

# Item 4.1: Q3 2015 ERCOT Key Performance Indicator (KPI) Review

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Human Resources and Governance Committee ERCOT Public December 7, 2015

### Q3-2015 Key Performance Indicator (KPI) Summary

We serve the public by ensuring a reliable grid, efficient electricity markets, open access and retail choice.		YTD - 2015		Q3 - 2015		Q2 - 2015		Q1 - 2015				
electricity markets, open access and retail choice.	Stretch	Target	Below	Stretch	Target	Below	Stretch	Target	Below	Stretch	Target	Below
RELIABLE GRID												
Grid Security Management / Real-Time System Control / Scheduling & Disptach												
Outage Coordination / Planning												
Forecasting	50%		50%				50%		50%	50%		50%
Compliance Monitoring & Reporting												
IT Application Services	70%		30%	70%		30%	70%		30%	70%		30%
EFFICIENT ELECTRICITY MARKETS												
Bidding, Scheduling and Pricing	50%		50%				50%		50%			
Settlement & Billing	50%		50%							50%		50%
Market Credit												
Market Information												
IT Application Services												
OPEN ACCESS & RETAIL CHOICE												
Determine REC Obligations and Verify Compliance												
Customer Switching / Registry												
Market Information												
IT Application Services							50%		50%			
OTHER SUPPORT & MANAGEMENT FUNCTIONS												
Finance												
Security												
Total number of KPIs tracked:		30			30			30			30	
% meeting Stretch:		80%			90%			80%			83%	
% meeting Target:		13%			7%			17%			17%	
% below Target:		7%			3%			3%			0%	

KPI									
Indentifer	Executive	Capability	KPI Description	Target	Stretch	2015_YTD	2015_Q3	2015_Q2	2015_Q1
			Manage spending to be equal	Between 0-					
			to or less than the board	5%					
	Petterson,		approved expenditure budget	favorable					
OSM 1	Michael	Finance	for 2015	variance	n/a	-0.20%	-0.50%	-0.40%	0.49%
			SCED solution is solved and						
			posted: percent of 15-minute						
		Bidding,	Settlement Interval prices						
	Ogelman,	Scheduling	where price corrections are						
EM 2	Kenan	& Pricing	performed.	0.5% 1%	< 0.5%	1.22%	0.02%	3.614%*	0.02%

\*The Q2 value for EM2 changed from 0.51% (green) to 3.614% (red). This is due to a price correction for Q2 that was approved by the Board in Q3. The number displayed reflects the new value based on the price correction.



# Appendix



#### Q3-2015 KPI Detail – Reliable Grid

KPI ID					03	01	01
		2015 Target Performance	2015 Stretch Performance	2015 YTD	Q3	Q2	Q1
Grid Sec	curity Management / Real-Time System Control / Scheduling & Dispatch	1	1				
RG 1	Control Performance Standard 1 (CPS1) frequency control	> 140	> 150	171.75%	171.75	169.15	166.06
RGI	performance (rolling 12 month CPS1 score). Interconnection Reliability Operating Limit (IROL)	>140	> 150 None longer than 10	1/1.75%	1/1.75	169.15	166.06
000		Need Learner than 20 minutes	-	Ne exceedances	Newcoodances	Nerovcoodpin.coc	Nerwoodances
	exceedance limitations.	None longer than 20 minutes	minutes	No exceedances	No exceedances	No exceedances	No exceedances
	Coordination / Planning Outage Coordination performance: requests approved or denied		1				
	within timeline and with mitigation plans developed if required.	070/	0.027	99.44%	99.8%	99.3%	99.22%
		97%	99%	99.44%	99.8%	99.3%	99.22%
Forecast	Coperations Load Forecast performance - Mean Average Percent	1	1	Utebast Monthly	tilebect Monthly	Ui-bast monthly	Webest monthly
				Highest Monthly	Highest Monthly	Highest monthly	Highest monthly
RG 4	Error (MAPE): monthly average day ahead load forecasts used for DRUC MAPE	All less than 4.0%	All less than 3.5%	MAPE occurred in	MAPE occurred in	average MAPE was	average MAPE was 3.81% in March
	Wind forecast performance - MAPE based on installed wind	All less than 4.0%	All less than 3.5%	May at 3.8%	August at 2.91% 4.72%- July	3.5% in May	5.8%- Jan
						7.27% - April	
	capacity: monthly average day ahead wind forecasts used for	and and			4.45-% - Aug	7.63-% - May	8.5% - Feb
		All less than 15%	All less than 10%	all below 10%	5.01%- Sept	5.64% - June	7.1% - March
Compila	ance Monitoring & Reporting	let	1				
		No more than 1 high severity and no more than					
		3 total exceptions from NERC Standards as					
		found in a NERC Compliance Audit excluding	No exceptions from NERC				
	Achieve full compliance with NERC/FERC planning and operating	current registration mitigation plan regarding	Standards as found in a				
RG 6	standards, OPS, Protocols	TOP.	NERC Compliance Audit.	No exceptions	No exceptions	No exceptions	No exceptions
		No more than 1 high severity and no more than					
		3 total alleged violations from NERC Standards					
		as found in a NERC or TRE initiated CIP CMEP in					
		2015.	No alleged violations from				
	Assure property, personnel, and cyber assets are protected (cyber	SSAE16 - No more than 1 exception in logical or	NERC Standards as found in				
	and physical) in accordance with NERC CIP Standards and SSAE16	physical security controls and an unqualified	a NERC or TRE initiated CIP	No alleged	No alleged	No alleged	No alleged
RG 7	Controls	opinion in logical or physical security controls.	CMEP in 2015.	violations	violations	violations	violations
IT Applic	cation Services						
RG 8	Energy Management System Aggregate Availability	99%	99.5%	100.00%	100.00%	100.00%	100%
RG 9	Security Constrained Economic Dispatch (SCED) Availablity	99.9%	99.95%	99.99%	100.00%	100.00%	99.98%
	Security Constrained Economic Dispatch (SCED): number of						
	unplanned outages greater than 30 consecutive minutes						
RG 10	(per quarter)	zero	n/a	0	0	0	o
RG 11	Load Frequency Control (LFC) Availability	99.9%	99.95%	100.00%	100.00%	100.00%	100%
	Load Frequency Control (LFC): number of unplanned outages						
RG 12	greater than 30 consecutive minutes (per quarter)	zero	n/a	0	0	0	o
RG 13	Outage Scheduler Availability	99%	99.5%	99.99%	100.00%	100.00%	99.98%
	Network Model Management System (NMMS) Availability	99%	99.5%	99.98%	99.99%	100.00%	99.97%
	netholik model management of sterr,	55%	55.570	55.567		200.007	55.5770



#### Q3-2015 KPI Detail – Efficient Electricity Markets

KPI ID	KPI Description	2015 Target Performance	2015 Stretch Performance	2015 YTD	Q3	Q2	Q1
Bidding,	Scheduling and Pricing						
	DAM quality of solution as measured with price corrections:						
	percent of hourly prices requiring DAM price correction.	1-3 % of time	< 1 % of time	0.0004%	0.001%	0%	0%
	SCED solution is solved and posted: percent of 15-minute						
	Settlement Interval prices where price corrections are						
EM 2	performed.	0.5% 1%	< 0.5%	1.22%	0.02%	3.614%*	0.02%
Settleme	nt & Billing						
EM 3	Achieve timely settlements, per Protocol defined timelines.	99%	100%	100%	100%	100%	100%
	Deeferse encoded and the second builty and the						
	Perform accurate settlements as measured by the percent						
	of Operating Day and operating month settlement that						
	does not require a correction as a result of an error in the						
	settlement and billing systems or processes.	98%	99.9%	99.63%	100%	99.95%	99.34%
Market 0	redit		1				
EM 5	Credit reports are correct and posted in a timely manner.	98%	100%	100%	100%	100%	100%
Market I	nformation						
EM 6	Wholesale extracts available per Protocol timelines	98%	99%	99.79%	99.73	99.87%	99.77%
IT Applic	cation Services						
EM 7	Congestion Revenue Rights (CRR) Availability	99%	99.5%	100%	100.00%	100%	100%
EM 8	Market Management System Aggregate Availability	99%	99.5%	99.99	100.00%	100%	99.98%

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### Q3-2015 KPI Detail – Open Access & Retail Choice

KPI ID	KPI Description	2015 Target Performance	2015 Stretch Performance	2015 YTD	Q3	Q2	01
	ine REC Obligations & Verify Compliance	2015 talget renormance	2015 Strettin Performance	2013 110	40	42	41
	Fulfill the protocol obligations for RPS mandate calculations						
		99%	100%	100 %	100%	100%	100%
Custome	er Switching / Registry						
OARC 2	Conduct retail transaction processing per Protocol timelines	98%	99%	99.98%	99.98%	99.99%	99.97%
	End use customer switch notifications processed per PUCT						
OARC 3	rules	99%	100%	100%	100%	100%	100%
Market I	Information						
OARC 4	Retail extracts available per Protocol timelines	98%	99%	100%	100%	100%	100%
IT Applic	cation Services						
OARC 5	Retail Processing Availability - Bus. Hours	99.5%	99.7%	100%	100%	100%	100%
OARC 6	Retail Processing Availability - Non bus. Hours	99%	99.5%	99.67%	99.77%	99.43%	99.80%



#### Q3-2015 KPI Detail - Other Support & Management Functions

KPI ID	KPI Description	2015 Target Performance	2015 Stretch Performance	2015 YTD	Q3	Q2	Q1
Finance	2						
	Manage spending to be equal to or less than					-2.6%, updated to	
OSM 1	the board-approved expenditure budget for 2015.	Between 0 5% favorable variance	n/a	2%	-0.5%	4% 8.6.15	0.49%
Security	4						
	Maintain ERCOT ISO's security posture against cyber and		Zero Stage 2 or Stage 3				
	physical security threats as defined in the Cyber Security	No more than one Stage 2 or Stage 3 cyber	cyber or physical security				
OSM 2	Incident Response Plan.	or physical security incidents.	incidents.	Zero	Zero	Zero	Zero

