



Rooftop Solar & Storage

An Essential Solution to Clean Air &
Energy Affordability

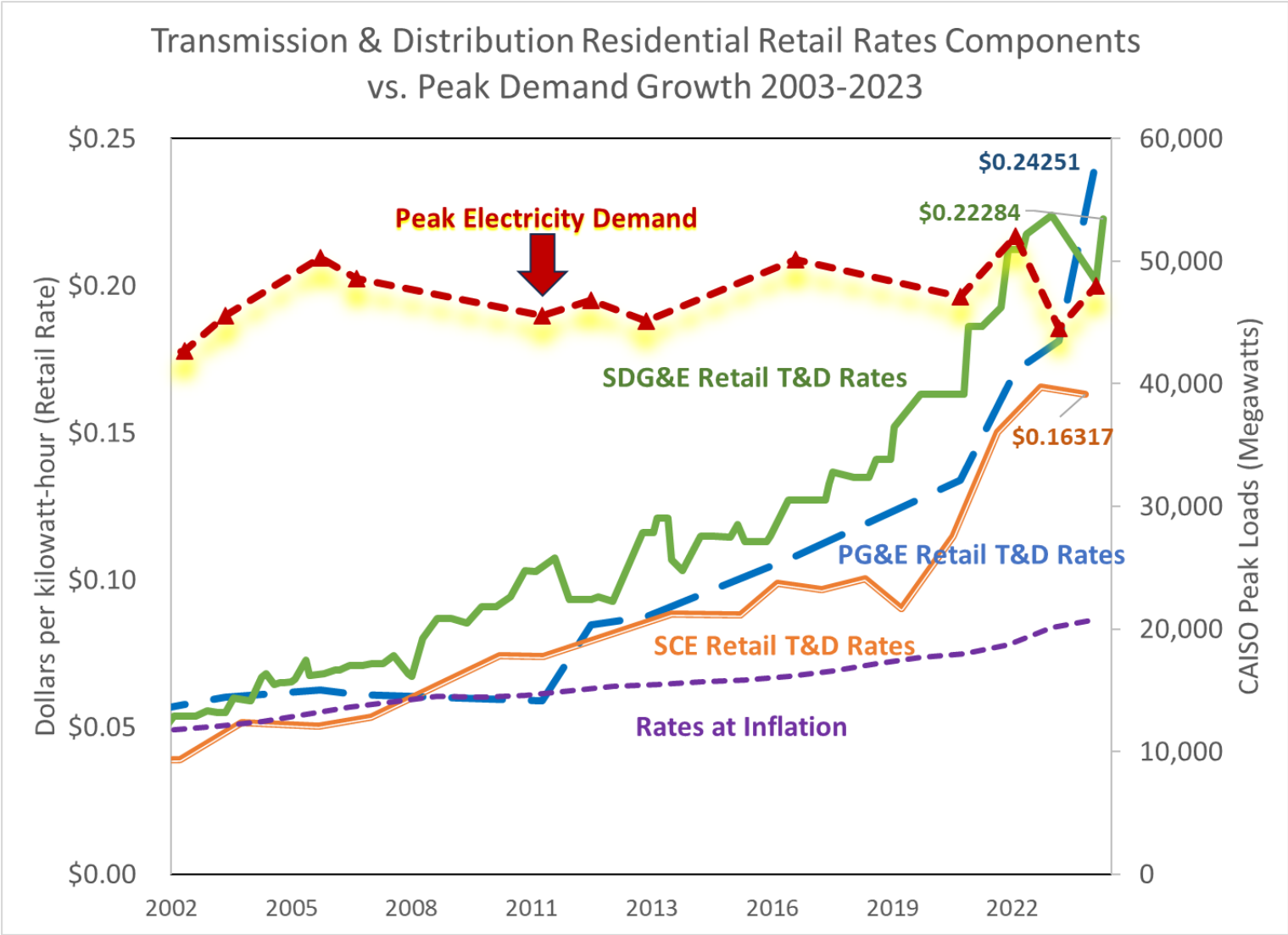
Dr. Richard J. McCann, MPP, Ph.D.

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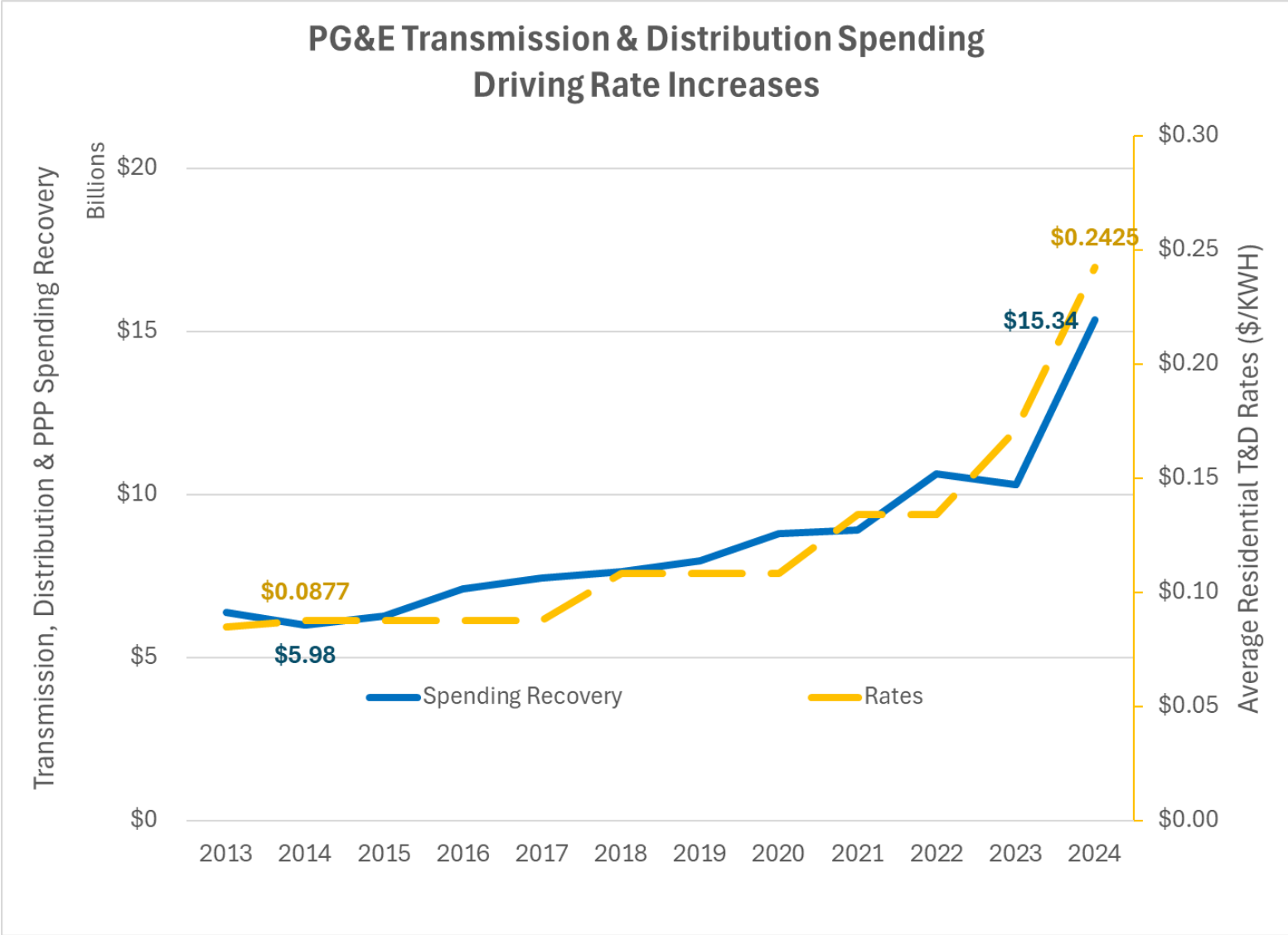


Demand Has Been Flat For Years, Yet T&D Spending Is Up 300%



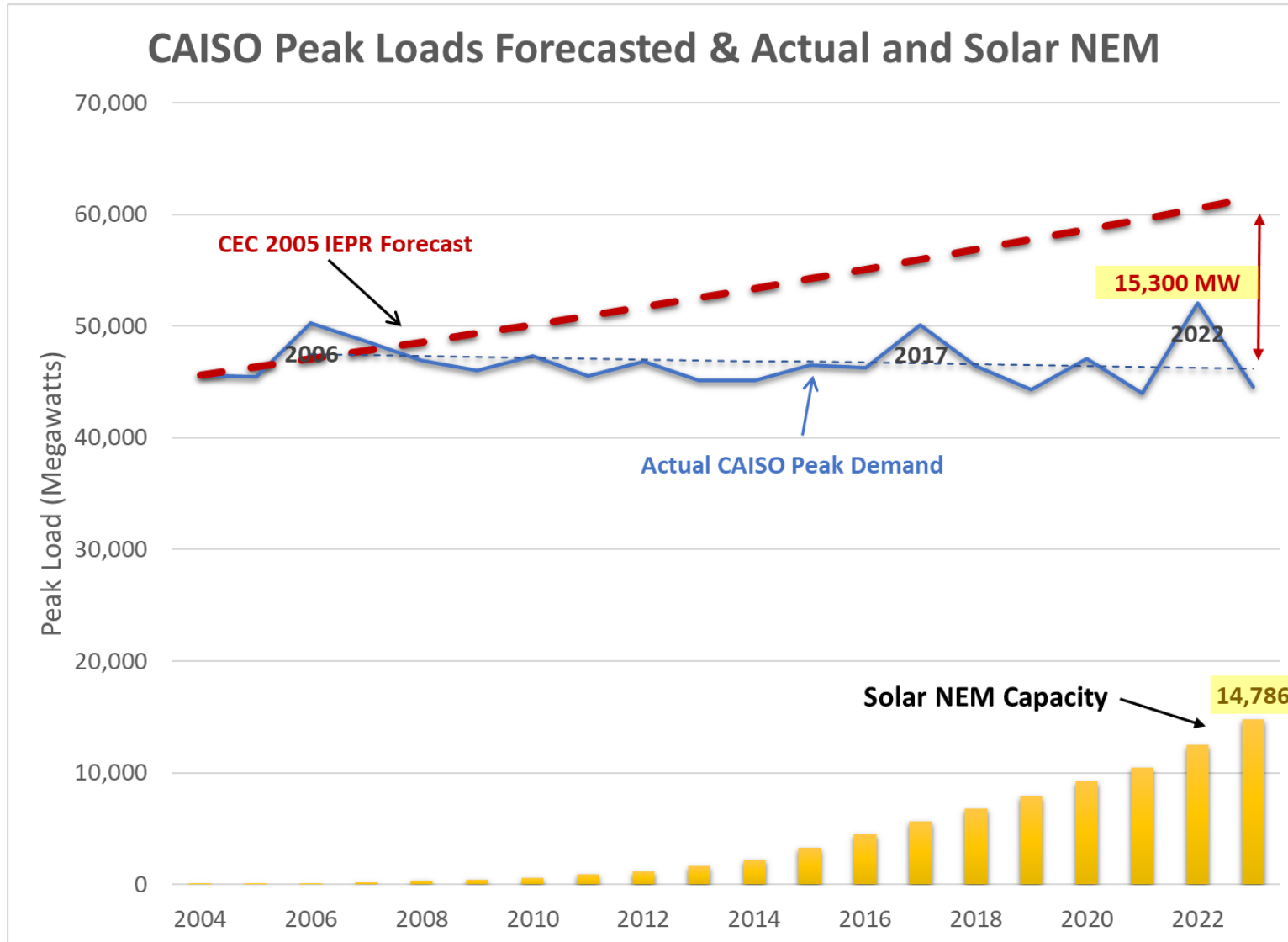
Source: Utility Advice Letters; CAISO website

Rates Have Increased Because Spending Has Increased



Source: PG&E Annual Electric True-up Advice Letters
 ("Spending Recovery" = Collections from ratepayers for utility spending from current and previous years, a.k.a. revenue requirements)

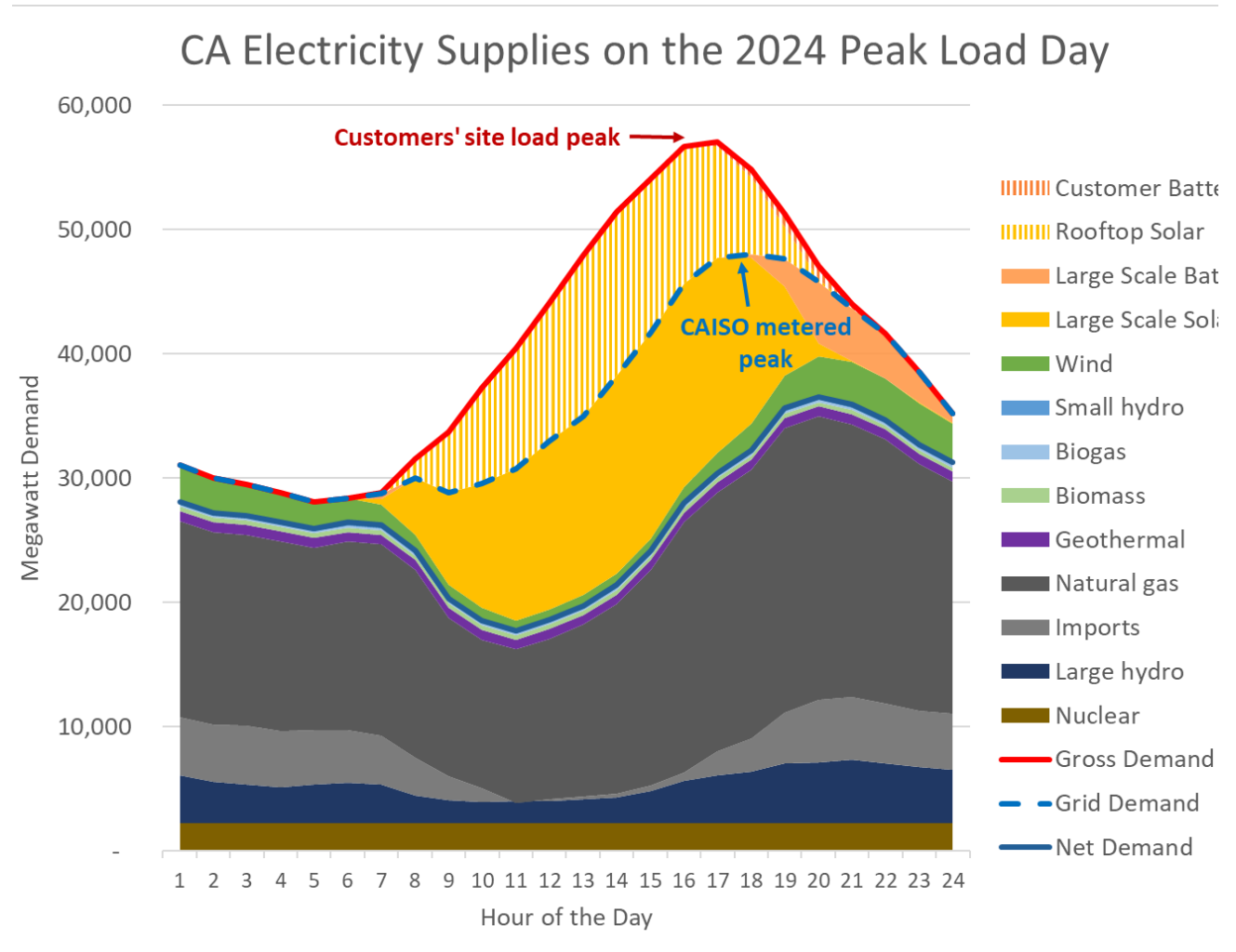
Rooftop Solar Has Helped Keep Peak Electricity Demand Flat for 20 Years



Energy planners expected peak loads to increase by 15,000 MW

Instead, consumers covered load growth with 15,000 MW of solar

NEM Customers Serve Nearly 20% of Peak Demand



Source: CAISO website; California Distributed Generation Statistics; PV Watts

Cost Shift Isn't the Explanation for High Rates

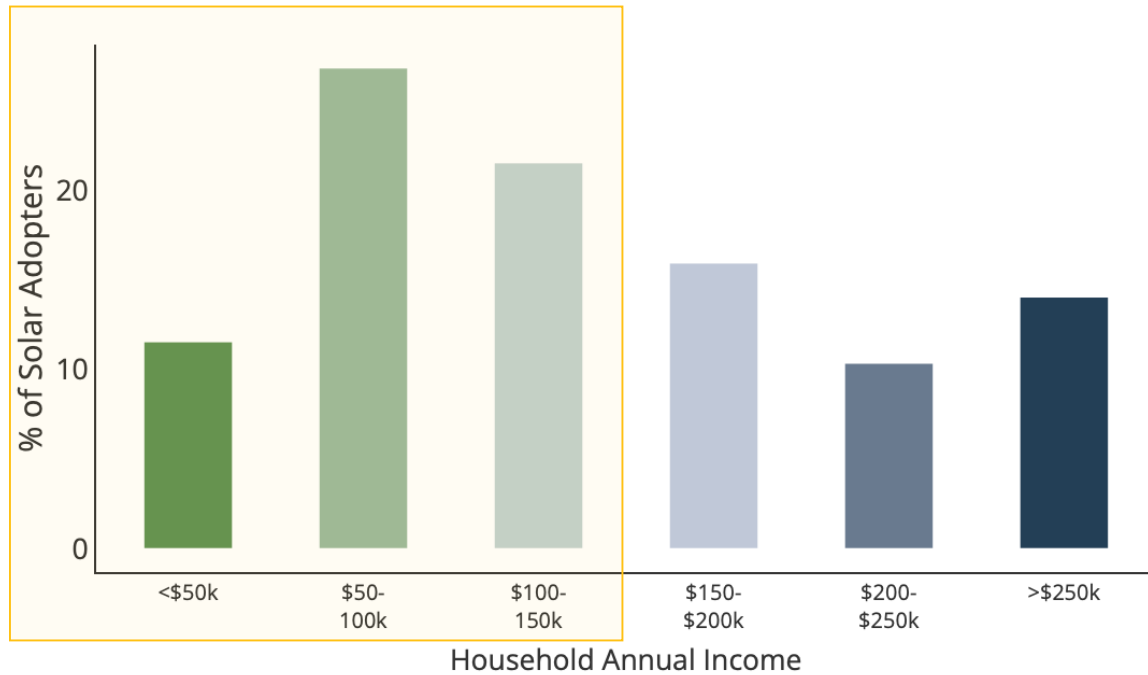
- Utility spending is driving rate increases
 - Even programmatic and policy spending are a small proportion
- Customers investing in rooftop solar and energy efficiency are saving ratepayers money
 - The state's loading order emphasizes customer-centered solutions
- Important question is how do we control utility spending effectively?

Thank You

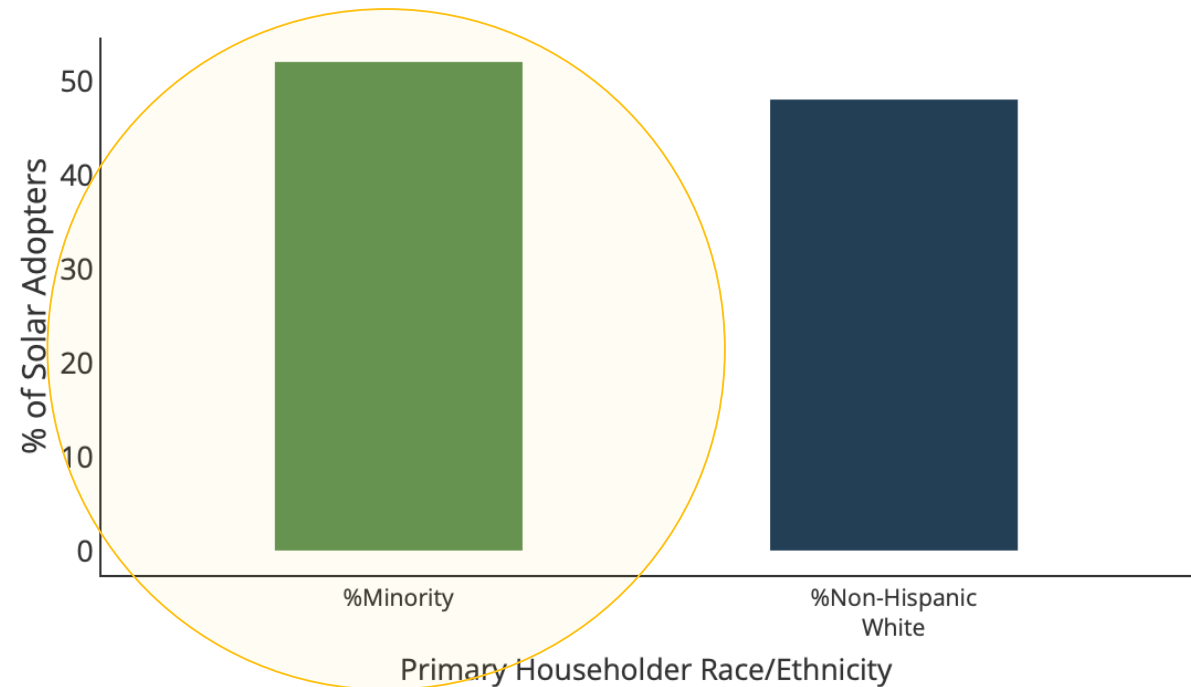
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60% of 2023 Solar Users Low- and Middle-Income; 52% People of Color

California Solar Adopter Income Distribution



California Solar Adopter Race Distribution



Source: Lawrence Berkeley National Labs Solar Demographics

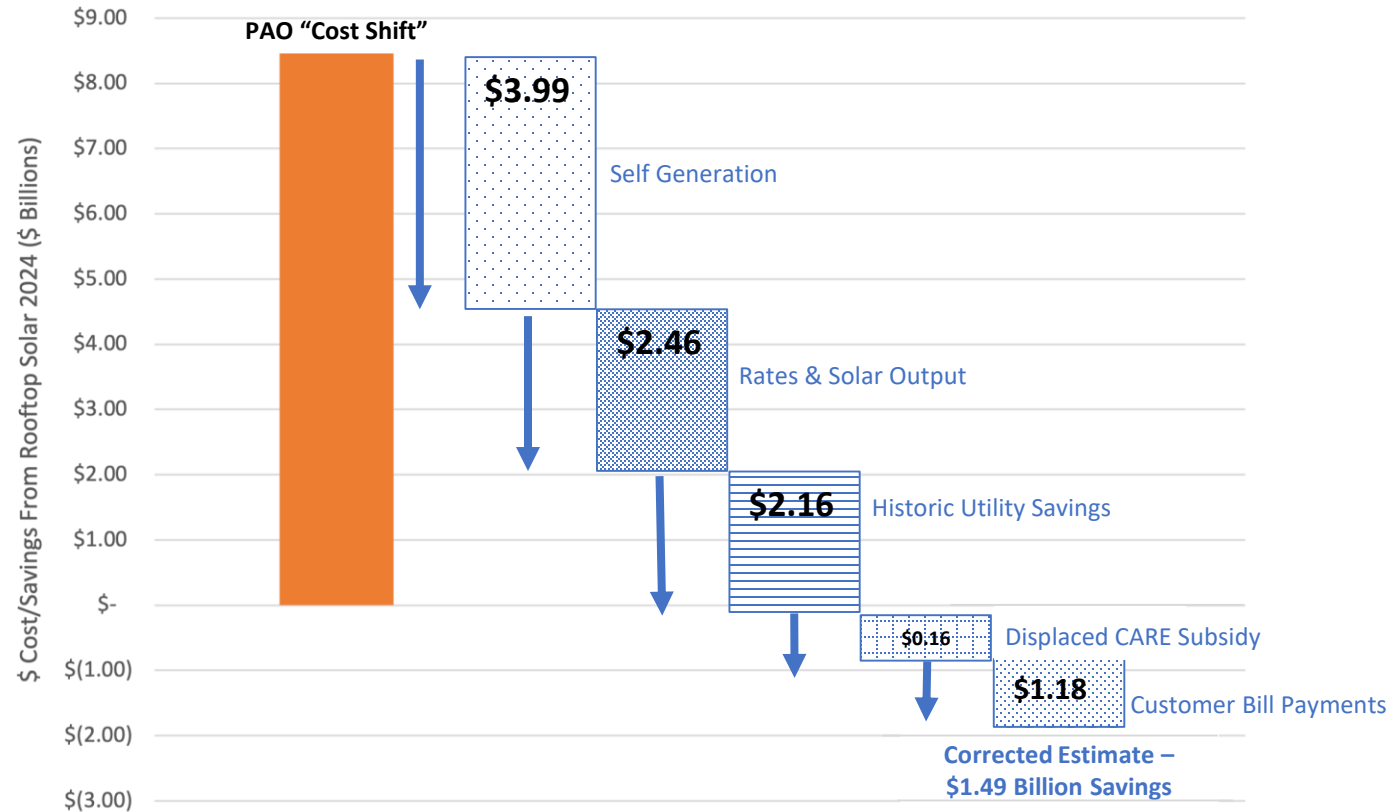
Rooftop Solar Saves Everyone Money

Correcting their skewed analysis shows that rooftop solar produced a net savings to *all ratepayers* of \$1.5 billion in 2024.

- Self generation reduces the cost by half
- Ignored CARE customers, applied too high of solar output, and used too high of retail rates
- Ignored historic savings over the last two decades

It scapegoats solar to deflect attention from the true cause of rate increases: utility spending.

**Corrections to PAO "Cost Shift" Estimate
2024 \$ Billions**



Source: M.Cubed workpapers contain citations

An Economist's Perspective: The Problem Is Out of Control Utility Spending



- **Richard McCann is an economist with M.Cubed Consulting. He has served as an expert witness in rate cases at the CPUC and other regulatory agencies for 30 years.**
- **He holds a Ph.D. and M.S. in Agricultural and Resource Economics from the University of California, Berkeley, and an M.P.P. from the University of Michigan.**
- **Dr. McCann manages a blog at mcubedecon.com.**

Example List of Recent M.Cubed California Clients

Governments & Tribes

Bay Area Regional Energy Network
California State Attorney General
CalEPA
CARB
CEC
CPUC
Carpinteria Valley Water District
Clean Power San Francisco
Delta Protection Commission
Delta Stewardship Council
Electricity Oversight Board
Irvine Ranch Water District
Placer County
Round Valley Indian Tribes
San Luis Obispo County
San Mateo County
Santa Clara County
Semitropic Water Storage District

Sonoma County

Sonoma County Water Agency
State Water Resources Control Board
United Conservation Water District
Yolo County

CCAs

California Choice Energy Authority
(Lancaster)
California Community Choice Assoc.
Clean Power Alliance (Los Angeles)
Silicon Valley Clean Energy
Sonoma Clean Power Authority
Valley Clean Energy Alliance

NGOs

Center for Biological Diversity
Environmental Defense Fund
Sierra Club

Business/Trade Associations

Agricultural Energy Consumers Association
California Energy Storage Association
California Farm Bureau Federation
California Solar and Storage Association
California Water Service Company
Small Business Utilities Association
Western Manufactured Housing Communities Assoc.