

WECC

Resource Adequacy in the Western Interconnection

NWGA Annual Energy Conference June 11-13, 2024

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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





<Public>

Projected Resource Retirements



■ Coal ■ Natural Gas and Other Gases ■ Nuclear ■ Solar ■ Wind ■ Other

<Public>

Energy Emergency Alert (EEA) Event Trends



■ EEA-1 ■ EEA-2 ■ EEA-3

*2024 data as of June 3, 2024

Case Study: August 2020 Heat Wave Event

- Extremely hot conditions across the West (widespread and longduration)
- Firm load was shed on Aug 14 (1,087 MW) and Aug 15 (692 MW)
- Energy imports affected



Source: https://www.abc10.com/article/weather/accuweather/heat-wave-weather-forecast-western-us/507-f22bddea-cbed-4122-9828-0d60ae22a887

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





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