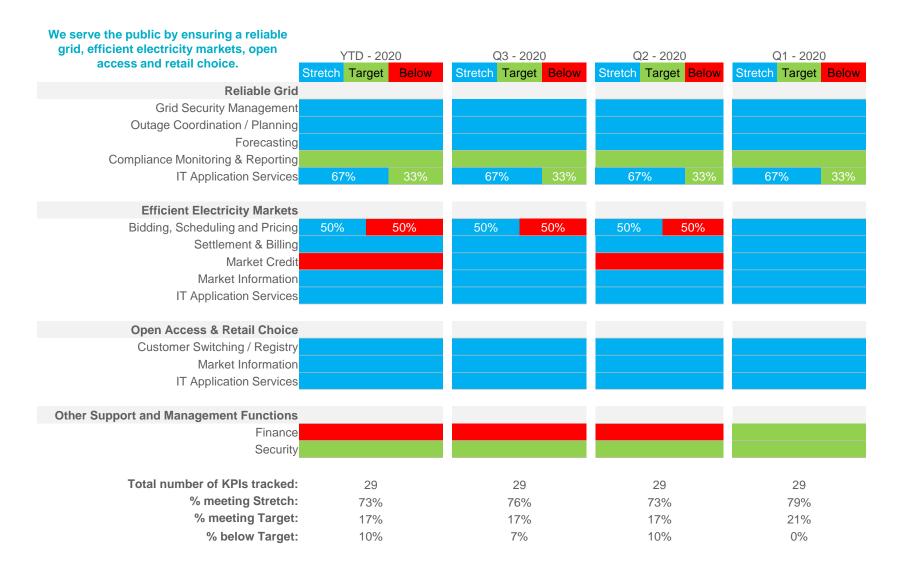**Item 5.1: Q3 2020 Key Performance Indicators (KPIs) Review**

Kristi Hobbs
Director, Enterprise Risk Management & Strategic Analysis

Urgent Human Resources and Governance Committee Meeting

ERCOT Public
December 7, 2020

Q1 – Q3 2020 Key Performance Indicator (KPI) Summary

We serve the public by ensuring a reliable grid, efficient electricity markets, open access and retail choice.

	YTD - 2020			Q3 - 2020			Q2 - 2020			Q1 - 2020		
	Stretch	Target	Below	Stretch	Target	Below	Stretch	Target	Below	Stretch	Target	Below
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%			
Settlement & Billing												
Market Credit			(red)						(red)			
Market Information												
IT Application Services												
Open Access & Retail Choice												
Customer Switching / Registry												
Market Information												
IT Application Services												
Other Support and Management Functions												
Finance			(red)			(red)			(red)		(green)	
Security		(green)			(green)			(green)			(green)	
Total number of KPIs tracked:	29			29			29			29		
% meeting Stretch:	73%			76%			73%			79%		
% meeting Target:	17%			17%			17%			21%		
% below Target:	10%			7%			10%			0%		

Appendix:

Q1- Q3 2020 KPI Detail – Reliable Grid

KPI ID	KPI Description	2020 Target Performance	2020 Stretch Performance	2020 YTD	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	Jul-168.30%, Aug-170.50%, Sep-173.60%	April-168.90%, May-170.80%, June-170.70%	Jan-174.86%, Feb-174.80%, March-174.51%
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%	99.69%	99.92%	99.80%	99.34%
Forecasting							
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%	2.63%	2.26%	3.22%	2.42%
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-4.60%, Aug-4.40%, Sep-3.40%	April-4.50%, May-4.50%, June-4.80%	Jan-4.00%, Feb-4.10%, March-5.10%
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-5.40%, Aug-5.24%, Sep-6.76%	April-5.01%, May-6.79%, June-5.01%	Jan-5.82%, Feb-5.77%, March-7.37%
Compliance Monitoring & Reporting							
RG 8	Achieve compliance with SOC controls	No exceptions found in a SOC audit	N/A	No exceptions found in a SOC audit	No exceptions found in an SOC audit	No exceptions found in a SOC audit	No exceptions found in a SOC audit

RG7 is intentionally left blank.

Q1- Q3 2020 KPI Detail – Reliable Grid

KPI ID	KPI Description	2020 Target Performance	2020 Stretch Performance	2020 YTD	Q3	Q2	Q1
IT 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%	100%	100%	100%	100%

Q1- Q3 2020 KPI Detail – Efficient Electricity Markets

KPI ID	KPI Description	2020 Target Performance	2020 Stretch Performance	2020 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	6.19%	7.87%	10.45%	0.25%
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%	0.04%	0.09%	0.02%	0.00%
Settlement & 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%	99.95%	99.94%	99.90%	100%
Market Credit							
EM 5	Credit reports are correct and posted in a timely manner	98%	100%	98.41%	99.94%	95.30%	100%
Market Information							
EM 6	Wholesale extracts available per Protocol timelines	98%	99%	99.96%	99.96%	99.96%	99.98%
IT Application 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%

Q1- Q3 2020 KPI Detail – Open Access & Retail Choice

KPI ID	KPI Description	2020 Target Performance	2020 Stretch Performance	2020 YTD	Q3	Q2	Q1
Customer Switching / Registry							
OARC 1	Conduct retail transaction processing per Protocol timelines	98%	99%	99.86%	99.64%	99.99%	99.94%
OARC 2	End use customer switch notifications processed per PUCT rules	99%	100%	100%	100%	100%	100%
Market Information							
OARC 3	Retail extracts available per Protocol timelines	98%	99%	100%	100%	100%	100%
IT Application 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%	99.95%	99.99%	99.88%	99.97%

Q1- Q3 2020 KPI Detail – Other Support & Management Functions

KPI ID	KPI Description	2020 Target Performance	2020 Stretch Performance	2020 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	-0.10%	6.30%	-9.10%	2.50%
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 physical security incidents