

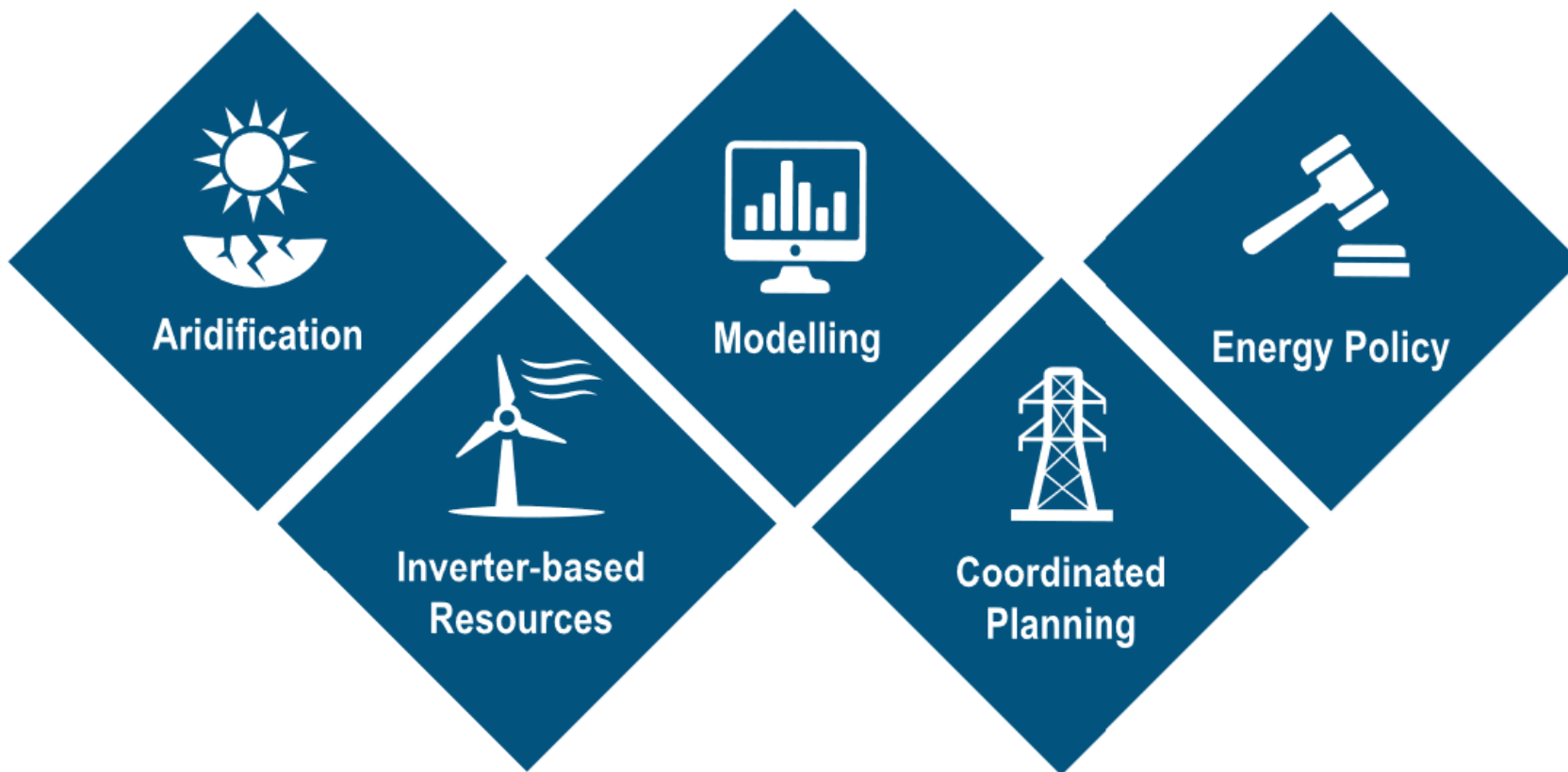


WECC Reliability Risk Priorities

Mid-C Seminar
July 31, 2024

Branden Sudduth
VP, Reliability Planning and
Performance Analysis

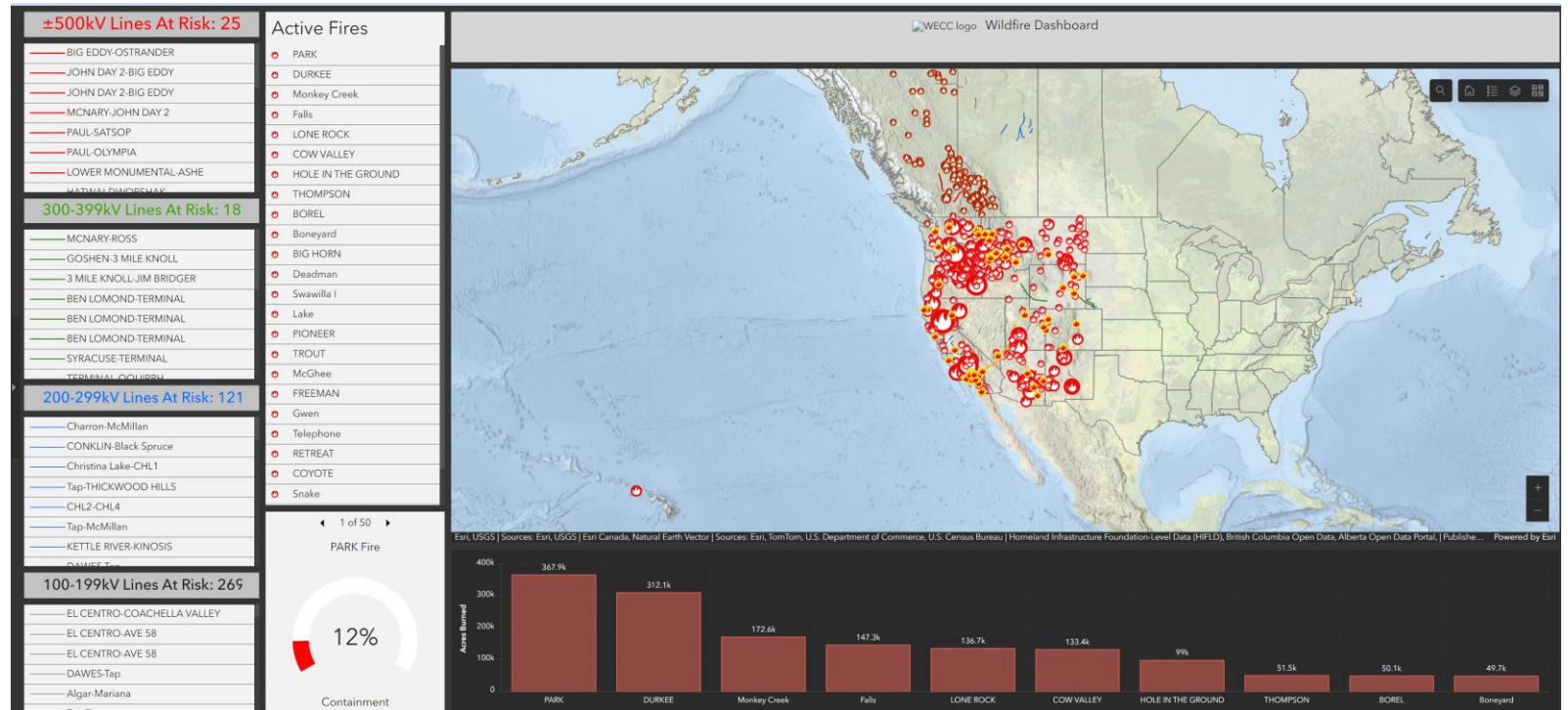
WECC 2024-2026 Reliability Risk Priorities



Extreme Weather Impacts

- New Western Interconnection peak demand record
 - 167,988 MW (July 10, 2024 at 6:10 pm MT)

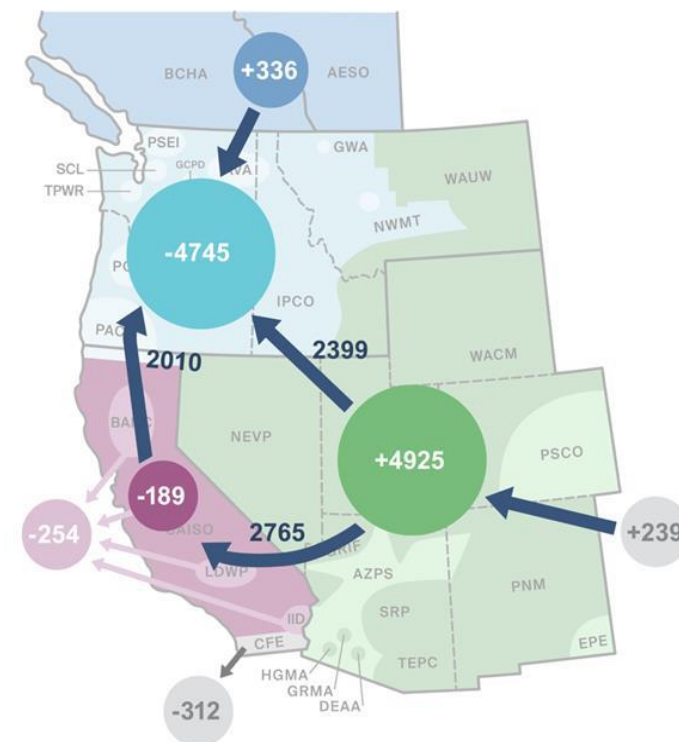
- WECC Wildfire Dashboard



Case Study: January 2024 Arctic Storms

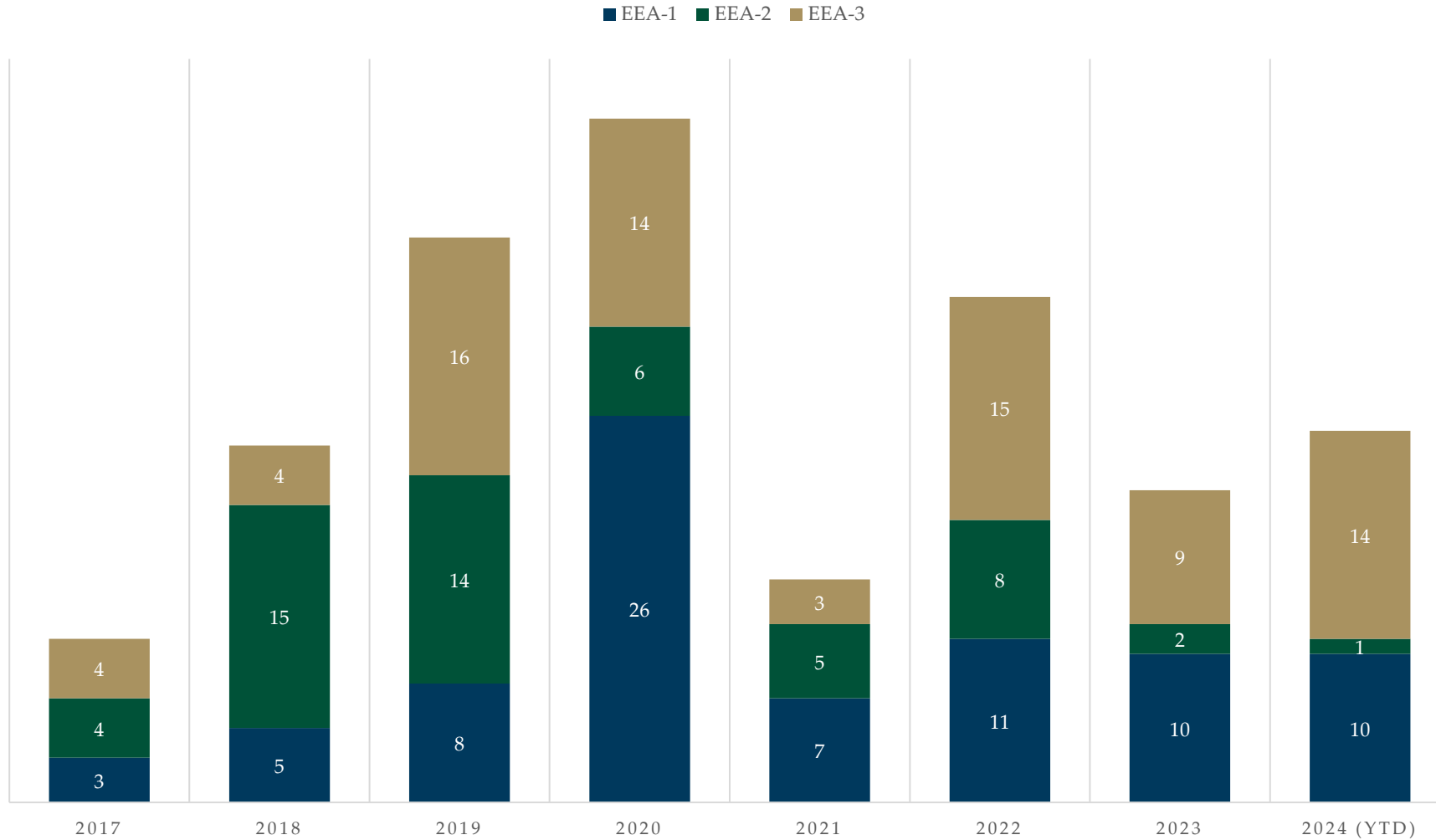
- Extremely cold temperatures across the Pacific Northwest, British Columbia, and Alberta due to Winter Storms Gerri and Heather
- Atypical flows in the U.S. Northwest
- Zero system operator-initiated load shed
- Gas and electric sector improvements made due to lessons learned from previous winter storms

Average Net Imports and Exports During Peak Demand Hours (4-8 pm)



Source: Powerex Analysis of the January 2024 Winter Weather Event. Data from Open Access Same-Time Information Systems (OASIS) Transaction Schedules (scheduledetail), BPA Transmission Operations Data (AC Intertie Path data), Form EIA-930 Interchange

Energy Emergency Alert Trends in the West



WECC Western Assessment of Resource Adequacy

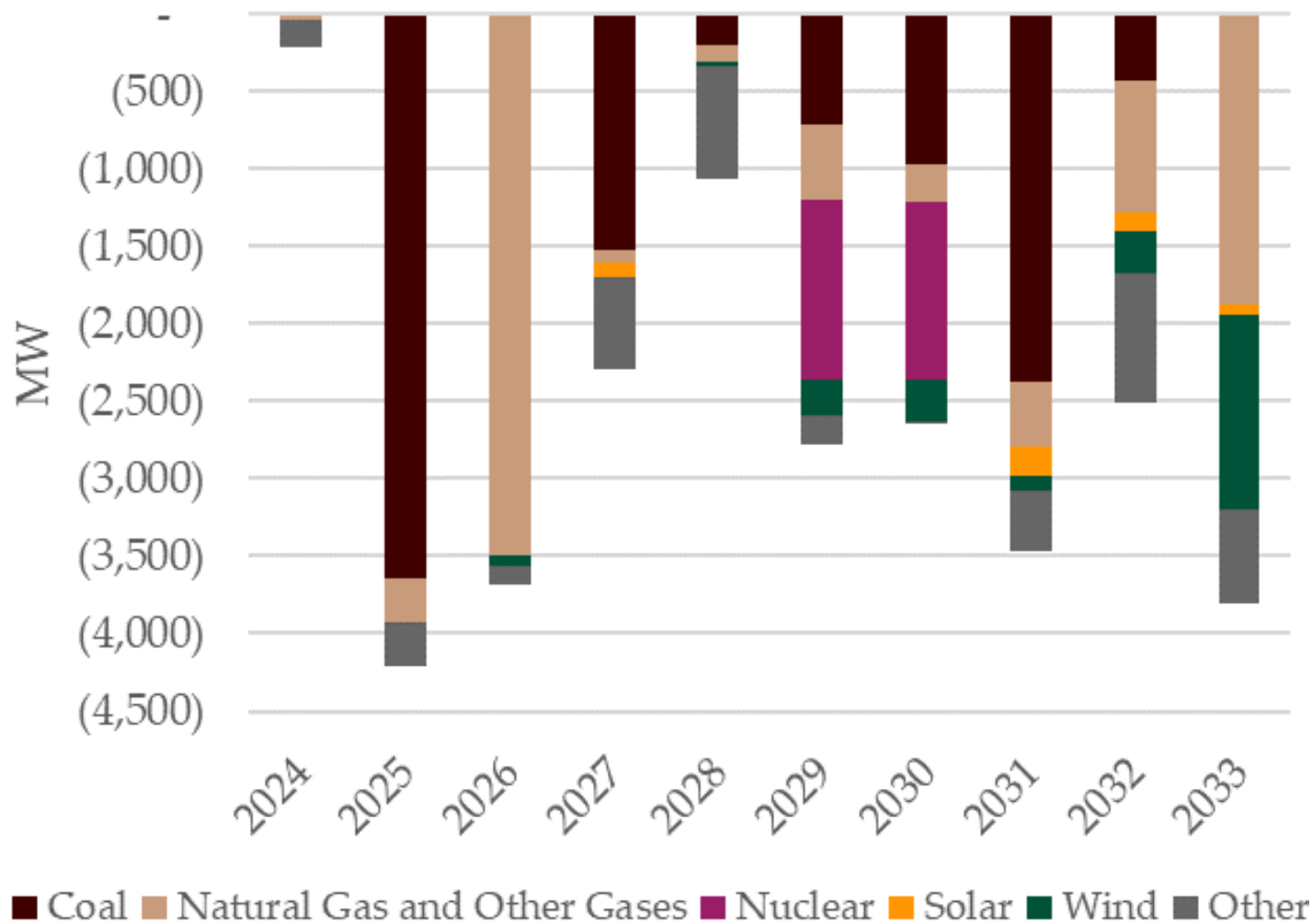
- Resource and demand variability increasing
- Resource additions (and retirements) coming at an unprecedented rate
- High load growth expected over the next several years



 OVERVIEW 

LEARN MORE

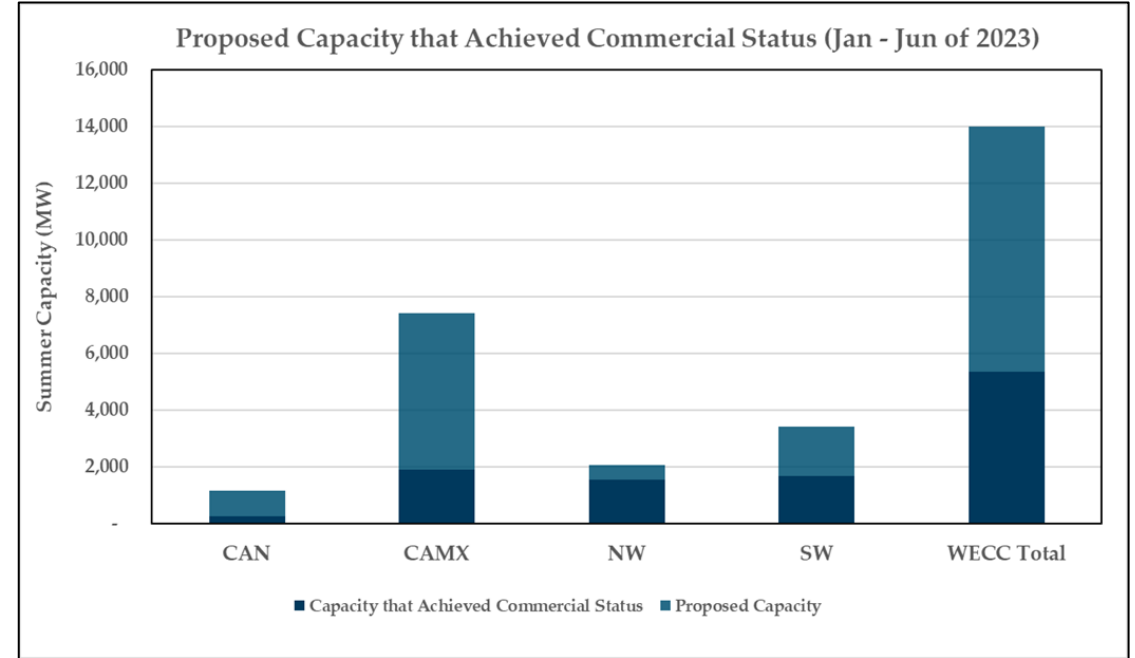
Projected Resource Retirements



Resource Build Risk

- Supply chain—project delays
 - Transformers (10 Months–3 Years)
 - Circuit breakers (1.5–2.5 Years)
 - Switchgears (1 Year)
 - Increasing costs
 - Skilled labor shortage

- WECC 2024 summer proposed capacity additions = 17 GW



WECC: Capacity Additions*				
Region	Proposed for Summer of 2023 (MW)	Proposed Capacity that Achieved Commercial Status by Summer of 2023 (MW)	Proposed Capacity that Achieved Commercial Status by Summer of 2023 (%)	Proposed Capacity for Summer of 2024 (MW)
CAN	1,137	265	23%	2,395
CAMX	7,409	1,901	26%	5,871
NW	2,060	1,528	74%	4,991
SW	3,401	1,653	49%	3,802
WECC Total	14,007	5,347	38%	17,059

*Capacity additions of any tier between January and July of listed year.



Electric Reliability and Security for the West

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