
4th Quarter



Retail Performance Measures (Standard Move-In) – June 2014

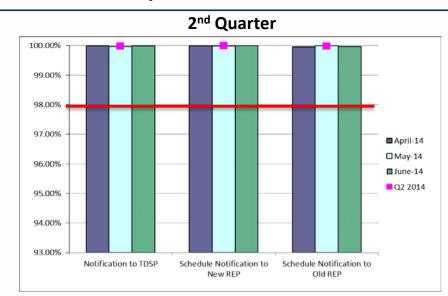


3rd Quarter

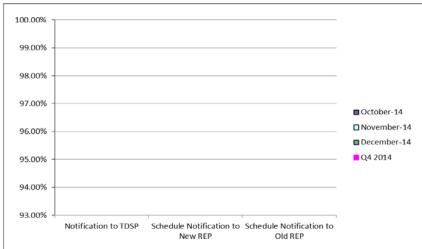


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4th Quarter



Projects Report

		2014 Project Fundin	ıg	\$ 25,000,000			
Impact Metric Tolerances				2014 Portfolio Spending Estimate	Total Portfolio Demand		
the report.		Projects In Flight/On Hold (Count = 55)		\$ 24,542,236	\$ 52,737,085		
		Projects Not Yet Started (Count = 27)			\$ 11,447,085		
- Unfavorable variance between 4.9% and 9.9% nfavorable variance more than 9.9%	Projects Completed (Count = 12)			\$ 324,813	\$ 901,977		
- Red = Untavorable variance more than 9.9%		Spending Reductions Required to Maintain Capital Budget			N/A		
	TOTAL			\$ 25,000,000	\$ 65,086,147		
Projects in Initiation Phase (Count = 5)							
Access and Roles Management							
Testing Environment Management							
OSI Pi Visualization Enhancements							
Required Combined Cycle Telemetry for Operational Awareness and PDCWG Analysis							
Increase to the CRR Auction Transaction Limit							
Projects in Planning Phase (Count = 13)	Baseline Phase Start	Baseline Phase Finish	Scheduled Go-Live Date	Scheduled Phase Finish	Schedule Impact	Budg	get Impact
EMS Upgrade	8/7/2013	10/30/2014	TBD	10/30/2014	-4%		0%
NMMS Upgrade	5/1/2013	3/1/2014	TBD	7/16/2014	1 -45%	1	-31%
Cyber Security Project #9	12/17/2013	3/26/2014	TBD	6/11/2014	2 -77%		33%
Information Technology Change Management	4/10/2013	4/2/2014	TBD	10/17/2014	1 -55%	1	-30%
ABB MMS OS Technology Refresh	5/29/2013	5/30/2014	TBD	7/1/2014	2 -8%		15%
Disaster Recovery: S&B, RTL, MDT	5/15/2013	11/15/2013	TBD	8/29/2014	1 -155%	1	-8%
MP Online Data Entry - Ph 1	10/9/2013	3/5/2014	TBD	9/22/2014	4 -136%		42%
IT Production Hardening	2/12/2014	9/24/2014	TBD	9/24/2014	0%		3%
SQL Server 2012 Upgrade / Cluster Consolidation	3/6/2014	8/27/2014	TBD	8/27/2014	0%		21%
Email Gateway Refresh	4/2/2014	6/16/2014	TBD	7/30/2014	2 -58%		3%
Privileged Account Management	6/5/2014	11/19/2014	TBD	11/19/2014	0%		1%
EIS Reporting and Control Systems Upgrade	6/4/2014	8/13/2014	TBD	8/13/2014	0%		-3%
Align Credit Lock for CRR Auctions with Transaction Submission Deadline	5/7/2014	7/2/2014	TBD	6/25/2014	12%		5%
	Projects in Initiation Phase (Count = 5) Access and Roles Management Testing Environment Management OSI Pi Visualization Enhancements Required Combined Cycle Telemetry for Operational Awareness and PDCWG Analysis Increase to the CRR Auction Transaction Limit Projects in Planning Phase (Count = 13) EMS Upgrade Cyber Security Project #9 Information Technology Refresh Disaster Recovery: S&B, RTL, MDT MP Online Data Entry - Ph 1 IT Production Hardening SQL Server 2012 Upgrade / Cluster Consolidation Email Gateway Refresh Prided Account Management	Projects In Fligh No more than 4.9% unfavorable variance Unfavorable variance between 4.9% and 9.9% nfavorable variance more than 9.9% Projects Not Yet Projects in Initiation Phase (Count = 5) Access and Roles Management Testing Environment Management OSI Pi Visualization Enhancements Required Combined Cycle Telemetry for Operational Awareness and PDCWG Analysis Increase to the CRR Auction Transaction Limit Projects in Planning Phase (Count = 13) Baseline Phase Start Start Information Technology Refresh 5/1/2013 Disaster Recovery: S&B, RTL, MDT MP Online Data Entry - Ph 1 10/9/2013 IT Production Hardening 2/12/2014 SQL Server 2012 Upgrade / Cluster Consolidation 3/6/2014 Privileged Account Management 6//2/2014	Impact Metric Tolerances ple variances are represented as negative numbers within No more than 4.9% unfavorable variance Unfavorable variance between 4.9% and 9.9% nfavorable variance more than 9.9% Projects Not Yet Started (Count = 27) Projects Completed (Count = 12) Spending Reductions Required to Main Budget TOTAL Projects in Initiation Phase (Count = 5) Access and Roles Management Testing Environment Management OSI Pi Visualization Enhancements Required Combined Cycle Telemetry for Operational Awareness and PDCWG Analysis Increase to the CRR Auction Transaction Limit EMS Upgrade 8/7/2013 NMMS Upgrade 5/1/2013 Cyber Security Project #9 12/17/2013 Information Technology Change Management 4/10/2013 ABI MMS OS Technology Refresh 5/29/2013 Disaster Recovery: SAB, RLI, MDT 5/11/2013 MP Online Data Entry - Ph 1 10/9/2013 MP Online Data Entry - Ph 1 10/9/2014 MP Online Data Entry - Ph 1 10/9/2014 MP Online Data Entry - Ph 1 10/9/2013 MP Online Data Entry - Ph 1 10/9/2014	Projects In Flight/On Hold (Count = 55) No more than 4.9% unfavorable variance Unfavorable variance between 4.9% and 9.9% nfavorable variance more than 9.9% Projects Not Yet Started (Count = 12) Spending Reductions Required to Maintain Capital Budget TOTAL Projects in Initiation Phase (Count = 5) Access and Roles Management Testing Environment Management OSI P1 Visualization Enhancements Required Combined Cycle Telemetry for Operational Awareness and PDCWG Analysis Increase to the CRR Auction Transaction Limit Projects in Planning Phase (Count = 13) Baseline Phase Finish Cycle Telemetry for Operational Awareness and PDCWG Analysis Increase to the CRR Auction Transaction Limit Projects in Planning Phase (Count = 13) Baseline Phase Finish Cycle Telemetry for Operational Awareness and PDCWG Analysis Increase to the CRR Auction Transaction Limit Information Technology Change Management 4/10/2013 3/1/2014 MMMS Upgrade 5/1/2013 Cyber Security Project #9 12/17/2013 Information Technology Change Management 4/10/2014 ABB MMS OS Technology Refresh 5/29/2013 Disaster Recovery: S&B, RT	Impact Metric Tolerances 2014 Portfolio No more than 4.9% unfavorable variance Projects In Flight/On Hold (Count = 55) \$ 24,542,236 No more than 4.9% unfavorable variance Projects Not Yet Started (Count = 27) \$ 1,800,000 Projects nore than 9.9% Projects Completed (Count = 12) \$ 324,813 Spending Reductions Required to Maintain Capital Budget \$ (1,667,049) TOTAL \$ 25,000,000 Projects in Initiation Phase (Count = 5) \$ (1,667,049) Access and Roles Management \$ 25,000,000 Projects in Initiation Phase (Count = 5) \$ (1,667,049) Access and Roles Management \$ (2,000,000 Projects in Planning Phase (Count = 5) \$ (1,667,049) Access and Roles Management \$ (2,000,000 Projects in Planning Phase (Count = 5) \$ (1,667,049) Marcess to the CRR Auction Transaction Limit \$ (2,000,000 Projects in Planning Phase (Count = 13) Baseline Phase Finish \$ (2,000,000 MMS Upgrade \$ (7/2013) 10/30/2014 TBD 10/30/2014 Cyber Security Project #9 10/7/2013 3/7/2014 TBD 10/30/2014	Impact Metric Tolerances 2014 Portfolio Demaing Estimates 2014 Portfolio Demaing Estimates No more than 4.9% unfavorable variance Projects In Flight/On Hold (Count = 55) \$ 24,542,236 \$ 52,737,085 Projects no test started (Count = 27) \$ 1,800,000 \$ 11,447,085 Projects no test started (Count = 12) \$ 324,813 \$ 901,977 Spending Reductions Required to Maintain Capital Budget \$ (1,667,049) N/A Projects in Initiation Phase (Count = 5) \$ 25,000,000 \$ 65,086,147 Access and Roles Management \$ 25,000,000 \$ 65,086,147 OSIP Visualization Enhancements \$ 10,000,000 \$ 65,086,147 Projects in Initiation Phase (Count = 5) \$ 25,000,000 \$ 65,086,147 Access and Roles Management \$ 10,000,000 \$ 65,086,147 OSIP Visualization Enhancements \$ 10,000,000 \$ 65,086,147 Required Combined Cyclo Telemetry for Operational Awareness \$ 10,000,000 \$ 65,086,147 Increase to the CRR Auction Transaction Limit \$ 10,000,001 \$ 11,467,041 \$ 11,470,013 Information Technology Change Management \$ 10,000,001 \$ 11,470,013 \$ 11,000,0001 \$ 11,000,0	Impact Metric Tolerances 2014 Portfolio Jumpact Metric Tolerances 2014 Portfolio Spending Estimate 2014 Portfolio Devatances are represented as negative numbers within Projects In Flight/On Hold (Count = 55) \$ 24,542,236 \$ 52,737,085 No more than 4.9% unfavorable variance Projects Not Yet Started (Count = 27) \$ 1,800,000 \$ 11,447,085 Projects completed (Count = 12) \$ 324,813 \$ 901,977 Spending Reductions Required to Maintain Capital \$ (1,667,049) N/A Impact Metric Tolerances Impact Management \$ 25,000,000 \$ 65,086,147 Projects in Initiation Phase (Count = 5) Access and Roles Management Impact Management OSI Projects in Planning Phase (Count = 13) Baseline Phase finish Scheduled Phase Scheduled Phase Required Comment Management Impact 11/2013 10/30/2014 Impact 14/% Impact 14/% Increase to the CRR Auction Transaction Limit Baseline Phase finish Scheduled Phase Scheduled Phase Information Technology Change Management 10/30/2014 Impact 14/% Impact 14/% Information Technology Change Management 10/30/2014 Impact 14/% Impact 14/% Increase to the CRR Auction Transaction Limit Impact 13/% Impact 14/10/2013 Impact 14/10/2014 Impact 14/



Project Number	Projects in Execution Phase (Count = 24)	Baseline Phase Start	Baseline Go-Live Target	Scheduled Go-Live Date	Scheduled Phase Finish	Sche	dule Impact	Bud	get Impact
10052_01	Settlement System Upgrade	1/25/2012	12/23/2014	12/6/2014	4/8/2015	İ	1%	2	-5%
017-01	IOracle 11g Upgrade	10/10/2012	7/16/2014	7/16/2014	7/17/2014		0%		-1%
057-01	EPS Metering DB Redesign	4/17/2013	9/6/2013	8/6/2014	9/3/2014	2	-235%	2	-145%
066-01	Planning Site Transition to MIS	7/2/2014	10/16/2014	10/16/2014	12/3/2014		0%		0%
077-01	Contract Lifecycle Management	9/11/2013	5/5/2014	9/4/2014	10/2/2014	2	-51%		5%
115-01	Cyber Security Project #14	6/30/2014	1/15/2015	1/15/2015	2/26/2015		0%		0%
116-01	Collage Replacement	2/6/2014	9/22/2014	11/4/2014	12/5/2014	4	-18%		25%
121-01	2013/2014 Network Refresh	5/14/2014	10/17/2014	10/17/2014	12/13/2014		0%		-2%
122-01	Infoblox DNS/DHCP	5/21/2014	11/5/2014	11/5/2014	11/5/2014		0%		1%
128-0x	Capital Efficiencies and Enhancements - 2014	1/1/2014	12/31/2014	12/31/2014	12/31/2014		0%		23%
130-01	Electronic Crisis Communications Enhancements	6/19/2014	12/12/2014	12/8/2014	1/16/2015		2%		28%
132-01	Client Digital Certificate Upgrade	6/12/2014	8/17/2014	8/17/2014	9/17/2014		0%		4%
135-01	Common Infrastructure - 2014	1/1/2014	12/31/2014	12/31/2014	12/31/2014		0%		80%
128-04	Reactive Test Forms Revision	5/19/2014	8/1/2014	8/1/2014	8/31/2014		0%	NA	See #128- 01
99914	IMinor Cap - 2014	1/1/2014	12/31/2014	12/31/2014	12/31/2014	NA	0%		25%
2014 PC	Program Control - 2014	1/1/2014	12/31/2014	12/31/2014	12/31/2014	NA	0%		5%
NPRR467	Balancing Account Resettlement Due to DAM Resettlement	7/1/2014	12/6/2014	12/6/2014	4/8/2015		0%	NA	See #10052
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	2/26/2014	8/1/2014	8/1/2014	8/31/2014		0%	NA	See #128- 01
NPRR571	ERS Weather-Sensitive Loads Requirements	4/8/2014	9/30/2014	9/30/2014	10/31/2014		0%	NA	See #128- 01
NPRR580	Establishment of a Rolling CRR Balancing Account Fund	7/1/2014	12/6/2014	12/6/2014	4/8/2015		0%	NA	See #10052
SCR756	MarkeTrak Enhancements - Remaining SCR756 Items	2/5/2014	7/23/2014	7/27/2014	9/12/2014		-2%		1%
SCR769	CRRAH Digital Certificate New Role for Read Only Access	3/20/2014	8/1/2014	8/1/2014	9/10/2014		0%		9%
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 = 11)	Baseline Execution Phase Start	Baseline Go-Live Target	Actual Go-Live Date	Scheduled Execution Phase Finish	Schedule Impac	Buc	lget Impact
NPRR240	Proxy Energy Offer Curve	1/8/2014	2/7/2014	2/7/2014	8/15/2014	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	8/15/2014	0%	NA	See #117- 01
NPRR555	Load Resource Participation in Security-Constrained Economic Dispatch	1/8/2014	6/1/2014	6/1/2014	8/15/2014	0%	NA	See #117- 01
NPRR564	Thirty-Minute Emergency Response Service (ERS) and Other ERS Services	1/8/2014	4/27/2014	4/18/2014	8/15/2014	8%	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	8/15/2014	0%	NA	See #117- 01
047-01	CMSDK/MIR Replacement	4/24/2013	12/8/2013	4/15/2014	10/2/2014	2 -56%	2	-51%
083-01	Centralized Application Log Management	8/28/2013	5/7/2014	3/27/2014	8/13/2014	16%		5%
	IBM AIX Operating System Upgrades	1/29/2014	5/2/2014	5/2/2014	7/16/2014	0%		42%
110-01	Taylor Control Room Upgrade	2/19/2014	7/7/2014	6/4/2014	8/13/2014	23%		
	2014 Market System Enhancements	1/8/2014	<u>6/1/2014</u>	6/1/2014	8/15/2014	0%	5	-20%
119-01	ICREZ Voltage Control and Coordination	3/6/2014	4/18/2014	4/18/2014	10/1/2014	0%	.	22%
Project Number	Projects On Hold (Count = 2)	Forecast Start Date	Baseline Phase Finish	Scheduled Go-Live Date	Scheduled Phase Finish	Schedule Impac	Buc	lget Impact
PROJECTS ON HOLD (Count = 2) Sorted by Project Number								
NPRR327	State Estimator Data Redaction Methodology	12/5/2012	2/12/2013	TBD	TBD	3	3	
SCR772	New Extract for Five Minute Interval Settlement Data	2/12/2014	4/19/2014	TBD	TBD	3	3	7 1
								1
	Due is stal O successful to the Common to Years	Baseline						
Project Number	Projects Completed in the Current Year	Execution Phase	Baseline Go-Live Target	Actual Go-Live	Actual Execution	Schedule Status	Tot	al Variance
Number	(Count =12)	Start	_	Date	Phase Finish			
PROJECT	rs completed in 2014 (Count = 12) Sorted by Proj							17%
NPRR425	Creation of a WGR Group for GREDP and Base Point Deviation	8/21/2013	3/26/2014	3/3/2014	3/31/2014	10%		46%
NPRR509	Shortened RTM Settlement Timeline	12/11/2013	2/23/2014	2/23/2014	2/23/2014	0%	NA	See #128- 01
NPRR570	Reduce RTM Settlement Timeline to Operating Day Plus Five	2/16/2014	4/27/2014	4/18/2014	4/27/2014	12%	NA	See #128- 01
NPRR575	Clarification of the RUC Resource Buy-Back Provision for Ancillary	12/10/2013	1/7/2014	1/7/2014	1/31/2014	0%	NA	See #78-01
NOGRR105 016-01	Generation Resource Frequency Response Test Procedure	<u>12/4/2013</u> 11/6/2013	2/7/2014 3/26/2014	2/7/2014 3/26/2014	3/26/2014 5/6/2014	0%	-	<u>31%</u> 23%
	Emergency Notification System Hardware Refresh	11/13/2013	1/24/2014	12/20/2013	1/24/2014	48%	-	-2%
108-01	Alstom Load Forecasting Upgrade	11/20/2013	4/23/2014	4/16/2014	5/14/2014	4%	_	2%
	Dev Hardware Refresh and Virtualization Expansion	11/13/2013	1/24/2014	1/9/2014	2/28/2014	20%		-2%
114-01	Lawson Security	1/29/2014	2/17/2014	2/17/2014	3/5/2014	0%	2	-36%
118-01	Mitigation Plan RTCA Enhancements	2/5/2014	4/18/2014	4/17/2014	5/8/2014	1%		6%
125-01	VSAT/TSAT Upgrade	3/27/2014	7/16/2014	6/10/2014	7/2/2014	32%		31%
			Footnotes					
				r than expected, resul	ting in additional funding a	and/or time required		
			1 - Current phase took longe 2 - Current phase requiring r				quired	
			 Current phase took longe Current phase requiring r Project placed on hold 	more labor than expect	ted, resulting in additional		quired	
			1 - Current phase took longe 2 - Current phase requiring r 3 - Project placed on hold 4 - Resource constraints res	more labor than expect	ed, resulting in additional	funding and/or time re		
			Current phase took longe Current phase requiring r Project placed on hold Resource constraints res 5 - 2014 Market System Enh.	nore labor than expect sulted in delay to curre ancements w as Planne	ed, resulting in additional	funding and/or time re		ed target
			1 Current phase took longe 2 Current phase requiring r 3 Project placed on hold 4 Resource constraints res 5 2014 Market System Enhance implementation date resulting to Current subtraints	nore labor than expect sulted in delay to curre ancements w as Planne in a budget overrun	ed, resulting in additional	funding and/or time re		ed target
			1 - Current phase took longe 2 - Current phase requiring r 3 - Project placed on hold 4 - Resource constraints res 5 - 2014 Market System Enhimplementation date resulting NA - Metric not calculated be	nore labor than expect sulted in delay to curre ancements was Plann in a budget overrun scause:	ted, resulting in additional nt phase ed and Executed on an ur	funding and/or time re		ed target
			1 - Current phase took longe 2 - Current phase requiring r 3 - Project placed on hold 4 - Resource constraints res 5 - 2014 Market System Enhimplementation date resulting NA - Metric not calculated be	nore labor than expect sulted in delay to curre ancements was Plann in a budget overrun acause: parent project level, or	ted, resulting in additional nt phase ed and Executed on an ur	funding and/or time re		ed target
			Current phase took longe Current phase requiring r - Current phase requiring r - Project placed on hold - Resource constraints res - 2014 Market System Enh implementation date resulting NA - Metric not calculated be - it is reported at the	nore labor than expect sulted in delay to curre ancements was Plann in a budget overrun acause: parent project level, or	ted, resulting in additional nt phase ed and Executed on an ur	funding and/or time re		ed target



Project Number	Projects Not Yet Started (Count = 27)	Forecast Star Date	rt
PROJECT	TS NOT YET STARTED (Count = 27) Sor	rted by Start Date	
TBD	OC-48 Replacement with DWDM	Jul-2014	
TBD	Move iTron LF Application to High Availability Environment	Jul-2014	
TBD	Production Virtualization Expansion	Jul-2014	_
TBD	Replace N2N System	Jul-2014	
NPRR439	Updating a Counter-Party's Available Credit Limit for Current I	Jui-2014	
	Revisions to Congestion Revenue Rights Credit Calculations a	and Jul-2014	
NPRR495	Changes to Ancillary Services Capacity Monitor	Jul-2014	
NPRR500	Posting of Generation that is Off but Available	Jul-2014	
NPRR543	Message for Confirmed E-Tags	Jul-2014	
	Revisions to MCE Calculation	Jul-2014	
NPRR597	IUtilize Initial Estimated Liability (IEL) Only During Initial Mark	Jui-2014	
NPRR601	Inclusion of Incremental Exposure in Mass Transitions to Cou IParties that are Registered as QSEs and LSEs and Provide F IService		
	Bilateral CRR Interface Enhancement	Jul-2014	
SCR778	Credit Exposure Calculations for NOIE Options Linked to RTM PTP Obligations	M Jul-2014	-
NPRR519	Exemption of ERS-Only QSEs from Collateral and Capitalizat Requirements	Aug-2014	_
NPRR524	Resource Limits in Providing Ancillary Service	Aug-2014	_
NPRR556	Resource Adequacy During Transmission Equipment Outage	eAug-2014	
NPRR573	Alignment of PRC Calculation	Aug-2014	
NPRR581	Add Fast Responding Regulation Service as a Subset of Regulation Service	Aug-2014	_
NPRR589	Ancillary Service Offers in the Supplemental Ancillary Service	Aug-2014	_
	Setting the Shadow Price Caps and Power Balance Penalties	Aug-2014	
	IERCOT System Change Allowing Independent Master QSE to IRepresent Split_Generation Resources	Aug-2014	
SCR775	Posting Results of Real-Time Data in a Display Format	Aug-2014	
NOGRR084	Daily Grid Operations Summary Report	Sep-2014	
TBD	EDW Platform Transition Phase 2	Sep-2014	
NPRR272	Definition and Participation of Quick Start Generation Resource	rces Oct-2014	
TBD	CREZ Voltage Control and Coordination - Phase 2	Oct-2014	_



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