

ITCS Announced Retirements Sensitivity Study

Saad Malik, NERC

RELIABILITY | RESILIENCE | SECURITY





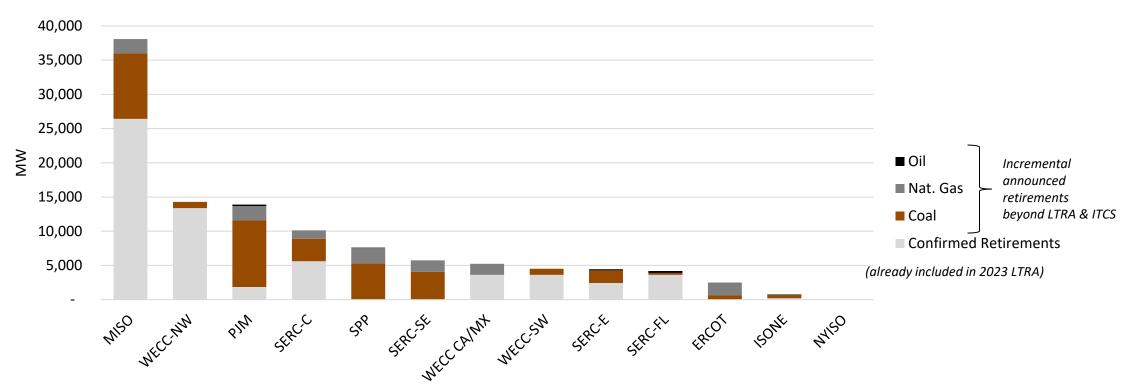






Announced Retirements byLTRA Assessment Area

Announced Retirements by Fuel Type and LTRA Assessment Area



- NERC evaluated announced retirements beyond what was reported in the 2023 Long-Term Reliability Assessment (LTRA).
- This sensitivity study included <u>announced retirements</u>, but did not include economic retirements or fuel switching.
- Replacement capacity was based on proposed resources, adjusted for effective capacity contributions based on the resource mix in the Tier 2 and 3 resources).



Replace Resources Method

Identify Retirements

 Reliability Assessments team compiled announced retirements (beyond 2023 LTRA data used in ITCS)

Identify Replacement Resource Types

- Percentage (by type) of replacement capacity based on Tier 2 and 3 submissions*
- Placement based on existing resource mix locations

Calculate Replacement Capacity

 Equivalent capacity of retiring and replacement capacity based on output during key study hours

Net change in capacity relative to ITCS Reference Case (GW)

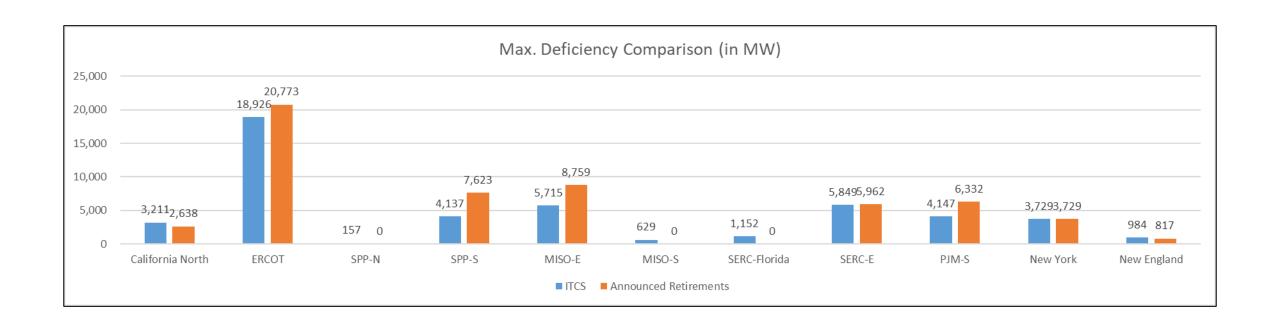
	COAL	OIL	GAS (retire)	GAS (add)	LBW	UPV	BATTERY STORAGE
TOTAL	-36.24	-0.76	-12.64	8.29	10.91	40.43	49.63

Incremental retirements: ~50 GW Incremental replacements: ~109 GW

^{*}If there were no Tier 2 & 3 resources in the 2023 LTRA, then Tier 1 resources were used.

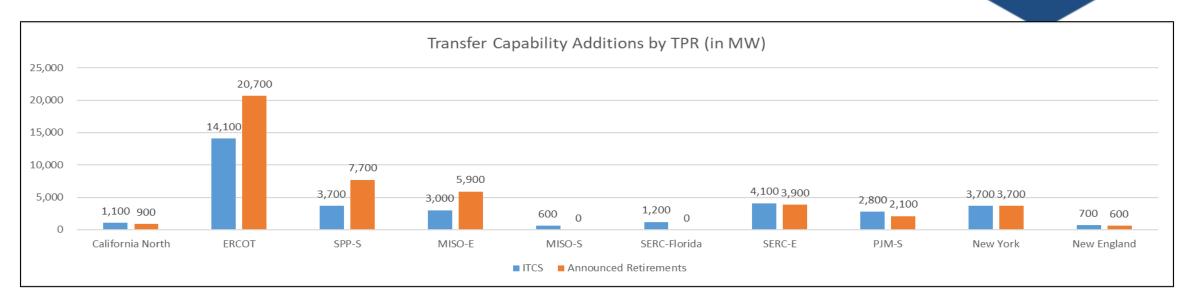


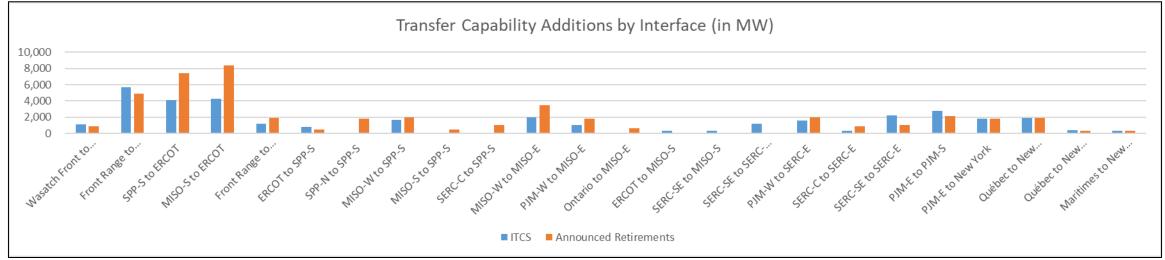
Maximum Deficiency Comparison





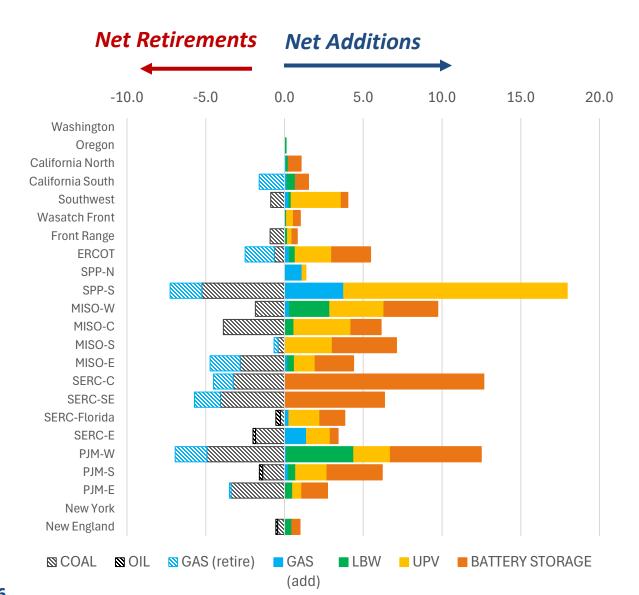
Comparison of Transfer Capability Additions







Net Change in Capacity by TPR and Resource Type



Net change in capacity relative to ITCS Reference Case (GW)

	COAL	OIL	GAS	GAS	LBW	UPV	BATTERY
			(retire)	(add)			STORAGE
TOTAL	-36.24	-0.76	-12.64	8.29	10.91	40.43	49.63

Total retirements: ~50 GW

Total replacements: ~109 GW



