

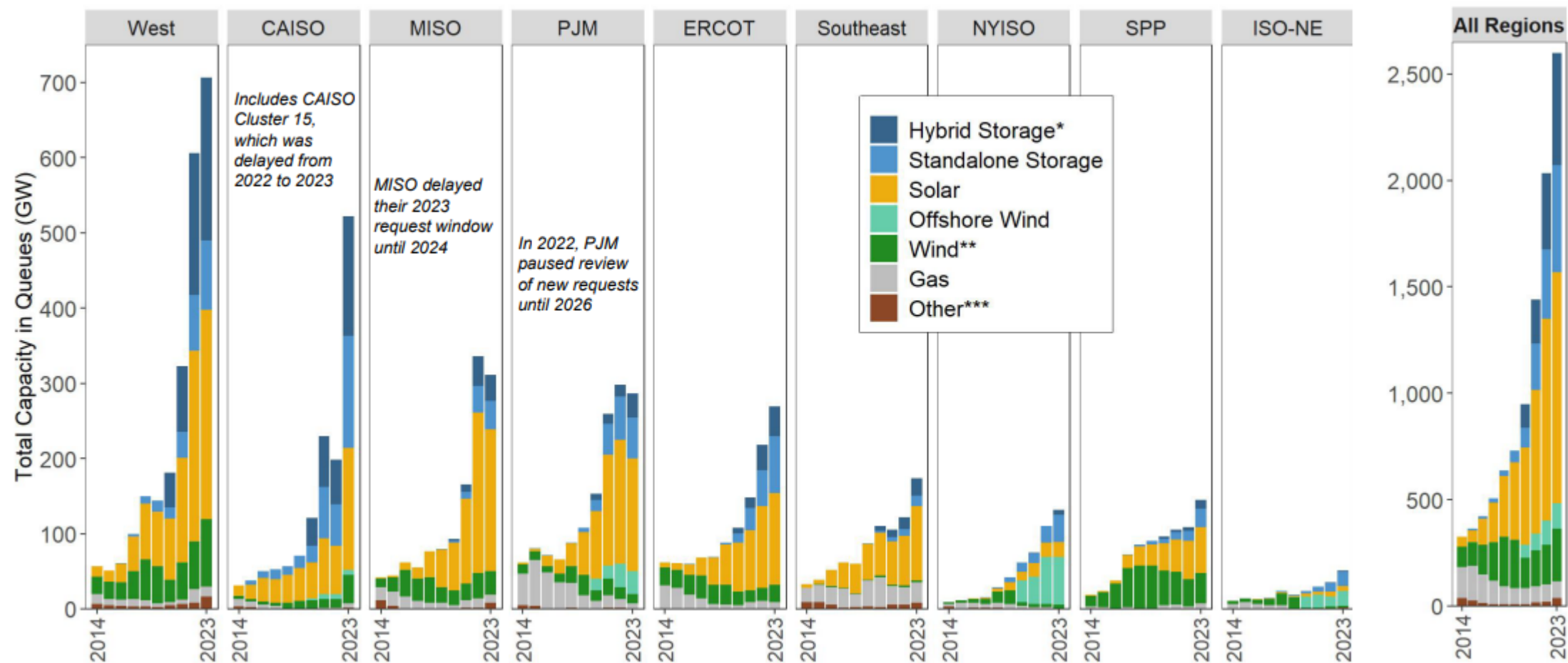
# 2024 ESGC Summit

## *Day 2 Opening Remarks*

August 2024



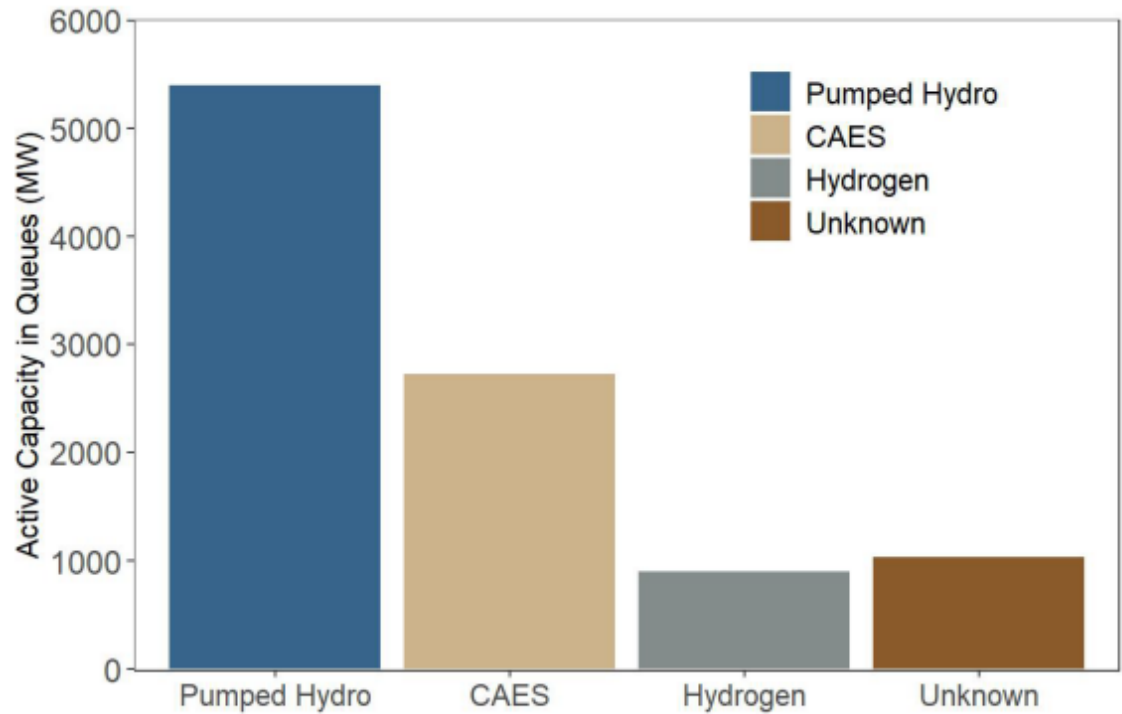
# Good News → Lots of Energy Storage in the Interconnection Queues



At the end of 2023, there was 1,028 GW of Energy Storage in various interconnection queues

# Good News → Lots of Storage in the Interconnection Queues

Batteries make up ~99% of storage capacity in the queues, but there are 10 GW of active requests for Pumped Hydro, Hydrogen, and Compressed Air Energy Storage (CAES)

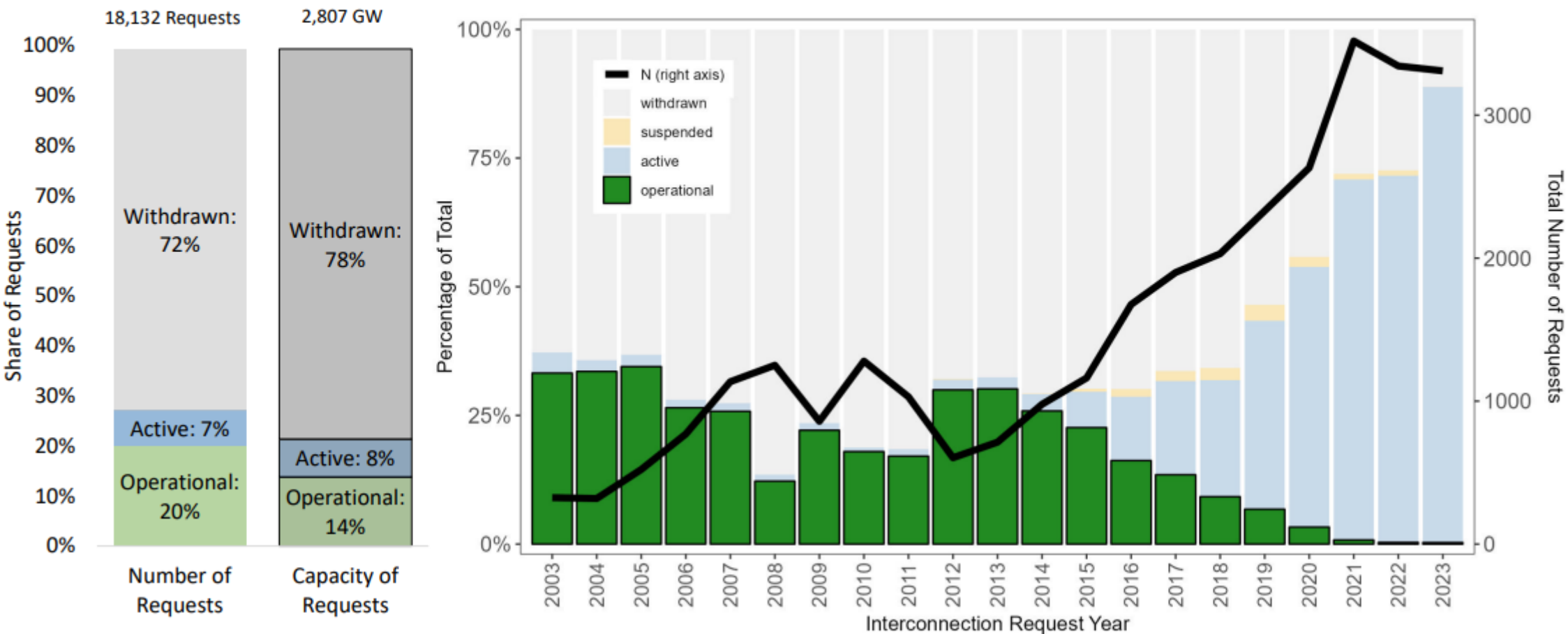


All active requests for non-battery storage projects are in CAISO and the non-ISO West.

Active Capacity in Queues (MW)				
Region	Pumped Storage	CAES	Unknown	Hydrogen
CAISO	2,402		1,036	
West (non-ISO)	3,000	2,720		902

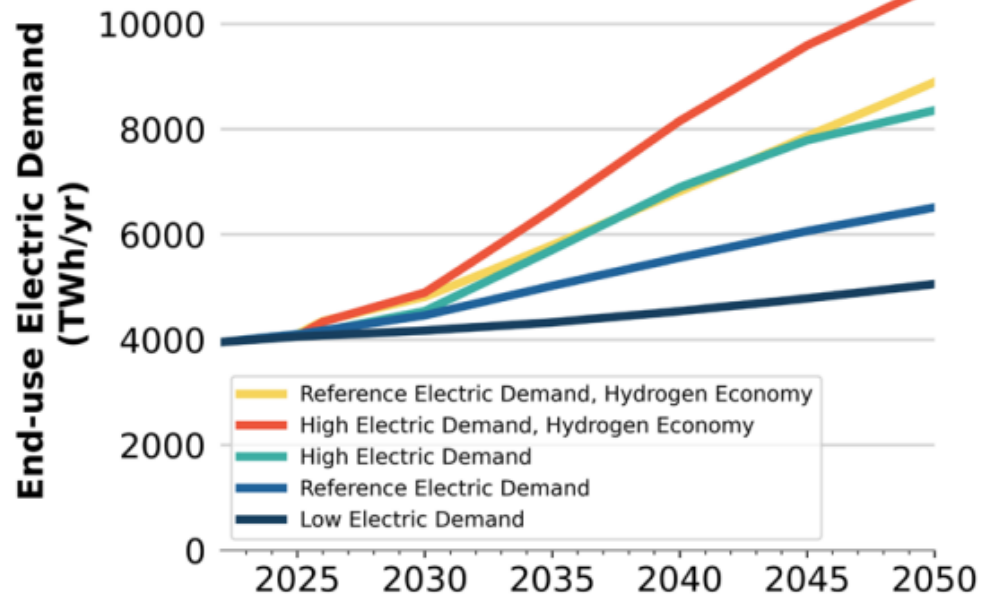
# Bad News → Only a Small Fraction of Requests Become Operational

The majority (>70%) of interconnection requests are withdrawn. Just 20% of requests (14% of capacity) submitted from 2000-2018 had been built as of the end of 2023



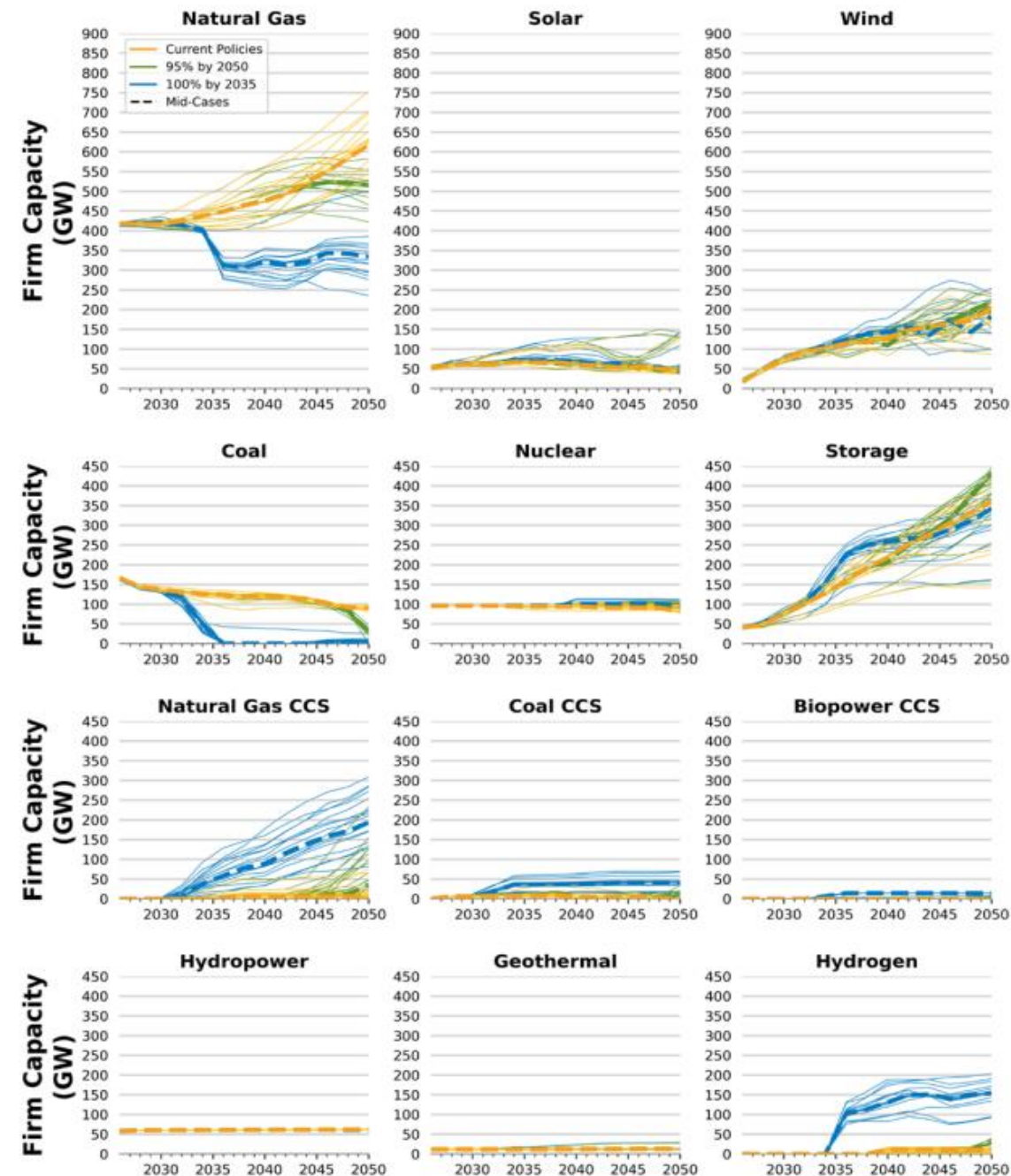
LBNL Queued Up (2024)

# Significant Future Uncertainty



- Load growth
- Policy Constraints and/or Support
- Generation Mix & Transmission Expansion
- Capacity Accreditation
- LDES Cost and Representation

NREL 2023 Standard Scenarios (2023)



# Good New → Multiple States Implementing Supportive Policies

Oregon – 5 MWh for each IOU by 2020 or max 1% of 2014 peak

California – 1,825 MW by 2020

Nevada – 1,000 MW by 2030

New Jersey – 2,000 MW by 2030

Massachusetts – 1,000 MWh by 2025

Virginia – 3,100 MW by 2035

Connecticut – 1,000 MW by 2030

Maine – 400 MW by 2030

New York – 6,000 MW by 2030

Maryland – 3,000 MW by 2033

## Energy Storage Policy Database

