

Item 9: Q4 2018 Key Performance Indicator (KPI) Review

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Human Resources and Governance Committee Meeting

ERCOT Public February 11, 2019

Q4 2018 Key Performance Indicator (KPI) Summary

We serve the public by ensuring a reliable grid, efficient electricity markets, open YTD - 2018 Q4 - 2018 Q3 - 2018 Q2 - 2018 Q1 - 2018 access and retail choice. Stretch Target Below **Reliable Grid** Grid Security Management Outage Coordination / Planning Forecasting 50% Compliance Monitoring & Reporting 50% 50% IT Application Services 50% 67% 67% 67% **Efficient Electricity Markets** Bidding, Scheduling and Pricing Settlement & Billing 50% 50% Market Credit Market Information IT Application Services **Open Access & Retail Choice** Customer Switching / Registry 50% Market Information IT Application Services 50% 50% 50% 50% 50% **Other Support and Management Functions** Finance Security Total number of KPIs tracked: 29 29 29 29 29 % meeting Stretch: 62% 69% 69% 69% 66% % meeting Target: 28% 28% 28% 21% 31% % below Target: 10% 3% 3% 3% 10%

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Appendix



Q4 2018 KPI Detail – Reliable Grid

KPI ID	KPI Description	2018 Target Performance	2018 Stretch Performance	2018 YTD	Q4	Q3	Q2	Q1			
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	Oct:176.03%, Nov:173.73%, Dec:175.64%; 12 Months rolling CPS1 average of 175.67% at the end of Dec 2018	Jul:176.4%, Aug:174.8%, Sep:174.4%; 12 Months rolling CPS1 average of 176.0% at the end of September 2018	Apr:175.9%, May:174.1%, Jun:173.7%; 12 Months rolling CPS1 average of 176.7% at the end of June 2018	Jan-178.78%, Feb-176.49% March 177.93%; 12 Months rolling CPS1 average of 176.59% at the end of March 2018			
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	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%	99.78%	99.59%	99.78%	99.93%	99.81%			
Foreca	sting										
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%	3.81%	2.91%	2.41%	2.14%	3.81%			
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%	Oct-3.60%, Nov-4.55% and Dec-4.95%	Jul-4.5%, Aug-5.4% and Sep-3.8%	Apr-5.1%, May-4.9% and Jun-5.8%	Jan-5.50%, Feb-7.60% and March-5.40%			
Compli	ance Monitoring & Reporting										
RG 6	Achieve compliance with NERC/FERC Standards	No significant violations found in a NERC Compliance Engagement	N/A	Two NERC violations settled from self-reports in 2016/2017 with TRE/NERC/FERC	a NERC Compliance	No significant violations found in a NERC Compliance Engagement	Two NERC violations settled from self-reports in 2016/2017 with TRE/NERC/FERC	No significant violations found in a NERC Compliance Engagement			
RG 8	Achieve compliance with SOC controls	No exceptions found in an SOC audit	N/A	No exceptions found in an SOC audit	No exceptions found in an SOC audit	No exceptions found in an SOC audit	No exceptions found in an SOC audit	No exceptions found in an SOC audit			



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Q4 2018 KPI Detail – Reliable Grid

KPI ID	KPI Description	2018 Target Performance	2018 Stretch Performance	2018 YTD	Q4	Q3	Q2	Q1		
IT Applic	T 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%	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	99.99%	100%	100%	99.99%	100%		
RG 11	Security Constrained Economic Dispatch (SCED) Availablity	99.95%	100%	99.99%	99.99%	100%	100%	100%		
RG 12	Number of unplanned SCED outages greater than 30 consecutive minutes (per quarter)	Zero	N/A	Zero	Zero	Zero	Zero	Zero		
RG 13	Outage Scheduler Availability	99%	99.5%	100%	100%	100%	100%	100%		
RG 14	Network Model Management System (NMMS) Availability	99%	99.5%	100%	100%	100%	100%	100%		

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Q4 2018 KPI Detail – Efficient Electricity Markets

KPI ID	KPI Description	2018 Target Performance	2018 Stretch Performance	2018 YTD	Q4	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	0.16%	0.38%	0.27%	0%	0%	
EM 2	SCED solution is solved and posted: percent of 15-minute Settlement Interval prices where price corrections are performed	0.5% - 1%	< 0.5%	0.03%	0%	0.10%	0%	0%	
Settlem	ent & Billing								
EM 3	Achieve timely settlements per Protocol defined timelines	99%	100%	100%	100%	100%	100%	100%	
EM 4	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%	99.72%	99.78%	99.11%	100%	100%	
Market	Credit						191		
EM 5	Credit reports are correct and posted in a timely manner	98%	100%	100%	100%	100%	100%	99.89%	
Market	Information								
EM 6	Wholesale extracts available per Protocol timelines	98%	99%	99.93%	99.98%	99.97%	99.94%	99.81%	
IT Application 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%	100%	

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Q4 2018 KPI Detail – Open Access & Retail Choice

KPI ID	KPI Description	2018 Target Performance	2018 Stretch Performance	2018 YTD	Q4	Q3	Q2	Q1		
Custome	Customer Switching / Registry									
OARC 1	Conduct retail transaction processing per Protocol timelines	98%	99%	99.40%	99.98%	99.92%	98.37%	99.31%		
OARC 2	End use customer switch notifications processed per PUCT rules	99%	100%	100%	100%	100%	100%	100%		
Market Ir	Market Information									
OARC 3	Retail extracts available per Protocol timelines	98%	99%	100%	100%	100%	100%	100%		
IT Applic	ation Services									
OARC 4	Retail Processing Availability - Business Hours	99.90%	99.95%	99.64%	100%	100%	98.97%	99.58%		
OARC 5	Market Information System (MIS) Availability	99%	99.5%	99.92%	99.79%	99.90%	99.94%	99.99%		

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Q4 2018 KPI Detail – Other Support & Management Functions

KPI ID	KPI Description	2018 Target Performance	2018 Stretch Performance	2018 YTD	Q4	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	-2.02%	-5.12%	-4.1%	-0.8%	1.8%		
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						
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						

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