



Item 10: Publicly Owned Utility Integrated Resource Plans (IRP)

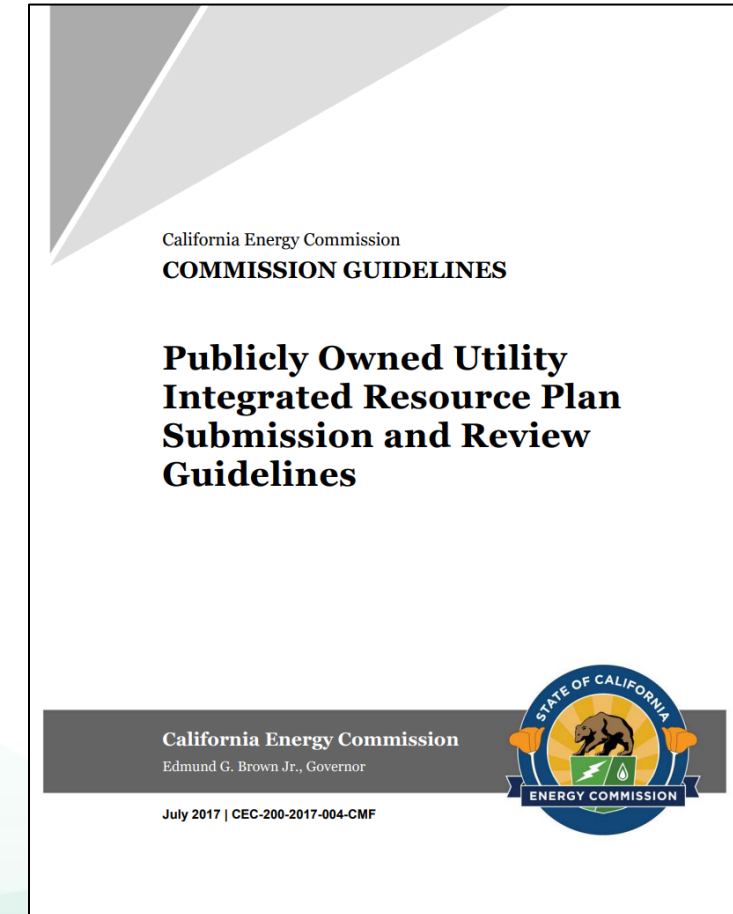
August 13, 2025 Business Meeting

Bryan Neff
Energy Assessments Division



IRP Overview

- Comprehensive planning document describing:
 - Energy and capacity resource needs
 - Policy goals
 - Physical and operational constraints
 - Other utility priorities
- Developed and adopted by 16 largest POUs
- Submitted to CEC every 5 years
- CEC reviews for statutory requirements per IRP Guidelines
- CEC Business Meeting





Public Utilities Code (PUC) Section 9621

IRPs must address:

- GHG emissions targets
- Renewables Portfolio Standard
- Just and reasonable rates
- System and local reliability
- Diverse, resilient, and sustainable energy system and communities
- Localized air pollutants with priority on disadvantaged communities
- Diverse portfolio of energy resources



Reviews for Approval of Adoption

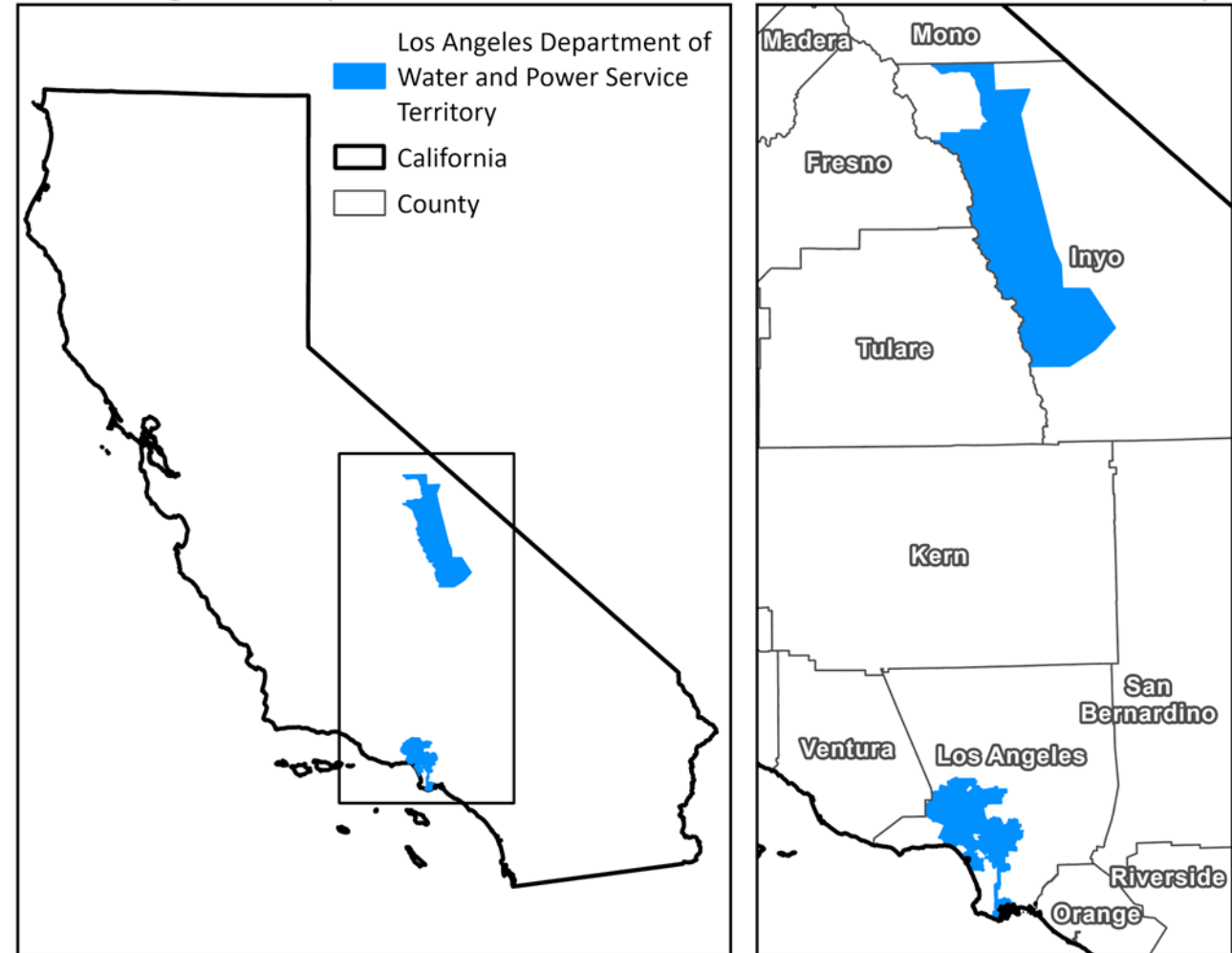
- Los Angeles Department of Water and Power
- Anaheim Public Utilities
- Modesto Irrigation District
- Turlock Irrigation District
- Roseville Electric Utility



Los Angeles Department of Water and Power 2023 IRP

- Nation's largest municipal utility
- Serves City of Los Angeles and Owen's Valley
- Is a balancing authority
- 5,500 MW managed peak demand
 - 0.5% average annual growth
- 24,000 GWh net energy annually
 - 0.9% average annual growth

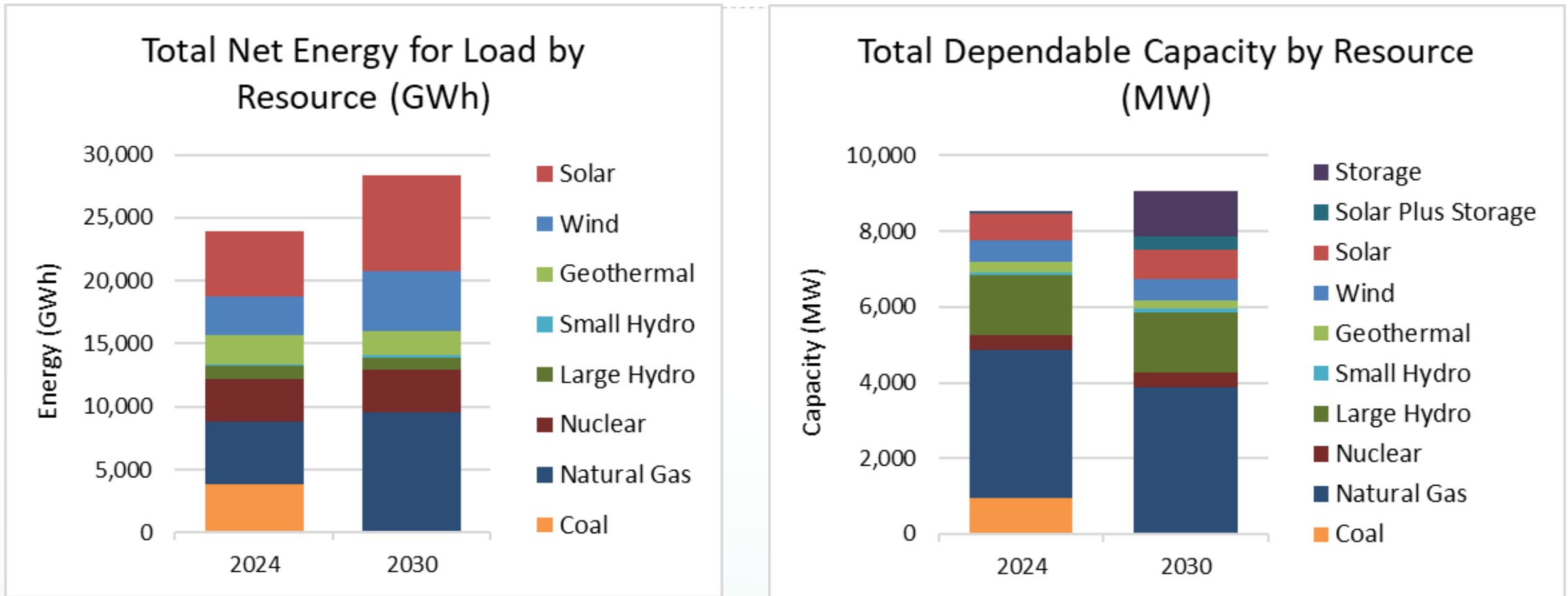
Los Angeles Department of Water and Power Service Territory



Source: CEC



LADWP Energy Supply and Dependable Capacity



- Coal is retired, replaced with hydrogen enabled natural gas
- Increased solar, wind, storage and solar plus storage
- Natural gas maintained for reliability and peak demand

Source: CEC analysis of LADWP's 2023 IRP



LADWP IRP Take-Aways

Vision for the Future:

- Continue investment in energy efficiency
- Continue investment in building and vehicle electrification
- Phase out coal
- Invest in wind, solar, storage, and solar plus storage
- Fuel switch enabling: Intermountain Power Project and Scattergood 30% hydrogen blend capable

Challenges Ahead:

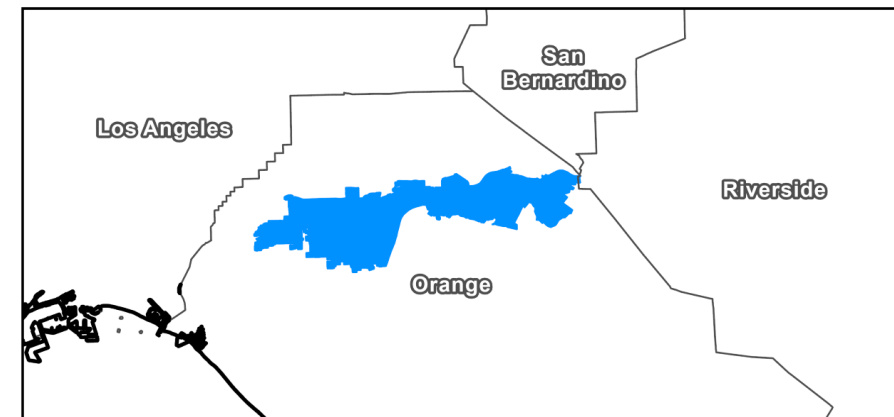
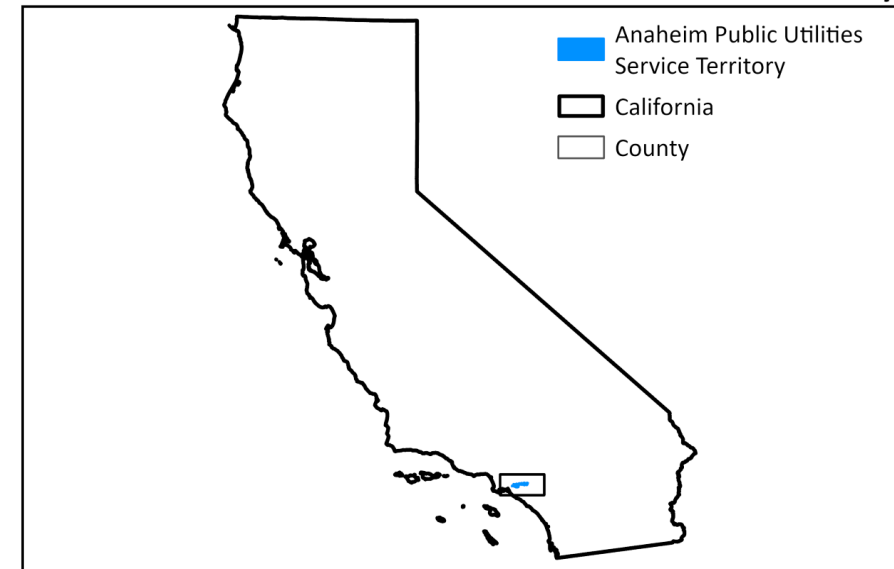
- Decarbonizing in-basin generation while maintaining reliability
- Commercial availability of hydrogen generation system
- Prospective rate increases



Anaheim Public Utilities 2023 IRP

- Serves City of Anaheim
- In CAISO's balancing authority
- 600 MW managed peak demand
 - 0.05% average annual growth
- 2,400 GWh net energy for load
 - 0.6% annual growth

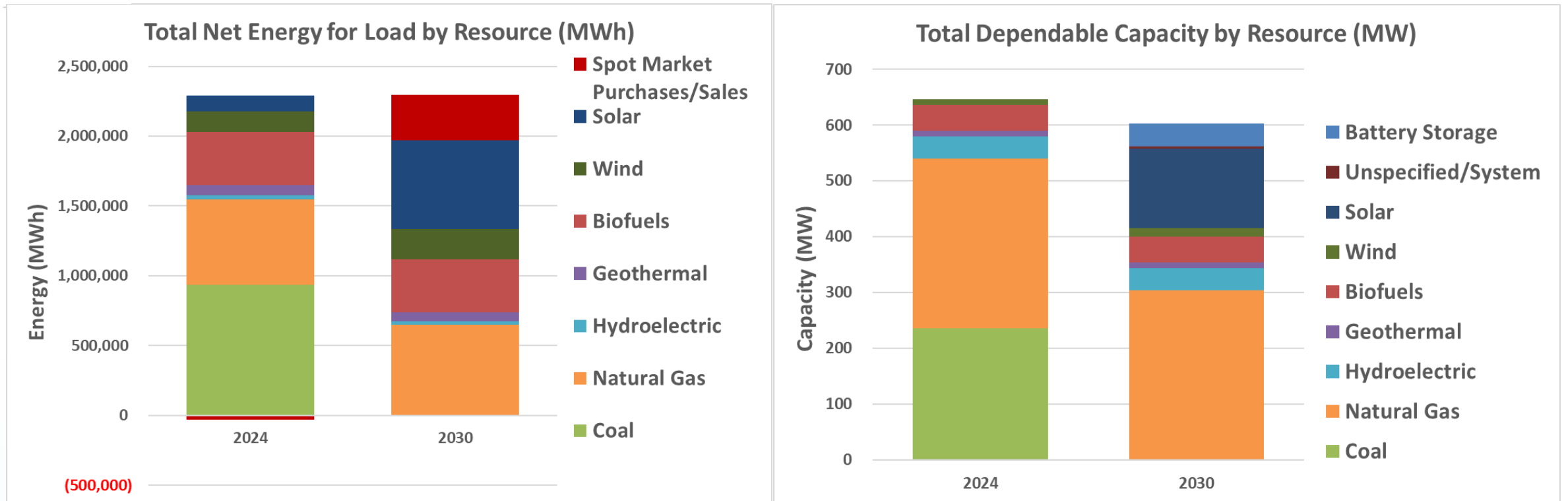
Anaheim Public Utilities Service Territory



Source: CEC



APU Energy Supply and Dependable Capacity



- Coal is retired, spot market energy purchases when necessary
- Natural gas, geothermal, hydroelectric, and biofuels remain constant
- Increased wind and solar



APU IRP Take-Aways

Vision for the Future:

- Phase out coal
- Invest in wind, solar, storage, and solar plus storage
- Invest in vehicle electrification
- Invest in energy efficiency

Challenges Ahead:

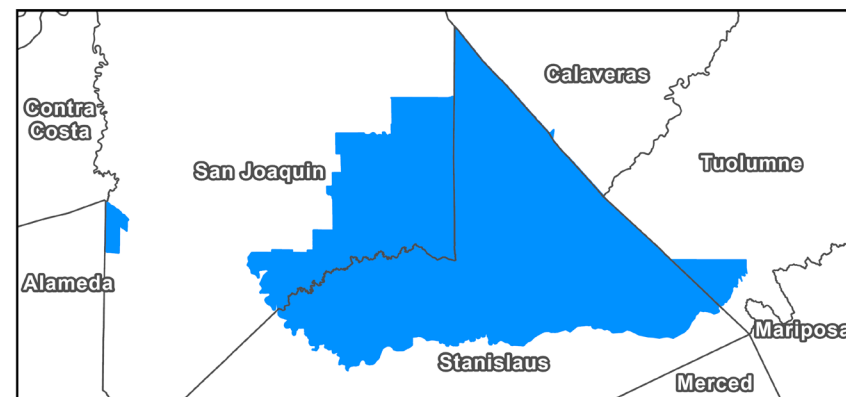
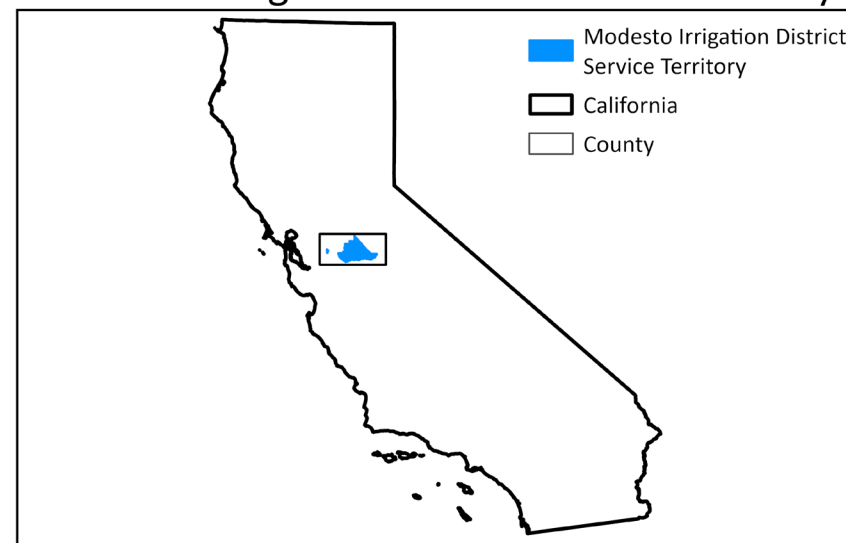
- Decarbonizing in-basin generation while maintaining reliability
- Reducing spot market purchases



Modesto Irrigation District 2023 IRP

- Provided electric service since 1923
- Serves Modesto and the surrounding areas
- Independent, publicly-owned utility
- 760 MW 1-in-2 peak demand
 - 0.5 percent average annual growth
- 2,800 GWh net energy annually
 - 0.56 percent average annual growth

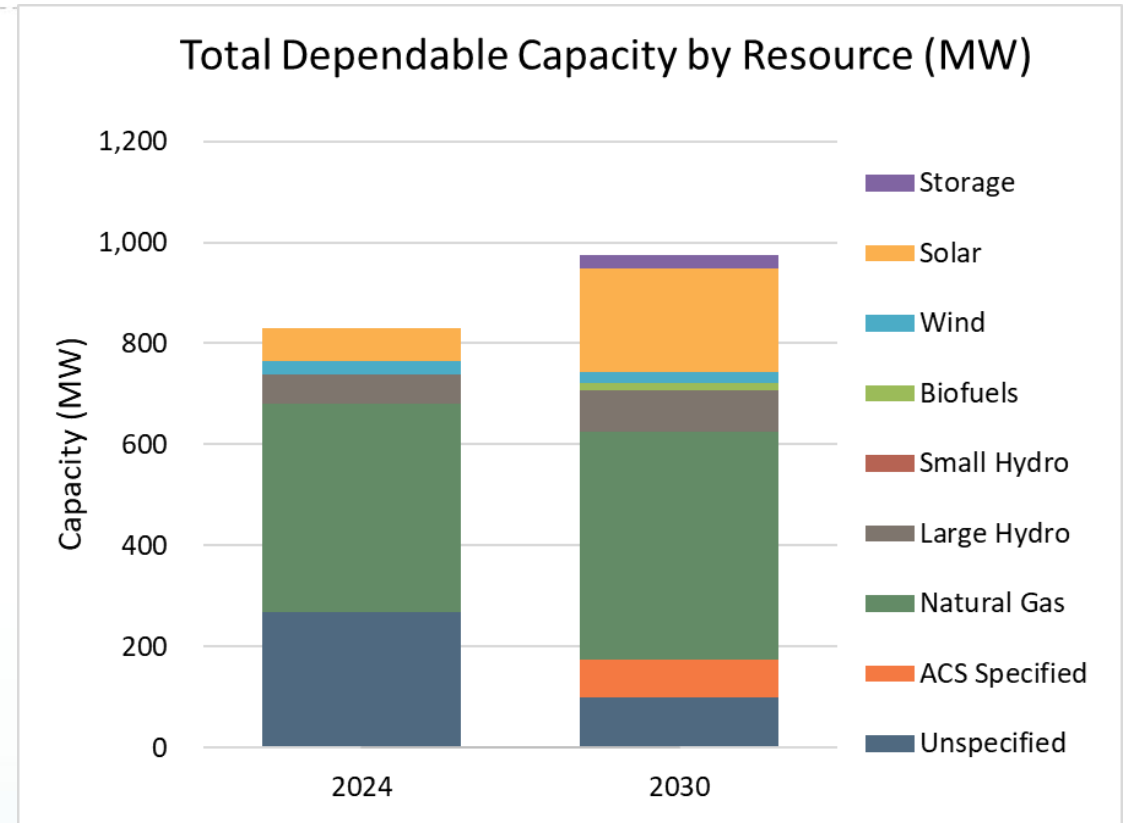
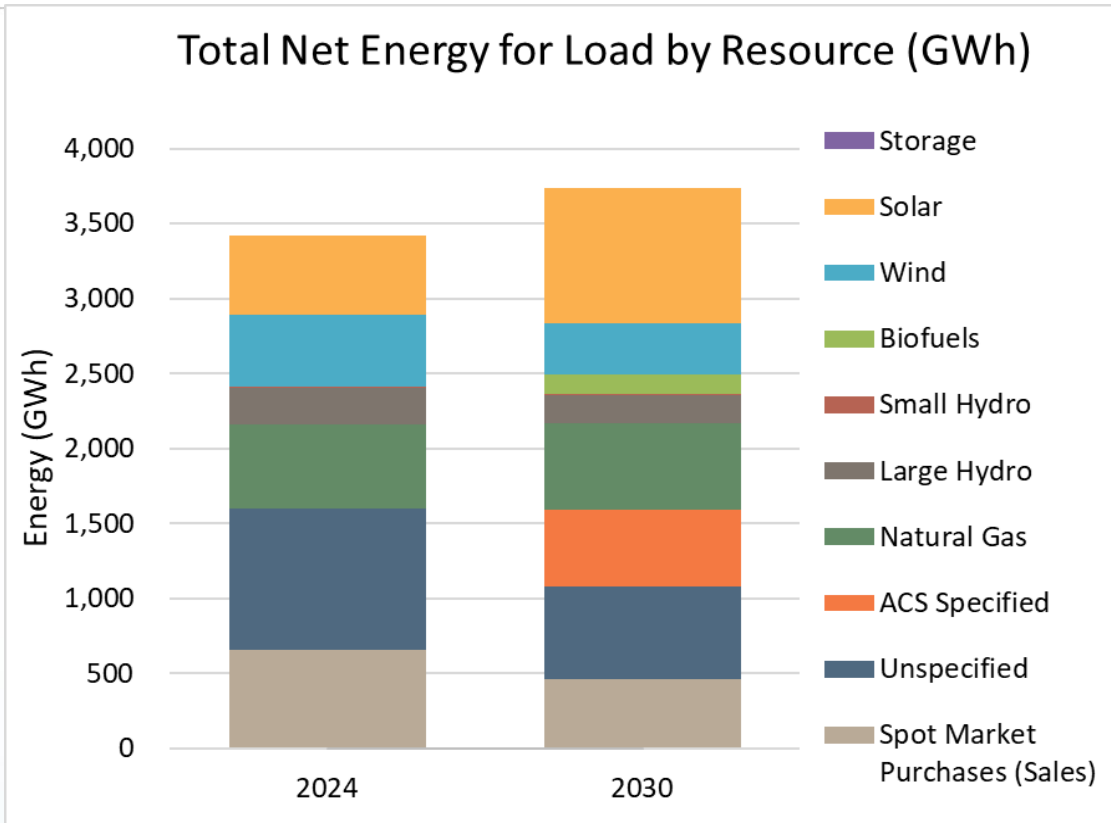
Modesto Irrigation District Service Territory



Source: CEC



MID Energy Supply and Dependable Capacity



- Fewer contracts for Unspecified energy and decrease of spot market purchases
- Increased solar and biofuels
- Natural gas maintained for reliability and peak demand

Source: CEC analysis of MID's 2024 IRP



MID IRP Take-Aways

Vision for the Future:

- Continue operation of gas plants
- Maintain most renewable contracts
- Addition of storage, solar, wind, and biofuels
- Asset Controlling Supplier specified purchases reduce emissions (mostly hydro)

Challenges Ahead:

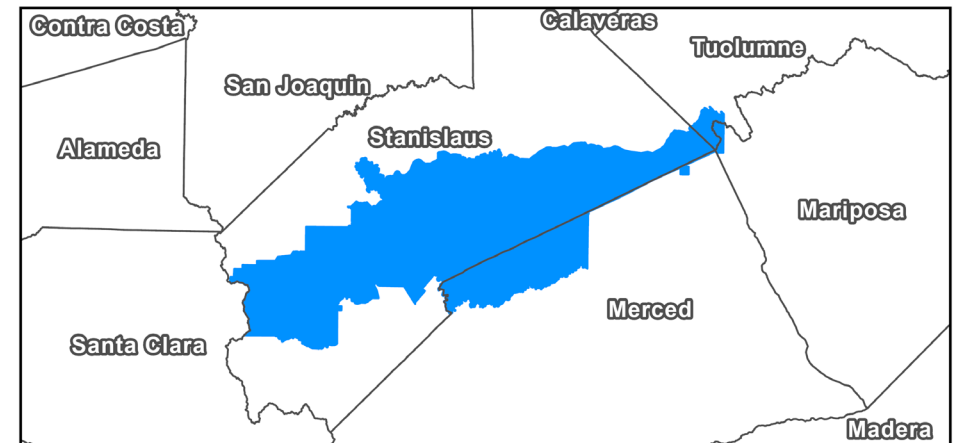
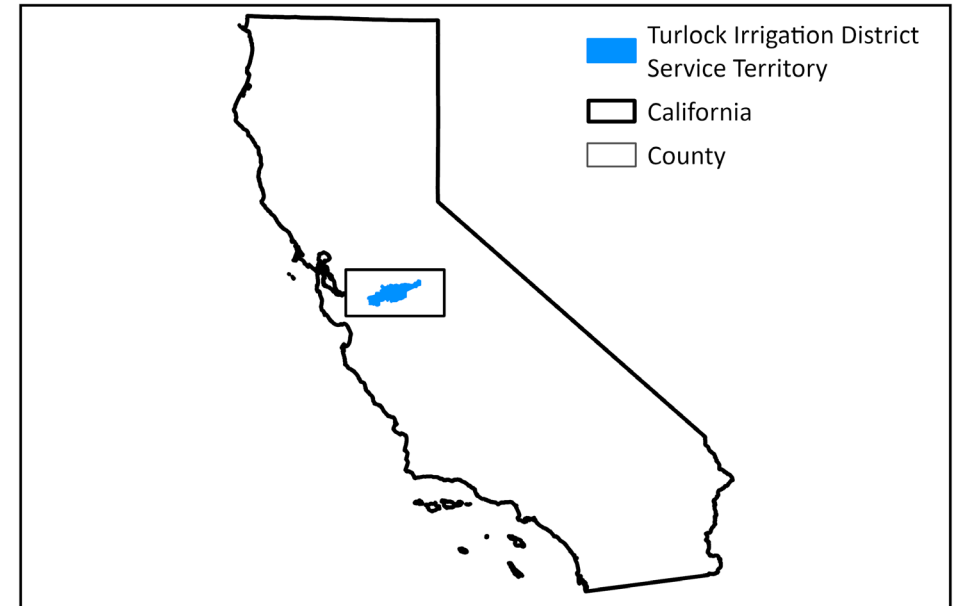
- Future considerations of energy storage on an economic basis
- Meeting future demand from electric vehicles
- 7.5% rate increases in 2023 and 2024 (first increases since 2012)



Turlock Irrigation District 2023 IRP

California's first irrigation district!

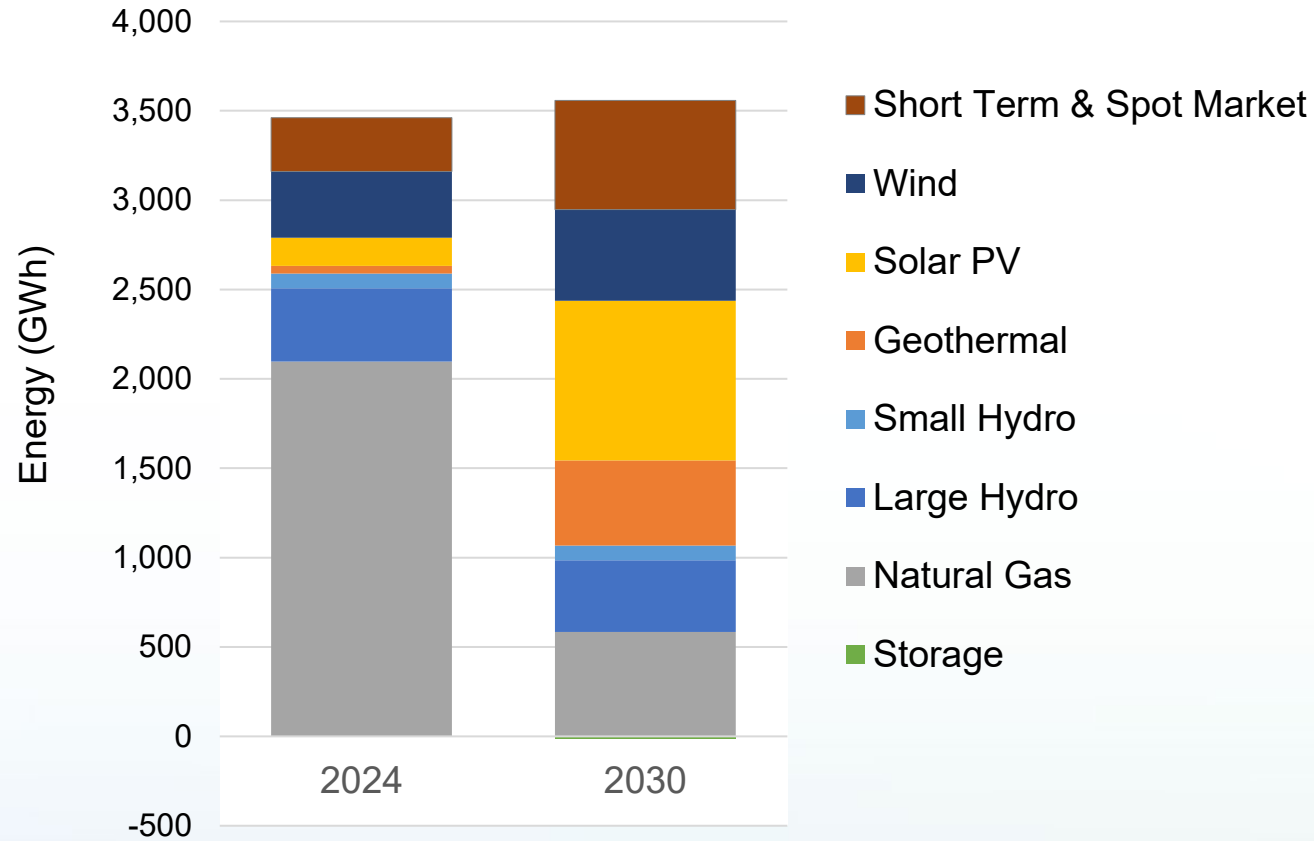
- Electric service in Stanislaus, Merced, and Tuolumne Counties
- Balancing Authority for TID and Merced Irrigation District
- Four percent growth 2024 to 2030
 - 602 MW peak demand, 2024
 - 2,377 GWh annual energy, 2024



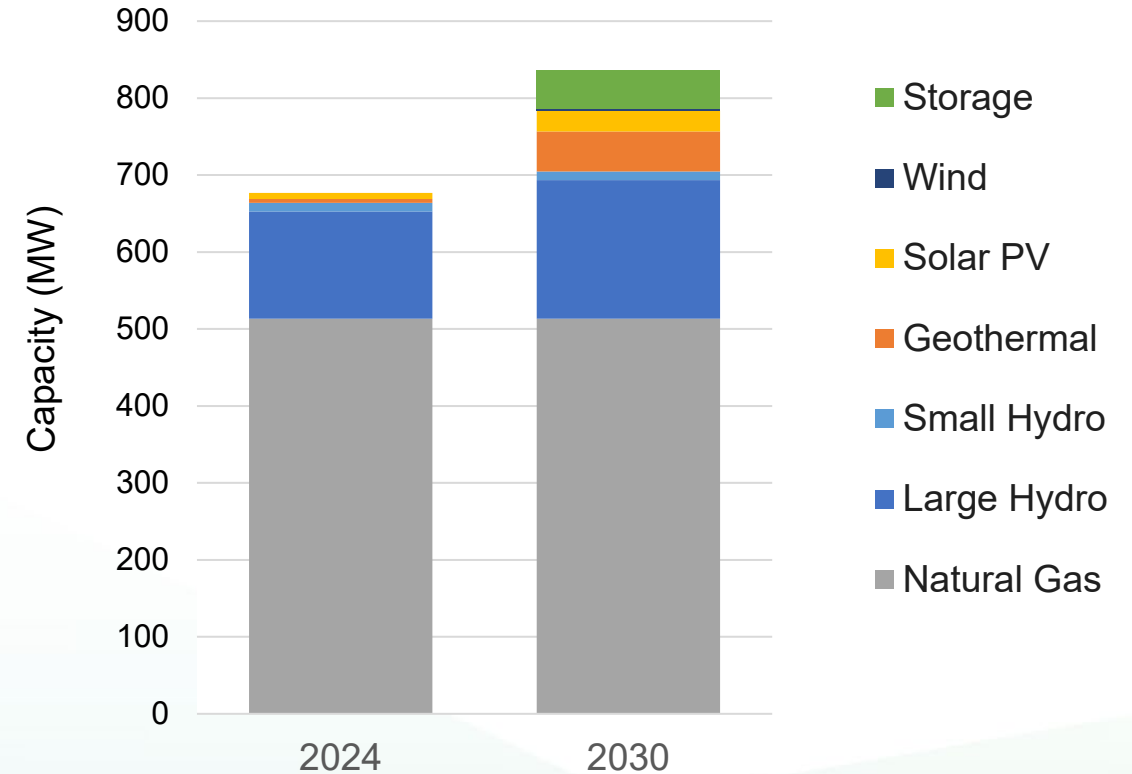


TID Energy Supply and Dependable Capacity

Total Net Energy Load by Resource (GWh)



Total Dependable Capacity by Resource (MW)



- Increased hydro, geothermal, solar, and wind consumption
- Reduced natural gas consumption

Source: CEC analysis of
TID's 2023 IRP



TID IRP Take-Aways

Vision for the Future:

- Reduce natural gas consumption
- Invest in hydro, geothermal, storage, solar, wind, efficiency

Challenges Ahead:

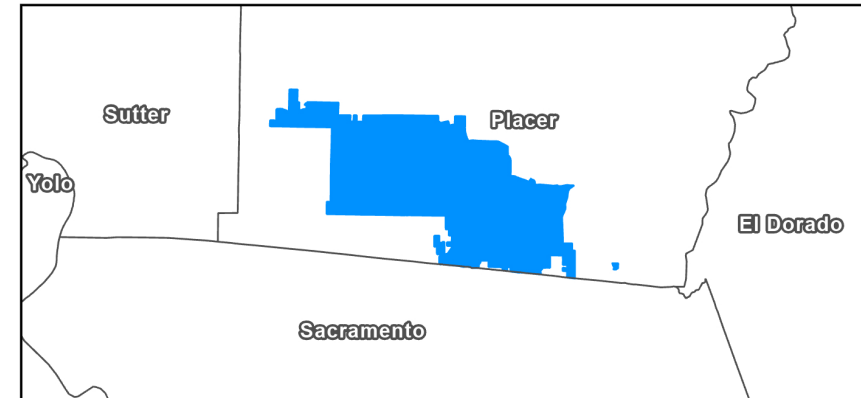
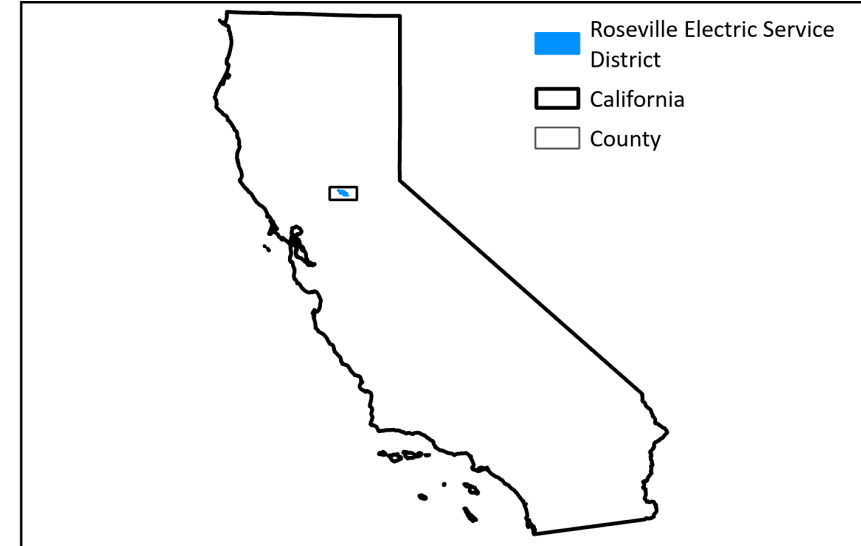
- Local capacity additions for reliability after 2030
- Reliance on short term and spot market purchases



Roseville Electric Utility 2023 IRP

- Serves the City of Roseville
- Balancing authority is BANC
- 335 MW managed peak demand
 - 0.9 percent average annual growth
- 1,200 GWh net energy for load
 - 0.6 percent average annual growth

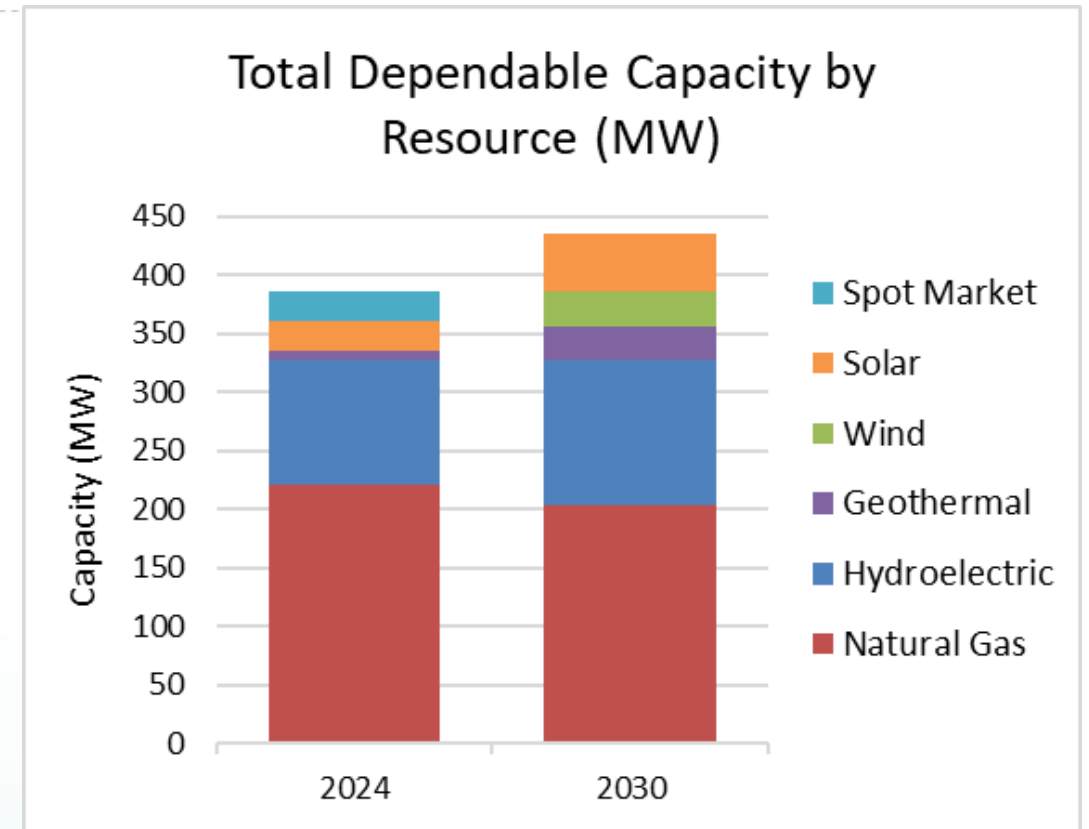
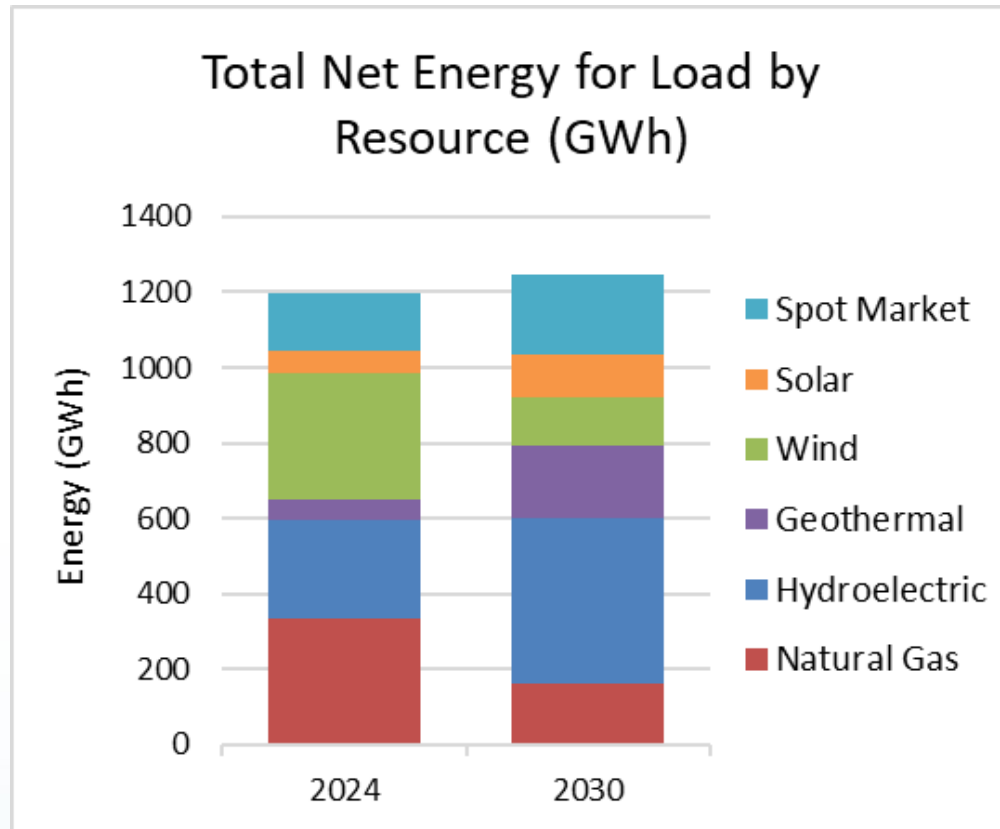
Roseville Electric Service District



Source: CEC



Roseville Energy Supply and Dependable Capacity



- Decreased generation, capacity from natural gas
- Decreased generation, increased capacity from wind
- Increased generation and capacity from solar, geothermal, hydropower

Source: CEC analysis of Roseville's 2023 IRP



Roseville Electric IRP Take-Aways

Vision for the Future:

- Mix of new resources
- Increase import capacity
- New demand side management programs enabled by AMI

Challenges Ahead:

- Reducing gas generation while maintaining reliability and affordability
- Potential for low hydro generation
- Battery resources not included due to cost
- Cumulative rate increases of 7-12% by 2035



CEC Staff Determination

Each IRP (LADWP, APU, MID TID, Roseville Electric) is consistent with statutory requirements:

- GHG emissions targets
- Renewables Portfolio Standard
- Just and reasonable rates
- System and local reliability
- Diverse, resilient, and sustainable energy system and communities
- Localized air pollutants with priority on disadvantaged communities
- Diverse portfolio of energy resources



Staff Recommendation

Approve orders adopting CEC's determination that the POU IRP filings are consistent with the requirements of Public Utilities Code Section 9621.