

Item 7.5: Technology and Projects Update

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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	• Delivered
	Create Firm Fuel Supply Service	• Delivered
	RARF Replacement	DeliveredStoplight red due to missed OKR for August Go-Live
	ERCOT Contingency Reserve Service (ECRS) Implementation	 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	 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	 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	 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





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

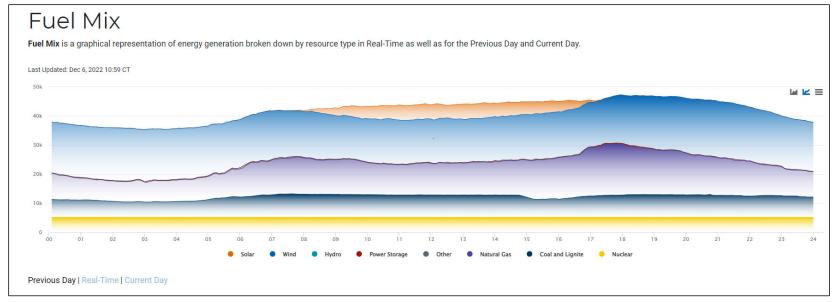


ERCOT Technology Health Upgrades

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



Solar Solar	3,124 MW	(7.1%)
€ Wind	6,974 MW	(15.9%)
Hydro	5 MW	(0.0%)
Power Storage	199 MW	(0.5%)
ooo Other	0 MW	(0.0%)
Natural Gas	20,601 MW	(47.1%)
Ø Coal and Lignite	7,762 MW	(17.7%)
Nuclear	5,112 MW	(11.7%)

