Item 5: Review of Q1 2021 Key Performance Indicators (KPIs)

Kristi Hobbs
Vice President, Corporate Strategy and
PUC Relations

Urgent Human Resources and Governance
Committee Meeting

ERCOT Public
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Q1 2021 Key Performance Indicator (KPI) Summary

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

Q1 - 2021

	Stretch	Target	Below

Reliable Grid

Grid Security Management			
Outage Coordination / Planning			
Forecasting	67%		33%
Compliance Monitoring & Reporting			
IT Application Services	67%	33%	

Efficient Electricity Markets

Bidding, Scheduling and Pricing	50%	50%	
Settlement & Billing	50%	50%	
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
% meeting Stretch:	69%
% meeting Target:	28%
% below Target:	3%

Appendix:

Q1 2021 KPI Detail – Reliable Grid

KPI ID	KPI Description	2021 Target Performance	2021 Stretch Performance	Q1
Grid Security Management				
RG 1	Control Performance Standard 1 (CPS1) frequency control performance (rolling 12 month CPS1 score)	> 140	> 150	Jan-170.94%, Feb-169.62%, March-169.39%
RG 2	Interconnection Reliability Operating Limit (IROL) exceedance limitations	None longer than 20 minutes	None longer than 10 minutes	None longer than 10 minutes
Outage Coordination / Planning				
RG 3	Outage Coordination performance: requests approved or denied within timeline and with mitigation plans developed if required	97%	99%	99.16%
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%	4.74%
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%	Jan-4.40%, Feb-3.70%, March-4.01%
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%	Jan-5.82%, Feb-8.33%, March-8.21%
Compliance Monitoring & Reporting				
RG 8	Achieve compliance with SOC controls	No exceptions found in a SOC audit	N/A	Testing has not yet started for the SOC audit

RG7 is intentionally left blank.

Q1 2021 KPI Detail – Reliable Grid

KPI ID	KPI Description	2021 Target Performance	2021 Stretch Performance	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%
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%
RG 11	Security Constrained Economic Dispatch (SCED) Availablity	99.95%	100%	99.99%
RG 12	Security Constrained Economic Dispatch (SCED): number of unplanned outages greater than 30 consecutive minutes (per quarter)	Zero	N/A	Zero
RG 13	Outage Scheduler Availability	99%	99.5%	100%
RG 14	Network Model Management System (NMMS) Availability	99%	99.5%	100%

![ercot logo]

Q1 2021 KPI Detail – Efficient Electricity Markets

KPI ID	KPI Description	2021 Target Performance	2021 Stretch Performance	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	0.00%
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%	0.87%
Settlement & Billing				
EM 3	Achieve timely settlements per Protocol defined timelines	99%	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%	99.83%
Market Credit				
EM 5	Credit reports are correct and posted in a timely manner	98%	100%	100%
Market Information				
EM 6	Wholesale extracts available per Protocol timelines	98%	99%	99.95%
IT Application Services				
EM 7	Congestion Revenue Rights (CRR) Availability	99%	99.5%	100%
EM 8	Market Management System Aggregate Availability	99%	99.5%	100%

Q1 2021 KPI Detail – Open Access & Retail Choice

KPI ID	KPI Description	2021 Target Performance	2021 Stretch Performance	Q1
Customer Switching / Registry				
OARC 1	Conduct retail transaction processing per Protocol timelines	98%	99%	99.96%
OARC 2	End use customer switch notifications processed per PUCT rules	99%	100%	100%
Market Information				
OARC 3	Retail extracts available per Protocol timelines	98%	99%	100%
IT Application Services				
OARC 4	Retail Processing Availability - Business Hours	99.90%	99.95%	100%
OARC 5	Market Information System (MIS) Availability	99%	99.5%	99.79%

Q1 2021 KPI Detail – Other Support & Management Functions

KPI ID	KPI Description	2021 Target Performance	2021 Stretch Performance	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	2.90%
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

* Measure reflects number of successful attempts that would be reported externally.
  KPI will be revised in 2022 to align with new CIP-008 reporting requirements.