



Item 7.5: Technology and Projects Update

Venkat Tirupati

Senior Director, Grid and Market Solutions

Mandy Bauld

Senior Director, Project Management Office

Reliability and Markets Committee Meeting








ERCOT Public

December 19, 2022

ERCOT Application Release & Tech Health Upgrades

- Application Release Highlights
 - 4 NPRRs/SCRs* going live on December 8th
 - New Reports and Visualizations
- Technology Health Upgrades
 - 9 Key Systems/Initiatives* going live between November 28th and December 10th
 - Collaboration between Market Participants and ERCOT IT

2022 OKR Projects Stoplight

Status	Project	Update
	Fast Frequency Response (FFR) Advancement	<ul style="list-style-type: none"> Delivered
	Create Firm Fuel Supply Service	<ul style="list-style-type: none"> Delivered
	RARF Replacement	<ul style="list-style-type: none"> Delivered Stoplight red due to missed OKR for August Go-Live
	ERCOT Contingency Reserve Service (ECRS) Implementation	<ul style="list-style-type: none"> On Track – Release Cycle 3 (early June 2023) Market Interface Specifications provided in September 2022 Market testing window opens late March 2023 Market discussion of technical impacts at TWG
	Energy Management System (EMS) Upgrade	<ul style="list-style-type: none"> Not Tracking – missed December Key Result for testing On track – release in November 2023 Testing delays due to resource gaps Mitigating through increased resource capacity after Release Cycle 6 deliveries Market discussion of technical impacts at TWG Currently limiting EMS changes that impact in-flight projects Post-ECRS EMS changes limited to critical/emergency items
	DC5 Infrastructure Refresh Program	<ul style="list-style-type: none"> Subset of Program OKR milestones not trending on budget and/or schedule due to the global chip shortage, revised product end-of-life schedules, & additional migration effort Teams continue to focus on schedule and budget mitigations and meet project level milestones
	Treasury Management System Implementation	<ul style="list-style-type: none"> On Track – met OKR to reach Planning Phase milestone Focus on vendor and solution selection, which will inform remainder of Planning Phase activities and schedule

OKR Projects Targeted for Delivery in 2022



Distribution Generation Resource / Distribution
Energy Storage Resource (DGR/DESR)
Implementation
(February 2022)



Securitization - Subchapter N
(March 2022)



Load Resource Participation in Non-Spinning
Reserve ("NPRR1093")
(May 2022)



Fast Frequency Response (FFR) Advancement
(October 2022)



Create Firm Fuel Supply Service
(October 2022)



RARF Replacement
(December 2022)

Appendix

ERCOT Application Release

Project	Status
NPRR1096(a) - Require Sustained 4-Hour Capability for Non-Spin	On Track – December 8
NPRR1097 - Create Resource Forced Outage Report	On Track – December 8
SCR812 - Create Intermittent Renewable Generation Integration Report	On Track – December 8
NPRR1084 - Improvements to Reporting of Resource Outages, Derates, and Startup Loading Failures	On Track – December 8

Operations & Maintenance Activity	Status
New Solar Generation Resource Power Potential Forecast Report	On Track – December 8
New Wind Generation Resource Power Potential Forecast Report	On Track – December 8
Fuel Mix Dashboard	On Track – December 15

ERCOT Technology Health Upgrades

Technical Health Projects/Initiatives	Status
Congestion Revenue Rights (CRR) System	Complete – November 28
Real Time Dynamics Monitoring System (RTDMS)	Complete – December 1
ERCOT Content Management System (ECMS) Phase 2	Complete – December 3
Network Model Management System (NMMS)	Complete – December 4
Deprecation of Transport Layer Security (TLS) 1.0/1.1	Complete – December 5
Load Forecasting (LF) System	Complete – December 6
Actional Policy Enforcement (APE) Upgrade	On Track – December 8
Grid Geo Situational Awareness System	On Track – December 8
MarkeTrak Retail Phase 2	On Track – December 10

Fuel Mix Dashboard – Test Example

