

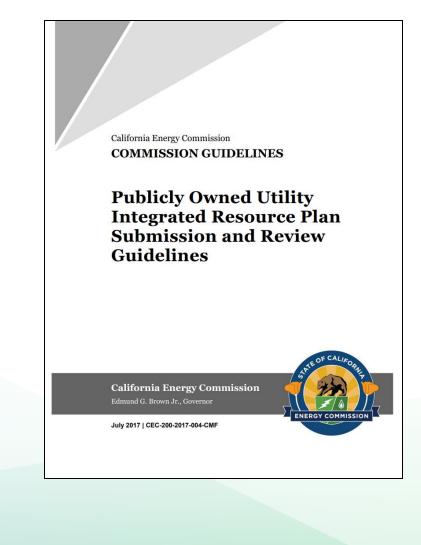
## Item 7: City of Redding Electric Utility IRP

May 8, 2025 Business Meeting

Alyssa Tavares Energy Assessments Division



- 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 five years
- CEC reviews for consistency with statutory requirements as specified in the IRP Guidelines.
- CEC determination adopted at a Business Meeting





An IRP must address statutory requirements in the areas of:

✓ GHG emissions targets

- ✓ Renewables Portfolio Standard
- ✓ Just and reasonable rates
- ✓ System and local reliability

✓ Diverse, resilient, and sustainable energy system and communities

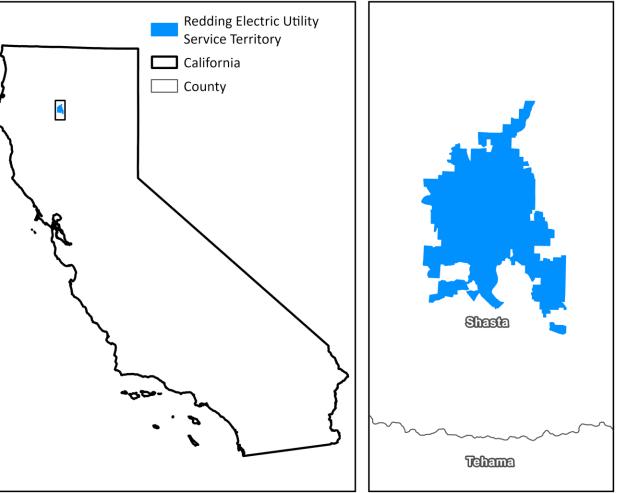
Localized air pollutants with priority on disadvantaged communities

✓ Diverse portfolio of energy resources



- Redding Electric Utility (REU)
- Vertically integrated utility
- Customer base (2022):
  - ~39,000 residential
  - ~5,000 commercial
  - ~350 industrial, and
  - ~1000 other

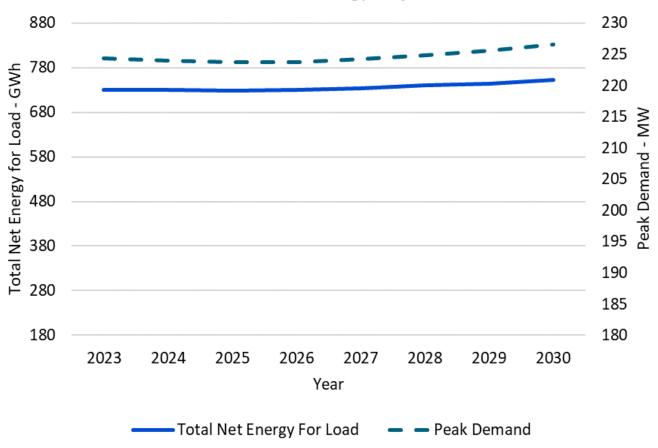
### Redding Electric Utility Service Territory





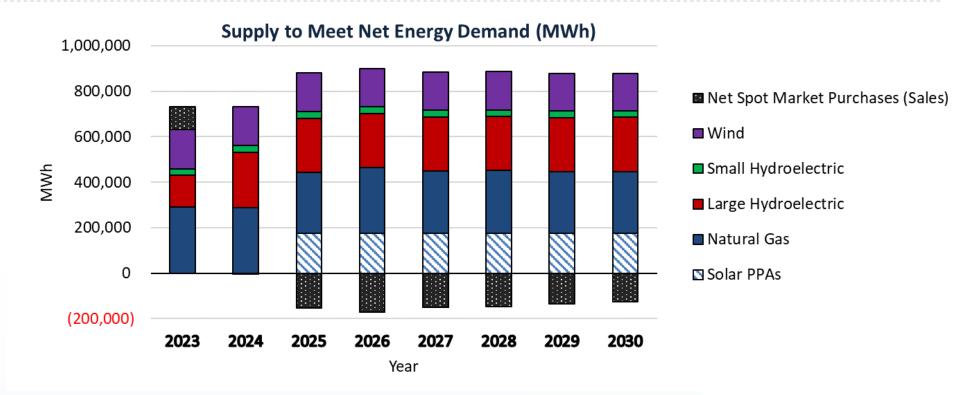
- Peak demand is relatively flat
- Net energy for load increases slightly
- Factors affecting load forecast:
  - BTM solar
  - Net migration and economic outlook
  - Efficiency gains of household appliances
- Increase in peak demand after the year 2030

**REU Peak and Energy Projections** 



Source: CEC analysis of REU's 2024 IRP

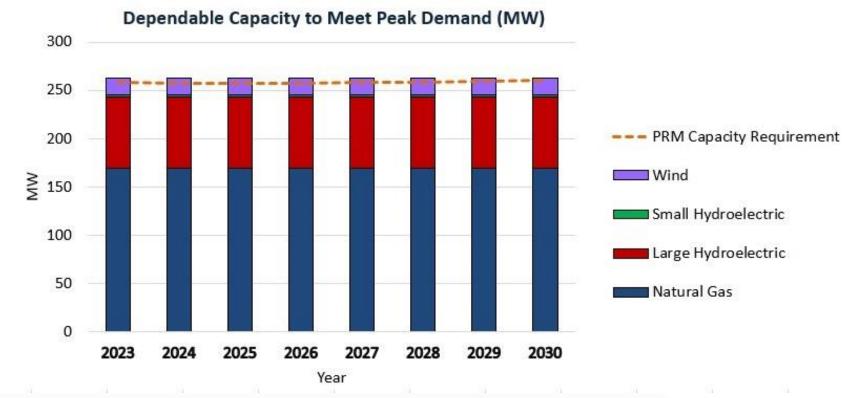
# Redding: Energy Supply



#### Source: CEC analysis of REU's 2024 IRP

- Purchases from spot market in 2023 converts to sales in 2025
- Solar PPAs online in 2025
- Natural gas from Redding Power Plant
- Increase in solar and 8-hour battery storage in 2031 and beyond

## Redding: Dependable Capacity



#### Source: CEC analysis of REU's 2024 IRP

- Natural gas from Redding Power Plant to meet peak demand
- Wind helps meet peak demand for horizon up to 2030
  - Contract from Big Horn expires in 2031
- Battery storage expected to provide incremental support beyond 2030 horizon



### Vision for the Future:

- Net-Zero Carbon 2045 scenario as preferred plan
  - $\circ$  Reliability and affordability
  - Meets renewable energy mandates and GHG goals by 2045
  - Costs align with current portfolio
- Procurement of solar and 8-hour batteries in later years

### **Challenges Ahead:**

Decisions about resource contracts
after 2030



REU's IRP is consistent with PUC 9621 statutory requirements in the areas of:

- ✓ 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 order adopting staff's determination that the City of Redding Electric Utility's IRP filing is consistent with Requirements of Public Utilities Code Section 9621.