

# Item 7: California Energy Demand 2023-2040 Forecast of Electricity and Gas Consumption

February 14, 2024 Business Meeting

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# **Benefits & Purpose of the Forecast**

Procurement and system planning at California Public Utilities Commission and California Independent System Operator

- Integrated Resource Planning
- Distributed Resource Planning
- Resource Adequacy
- Transmission Planning







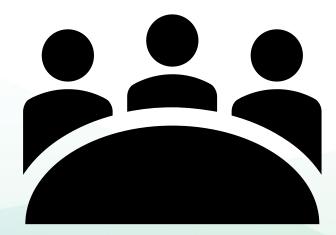
# **Updates to Forecast**

- Extended forecast horizon to 2040
- Additional historical load, interconnection, and generation data
- Updated economic, demographic, and electricity rate projections
- New climate simulation data
- Updated baseline hourly electricity consumption profile
- Model updates
  - > Refurbished residential end-use model
  - ➤ NREL dGen model
- Planning Scenario includes zero-emission appliance standard impacts



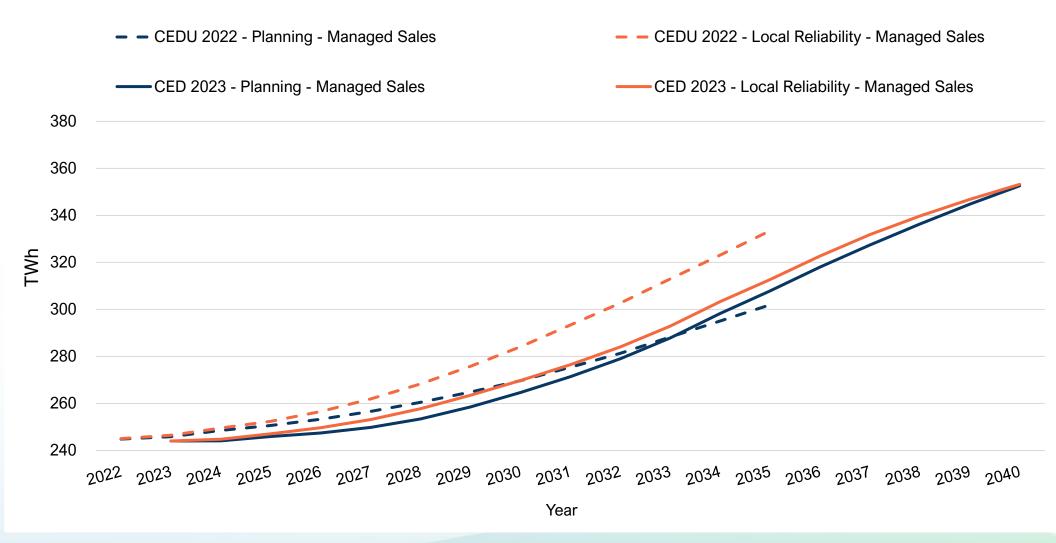
#### **Stakeholder Process**

- IEPR workshops
- Demand Analysis Working Group meetings
- Joint Agency Steering Committee discussion
- Single Forecast Set agreement





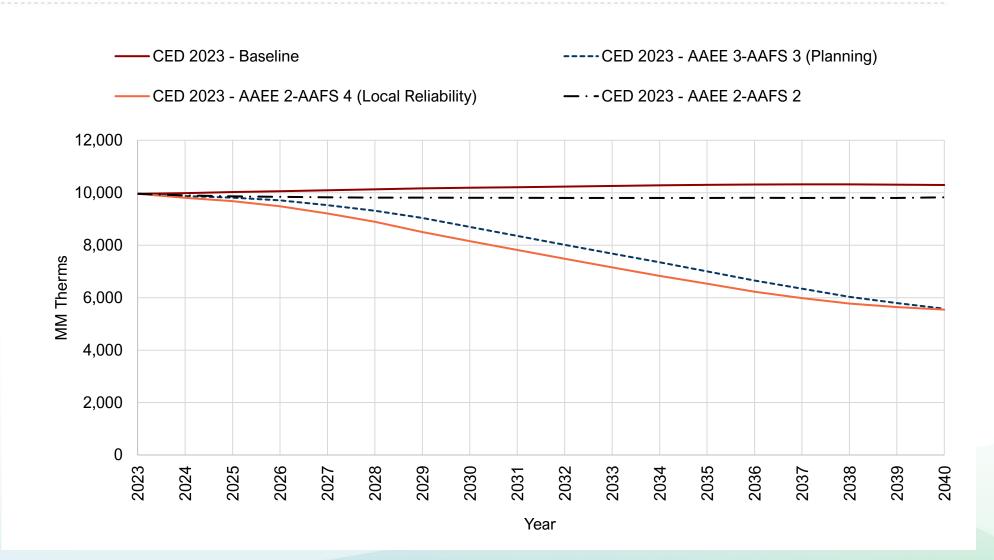
# Statewide Electricity Sales



Source: CEC



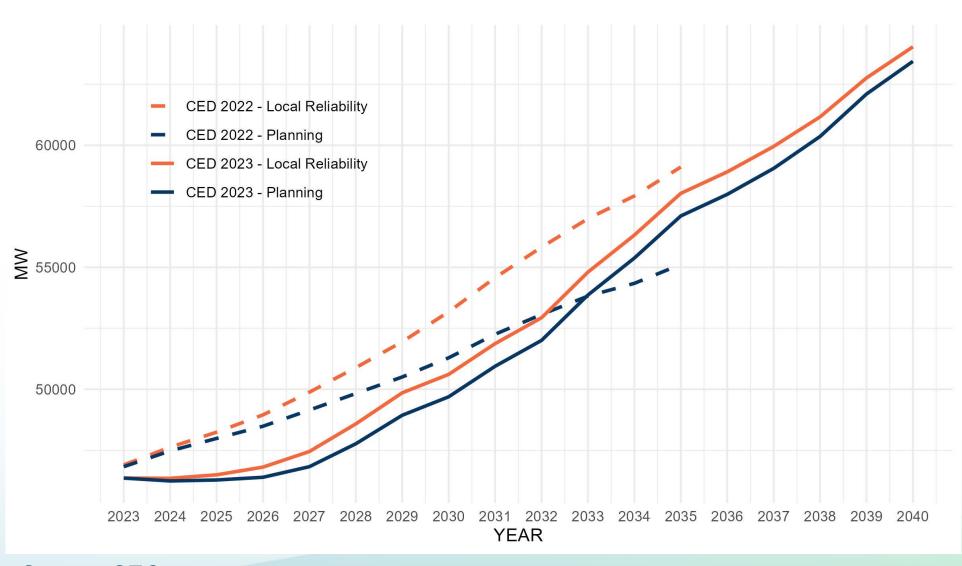
# **Statewide Gas Consumption**



Source: CEC



# Managed Peak Demand (CAISO)



Source: CEC



#### **Staff Recommendation**

Adopt California Energy Demand Forecast, 2023-2040