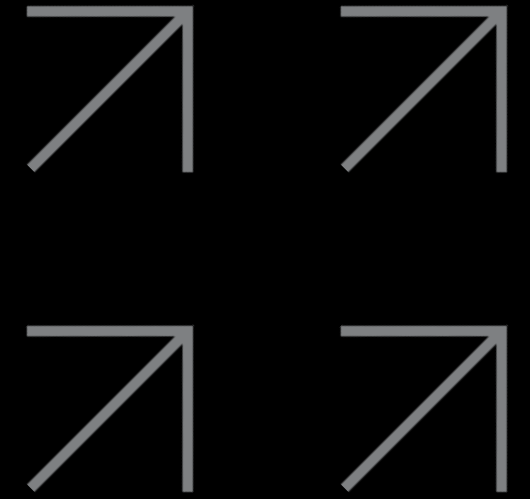


DER Integration for Transmission and Distribution Services

ESIG Spring Technical Workshop

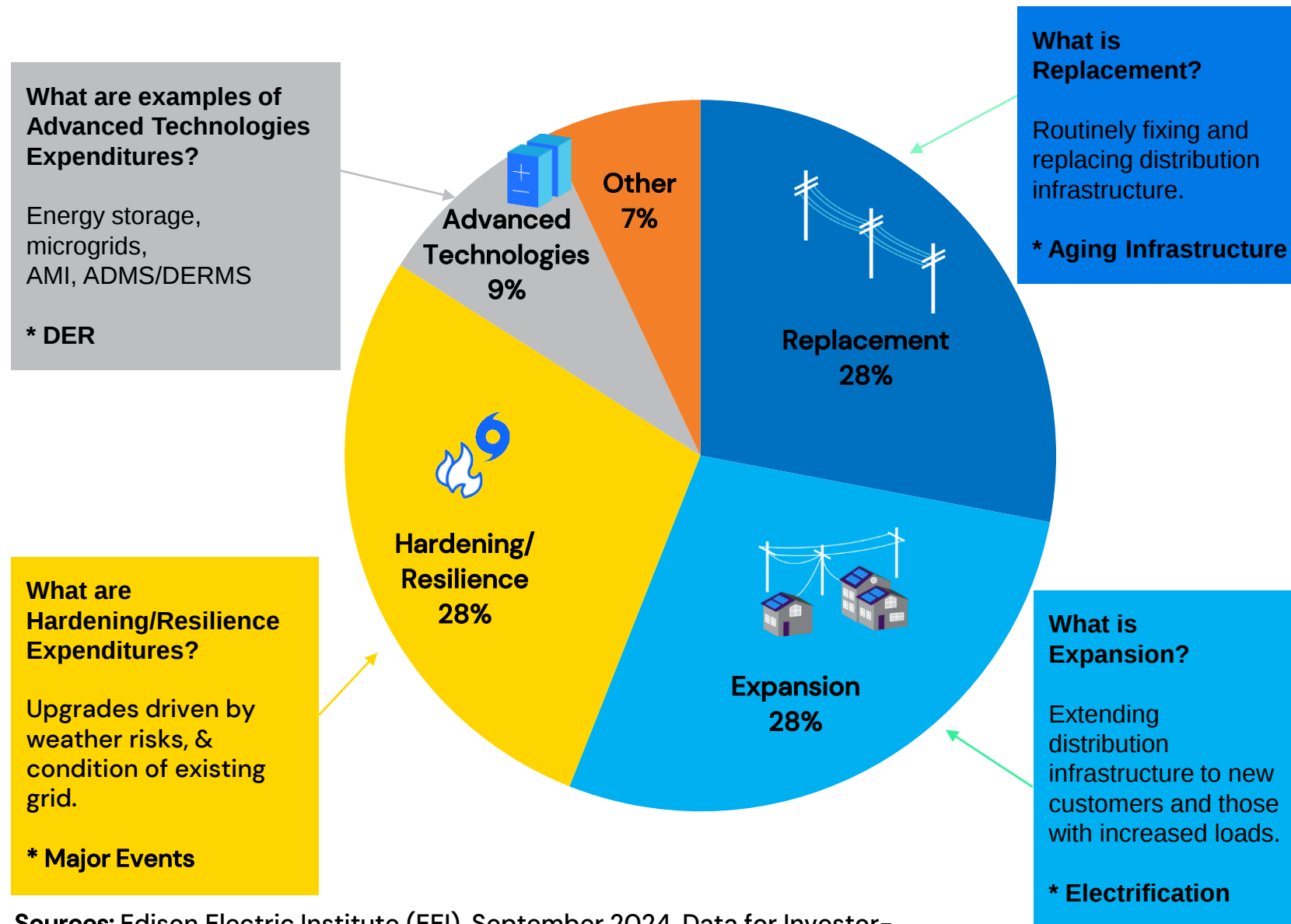


Darren Murtaugh
Director, Distribution Strategy

3/18/2025

Distribution Capital Costs

DIFFERENT TYPES OF UTILITY DISTRIBUTION CAPITAL COSTS

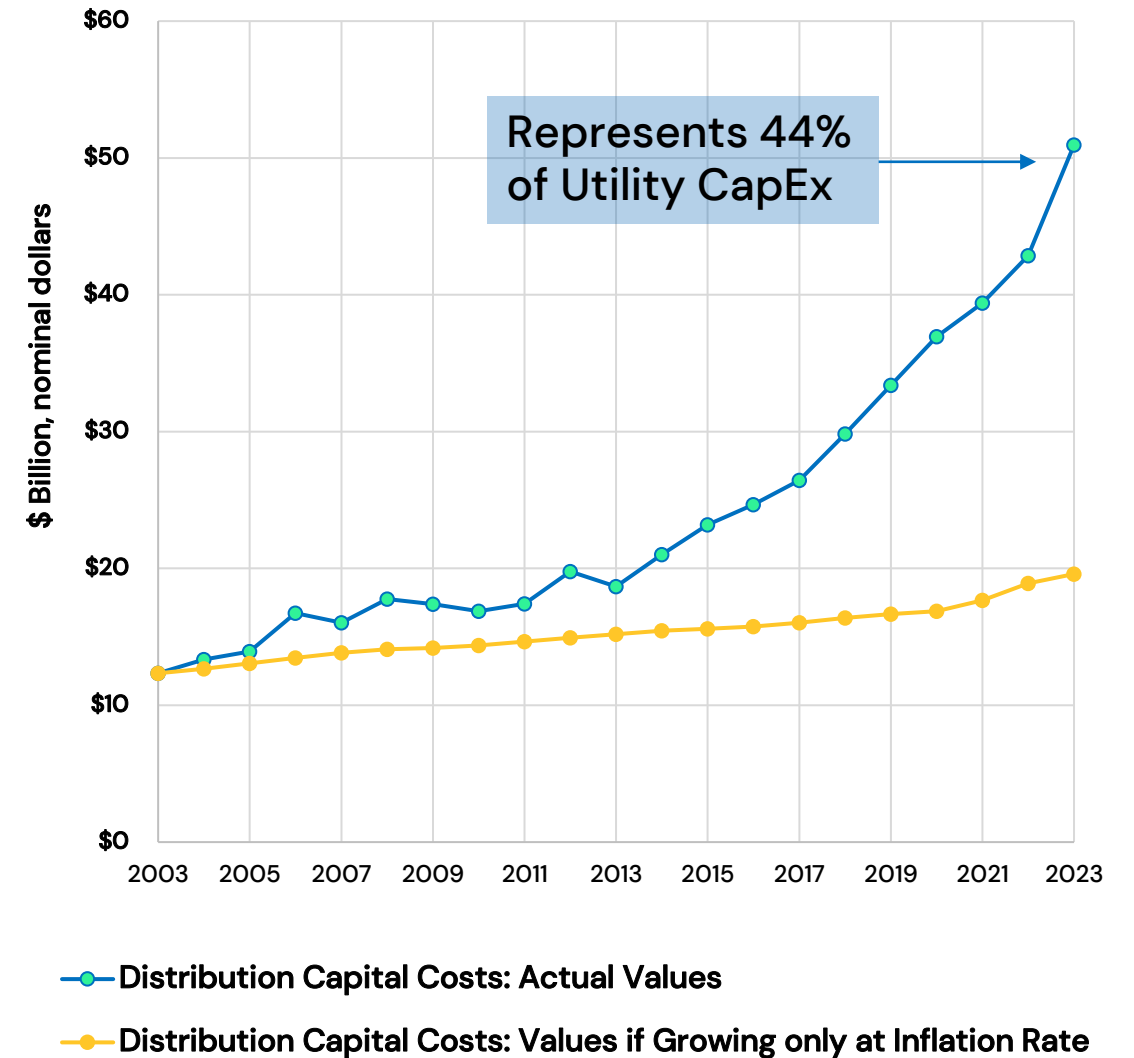


Sources: Edison Electric Institute (EEI), September 2024, Data for Investor-Owned Utilities.



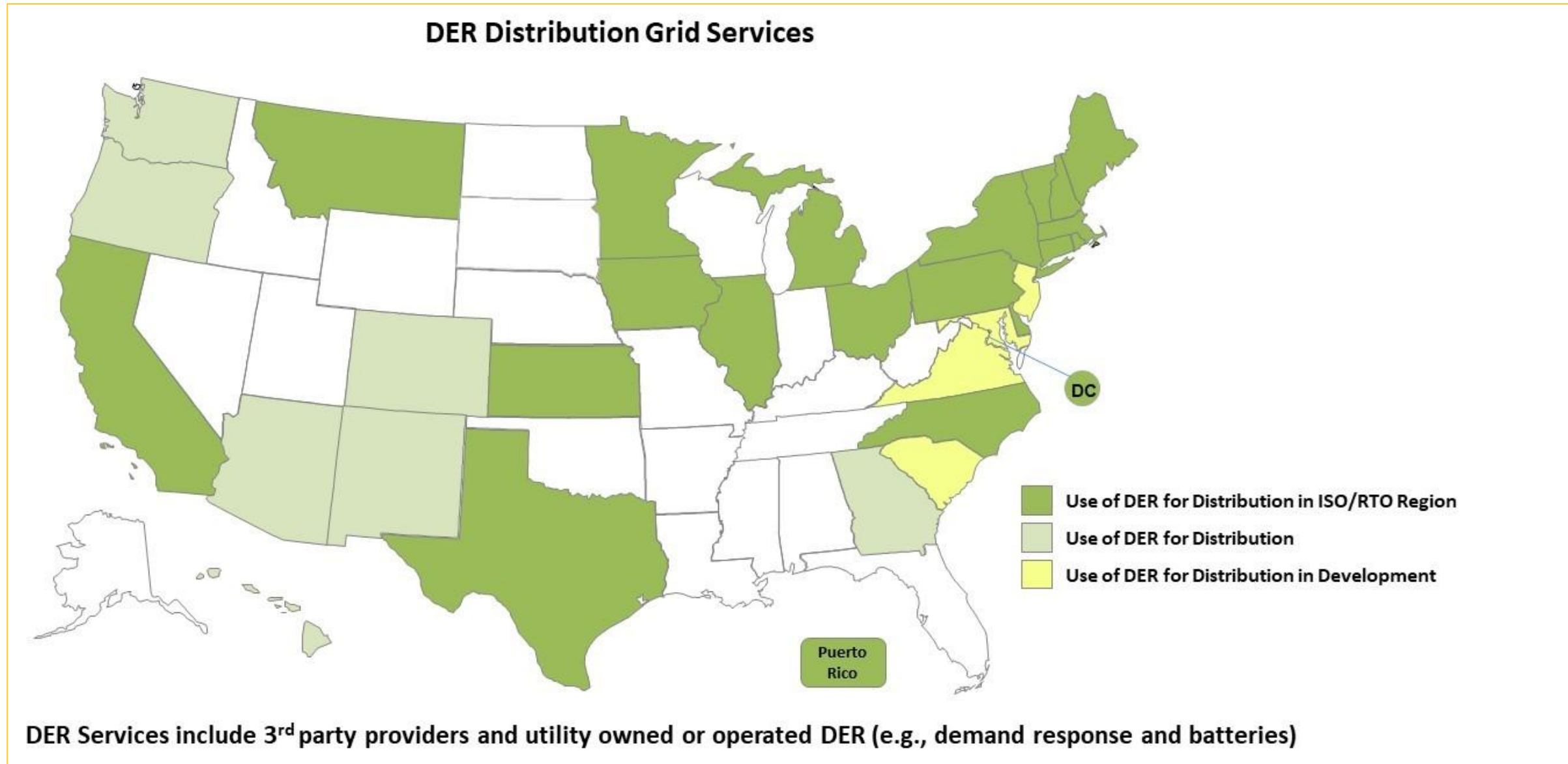
UTILITY DISTRIBUTION CAPITAL COSTS OVER TIME

Nationally, these costs have risen much faster than inflation



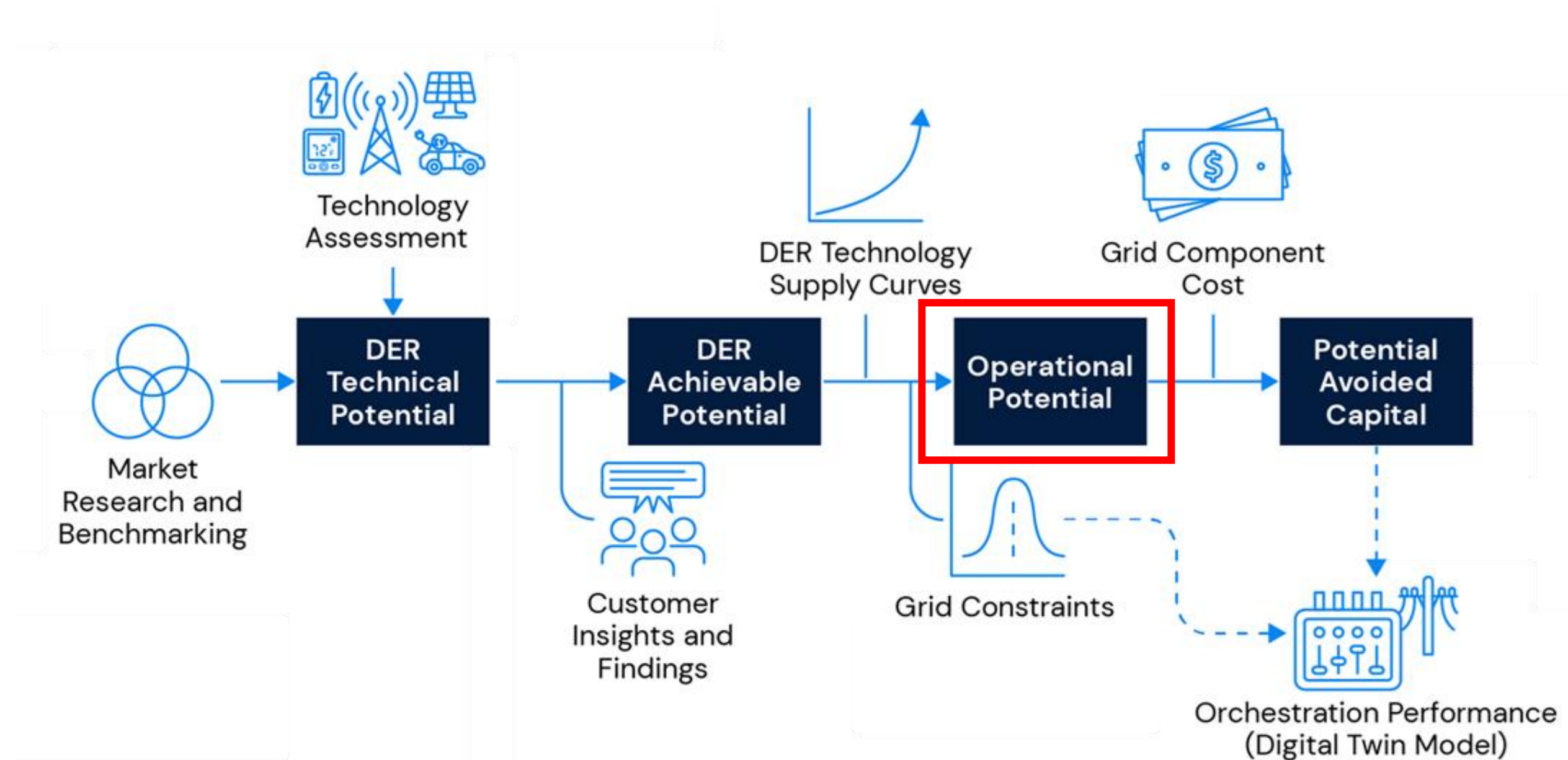
Source: EIA Data, based on Federal Energy Regulatory Commission (FERC) filings.

Several States Are Exploring Use of Distributed Energy Resources (DERs) for Distribution To Address Affordability and Resilience

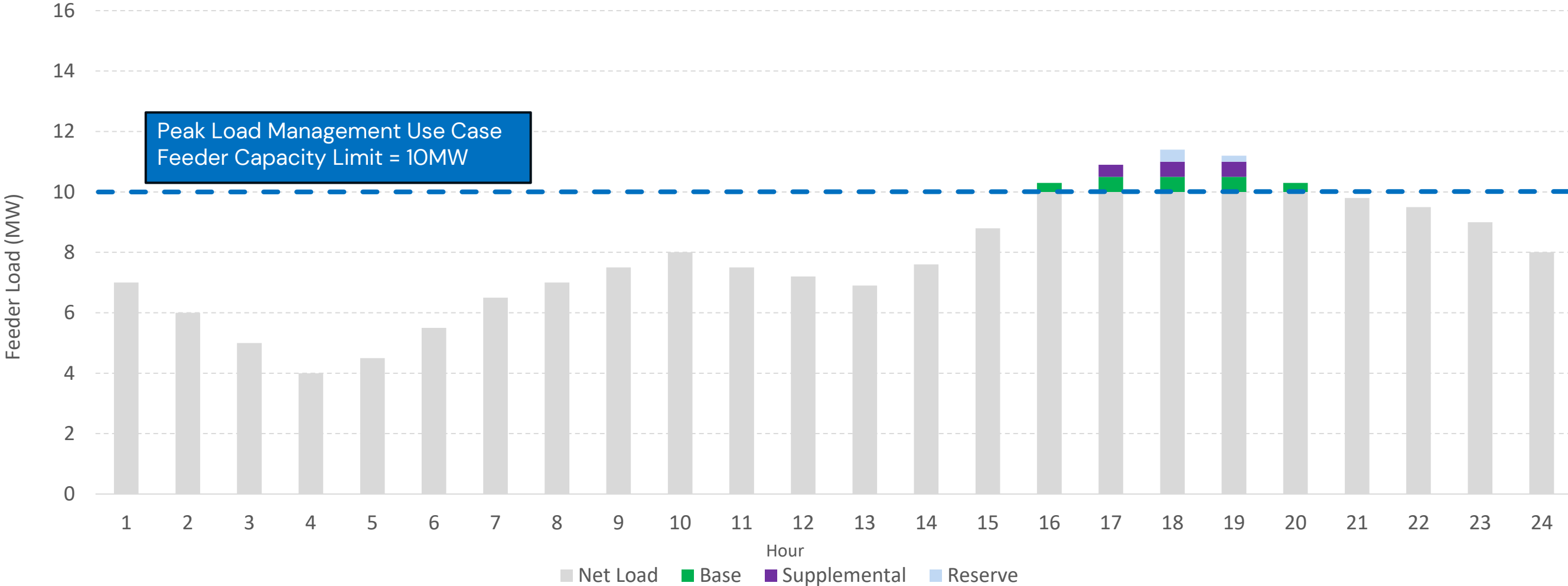


Reliable use of DER services for distribution requires new planning and operational capabilities coordinated with bulk power system planning and operations.

Operational Potential



Orchestrated Dispatch



		Capacity (MW)	Cost (\$/MW)	Availability
Base	DER Type 1	0.3	\$800	4PM to 10PM
	DER Type 2	0.2	\$700	5PM to 7PM
Supplemental	DER Type 3	0.4	\$1,200	All Day
	DER Type 4	0.1	\$800	4PM to 10PM
Reserve	DER Type 5	0.5	\$1,700	All Day