



PUBLIC

Item 6.1: Projects and Technology Update

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Technology and Security Committee Meeting

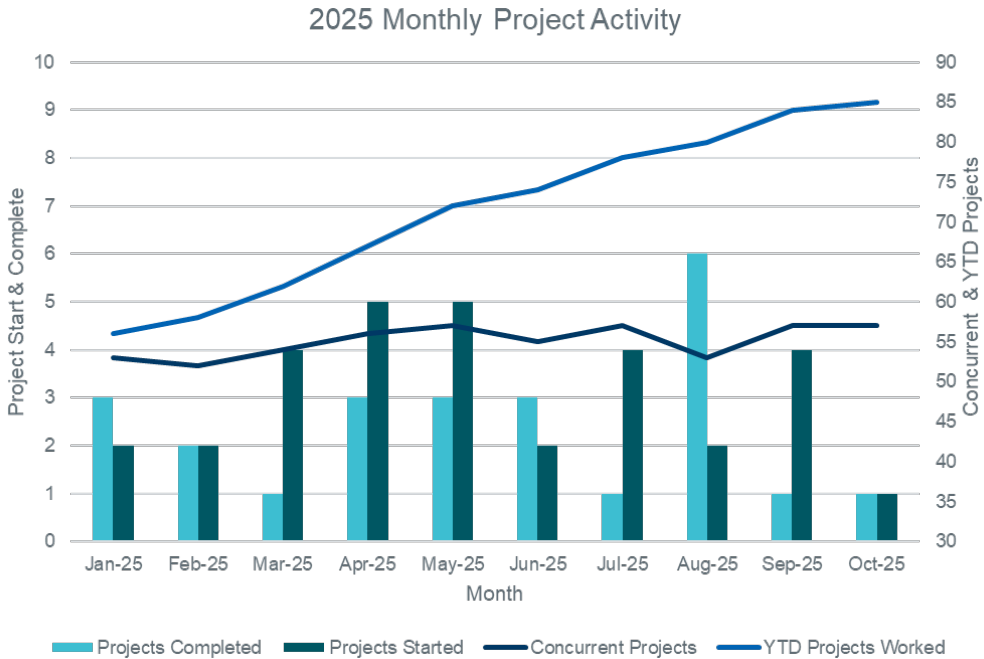
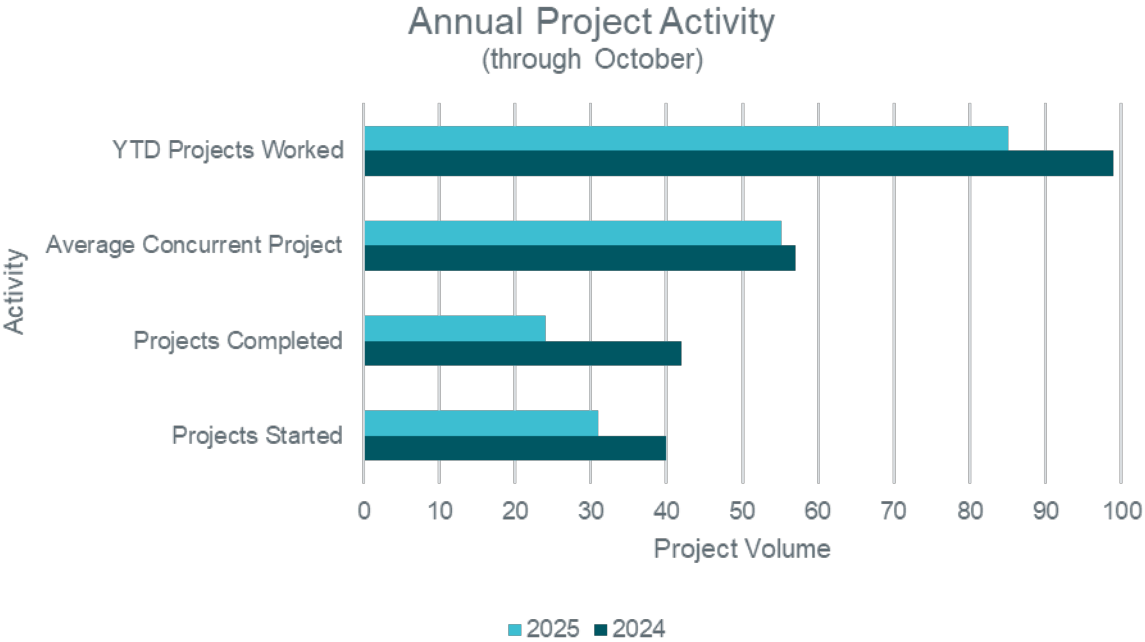
December 8, 2025

- **Purpose**
Periodic project updates and impact assessment due to Real-Time Co-optimization.
- **For Information Only**
No action is currently requested; for discussion only.

Key Takeaways

- 2025 activity across all projects is steady, but trending slightly lower than 2024 due to RTC+B
- Labor is ramping down after record highs in project activity mostly driven by RTC
- Continuing to maintain the tech health and do enhancements to our systems

2025 Project Activity



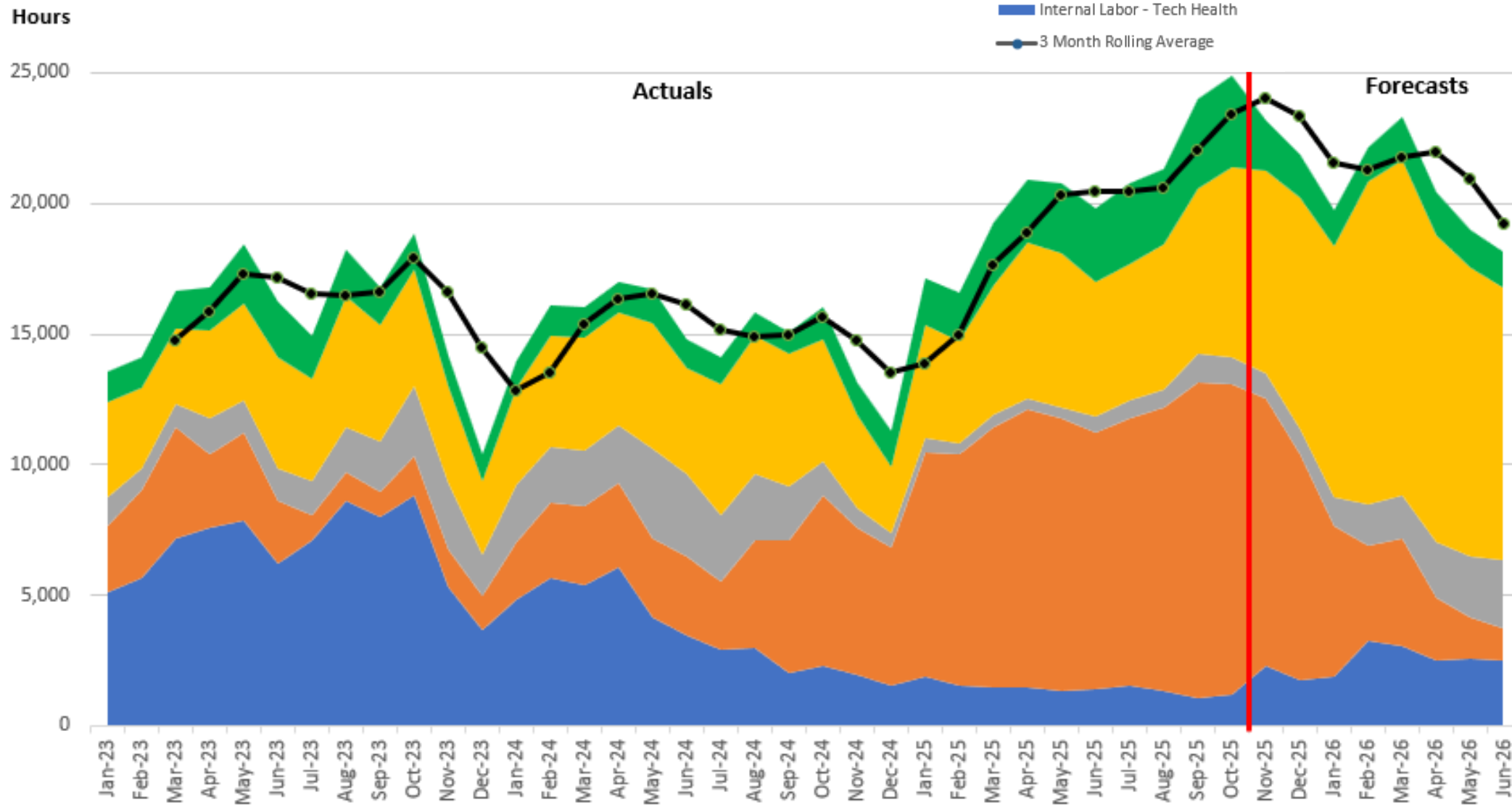
Key Takeaway:

- 2025 activity across all projects is steady, but trending slightly lower than 2024 due to RTC+B.



Item 6.1

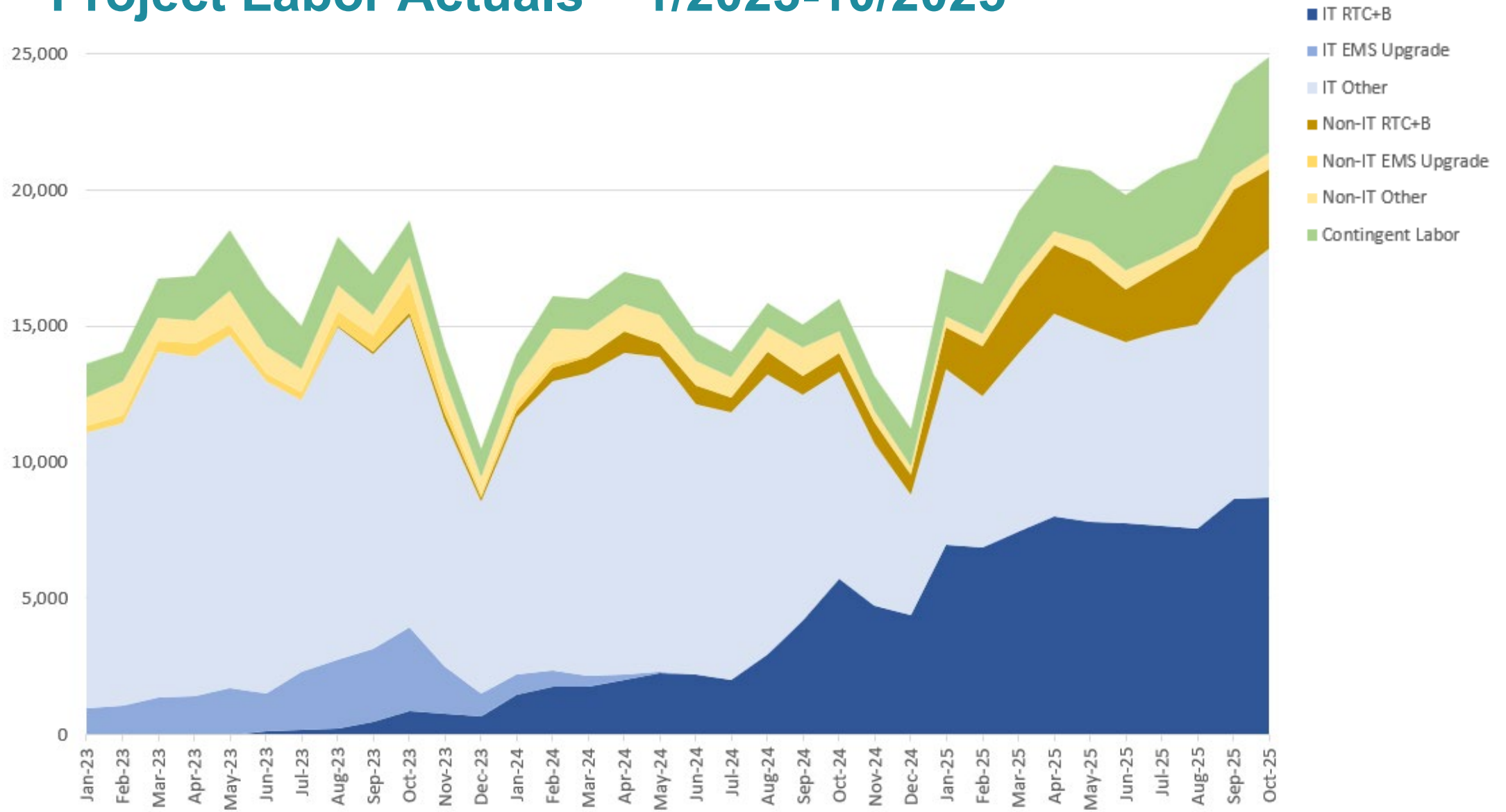
Project Labor Hours – 1/2023-6/2026



Key Takeaway: Labor is ramping down after record highs in project activity mostly driven by RTC.



Project Labor Actuals – 1/2023-10/2025



Key Takeaway: Labor shifts back to IT as we focus on cutover activities and defect fixing from RTC testing.



High priority items post-RTC

- RTC stabilization will be the top priority. Remember that the RTC project runs through June
- On-going discussions with Market Participants on a priority order (see appendix)
- ERCOT identified the following internal projects as priority for 2026
 - Large Load curtailment Manager to support SB6
 - Single Source of Truth for Large Load
 - Treasury Single Source of Truth

Key Takeaway: Work in Progress with Market participants for post RTC priority projects.



ERCOT Application Release this cycle

Release R11, RTC, 2026-R1 (Nov - Jan)

- RTC+B

Key Takeaway: Focus has entirely shifted to RTC go-live for business impacting projects while continuing to maintain tech health.



Potential SCED Price Correction Issue

Issue Summary

- On October 14, 2025, Operator detected an unexpected 3,000 MW spike in the external Short Term Load Forecast (STLF).
- A switch to the internal STLF was initiated, but due to a software defect, the transition failed.
- Due to the failure, the erroneous forecast factored into the Generation to be Dispatched (GTBD), triggering elevated SCED system prices between 8:10 PM and 8:15 PM.

Root Cause

- A software defect in the Energy Management System (EMS) prevented successful execution of the STLF source switch.

Resolution

- Permanent code fix deployed on October 28, 2025, in EMS and RTC+B environments.
- Test procedures enhanced to detect similar failure modes.

Key Takeaway: A software defect in the EMS triggered a price spike that went undetected within the two-business day price correction deadline.



SCED incidents

SCED Incident # 1

- **Event:** SCED failed to execute from 00:00 to 00:25 on October 7, 2025; resumed successfully at 00:28.
- **Impact:** Price corrections. Completed before the October 9, 4:00 PM deadline (Market Notice: M-C101325-01).
- **Root Cause:** A software defect triggered an edge-case Energy Offer Curve (EOC) configuration - first occurrence since nodal market go-live.
- **Resolution:** Vendor patch deployed to production on November 5, 2025; also applied to RTC+B environments to prevent recurrence.

SCED Incident # 2

- **Event:** SCED failed from 08:05 to 08:40 on October 8, 2025; resumed at 08:44
- **Impact:** Pricing corrections. Completed before the October 10, 4:00 PM deadline (Market Notice: M-B101325-01).
- **Root Cause:** A software defect triggered by a Resource's Three-Part Offer with NULL FIP/FOP values submitted post-adjustment window (per NPRR-1058)
- **Resolution:** Fix implemented same day in production and RTC+B. Test environment data quality enhanced to improve early detection of similar issues.

Key Takeaway: Two unrelated latent software defects triggered SCED outages on consecutive days, each lasting approximately 30 minutes.



Other SCED incidents

SCED Incident # 3

- **Event:** On October 12, 2025, SCED generated incorrect results for the 08:20 interval. Normal operation resumed at 08:25.
- **Impact:** Price correction. Completed before the October 14, 4:00 PM deadline (Market Notice: M-B101525-01).
- **Root Cause:** A defect in the SCED optimization solver led to an infeasible solution - an edge case not encountered since nodal market go-live.
- **Resolution:** A software update was deployed on November 5, 2025, to improve error handling and halt SCED execution when infeasibility is detected, preventing erroneous outputs. A permanent fix was not pursued due to the upcoming transition to RTC+B, which uses a new solver unaffected by this issue.

Key Takeaway: A rare optimization solver defect caused SCED to produce invalid results - future risk is mitigated by enhanced error handling and transition of solvers in RTC+B .



Appendix



What are we doing post RTC ?



Key Takeaway: Working with Market participants to establish a priority list for backlog.

What are we doing post RTC ?

System	2026				2027				2028				2029				2030				2031			
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Reporting	RTC+B Stabilization																							
	Pre-work	DRRS (replacement for NPRR1235 to be filed)																						
					NPRR1214 RDPA Fix																			
	Others in progress...				NPRR1226 Est. Demand Response Data												"High/Medium" TBD: NPRR1249							
	Reporting Tech Health																							
RIOO	Estimates in progress...																"High" TBD: NPRR1234							
																	"High/Medium" TBD: NPRR1267							
CMM	NPRR1277																"High/Medium" TBD: NPRR1201							
	NPRR1188, NPRR1244 CLR Improvements																							
	Treasury Single Source of Truth																							
	CMM Tech Health																							
CRR	NPRR1288, NPRR936				NPRR1289												TBD: NPRR1023				Planning		Execution	
	CRR Tech Refresh																TBD: NPRR1292, SCR833, NPRR1297				IA cost \$500k-\$1M			
NMMS																					IA cost \$100k-\$500k			
																					IA cost > \$1M			
																					IA cost <\$100k			
																					O&M work (RR drafting, stakeholder process, etc.)			
NDCRC	NDCRC Tech Health																				Project In Flight			
	SCR829 NDCRC API																				To Be Determined (TBD)			

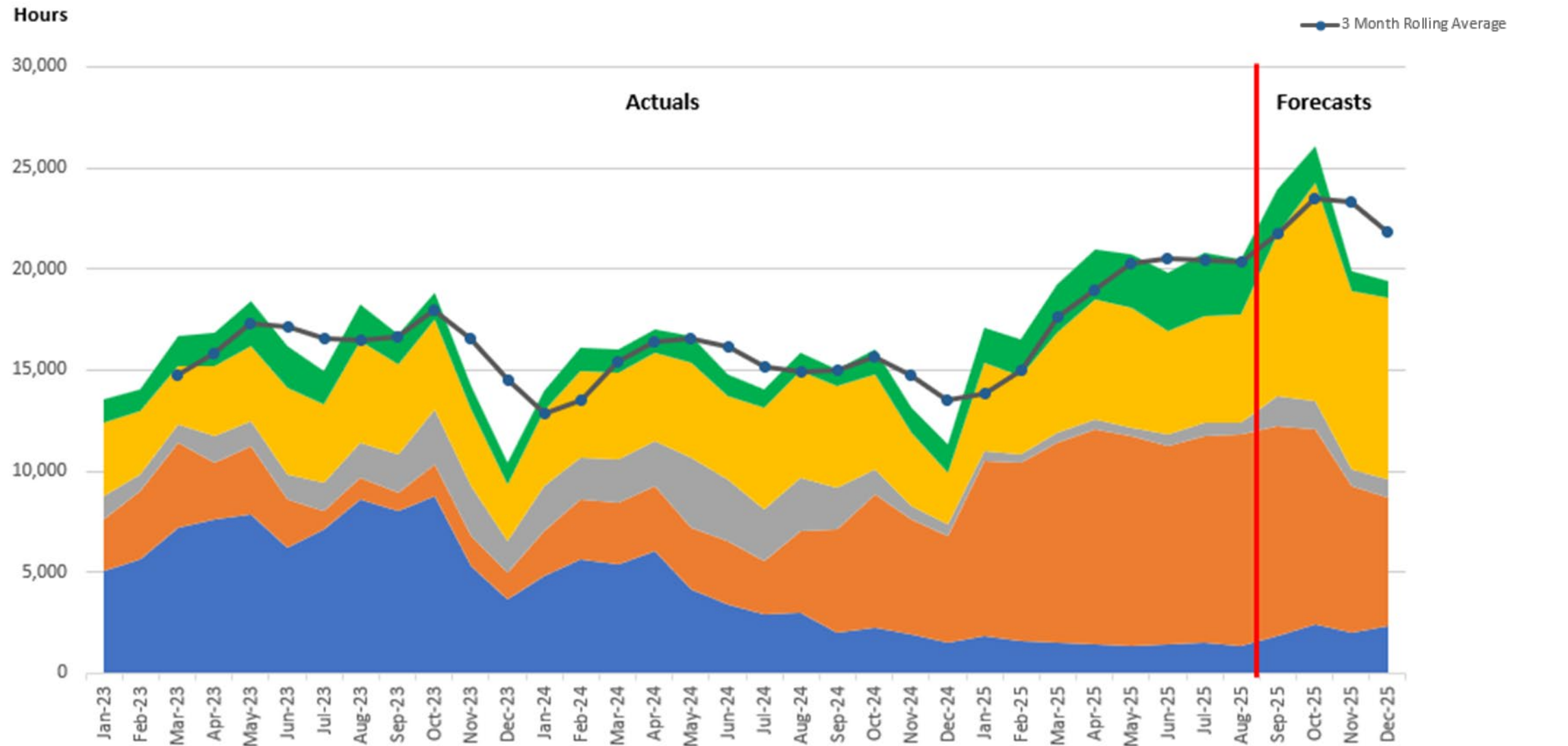
IMPORTANT
This third draft is still a work in progress

LEGEND



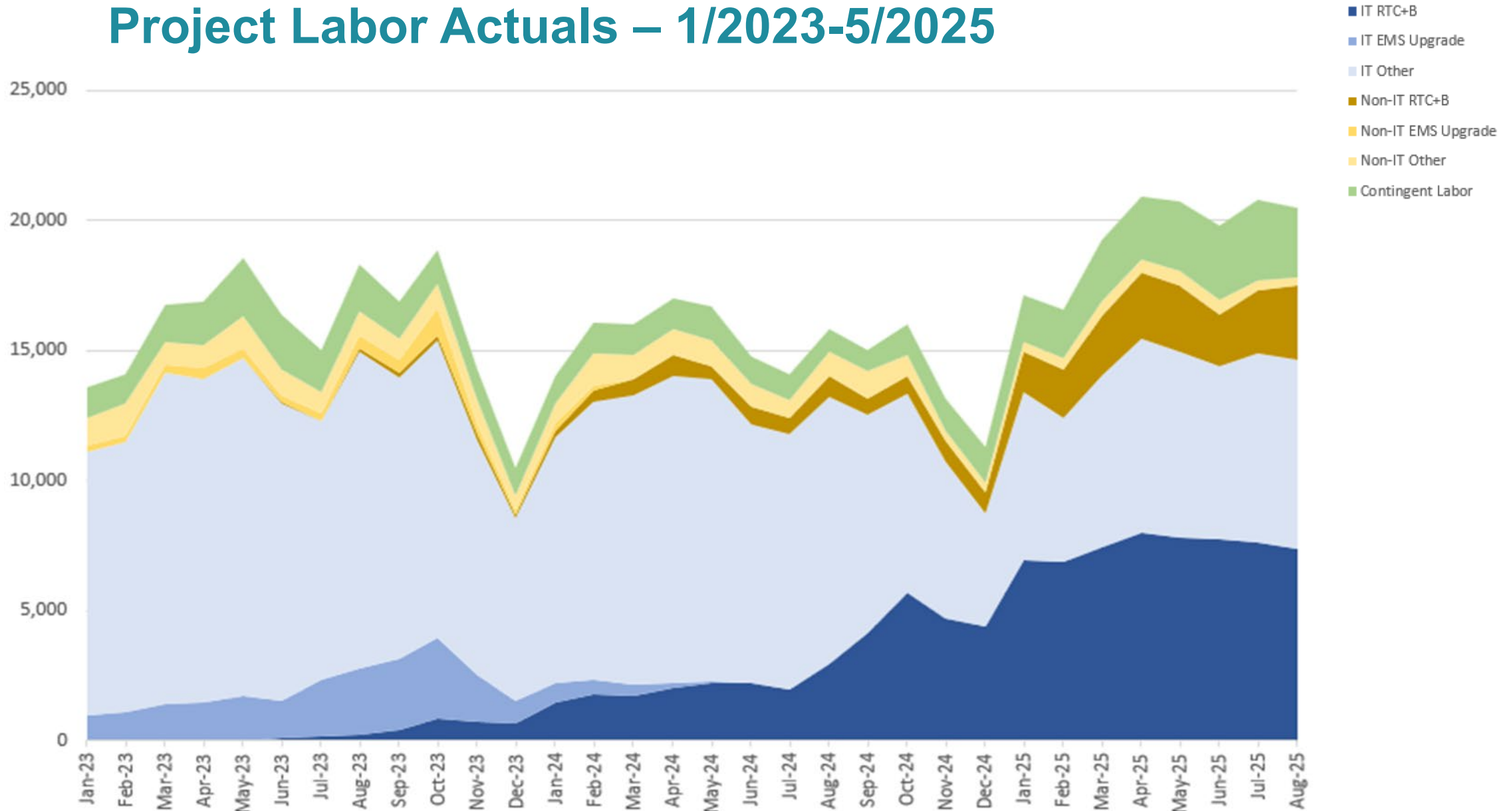
Key Takeaway: Working with Market participants to establish a priority list for backlog.

Project Labor Hours – 2023/2025



Key Takeaway: We have new records in project activity mostly driven by RTC.

Project Labor Actuals – 1/2023-5/2025



Key Takeaway: Labor shift from IT to Business owners driven by RTC market trials.

