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2023 IEPR Forecast Overview

Heidi Javanbakht, Demand Analysis Branch Manager December 19, 2023



CA Electricity Demand Forecast

- Foundational for procurement and system planning in the state
- Used by:
 - CPUC for Integrated Resource Planning
 - CAISO for transmission system planning
 - CPUC / utilities for resource adequacy requirements
 - IOUs for planning
- 15+ year system-level forecast of electricity and gas demand
 - Annual electricity and gas consumption
 - 8760 hourly electricity loads
 - 'Additional Achievable' scenarios for energy efficiency, building electrification, and transportation electrification that capture a range of uncertainty
 - 1-in-2, 1-in-5, 1-in-10, and 1-in-20 year net electricity peak



2023 IEPR Forecast Updates

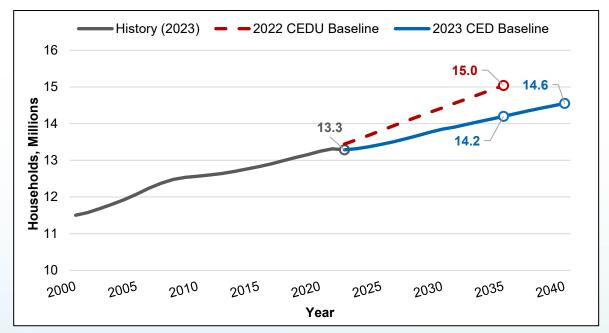
- Updated inputs
- Modernized residential end-use model
- Behind the meter PV and storage
 - Improved method for determining historical capacity
 - New market adoption model
- Additional Achievable Energy Efficiency and Fuel Substitution
 - Refresh Title 24 and program accounting
 - Inclusion of CARB's proposed zero emission appliance standard in the Planning Forecast, in collaboration with CARB
- Climate change



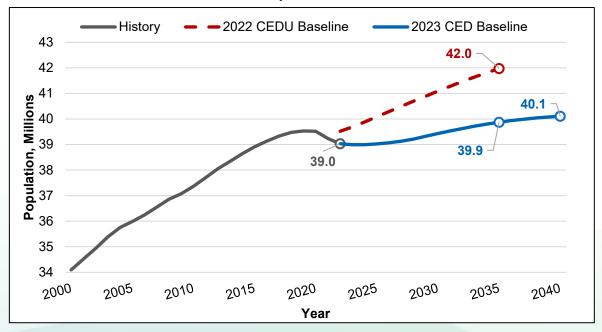
Statewide Households and Population

Households and Population both show lower growth over the whole forecast period, compared to the 2022 projections.

Households



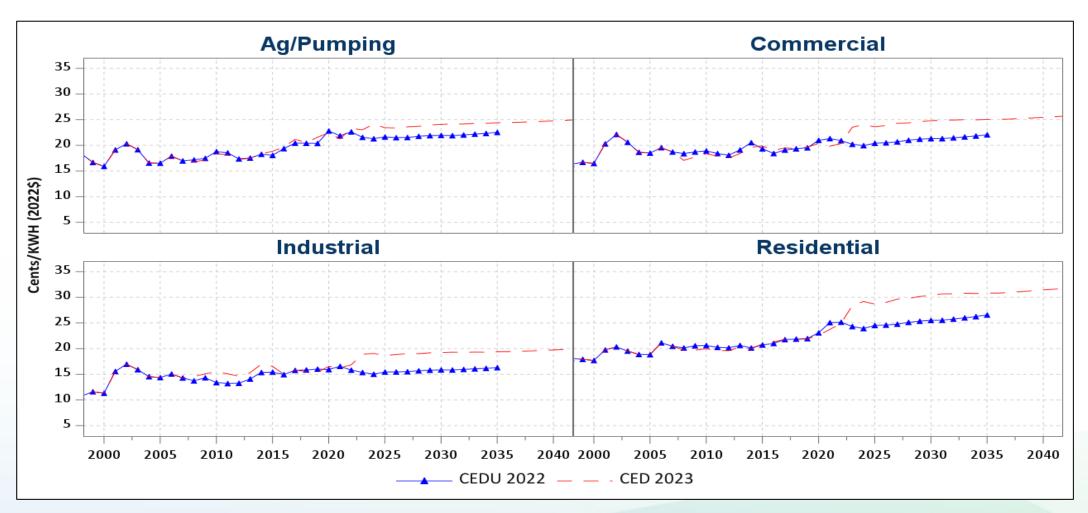
Population



Source: DOF



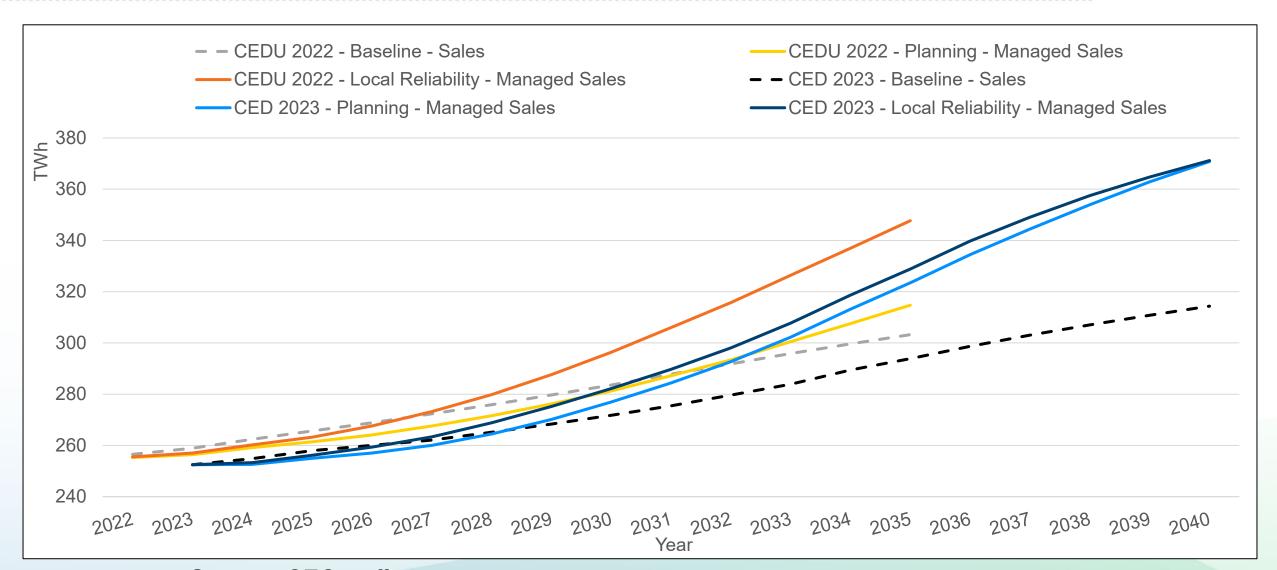
Statewide Average Electricity Rates



Source: CEC staff



Statewide Electricity Forecasts: Managed Sales



Source: CEC staff



2023 IEPR Forecast Timeline

- Aug 15: Inputs and Assumptions Workshop
- Aug 18: Load Modifier Inputs and Assumptions Workshop
- Nov 15: Load Modifier Results Workshop
- Dec 6: Annual Energy Forecast Workshop
- Dec 19: Peak Electricity Demand Forecast Workshop
- Jan 2024: Forecast results posted
- Feb 2024: Final IEPR posted and proposed for adoption

Demand Analysis Working Group (DAWG)