

Item 9: Q4 2015 Key Performance Indicator Review

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Human Resources and Governance Committee ERCOT Public February 8, 2016

Q4-2015 Key Performance Indicator (KPI) Summary

We serve the public by ensuring a reliable grid, efficient electricity markets, open	,	/TD - 20	15		Q4 - 201	5	Q3 - 2015		Q2 - 2015		Q1 - 2015		5		
access and retail choice.	Stretch	Target	Below	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%
Compliance Monitoring & Reporting			50%							50%		30%	50%		50%
IT Application Services			30%	70%		30%	70%		30%	70%		30%	70%		30%
EFFICIENT ELECTRICITY MARKETS	70%		30%	70%		30%	70%		30%	70%		30%	70%		30%
Bidding, Scheduling and Pricing	50%		50%							50%		50%			
Settlement & Billing			50%	50%		50%				50%		50%	50%		50%
Market Credit			50%	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%				50%		50%			
OTHER SUPPORT & MANAGEMENT FUNCTIONS															
Finance															
Security															
Total number of KPIs tracked:		30			30			30			30			30	
% meeting Stretch:		80%			83%			90%			80%			83%	
% meeting Target:		17%			14%			7%			17%	·		17%	
% below Target:		3%			3%			3%			3%			0%	

КРІ										
Indenti	ifer Executive	Capability	KPI Description	Target	Stretch	2015_YTD	2015_Q4	2015_Q3	2015_Q2	2015_Q1
				Between 0-5%						
	Petterson,		Manage spending to be equal to or less than the	favorable						
OSM 1	Michael	Finance	board approved expenditure budget for 2015	variance	n/a	-3.30%	-13.30%	-0.50%	-0.40%	0.49%



Appendix



Q4-2015 KPI Detail – Reliable Grid

KPI ID	<u></u>	2015 Target Performance	2015 Stretch Performance	2015 YTD	Q4	Q3	Q2	Q1
Grid Sec	curity Management / Real-Time System Control / Scheduling & I T	Dispatch T	T					
	Control Performance Standard 1 (CPS1) frequency							
RG 1	control performance (rolling 12 month CPS1 score).	> 140	> 150	173.34%	173.34	171.75	169.15	166.06
	Interconnection Reliability Operating Limit (IROL)		None longer than 10					
RG 2	exceedance limitations.	None longer than 20 minutes	minutes	No exceedances	No exceedances	No exceedances	No exceedances	No exceedances
Outage	Coordination / Planning					•		
	Outage Coordination performance: requests approved or							
	denied within timeline and with mitigation plans							
RG 3	developed if required.	97%	99%	99.5%	99.8%	99.8%	99.3%	99.22%
Forecas	ting		•		•	•	•	
	Operations Load Forecast performance - Mean Average			Highest Monthly	Highest Monthly	Highest Monthly	Highest monthly	Highest monthly
	Percent Error (MAPE): monthly average day ahead load			MAPE occurred in	MAPE occurred in	MAPE occurred in	average MAPE was	average MAPE was
RG 4	forecasts used for DRUC MAPE	All less than 4.0%	All less than 3.5%	March at 3.8%	November at 3.32%	August at 2.91%	3.5% in May	3.81% in March
	Wind forecast performance - MAPE based on installed				5.03% - October	4.72%- July	7.27% - April	5.8%- Jan
	wind capacity: monthly average day ahead wind				6.68% - November	4.45-% - Aug	7.63-% - May	8.5% - Feb
RG 5	forecasts used for DRUC MAPE	All less than 15%	All less than 10%	all below 10%	7.19% - December	5.01%- Sept	5.64% - June	7.1% - March
Complia	ance Monitoring & Reporting							
		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	current registration mitigation plan regarding	Standards as found in a					
RG 6	operating standards, OPS, Protocols	TOP.	NERC Compliance Audit.	No exceptions	No exceedances	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.						
		SSAE16 - No more than 1 exception in logical or	No alleged violations from					
	Assure property, personnel, and cyber assets are	physical security controls and an unqualified	NERC Standards as found in					
	protected (cyber and physical) in accordance with NERC	opinion in logical or physical security	a NERC or TRE initiated CIP	No alleged	No alleged	No alleged	No alleged	No alleged
RG 7	CIP Standards and SSAE16 Controls	controls.	CMEP in 2015.	violations	violations	violations	violations	violations
	cation Services		_					
RG 8	Energy Management System Aggregate Availability	99%	99.5%	100.00%	100.00%	100.00%	100.00%	100%
	Security Constrained Economic Dispatch (SCED)			400.000	400 000	100 000	400 000	
RG 9	Availablity	99.9%	99.95%	100.00%	100.00%	100.00%	100.00%	99.98%
	Security Constrained Economic Dispatch (SCED): number							
	of unplanned outages greater than 30 consecutive							
DC 10	minutes		-/-	0	0	0	0	0
RG 10 RG 11	(per quarter) Load Frequency Control (LFC) Availability	zero 99.9%	n/a 99.95%	100.00%	100.00%	100.00%	100.00%	100%
KG 11	Load Frequency Control (LFC): number of unplanned	33.370	33.33/6	100.00%	100.00%	100.00%	100.00%	100%
	outages greater than 30 consecutive minutes (per							
RG 12	quarter)	zero	n/a	0	0	0	0	0
RG 13	Outage Scheduler Availability	99%	99.5%	100.00%	100.00%	100.00%	100.00%	99.98%
10 13	Sauge senerate Availability		22.27	200.0070	200.00%	200.0070	200.0070	22.2070
RG 14	Network Model Management System (NMMS) Availability	99%	99.5%	99.99%	100.00%	99.99%	100.00%	99.97%
		1	1					



Q4-2015 KPI Detail – Efficient Electricity Markets

KPI ID	KPI Description	2015 Target Performance	2015 Stretch Performance	2015 YTD	Q4	Q3	Q2	01
	g, Scheduling and Pricing							
	DAM quality of solution as measured with price corrections:							
EM 1	percent of hourly prices requiring DAM price correction.	1-3 % of time	< 1 % of time	0.00027%	0%	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%	0.91%	0%	0.02%	3.614%	0.02%
Settlem	ent & Billing							
EM 3	Achieve timely settlements, per Protocol defined timelines.	99%	100%	100%	100%	100%	100%	100%
	Perform accurate settlements as measured by the percent							
	of Operating Day and operating month settlement that							
L	does not require a correction as a result of an error in the							
EM 4	settlement and billing systems or processes.	98%	99.9%	99.67%	99.78%	100%	99.95%	99.34%
Market	: Credit	1						
EM 5	Credit reports are correct and posted in a timely manner.	98%	100%	100%	100%	100%	100%	100%
Market	Information							
EM 6	Wholesale extracts available per Protocol timelines	98%	99%	99.79%	99.93%	99.73%	99.87%	99.77%
IT Appl	ication Services							
EM 7	Congestion Revenue Rights (CRR) Availability	99%	99.5%	100%	100%	100%	100%	100%
EM 8	Market Management System Aggregate Availability	99%	99.5%	100%	100%	100%	100%	99.98%



Q4-2015 KPI Detail – Open Access & Retail Choice

KPI ID	KPI Description	2015 Target Performance	2015 Stretch Performance	2015 YTD	Q4	Q3	Q2	Q1		
Determi	Determine REC Obligations & Verify Compliance									
	Fulfill the protocol obligations for RPS mandate									
OARC 1	calculations and reporting on time and accurately	99%	100%	100 %	100%	100%	100%	100%		
Custome	Customer Switching / Registry									
	Conduct retail transaction processing per Protocol									
OARC 2	timelines	98%	99%	99.91%	99.71%	99.98%	99.99%	99.97%		
	End use customer switch notifications processed									
OARC 3	per PUCT rules	99%	100%	100%	100%	100%	100%	100%		
Market I	nformation									
OARC 4	Retail extracts available per Protocol timelines	98%	99%	100%	100%	100%	100%	100%		
IT Applic	ation Services									
OARC 5	Retail Processing Availability - Bus. Hours	99.5%	99.7%	99.89%	99.55%	100%	100%	100%		
OARC 6	Retail Processing Availability - Non bus. Hours	99%	99.5%	99.71%	99.85%	99.77%	99.43%	99.80%		



Q4-2015 KPI Detail - Other Support & Management Functions

KPI ID	KPI Description	2015 Target Performance	2015 Stretch Performance	2015 YTD	Q4	Q3	Q2	Q1
Finance								
	Manage spending to be equal to or less than	Between 0 5% favorable						
OSM 1	the board-approved expenditure budget for 2015.	variance	n/a	-3.3%	-13.3%	-0.5%	4%	0.49%
Security	1							
	Maintain ERCOT ISO's security posture against cyber	No more than one Stage 2 or	Zero Stage 2 or Stage 3					
	and physical security threats as defined in the	Stage 3 cyber or physical	cyber or physical security					
OSM 2	Cyber Security Incident Response Plan.	security incidents.	incidents.	Zero	Zero	Zero	Zero	Zero

