Item 5.1: Q3 2019 KPI Review

Kristi Hobbs Director, Enterprise Risk Management & Strategic Analysis

Human Resources and Governance Committee Meeting

ERCOT Public December 9, 2019



Q3 2019 Key Performance Indicator (KPI) Summary

We serve the public by ensuring a reliable grid, efficient electricity markets, open access and retail choice.	YTD - 2 Stretch Targ		Q3 - 2 Stretch Targ		Q2 - 2 Stretch Targ		Q1 - 2 Stretch Targ	
Reliable Grid								
Grid Security Management								
Outage Coordination / Planning Forecasting								
Compliance Monitoring & Reporting								
IT Application Services	67%	33%	67%	33%	67%	33%	67%	33%
Efficient Electricity Markets								
Bidding, Scheduling and Pricing	50%	50%	50%	50%	50%	50%	50%	50%
Settlement & Billing								
Market Credit								
Market Information								
IT Application Services								
Open Access & Retail Choice								
Customer Switching / Registry								
Market Information								
IT Application Services								
Other Support and Management Functions								
Finance								
Security								
Total number of KPIs tracked:	29		29		29)	29)
% meeting Stretch:	76%	6	76%	6	769	%	769	%
% meeting Target:	21%		21%		219		249	
% below Target:	3%)	3%)	3%	0	0%	0

ercot 🦻 Item 5.1 **ERCOT** Public

Appendix



Q3 2019 KPI Detail – Reliable Grid

KPI ID	KPI Description	2019 Target Performance	2019 Stretch Performance	2019 YTD	Q3	Q2	Q1			
Grid Sec	Grid Security Management									
RG 1	Control Performance Standard 1 (CPS1) frequency control performance (rolling 12 month CPS1 score)	> 140	> 150	All scores greater than 150	Jul-174.34%, Aug-174.44%, Sep-174.50%	April-174.21%, May-174.20%, June-174.28%	Jan-175.30%, Feb-175.10%, March-174.60%			
RG 2	Interconnection Reliability Operating Limit (IROL) exceedance limitations	None longer than 20 minutes	None longer than 10 minutes	No IROL exceedances	No IROL exceedances	No IROL exceedances	No IROL exceedances			
Outage	Coordination / Planning				,	'				
RG 3	Outage Coordination performance: requests approved or denied within timeline and with mitigation plans developed if required	97%	99%	99.60%	99.38%	99.72%	99.69%			
Forecas	ting									
RG 4	Operations Load Forecast performance - Mean Average Percent Error (MAPE): monthly average day ahead load forecasts used for DRUC MAPE	All less than 4.0%	All less than 3.5%	2.80%	2.63%	3.03%	2.74%			
RG 5	Wind forecast performance - MAPE based on installed wind capacity: monthly average day ahead wind forecasts used for DRUC MAPE	All less than 10%	All less than 8%	All less than 8%	Jul-4.10%, Aug-4.70%, Sep-3.80%	April-5.20%, May-4.80%, June-4.70%	Jan-5.00%, Feb-6.10%, March-5.20%			
RG 6	Solar forecast performance - MAPE based on installed solar capacity: monthly average day ahead solar forecasts used for DRUC MAPE.	All less than 15%	All less than 10%	All less than 10%	Jul-4.94%, Aug-4.79%, Sep-6.44%	April-6.02%, May-8.68%, June-6.38%	Jan-8.37%, Feb-7.85%, March-8.77%			
Complia	nce Monitoring & Reporting									
RG 8	Achieve compliance with SOC controls	No exceptions found in a SOC audit	N/A	One exception found in first round of SOC Audit testing	No exceptions found in an SOC audit	One exception found in first round of SOC Audit testing	No exceptions found in a SOC audit			



RG7 is intentionally left blank.

Q3 2019 KPI Detail – Reliable Grid

KPI ID	KPI Description	2019 Target Performance	2019 Stretch Performance	2019 YTD	Q3	Q2	Q1			
IT Applic	Application Services									
RG 9	Energy Management System Tier 1 Aggregate Availability	All Tier 1 systems meet or exceed defined SLAs (99.90%)	N/A	100%	100%	100%	100%			
RG 10	Energy Management System Tier 2 Aggregate Availability	Achieve 99.9% availability for 10 of 11 Tier 2 systems	Achieve 99.9% availability for all Tier 2 systems	100%	100%	100%	100%			
RG 11	Security Constrained Economic Dispatch (SCED) Availablity	99.95%	100%	100%	100%	100%	100%			
RG 12	Security Constrained Economic Dispatch (SCED): number of unplanned outages greater than 30 consecutive minutes (per quarter)	Zero	N/A	Zero	Zero	Zero	Zero			
RG 13	Outage Scheduler Availability	99%	99.5%	100%	100%	100%	100%			
RG 14	Network Model Management System (NMMS) Availability	99%	99.5%	99.98%	100%	100%	99.93%			



Q3 2019 KPI Detail – Efficient Electricity Markets

KPI ID	KPI Description	2019 Target Performance	2019 Stretch Performance	2019 YTD	Q3	Q2	Q1		
Bidding, Scheduling and Pricing									
EM 1	DAM quality of solution as measured with price corrections: percent of hourly prices requiring DAM price correction	1-3 % of time	< 1 % of time	1.62%	1.82%	1.93%	1.10%		
EM 2	SCED solution is solved and posted: percent of 15-minute Settlement Interval prices where price corrections are performed. This measure includes corrections from routine work (e.g., database loads and site failover)	0.25% - 1%	<0.25%	0.01%	0.00%	0.00%	0.01%		
Settleme	nt & Billing								
EM 3	Achieve timely settlements per Protocol defined timelines	99%	100%	100%	100%	100%	100%		
EM 4	Perform accurate settlements as measured by the percent of statements/invoices that do not require a correction as a result of an error in the settlement and billing systems or processes	98%	99.9%	100%	100%	100%	100%		
Market C	redit								
EM 5	Credit reports are correct and posted in a timely manner	98%	100%	100%	100%	100%	100%		
Market In	formation								
EM 6	Wholesale extracts available per Protocol timelines	98%	99%	99.95%	99.93%	99.92%	99.99%		
IT Applic	ation Services								
EM 7	Congestion Revenue Rights (CRR) Availability	99%	99.5%	100%	100%	100%	100%		
EM 8	Market Management System Aggregate Availability	99%	99.5%	100%	100%	100%	100%		

Item 5.1 ERCOT Public

Q3 2019 KPI Detail – Open Access & Retail Choice

KPI ID	KPI Description	2019 Target Performance	2019 Stretch Performance	2019 YTD	Q3	Q2	Q1			
Customer S	Customer Switching / Registry									
OARC 1	Conduct retail transaction processing per Protocol timelines	98%	99%	99.98%	99.99%	99.99%	99.97%			
OARC 2	End use customer switch notifications processed per PUCT rules	99%	100%	100%	100%	100%	100%			
Market Info	ormation									
OARC 3	Retail extracts available per Protocol timelines	98%	99%	100%	100%	100%	100%			
IT Applicat	ion Services									
OARC 4	Retail Processing Availability - Business Hours	99.90%	99.95%	100%	100%	100%	100%			
OARC 5	Market Information System (MIS) Availability	99%	99.5%	99.80%	99.89%	99.90%	99.62%			

ercot 🦻 Item 5.1 **ERCOT** Public

Q3 2019 KPI Detail – Other Support & Management Functions

KPI ID	KPI Description	2019 Target Performance	2019 Stretch Performance	2019 YTD	Q3	Q2	Q1		
Finance									
OSM 1	Manage spending to be equal to or less than the board-approved expenditure budget	Between 0 - 5% favorable variance	N/A	4.00%	5.90%	1.90%	4.10%		
Securit	Security								
OSM 2	Maintain ERCOT ISO's security posture against cyber security threats as defined in the Security Incident Response Plan	Zero externally reportable cyber security incidents	N/A	Zero externally reportable cyber security incidents	Zero externally reportable cyber security incidents	Zero externally reportable cyber security incidents	Zero externally reportable cyber security incidents		
OSM 3	Maintain ERCOT ISO's security posture against physical security threats as defined in the Security Incident Response Plan	Zero externally reportable physical security incidents	N/A	Zero externally reportable physical security incidents	Zero externally reportable physical security incidents	Zero externally reportable physical security incidents	Zero externally reportable physica security incidents		

ercot 🦻 Item 5.1 **ERCOT** Public