Impact of State and Local Policies on IOU and POU Residential Electric Bills

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Prepared by

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Executive Summary

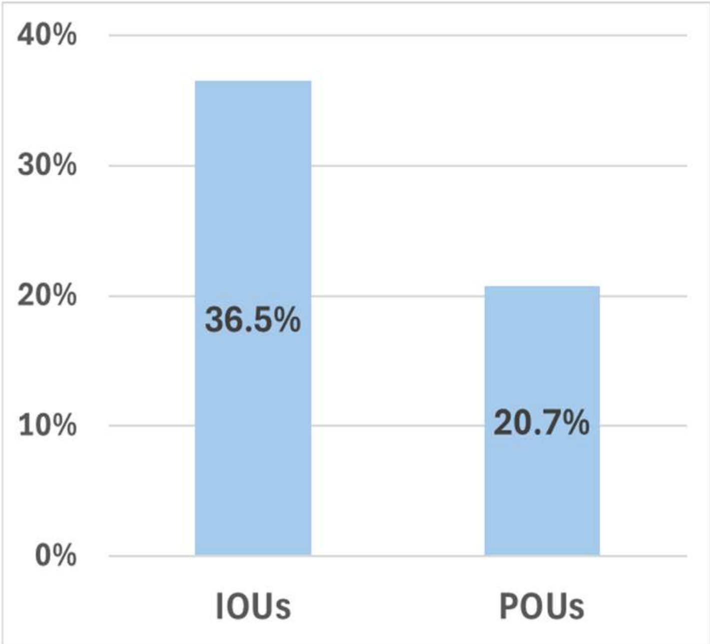
This report examines how public policies, regulatory oversight, legislative mandates, and other factors impact the residential electricity rates of the state's investor-owned utilities (IOUs), PG&E, SCE and SDG&E, and publicly-owned utilities (POUs),[1] such as the Los Angeles Department of Water and Power (LADWP) and the Sacramento Municipal Utility District (SMUD).[2]

From a regulatory standpoint, IOUs are governed by the California Public Utilities Commission (CPUC) while POUs are self-regulated by local governments. The legislature has also mandated programs that result in higher utility bills.

Key findings –

- IOUs and POUs are subject to similar public policy requirements (rooftop solar, wildfire mitigation, renewable energy, low-income subsidies).
- However, these programs collectively represent a larger share of the typical IOU customer bill (nearly 37%) than of the typical POU bill (21%).[3,4] This difference is a key reason that IOU bills are higher than POU bills.
- Important drivers of the rate difference include the "solar cost shift" (14.2% of the IOU bill vs. 4.3% of POU) and wildfire risk mitigation (13.0% vs 2.8%).[5,6]

Figure 1 – State and Local Policy Costs as % of Typical IOU and POU Residential Bill (2025)



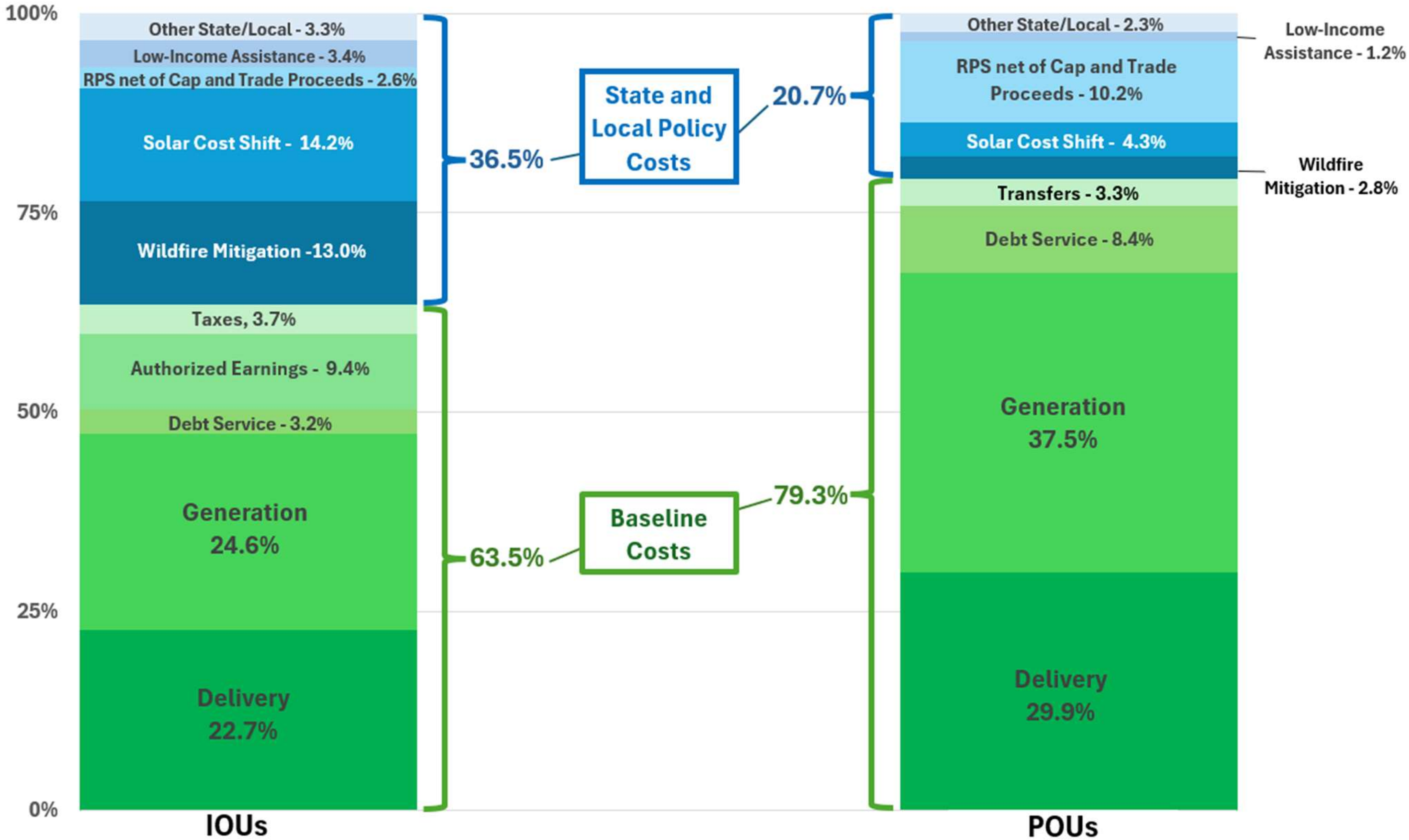
Overview of the State and Local Policies Imposing Higher Costs on IOU Customers

Divergence between IOU and POU rates is largely due to the disproportionate impacts of a variety of state policies on IOU customers.

State / Local Policy	Difference in POU and IOU Customer Bill Impacts
Service Territories	IOUs must provide electricity to much larger and more sparsely populated regions. As a result, the IOUs must maintain larger delivery systems (per customer served) than POUs.
Wildfire Mitigation	On average, POU service areas are more urbanized than IOU service areas, with far less wildfire exposure. Therefore, IOUs incur greater costs for wildfire risk mitigation efforts than POUs.
Solar Cost Shift	Though both IOU and POU rooftop solar policies shift cost burdens to customers without rooftop solar, IOUs are required to provide larger subsidies, which has resulted in a larger solar cost shift for IOU customers.
Low-Income Assistance Programs	The California Alternative Rates for Energy (CARE) Program offered by IOUs is typically more generous than equivalent programs offered by POUs, leading to higher electricity rates for non-CARE customers.
Other State and Local Programs	While both IOUs and POUs implement a variety of additional programs, such as energy efficiency and transportation electrification initiatives, the other state programs IOUs are mandated to offer account for a larger share of total utility expenses than POU-equivalent programs.

State Policies Impose Higher Costs on Residential Customers of IOUs than on Customers of POUs

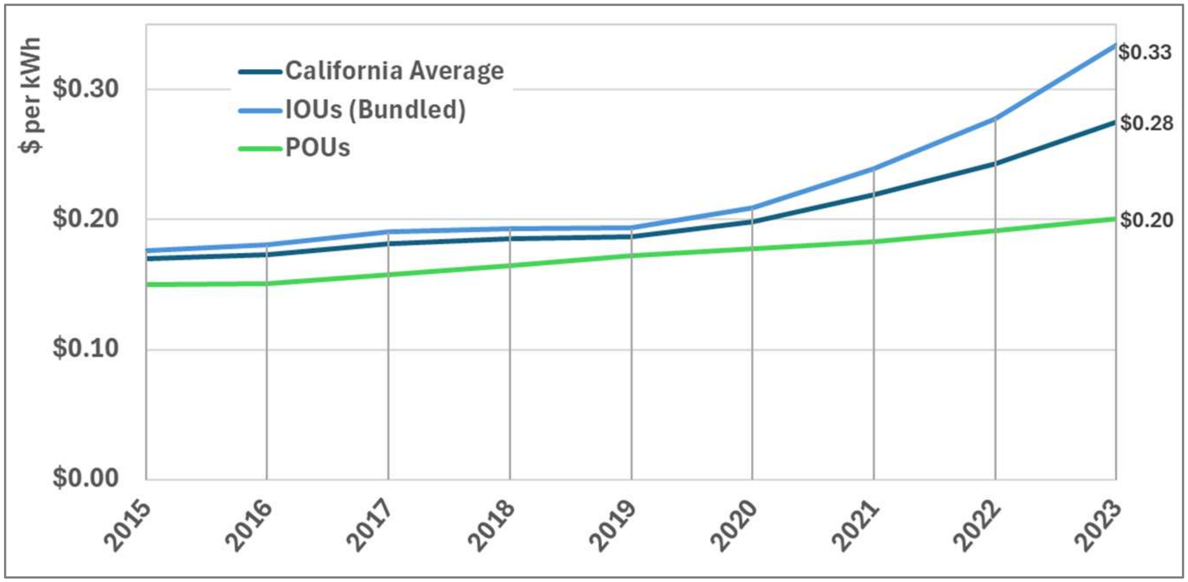
***Figure 2 – State and Local Policy & Baseline Cost Shares of the Typical IOU and POU Bill (2025)*[7]**



Within California, IOUs' Residential Rates Have Grown Faster than POU Rates

- Until recently, the gap between IOU and POU residential electricity rates was relatively consistent from one year to the next (Figure 3).
  - As of 2019, the average IOU residential rate was 2.1 cents higher than the average POU rate statewide. But over the 2018 – 2020 period, the average IOU rate was just 0.2 cents higher than the average LADWP rate.[8]
- The growing spread between IOU and POU rates since 2020 is largely attributable to the expanding costs of state policy mandates that increase IOU customer bills, as well as differences between IOU and POU service area densities.

Figure 3 – IOU and POU Average Residential Electricity Rates (2015 - 2023)[9]



Differences Between IOU and POU Service Areas Contribute to Higher Delivery Costs for IOUs

- California's major IOUs serve most of the state's rural areas (Figure 4) and must maintain larger delivery systems (per customer) than POUs
  - IOUs operate nearly 270,000 circuit-miles of distribution and transmission lines, or 1.61 circuit-miles per gigawatt-hour (GWh) sold (Figure 5).
  - The POUs maintain roughly half as many circuit-miles per GWh sold.

Figure 4 – IOU Territory is Largely Rural[10]

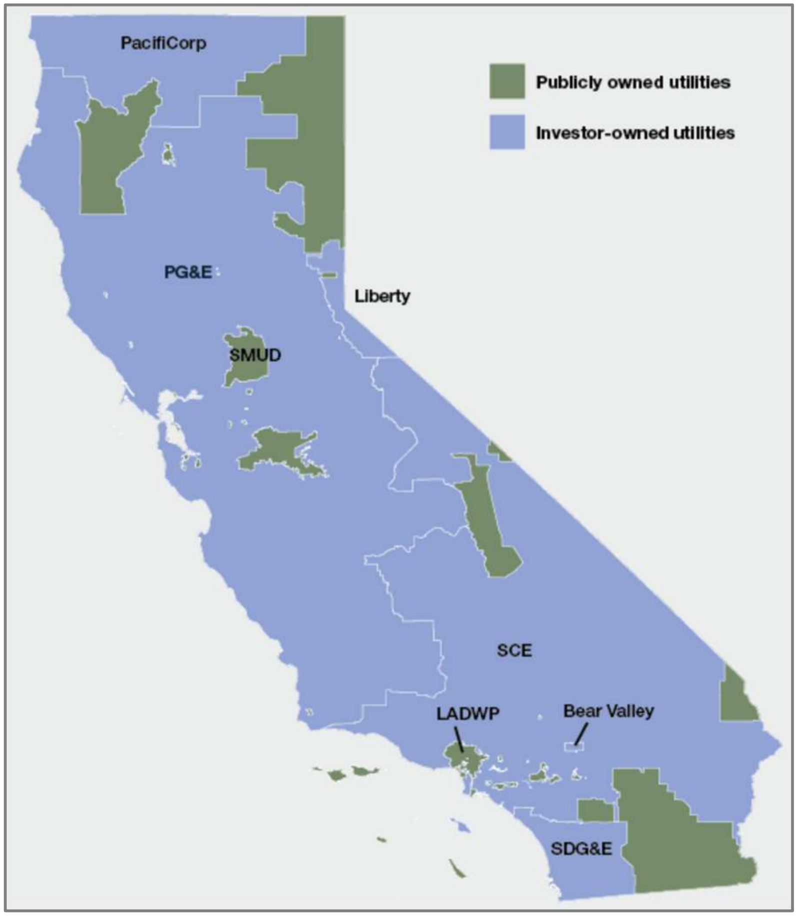


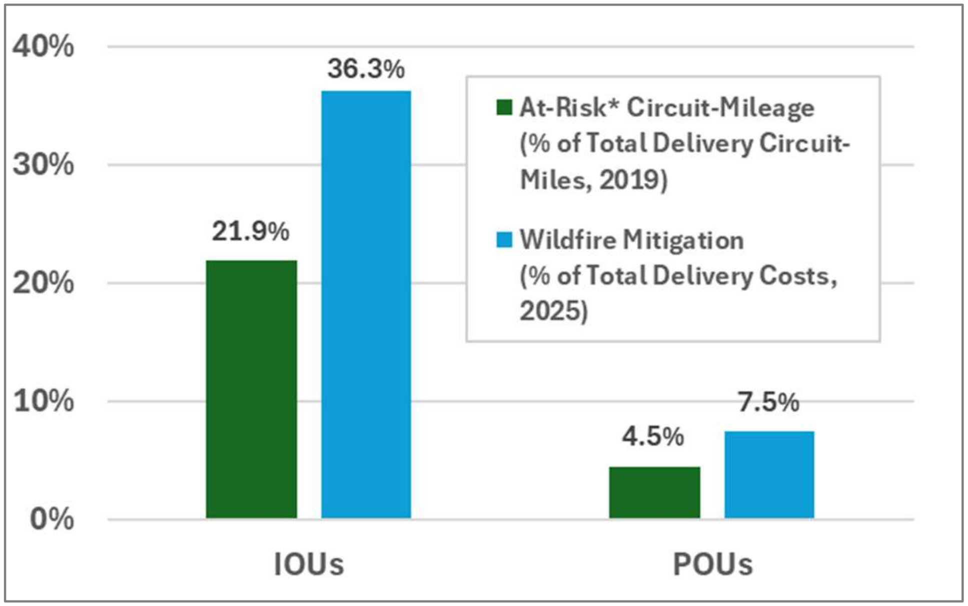
Figure 5 – Delivery System Size (IOUs vs. POUs)[11]

	IOUs	POUs
Transmission Circuit-Miles	*39,703*	3,090
Distribution Circuit-Miles	*228,916*	10,959
Total Circuit-Miles	**268,619**	**14,049**
Retail Sales (GWh)	**167,154**	**17,750**
Circuit-Miles per GWh	**1.61**	**0.79**

IOU Customers Pay Higher Costs for Wildfire Mitigation and Recovery

- Because IOU service areas cover nearly all the areas most prone to wildfires, IOU wildfire mitigation costs have increased far more than POU wildfire mitigation costs in recent years.
- As of 2019, 21.9% of IOUs' total circuit-miles were overhead wires within High Fire Threat Districts (HFTD) (Figure 6), and wildfire mitigation accounts for 36.3% of total Delivery-related expenses—and 13.0% of the total customer bill—in 2025.
- By contrast, just 4.5% of POU circuit-mileage was overhead and within a HFTD as of 2019. Wildfire mitigation costs account for an estimated 7.5% of POU Delivery system costs (Figure 6) and 2.8% of the typical POU residential bill.[12]

Figure 6 – Wildfire Mitigation Costs - IOUs vs POUs[13]



The Solar Cost Shift Increases Costs for Ratepayers

- The "solar cost shift"[14] reflects the increase in costs imposed on customers without rooftop solar due to net energy metering (NEM) policies and is composed of both a "solar export" and "on-site consumption" cost shift. Both IOU and POU non-solar customers must pay for the cost shift.
- The total cost shift is attributable to a "solar export" and "on-site consumption" shift:
  – *Solar Export Cost Shift –*
    - Most energy exported to the grid from rooftop solar is credited to customer bills at or near the full retail rate (i.e., the rate that customers pay for energy imported from the grid)
    - Because the retail rate exceeds the avoided cost (per kWh) that utilities would otherwise incur procuring and delivering this energy,[15] rooftop exports raise costs for non-solar customers.

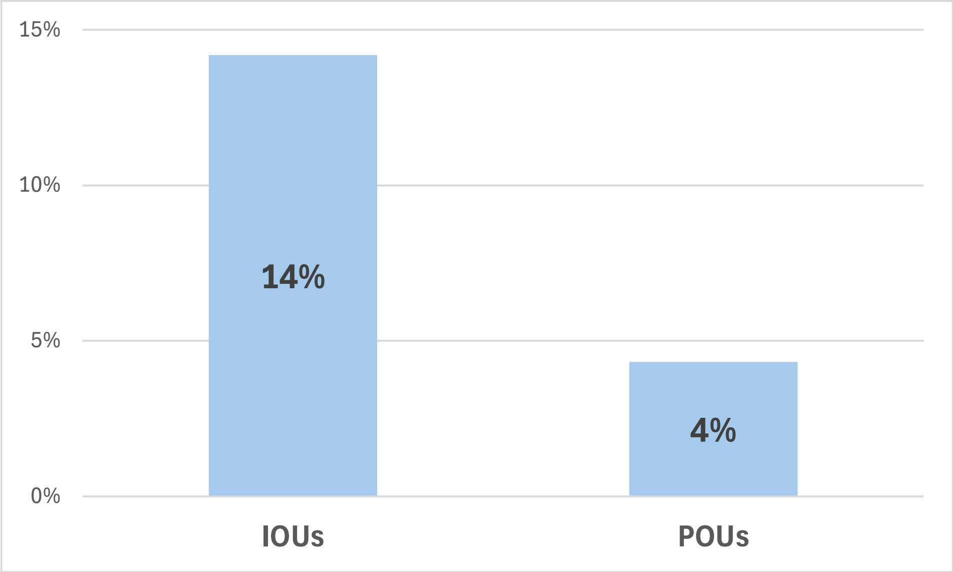
  – *On-site Consumption Cost Shift –*
    - Most utility service costs are fixed (e.g., distribution/transmission lines), but these costs are recouped from customers primarily through "volumetric" (i.e., per-kWh) rates rather than as fixed per-household charges.
    - Because rooftop solar customers import less energy, they contribute less toward the payment of these fixed costs, thus shifting a greater share of these costs onto non-solar customers.
- **The solar cost shift is more significant for IOU customers, accounting for 14.2% of the typical bill as compared with 4.3% for POU customers.**

The Solar Cost Shift Accounts for a Higher Share of the Typical IOU Residential Bill

Several factors result in a larger per-customer solar cost shift for the IOUs (Figure 7):

- *Greater deployment*: A larger percentage of IOU customers have rooftop solar. Rooftop solar accounts for an estimated 15% of IOU energy consumption (across all customers), versus 5% for the POUs.[16]
- *Limited reliance on fixed charges*: The POUs collect a larger share of their revenue through fixed charges, which allows them to charge lower per-kWh ("volumetric") rates. Because rooftop solar exports cannot be used to offset fixed charges, the POUs' solar cost shift is smaller. [17]
- *Higher per-kWh NEM subsidy*: In part due to IOUs' greater reliance on volumetric rates, **the implicit subsidy for IOU customers with rooftop solar generation is higher than the POU subsidy.**[18, 19]

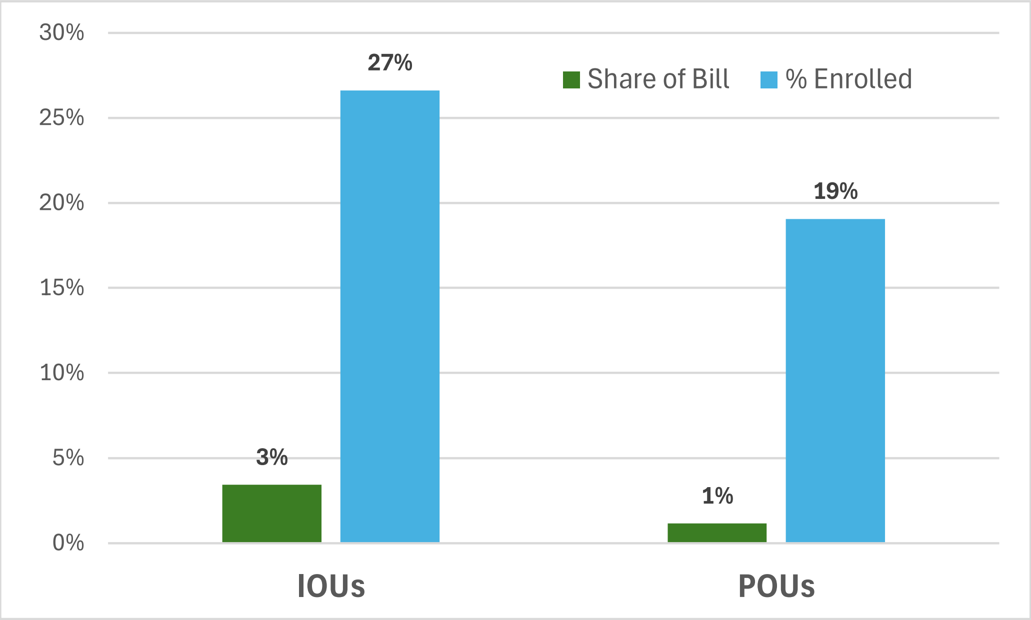
Figure 7 – Solar Cost Shift as a % of Typical Bill



Assistance for Low-Income Customers Accounts for Larger Share of the Typical IOU Bill

- Both the IOUs and POUs offer programs to assist households with low incomes, but the IOUs' program, California Alternate Rates for Energy (CARE),[20] imposes higher costs on non-participating customers than the surveyed POU programs.[21]
- CARE benefits a larger share of residential customers than POUs' equivalent programs and offers larger discounts:[22, 23]
  - The CARE discount is mandated by the state. On average, CARE provides a 38% bill discount (relative to the non-CARE bill)[24]
  - The discounts offered by POUs' CARE-equivalent programs can vary widely (depending on the specific program and the customer), but on average, these programs offer an estimated average discount of 14% relative to the standard customer bill[25]
- **As a result, CARE accounts for 3.4% of the typical non-CARE IOU residential bill, while equivalent programs for the POUs account for 1.2% of the typical POU bill.**[26]

Figure 8 – IOUs See Larger Impact of Low-Income Programs



Other State and Local Policy Impacts

Both IOU and POU customers incur additional costs imposed by state and local renewable energy policies and other public programs.

- *Renewables Portfolio Standard (RPS) and Cap-and-Trade –*
  - Under the state's RPS program, an escalating percentage of IOU and POU retail sales must be generated by renewable resource. When renewable energy prices exceed the price of non-renewables, these "above-market" RPS costs increase customer bills.
  - Because POUs' delivery systems are smaller than IOUs' (Slide 6), generation-related costs account for a larger share of the average POU bill. As a result, the estimated RPS impact is larger for POUs.[27]
  - Under Cap-and-Trade, both IOUs and POUs receive GHG allowances. IOUs auction these allowances to fund the "climate credit," which reduces customer bills. Similarly, POUs auction these allowances to reduce costs.[28]
- *Other State and Local Programs:* Both IOUs and POUs incur additional costs due to various energy efficiency and public purpose programs
  - For IOUs, major state-mandated programs include transportation electrification initiatives and energy efficiency initiatives required by the state.[29] In total, these other state policies account for 3.3% of the typical residential bill.
  - POUs are not subject to these state mandates, though LADWP and SMUD have similar policies. These other local policies account for an estimated 2.2% of the typical POU bill.[30]

Endnotes

1. This report examines state policy impacts on residential customers who (i) do not qualify for participation in their utility's low-income assistance program (i.e., California Alternate Rates for Energy (CARE) for the IOUs and CARE-equivalent programs for the POUs); and (ii) have not installed rooftop solar panels.

2. For purposes of this report, POU bill share estimates are based on the analysis of LADWP and SMUD. Though average residential rates and cost drivers vary substantially across POUs, the POU average is influenced heavily by LADWP and SMUD, which together account for 66.5% of residential customers of the POUs reporting to the Energy Information Administration (EIA). See EIA, Form 861 (2023).

3. Each component of the CY 2025 revenue requirement for each IOU was classified as belonging to state policy impact category (wildfire prevention, the Renewable Portfolio Standard, the Climate Credit, Public Purpose Programs, or Other State Policies) or as belonging to a "baseline" IOU expense category (Delivery and Generation), depending on the nature of the work or expenditures creating the revenue requirement.

Revenue requirements related to authorized earnings, debt service, and taxes associated with baseline category costs are shown separately in the baseline cost section of the bill stack summary visual. Where state policies resulted in additional earnings, debt service, or tax-related revenue requirements, these amounts are included in the bill share for the relevant state policy category.

4. For LADWP, the allocation of costs across state and local impacts and baseline expense categories is based on LADWP's Financial Statements and Required Supplementary Information for Fiscal Year 2024. For SMUD, this allocation is based on the SMUD 2025 Budget.

5. Based on IOU rates in effect as of 2025, the estimated weighted average monthly electric bill for the IOUs' non-CARE residential customers is $188.28. The PG&E average bill is an estimated $213.54 per month, based on 500 kWh of monthly consumption at an average rate of $0.427 per kWh. The average SCE bill is an estimated $168.91, based on 500 kWh of monthly consumption at an average rate of $0.338 per kWh. For SDG&E, the average bill estimate is $160.51, based on 400 kWh of monthly consumption at an average rate of $0.401 per kWh. Each IOU's share of the weighted average is proportional to its share of residential customers (both bundled and unbundled) in CY 2023, as published by the U.S. Energy Information Administration (EIA) (https://www.eia.gov/electricity/sales_revenue_price/).

6. The LADWP bill estimated for this analysis is $130.15 per month, based on 500 kWh of energy consumption at an average rate of 26.03 cents per kWh. See "R-1A Standard Residential Rate," LADWP, accessed July 11, 2025. The average SMUD monthly bill estimated for this analysis is $147.75, based on 750 kWh of energy consumption at an average rate of 19.70 cents per kWh. See "CEO and GM's Report and Recommendation on Rates and Services" (March 20, 2025).

Endnotes

7. For the IOUs, each state policy or baseline category's share of the customer bill (i.e., the percentages shown in the summary visual) is proportional to the sum of the revenue requirements related to that category relative to the IOU's total revenue requirement. However, a category's bill share will differ from its revenue requirement share to the extent different revenue requirements are recouped at different rates across different customer cohorts. For example, IOUs do not recoup generation-related revenue requirements from their "non-bundled" customers who belong to Community Choice Aggregators (CCAs), since CCAs procure energy separately. The bill shares for each category reflect the distribution of revenue requirements collected from bundled non-CARE residential customers.

For the POUs, each baseline category's share of the total bill stack was initially set proportional to its share of total utility expenditures based on the most recent financial data available (see Note 4). For expenditure categories that could not be assigned to single categories (e.g., depreciation and amortization), expenditures were allocated across Generation, RPS, and Delivery in proportion to each category's share of the utility's total utility plant assets. Baseline categories were then modified to the extent they included state or local policy impacts. The methodology for allocating POU expenditures to the state and local policies is explained at Note 12 (for wildfire mitigation), Note 19 (for the solar cost shift), Note 26 (for low-income assistance), Note 27 (for renewable energy), and Note 30 (for other state and local policies). The category percentages for bill stack categories for the POU bar represents the customer-weighted average percentage of the LADWP and SMUD bills. LADWP's residential customer population represented 70.9% of the total residential customer base across both LADWP and SMUD as of 2023. See EIA, Form 861 (2023).

8. EIA, Form 861 (2023). Over the 2018 – 2020 period, the average LADWP rate was 19.64 cents per kWh. Over the same period, the weighted average IOU rate was 19.87 cents per kWh.

9. EIA (2023).

10. Reprinted from LAO (2025).

11. Per-customer or per-MWh delivery system costs for electric utilities are influenced by several factors besides total circuit-mileage relative to sales volume. For example, because transmission wires may generally be more expensive to maintain, systems with higher relative shares of transmission mileage will impose higher delivery costs on customers. The terrain or geography that the system's wires traverse will also influence costs, as will the proportion of the system that has been undergrounded.

For Figure 5, total retail sales for the IOUs, LADWP, and SMUD are from EIA, Form 861 (2023). Transmission and distribution circuit-miles across the three IOUs are based on "Company Profile," Pacific Gas and Electric (https://www.pge.com/en/about/company-information/company-profile.html); "About SCE," Southern California Edison (https://www.sce.com/about-sce); "SDG&E 2024-2027 Budget Proposal," San Diego Gas and Electric (https://www.sdge.com/sites/default/files/documents/GRC_Overview2.pdf). All sources were last accessed on July 12, 2025. Transmission and distribution circuit-miles for LADWP are based on its 2024 Wildfire Mitigation Plan Update. For SMUD, circuit-miles are based on its 2023 – 2025 Wildfire Mitigation Plan.

Endnotes

12. Previous reviews of electricity costs in California suggest that wildfire risk mitigation activities impose larger costs on IOUs than POUs. LAO (2025); Madalsa Singh, Alison Ong, and Rayan Sud, "Wires and fire: Wildfire investment and network cost differences across California's power providers," The Electricity Journal (2025); Meredith Fowlie, "Not All of California's Electricity Prices Are High," Energy Institute at Haas (July 2023).

However, neither these studies nor LADWP's or SMUD's budget data or rate studies establish the share of these POUs' expenditures that are related to wildfire mitigation. For this analysis, POU wildfire cost shares were estimated based on the relationship between IOU wildfire mitigation spending and the percentage of the IOUs' total circuit-mileage that was both overhead and located within a HFTD as of 2019 (i.e., "at risk"), when utilities were first required to submit WMPs. For the IOUs, 22% of total circuit-mileage fit these criteria, and the wildfire mitigation comprised 36% of total delivery costs (i.e., baseline delivery plus wildfire mitigation). Because 6.3% of LADWP's circuit-mileage fit these criteria, 10.5% of LADWP's Delivery cost was allocated to wildfire mitigation (i.e., 0.063 * (0.36 / 0.22). Similarly, as 1.3% of SMUD's circuit-mileage fit these criteria, SMUD wildfire mitigation costs were estimated at 2.2% of total Delivery costs (i.e., 0.013 * (0.36 / 0.22)).

13. Wildfire Mitigation Plans for for PG&E, SCE, SDG&E, LADWP and SMUD (2019).

14. Several analyses of NEM impacts in California estimate the size of the solar cost shift for the IOUs. The IOUs estimate this impact on an annual basis and submit their modeling to the CPUC for its SB 695 report. The CPUC's Public Advocate's Office (PAO) estimated a total residential solar cost shift across the three IOUs of $6.7 billion in 2024 (see PAO, "Rooftop Solar Incentive to Cost Customers Without Solar an Estimated $8.5 Billion by the End of 2024" (August 2024)). Severin Borenstein of the University of California, Berkeley estimated a total residential cost shift of roughly $4 billion in 2024 (see Severin Borenstein, "Guess What Didn't Kill Rooftop Solar," Energy Institute at Haas (January 27, 2025)). Many environmental advocacy organizations have also highlighted the solar cost shift in recent years (see Natural Resources Defense Council, "A Four Point Guide to California's Net Metering Update" (November 18, 2021); Sierra Club, "Updating rooftop solar policy to achieve climate goals and benefit Californians of all income levels" (November 1, 2021)).

Additionally, in 2020, a SMUD study estimated its own cost shift at roughly $24 million. "Value of Solar and Solar + Storage Study," Energy + Environmental Economics (E3) (September 2020)).

15. For NEM 1.0 customers of IOUs, exports are credited at the full retail rate. For NEM 2.0 customers, exports receive the full retail rate less certain non-bypassable charges (NBCs), which are worth roughly 2 – 3 cents per kWh. According to the PAO (2024), IOUs' avoided cost per kWh of exported energy as of April 2024 was roughly 5.7 cents, but NEM customers were paid 30 – 40 cents per kWh for these exports. All customers who installed rooftop solar after April 2023 are credited for exports according to the Net Billing Tariff (NBT). Because NBT customers are paid based on the CPUC's estimate of the avoided costs associated with their exports, the NBT customer cost shift is less than the cost shift for NEM customers; however, it remains significant.

Endnotes

16. EIA, Form 861 (2023). EIA data shows net energy metering capacity (MW) and total residential retail sales (MWh) for each utility as of 2023. Estimated total annual generation (MWh) from rooftop solar for each utility was estimated by multiplying rooftop capacity by the number of hours in a year (8,760) at an average capacity factor of 17.12%. See Pacific Gas & Electric Company, Advice Letter 6967-E (June 22, 2023).

On-site consumption of rooftop solar energy is not included in a utility's total sales in Form 861 data. Therefore, because roughly half of rooftop solar generation is exported (see PAO; Borenstein), estimated total residential energy consumption was set equal to the sum of each utility's total retail sales and the onsite consumption share of rooftop solar MWh.

17. As of April 2025, IOUs generally did not collect fixed fees from residential customers, though the IOUs do set minimum bill amounts of roughly $10 - $12 per month. As a result, NEM customers who export more energy than they import will pay this minimum amount, though most solar customers incur net volumetric charges exceeding this bill minimum.

For LADWP, residential customers owe a tiered Power Access Charge (PAC) that is tied to their overall energy consumption. Households that consume fewer than 350 kWh (coastal Zone 1) or 500 kWh (inland Zone 2) pay a monthly fee of $2.30, while customers who exceed these thresholds pay $7.90 or $22.70 (if consumption exceeds 1,050 kWh or 1,500 kWh, depending on Zone). For SMUD, residential customers typically pay a System Infrastructure Fixed Charge (SIFC) of $25.50 per month.

18. The average NEM subsidy (cents per kWh) is equal to the NEM compensation rate (per kWh) less the avoided cost (per kWh). For purposes of calculating an implicit NEM subsidy, the average NEM compensation rate excludes NBT customers of IOUs (see Note 15) and the "Solar and Storage Rate" (SSR) customers of SMUD. Therefore, the estimated "NEM Subsidy" is roughly equal to the utility's average retail rate less the avoided cost for rooftop solar for that utility.

The avoided cost for each IOU was based on the per-kWh avoided costs reported in PAO (2024). Avoided cost estimates for SMUD and LADWP are detailed at Note 19. The avoided cost per kWh from rooftop solar generation relates mostly to reductions in generation service expenses that utilities would otherwise incur. Since energy procurement markets are competitive, these expenses will be similar across utilities, and therefore, avoided costs are very similar across utilities within any given year as well. See E3 (2020); CPUC, "2024 Distributed Energy Resources Avoided Cost Calculator Documentation," October 2, 2024.

19. Total solar cost shifts for each IOU (i.e., total revenues shifted across all residential customers) are based on IOU estimates made as of year-end 2024. These total cost shift estimates were converted by the IOUs into per-bill impacts, and these estimates were submitted to the CPUC for its upcoming SB 695 report (July 2025). The per-bill impacts reported by IOUs incorporate the cost shifts attributable to both residential and non-residential rooftop solar generation. *(Note 19 continued next page.)*

Endnotes

(Note 19 continued from previous page.) For the POUs, estimates are based on the modeling framework published by PAO (2024). Estimation of a utility's total cost shift using this model is based on the annual rooftop solar generation from both residential and non-residential installations (a function of total installed solar capacity (MW) and average solar capacity factor); the average "avoided rate" (per kWh) earned by solar customers when solar energy is consumed on-site; the average export price (per kWh) paid to solar customers for solar energy exports; and the average avoided cost (per kWh) saved by the utility. For both POUs, cost shifts from residential and non-residential panels were allocated across all customer classes equally.

For SMUD, total rooftop solar capacity for 2024 was based on "2024 Emission and zero-carbon program information," SMUD, accessed July 11, 2025 (https://www.smud.org/Corporate/Environmental-Leadership/2030-Clean-Energy-Vision/Emission-and-zero-carbon-program-information/2024-Emission-and-zero-carbon-program-information). The average avoided rate (for on-site consumption of rooftop solar) in 2024 (14.8 cents per kWh) was estimated based on E3 (September 2020)); the average avoided rate for 2020 estimated in this report was adjusted in proportion to the change in the average SMUD systemwide price ($ per kWh) over the 2020 – 2024 period. SMUD's estimated avoided cost for 2024 (5.9 cents) was based on the average avoided cost across all IOUs estimated by PAO (2024). Our SMUD estimate further incorporates the decline in the export price paid for solar energy exported from panels installed after March 2022 (i.e., SSR customers). While export prices for SMUD's NEM customers are equal to the avoided rate, for SSR customers, the export price is fixed at 7.4 cents per kWh.

For LADWP, total rooftop solar capacity for 2024 was based on LADWP, "Renewable Portfolio Standard and Clean Energy Resources Planning Monthly Report" (January 2025). The average avoided rate for LADWP's residential customers was set equal to the volumetric rate component for standard residential customers residing in Zone 1 and consuming 500 kWh of energy (22.32 cents per kWh). For commercial customers, volumetric rates vary widely across customers and rate schedules; the estimated avoided rate (19.0 cents) was based on the median volumetric "energy charge" rate component and the standard commercial adjustment factors. LADWP's avoided cost per kWh was set equal to PAO's estimate of SCE avoided costs (5.5 cents per kWh).

20. CPUC, "California Alternate Rates for Energy (CARE)," accessed June 2025 (https://www.cpuc.ca.gov/consumer-support/financial-assistancesavings-and-discounts/california-alternate-rates-for-energy).

21. For LADWP, the EZ-SAVE program is offered to households earning less than 200% FPL, and the Lifeline program is offered to seniors and persons with disabilities. For SMUD, the EAPR program is offered to households earning less than 200% FPL, and the MED program is offered to customers with eligible medical equipment.

22. IOU CARE customer counts are based on monthly reports on the CARE, FERA, and Energy Savings Assistance (ESA) program to the CPUC.

23. LADWP's EZ-SAVE customer count is an estimated 151,000 (Diane Gohl, "Customer Assistance Programs in Los Angeles," The Water Research Foundation) and Lifeline program participation was based on program expenditures data published in NREL, "Low-Income Energy Bill Equity and Affordability." For SMUD, EAPR and MED account for 89,956 customers (SMUD 2025 Budget).

24. The average CARE bill discount for the IOUs is based on their most recent electric rate advisory in effect as of April 2025.

Endnotes

25. For LADWP, EZ-SAVE and Lifeline customers receive discounts of $16.34 and $35.42, respectively, every other month (6 - 14% of the LADWP bill). For SMUD, EAPR customers earn discounts depending on their poverty level, while MED customers receive a discount of $15 per month. On average, these monthly discounts are worth $34.46 (or 23% of the typical SMUD bill).

26. To estimate EZ-SAVE's and Lifeline's share of the typical residential LADWP bill, total program expenditures were estimated by multiplying each program's estimated customer count by the program's average monthly benefit; total program expenses were then divided by total LADWP operating expenses (see LADWP FY 2024 audited financial statements). EAPR's and MED's share of the typical SMUD bill was calculated by dividing the subsidies reported for these programs by total operating expenses (see SMUD 2025 Budget).

27. SMUD estimated in its 2024 Rate Study that each additional kWh of generation would cost 9.72 cents, of which 1.93 cents (or 19.9%) would be attributable to RPS compliance. However, SMUD does not report RPS's share of total existing generation costs. SMUD also reports total costs for its Zero Carbon program but does not report the above-market share of these costs. LADWP similarly does not report above-market RPS costs. RPS above-market costs for LADWP and SMUD were estimated based on the Blue Sky Consulting Group estimates of IOU RPS above-market costs; specifically, these costs constitute roughly 24.5% of total generation costs. Since total generation costs account for a larger share of LADWP and SMUD costs than IOU costs, the estimated RPS bill component is larger for LADWP and SMUD.

28. For this analysis, the value of GHG allowances distributed to utilities is treated as an offset to the RPS above-market cost impact. For IOUs, over 80% of auction proceeds are devoted to funding the climate credit, which reduces the typical customer bill by roughly 5%. See CPUC, "California Climate Credit," accessed June 2025 (https://www.cpuc.ca.gov/climatecredit). Climate credits are set at a fixed per-household amount (i.e., do not vary with energy consumption). For POUs, the Cap-and-Trade offset of the typical customer bill was based on the values of the POUs' allowances as a percentage of total utility costs. See California Air Resources Board (CARB), "Summary of 2013-2023 Electrical Distribution Utility Use of Allocated Allowance Value," accessed July 28, 2025 (https://ww2.arb.ca.gov/our-work/programs/cap-and-trade-program/cap-and-trade-program-data).

29. Other state programs required for the IOUs include the Family Electric Rate Assistance Program (FERA), which offers bill discounts to families with incomes above CARE program limits but below 250% of the federal poverty line; costs of extending the operation of the Diablo Canyon nuclear power plant until 2030; transportation electrification programs, which pay for electric vehicle (EV) infrastructure; demand response programs, which offer incentives to IOU customers to reduce electricity consumption during periods of high demand; and energy efficiency programs that assist qualifying customers in reducing energy consumption (e.g., energy audits, weatherization, energy-efficient appliances). IOUs also incur the costs of unpaid customer balances ("Arrearages"), debt forgiveness programs, and nuclear decommissioning costs.

30. For SMUD, program expenditures were assigned to the Other State and Local Policy category if they were designated as "public good" expenses in the SMUD 2025 Budget. Additionally, expenses related to the "Advanced Energy Solutions" program (within SMUD's Zero Carbon Energy Solutions budget) were assigned to this category. For LADWP, the "Uncollectable accounts" line item was designated an Other Local Policy category.

About the Authors

The Blue Sky Consulting Group specializes in complex quantitative analyses of state and local public policy, fiscal, and economic issues. This report was prepared by Matthew Newman and James Paci.

Matthew Newman is a joint founder of the Blue Sky Consulting Group. Mr. Newman has led numerous consulting engagements since cofounding the firm, including development of complex quantitative analyses and forecasting models for the State of California, Los Angeles County, and the Cities of Oakland, Los Angeles and San Francisco. Previously, Mr. Newman was the Executive Director of the California Institute for County Government, a nonpartisan public policy research institute dedicated to improving decision making at the local level through research and analysis. He also worked for LECG, an international economics and public policy consulting firm and California's Legislative Analyst's Office. Mr. Newman is a Phi Beta Kappa, magna cum laude graduate of the College Honors program at the University of California at Los Angeles and holds a Master of Public Policy degree from Harvard University's Kennedy School of Government.

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