

# **2023 IEPR Demand Forecast Electricity Rate Forecast**

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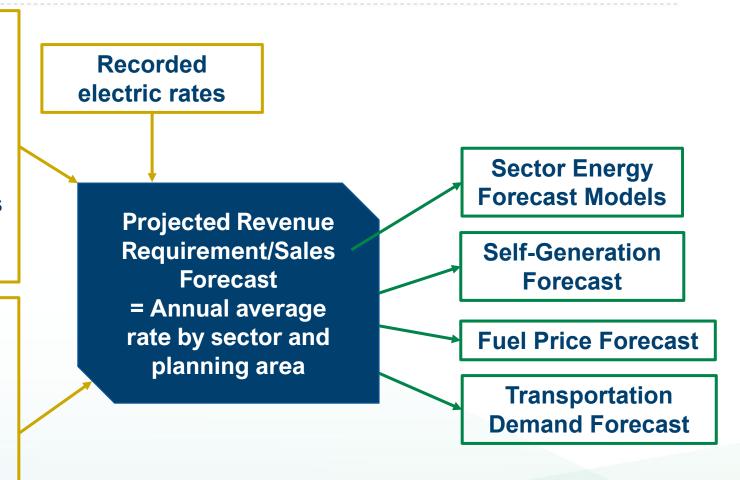
## **Rate Forecast Overview**

#### **Power Procurement**

- LSE procurement plans and costs
- Energy Prices
  - Natural Gas Prices
  - Wholesale Energy
  - Carbon Allowance Prices
- Renewable and capacity prices

# Transmission, Distribution, & Other

- LSE reported revenue requirements
- CPUC Tracking Tool
- Ratemaking Activity
  - Applications
  - Intervenor testimony
- Policy goals



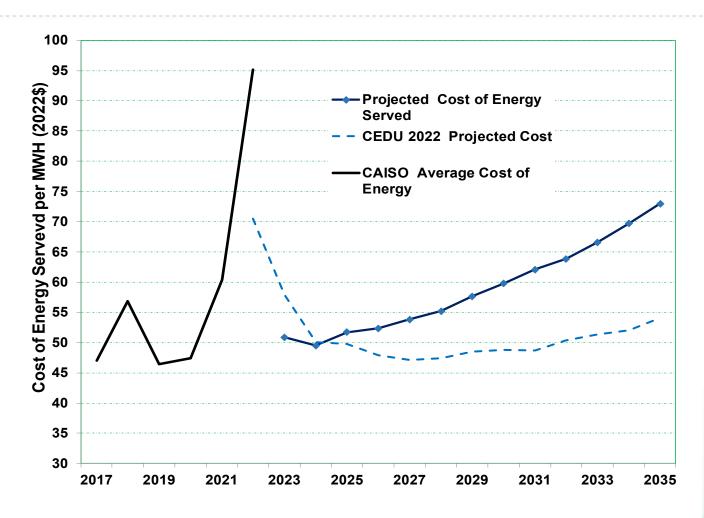


## **Key Inputs**

- Sales projections from the CEDU 2022 planning scenario, extrapolated using the 2021 IEPR Additional Transportation Electrification scenario.
- Historical electricity rates revised to use CEC QFER rates instead of EIA and QFER.
- Utility submitted revenue requirement projections (Form 8.1a), rate data (Form 2), and supply forms (S-1).
- Updated current and prospective IOU revenue requirements using June 2023 CPUC Energy Division Utility Cost & Rate Tracking Tool data.
  - Pending and recently approved applications include significant requests for wildfire mitigation spending and cost recovery.
- Wholesale electricity prices through 2035 from 2023 IEPR PLEXOS preliminary results.
- More discussion presented at the August 15, 2023, IEPR workshop:
  - IEPR Commissioner Workshop on Inputs and Assumptions



### **Procurement Costs**



- Using the CEDU 22
   planning forecast, projected wholesale energy prices are 33% higher by 2035
- Energy prices escalated with inflation after 2035.
- doubled in recent years.
  Based on CPUC contract data, additional capacity needs are valued at \$85/kw/year (2022\$) compared to \$72 for CEDU 2022.

Source: CEC Staff

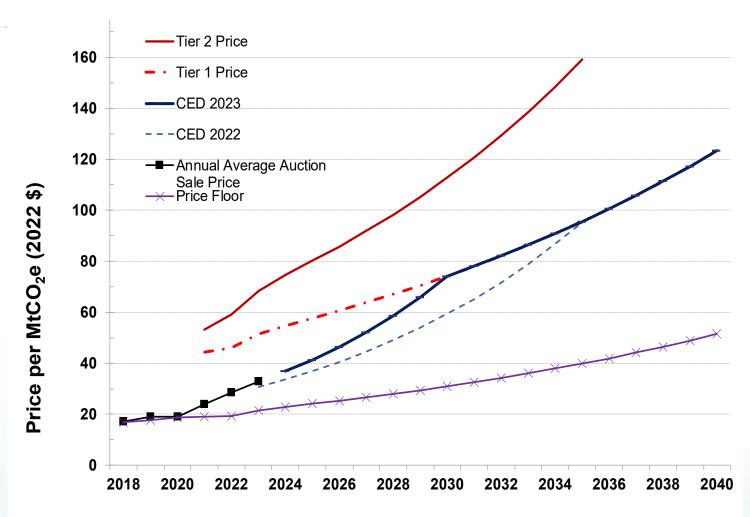


## **GHG Allowance Price Forecast**

- Since CARB initiated prerulemaking for revised Cap and Trade program rules, prices have increased and are currently at \$35 compared to the May 2023 auction price of \$30.
- The preliminary forecast assumes prices reach Tier Price 1 in 2030, docketed at:

2023 IEPR Preliminary GHG Allowance Price Projections

 Final forecast (Jan. 2024) will be revised based on any developments or analysis in the CARB proceeding.



Preliminary CED 2023 Forecast assumes prices will reach the Tier 1 price in 2030, then follow the Price Containment Reserve Tier 1 Price

Source: CEC Staff

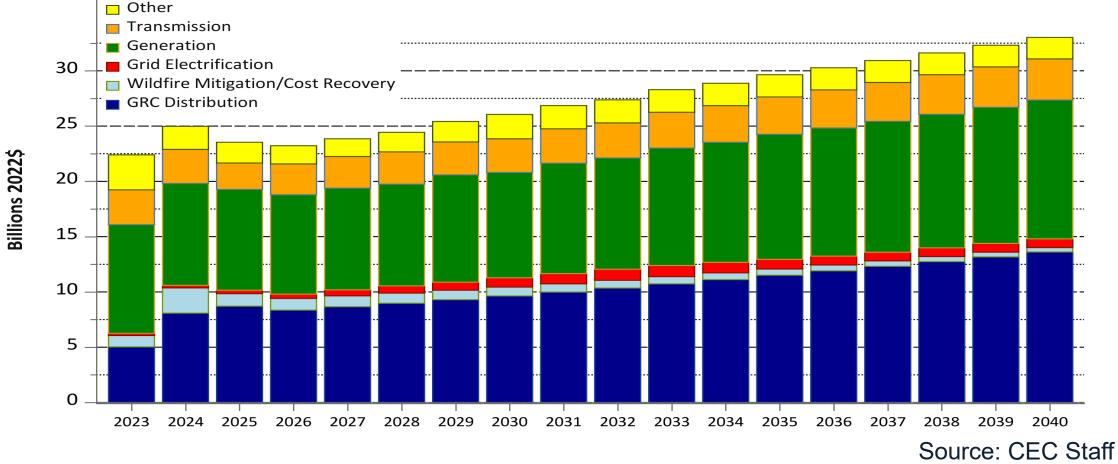


# Other Revenue Requirements

- General Rate Case proceedings
  - All 3 IOUs have pending General Rate Case applications with proposed increases averaging 10% or more annually. Wildfire risk mitigation is a major driver of higher GRC approved and requested amounts.
  - Staff adjusted requested amounts considering intervenor positions, when available, and recent CPUC decisions.
  - After current GRC period, GRC distribution escalates at 5.5% nominal annually.
- Transmission revenue uses current applications, forecasts provided by utilities, or escalation assumptions; escalates at 4 to 5% annually (nominal).
- Current levels of wildfire event cost recovery decline gradually from current level.
- Additional distribution system upgrade costs to support electrification approximated using Public Advocate Office **Distribution Grid Electrification Model Study and Report, August 2023,** using average of lower bound and central result (Table 3-3).
  - Currently subject to comment in High DER proceeding (R.21-06-017):
  - Order Instituting Rulemaking to Modernize the Electric Grid for a High Distributed Energy Resources Future



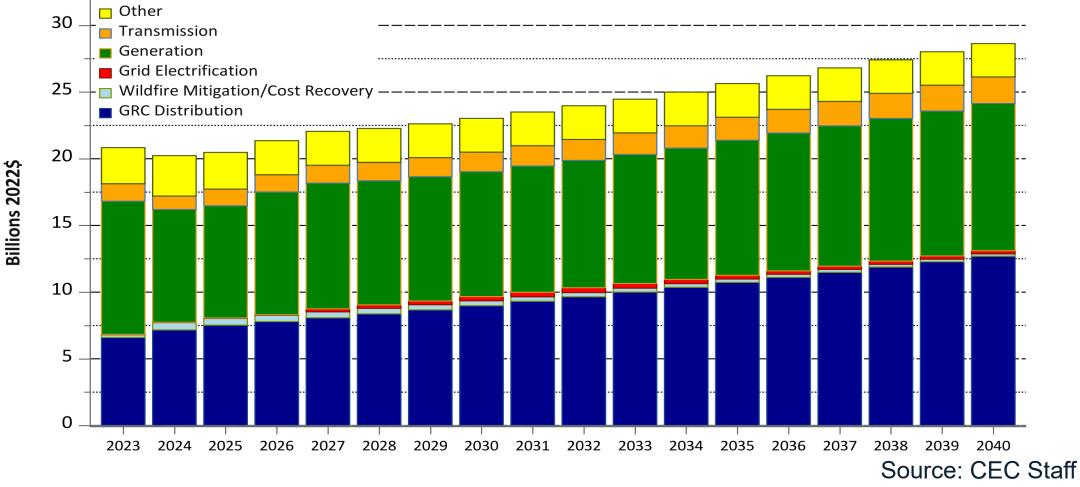
#### **PG&E CPUC-Jurisdictional Revenue Requirements**



- GRC Distribution increase in 2024 and 2025 includes amortization of 2023 balances.
- Grid investment to support increased electrification adds \$12 billion through forecast period.
- Total revenue increases 2.5% annually 2025-2040, compared to 2% increase in sales.



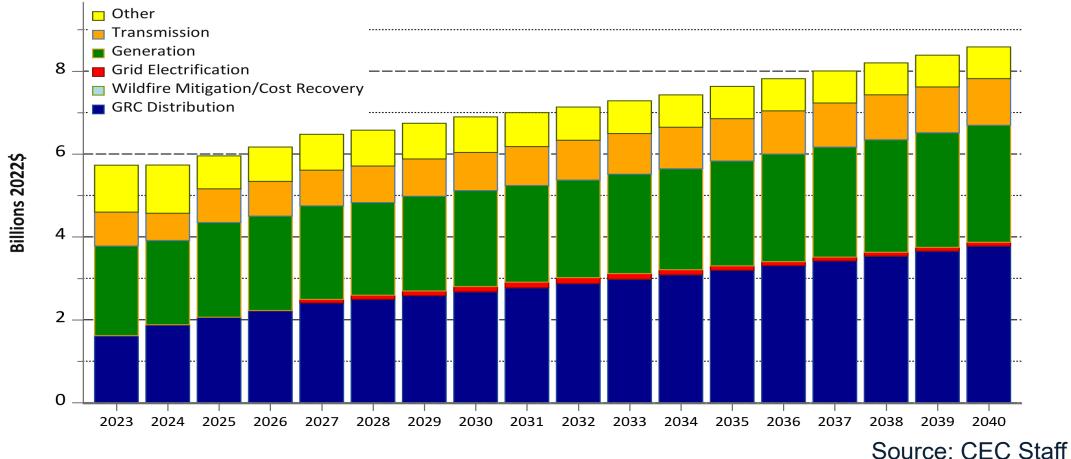
#### **SCE CPUC-Jurisdictional Service Area Revenue Requirements**



- 2024 increase in GRC Distribution is offset by decline in generation; 2023 generation rates include a large under-collection due to the 2022 spike in energy prices.
- Grid investment to support increased electrification adds \$4 billion through forecast period.
- Total revenue increases 2.3% annually 2025-2040, compared to 1.6% increase in sales.



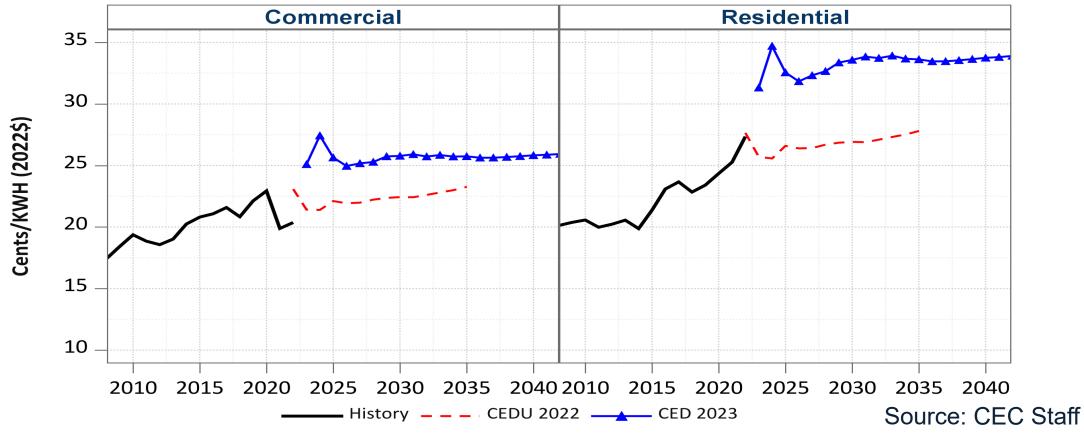
#### **SDG&E CPUC-Jurisdictional Service Area Revenue Requirements**



- 2024 GRC Distribution estimated to increase 10% annually through 2027.
- Grid investment to support increased electrification adds \$2 billion through forecast period.
- Total revenue requirement increases 2.5% annually 2025-2040, compared to 2.1% increase in sales.



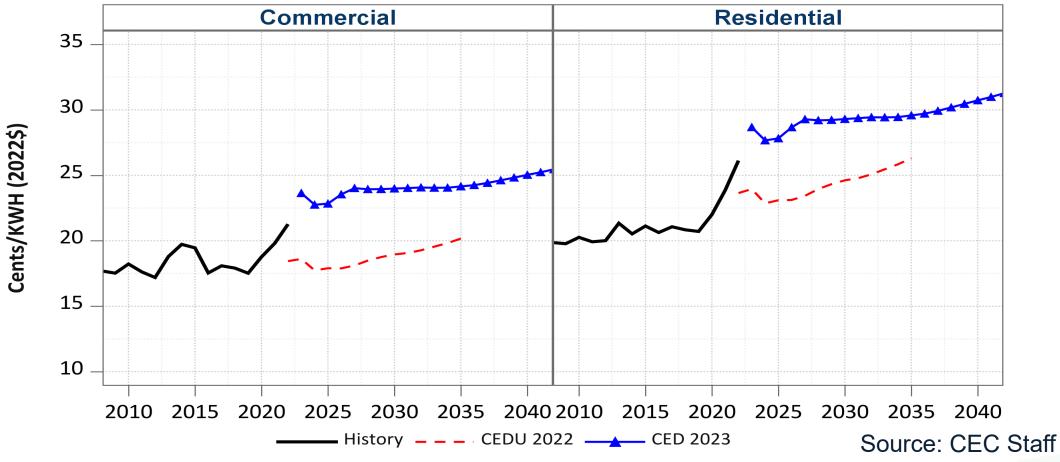
#### **PG&E Planning Area Rates**



- Estimated 2023 rates are higher than previously forecast primarily in part because of \$1
  billion interim rate increase to recover costs for various wildfire mitigation activities,
  response to catastrophic events, and other initiatives.
- High natural gas and energy prices starting in late 2022 increased procurement costs.



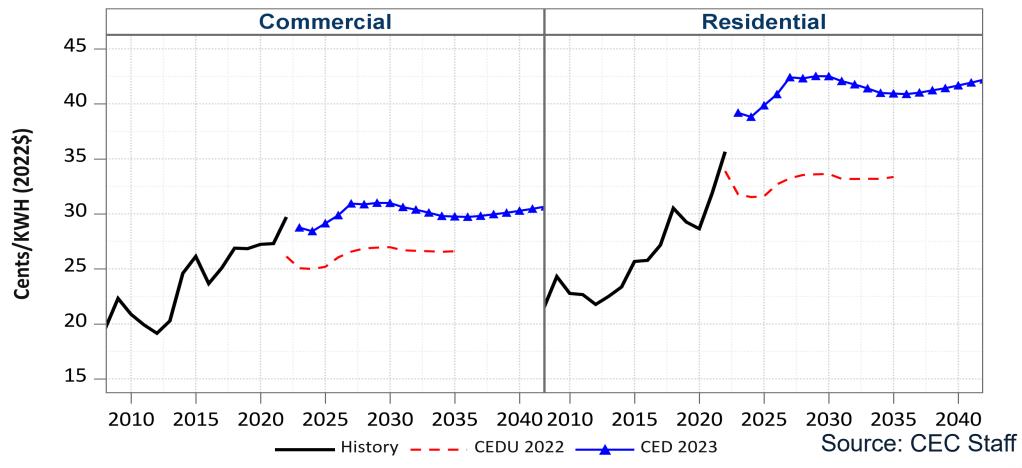
#### **SCE Planning Area Rates**



- Procurement costs increased 30% in 2023 but are expected to decline for 2024.
- Rates increase .7% annually through 2040.



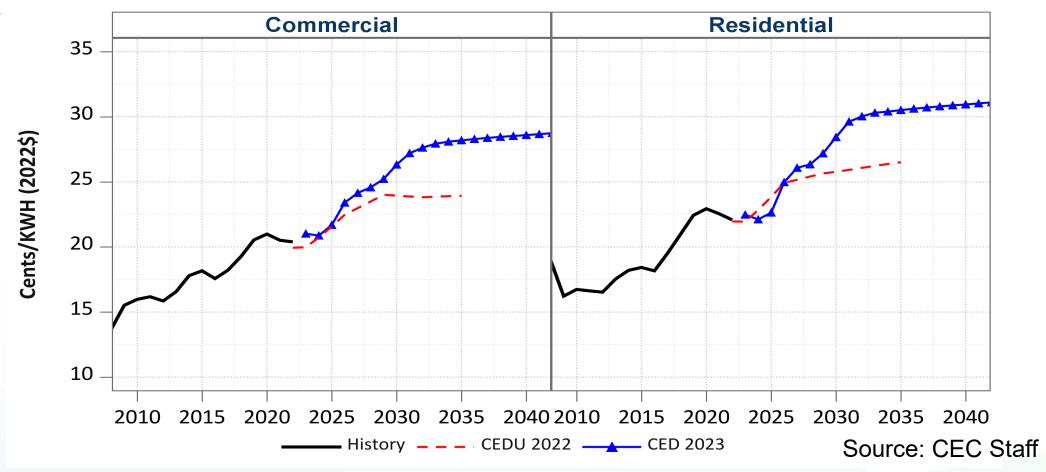
#### **SDG&E Planning Area Rates**



 Rates increase 1% annually through 2030, then decline as sales grows faster than revenue requirements.



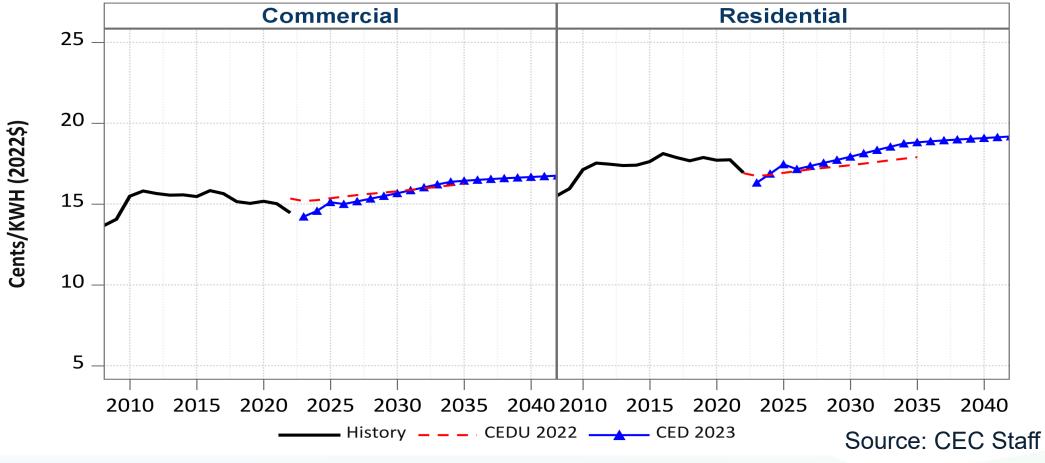
#### **LADWP Planning Area Rates**



- When a rate action plan to support LA100 pathways to 100% clean energy is implemented, rates are likely to increase about 4% annually through 2030.
- Meanwhile, cost adjustment factors maintain adequate revenues.



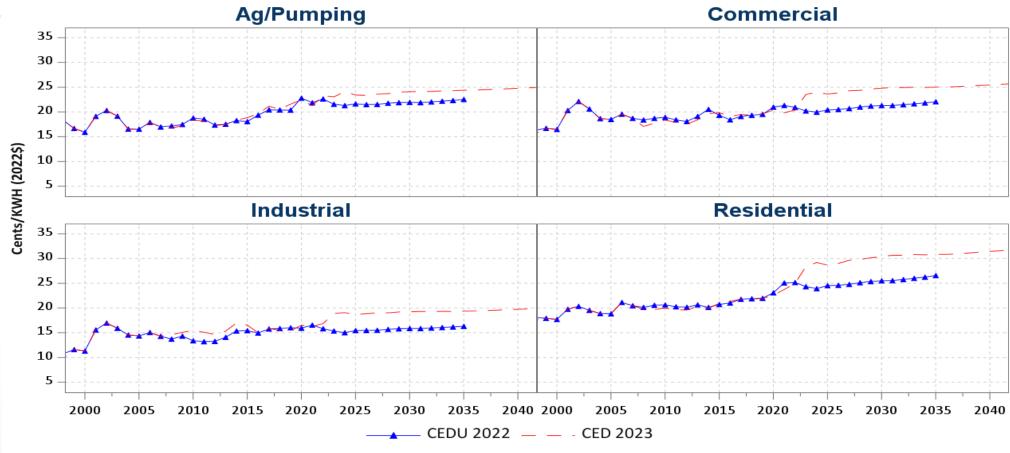
#### **NCNC Planning Area Rates**



- SMUD plans nominal rate increases of 5.5% in 2024 and 2025 to cover increased procurement and borrowing costs and to support their 2030 Zero Carbon Plan goals
- Board policy is to maintain rate increases consistent with inflation.



#### **Statewide Average Rates by Sector**



Source: CEC Staff

- Transportation demand models use statewide average rates.
- Planning area rates are weighted by sales.



# **Thank You!**