

# Resource Mix and Planning

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# Resource adequacy is a planning and procurement process to ensure sufficient capacity is made available to the ISO in the right places and at the right times

*As a federally regulated nonprofit organization, the ISO manages the high-voltage electric grid for California and a portion of Nevada.*

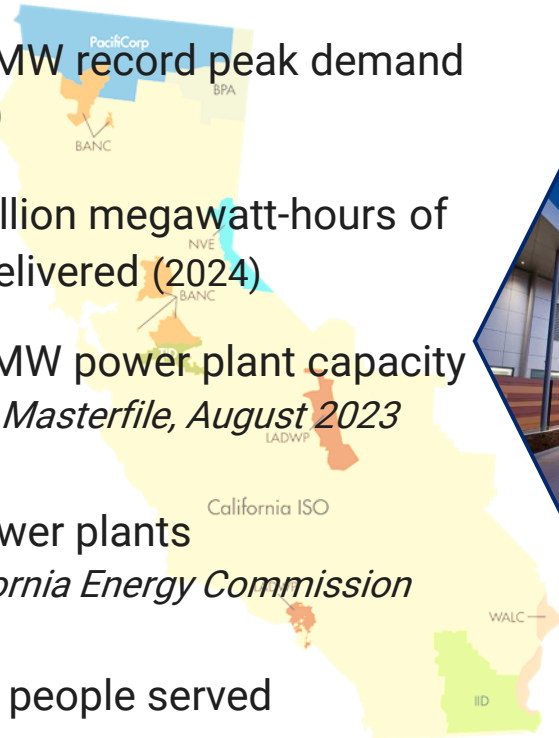
**52,061** MW record peak demand  
Sept. 6, 2022)

**241.8** million megawatt-hours of  
electricity delivered (2024)

**76,184** MW power plant capacity  
*Source: ISO's Masterfile, August 2023*

**1,119** power plants  
*Source: California Energy Commission*

**32** million people served



**CEC**  
Sets load  
forecasts for all  
load serving  
entities

**CAISO**  
Oversees approx  
80% of California  
load (small portion  
of Nevada) via  
Resource  
Adequacy Tariff



**CPUC/LRAs**  
Local regulatory  
authorities  
oversee resource  
adequacy  
programs for  
jurisdictional load  
serving entities

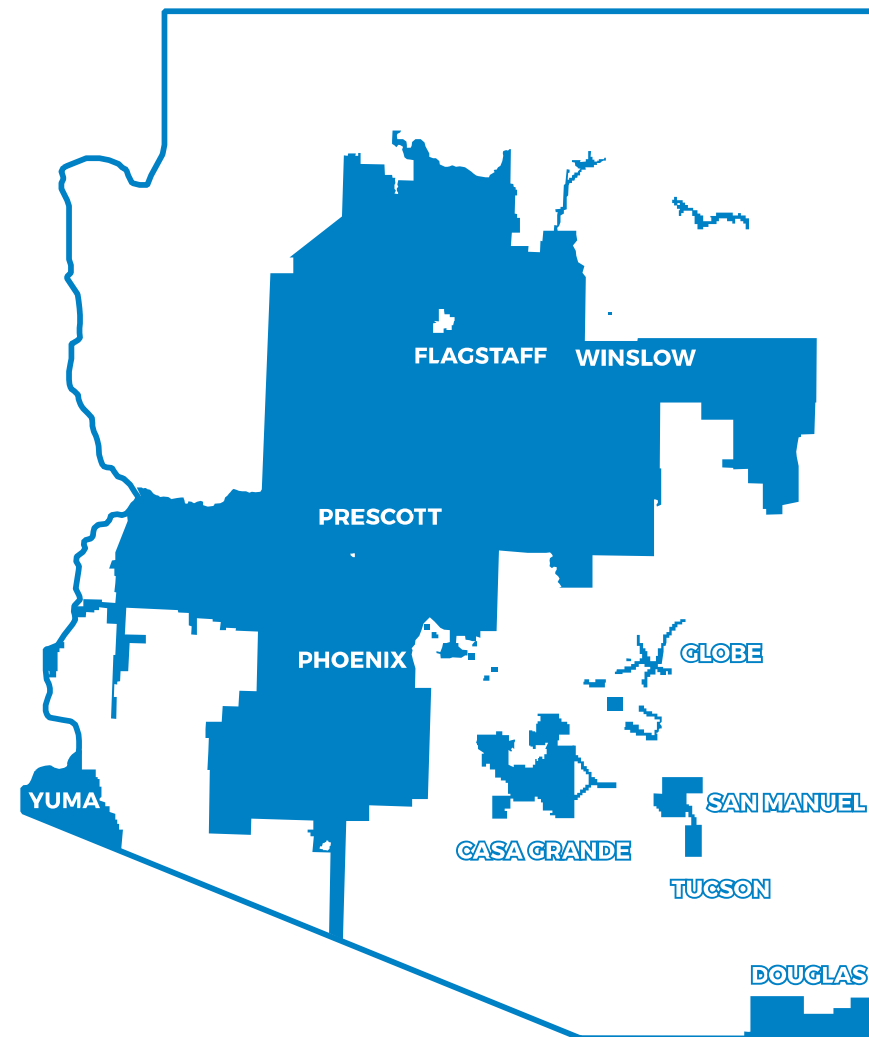
- *CPUC-jurisdictional LSEs represent ~90% of load in the CAISO BAA.*
- *Long-term resource planning is the responsibility of Local Regulatory Authority (LRA).*



# APS SERVICE TERRITORY

Since 1886, Arizona's largest and longest-serving utility.

- 34,646-square-mile service territory
  - 11 of 15 counties
  - 1.4 million customer accounts (89% residential)
  - Approximately 45% of Phoenix
- ~6,000 employees
- Peak demand is ~8,630 megawatts
- Vertically integrated and investor owned (PNW)

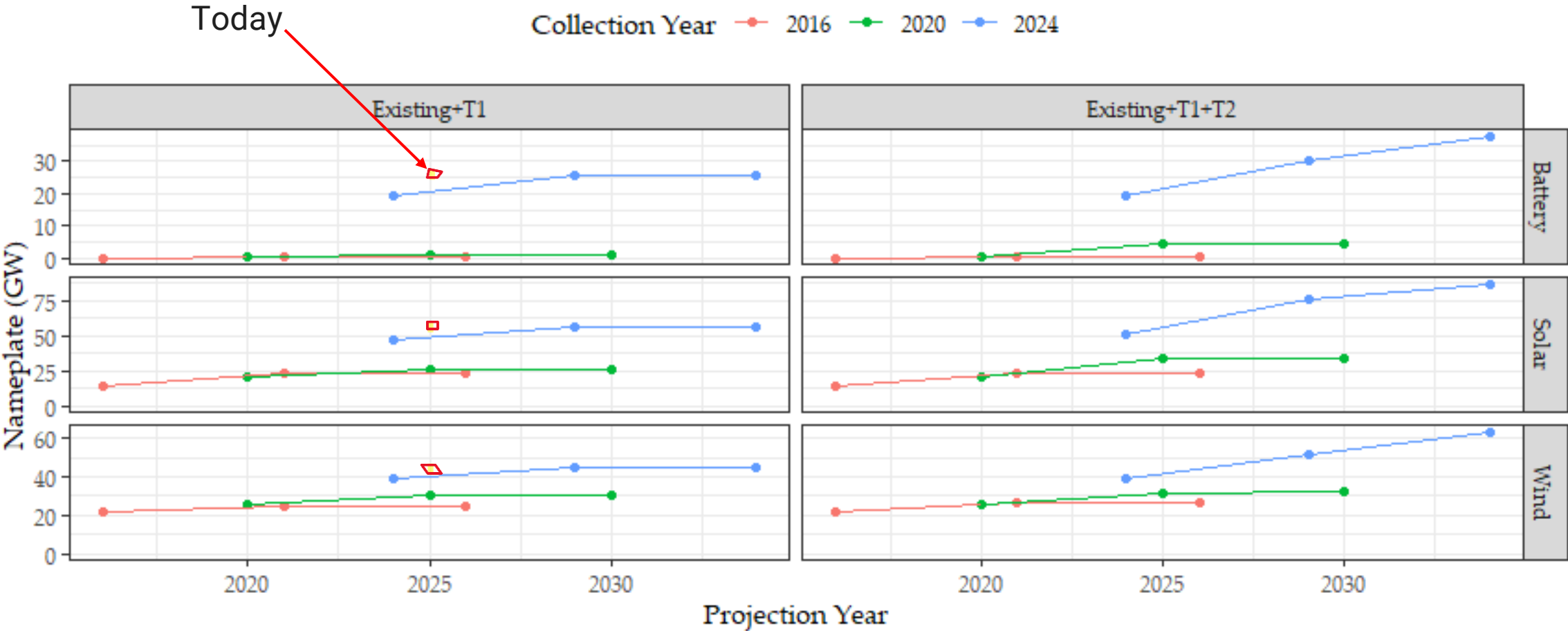






## Existing and Projected Generation Capacity (Based on WECC Loads and Resources)

**Tier 1 and Existing Capacity 2025**  
 BESS—26.7 GW  
 Solar (Grid Connected)—55.11 GW  
 Wind—46.54 GW



# Load and Demand Side

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- [OpenAI shows off Stargate AI data center in Texas and plans five more elsewhere with Oracle, Softbank | AP News](#)
- [OpenAI, Oracle, SoftBank plan five new AI data centers for \\$500 billion Stargate project](#)
- [Nvidia-Backed AI Startup Nscale Raises \\$1.1 Billion for Data-Center Rollout—WSJ](#)
- [Google Backs Crypto Miner Deal In Rush for AI Data Centers—Bloomberg](#)
- [California's grid gets a record power assist from a 100k home battery fleet | Electrek](#)
- [2024 Assessment of Demand Response and Advanced Metering](#)
- [Demand Response Analysis | Energy Systems Analysis | NREL](#)
- [Five Trends Shaping the Future of Demand Response in 2025](#)

# Volatility in Landscape

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- [Biden expands wind and solar tax credit to nuclear, hydropower, geothermal energy](#)
- [Trump says U.S. will not approve solar or wind power projects](#)
- [Trump administration deepens crackdown on solar and wind tax credits—POLITICO](#)
- [Bush—The President's Energy Initiatives](#)
- [Fact Sheet: President Bush Signs Into Law a National Energy Plan | The American Presidency Project](#)
- [President Clinton's 21st Century Approach to America's Energy Needs](#)
- [2025 Solar Industry Sounds Alarm: Tax Law Could Wipe Out 55 GW By 2030](#)



# Questions?



# WECC



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