Distributed Solar & Storage:

The Energy Revolution Begins (or Slows) With Us

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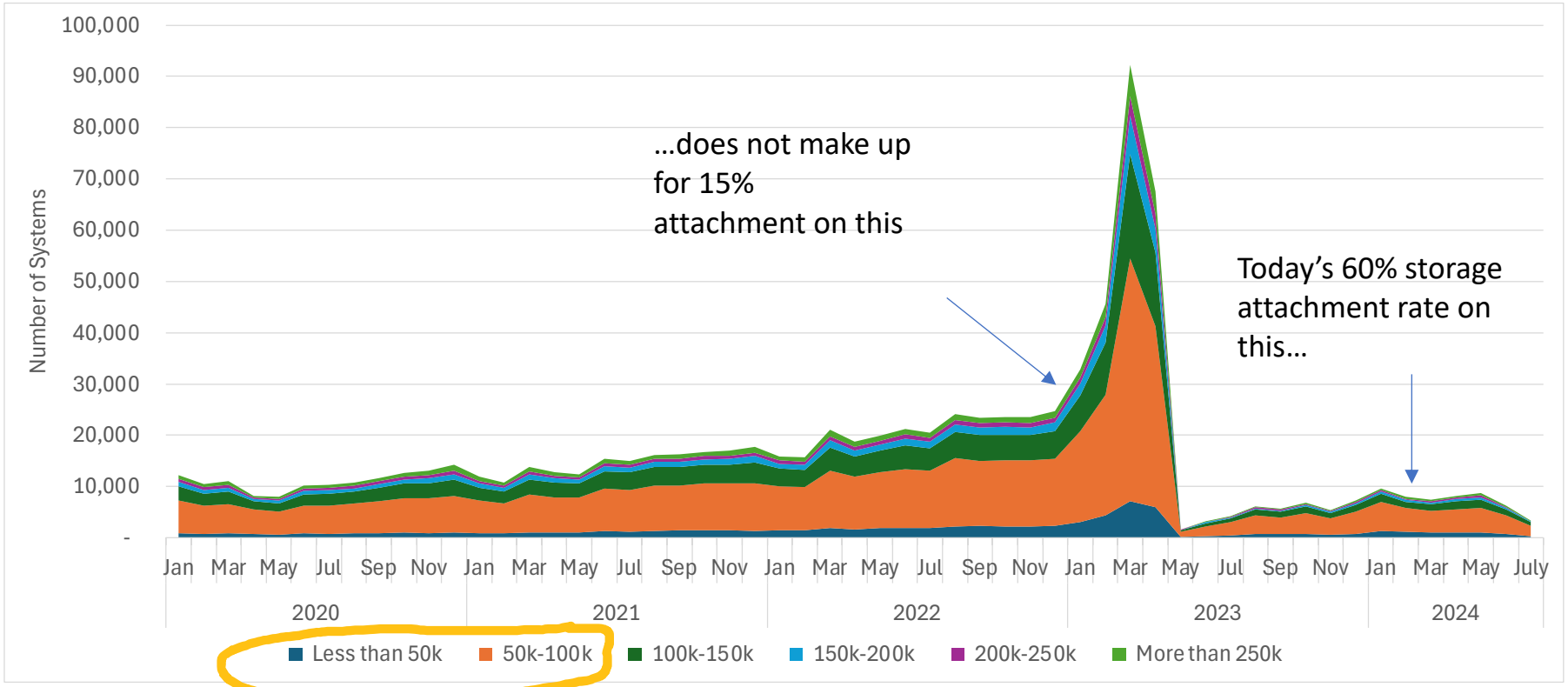
What's Happening in California?



Source: CALSSA analysis of DG Stats, Census Data

California's Anti-Rooftop Policy Decisions 2022-2024

2022

- **NEM "3.0"** – 3¢ exports
- **AB 2143** - public works/prevailing wage for all commercial installs

2023

- **VNEM/NEMA** – no self-consumption; Governor veto SB 1374

2024

- **High Fixed Charges** - $24, uncapped
- **Solar Tax** - ongoing threat
- **Limits on Storage Workforce** - contractors blocked from installing batteries – active litigation
- **Unfunded Storage Incentives**
- **Retroactive Changes to NEM** – ongoing threat

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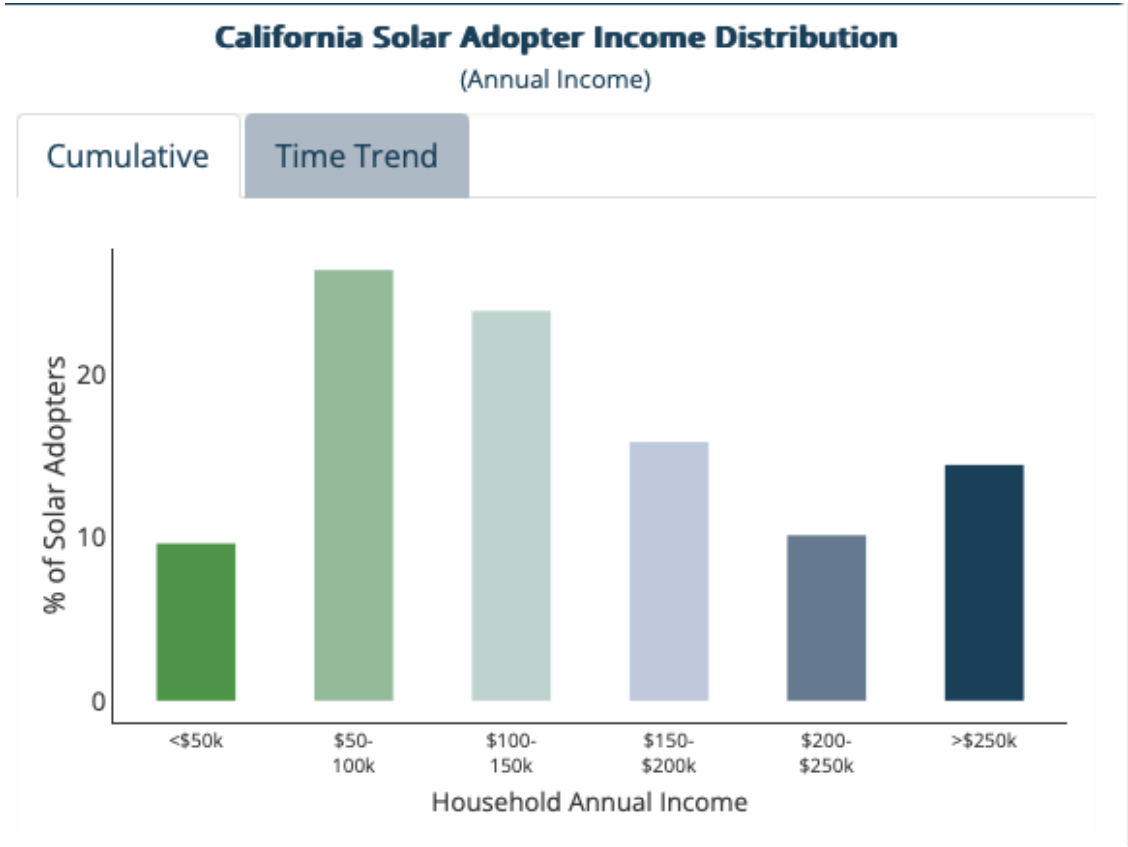
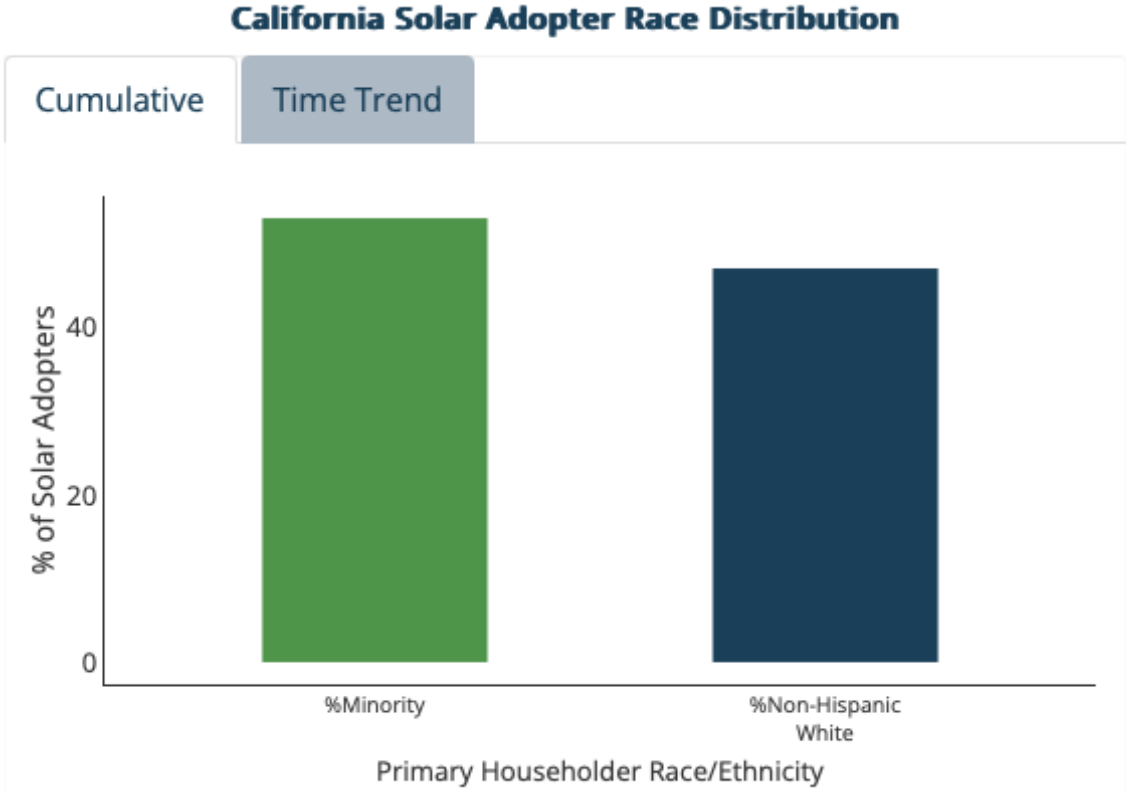
Damage Done In the Name of the “Cost Shift” Myth

- At the core of the utility’s “cost shift” myth is the idea that nearly all grid costs are “fixed”.
- Therefore, as more people go solar, these immutable “fixed costs” are paid for by fewer people who don’t have solar.
- Pouring fuel on the fire, they also falsely claim that solar users are rich and non-solar users are poor.
- But utility costs are anything but ”fixed”. Over the past 20 years, despite flat electricity usage, California utilities have increased T&D spending by more than 300%.

But, 60% of Solar Users Are Low- and Middle-Income, 53% Are People of Color





LBNL Solar Demographics

- Utilities claim rooftop solar is only for “the rich” and that the market lacks diversity, but the facts don’t match the rhetoric.
- These charts shows *all* California single-family solar adopters from 2010-2022. More recent years show even greater penetration in low-income and diverse communities. If LBNL were to include multi-family solar projects and commercial installations in disadvantaged communities, the data would show an even higher skew toward lower income and minority communities.

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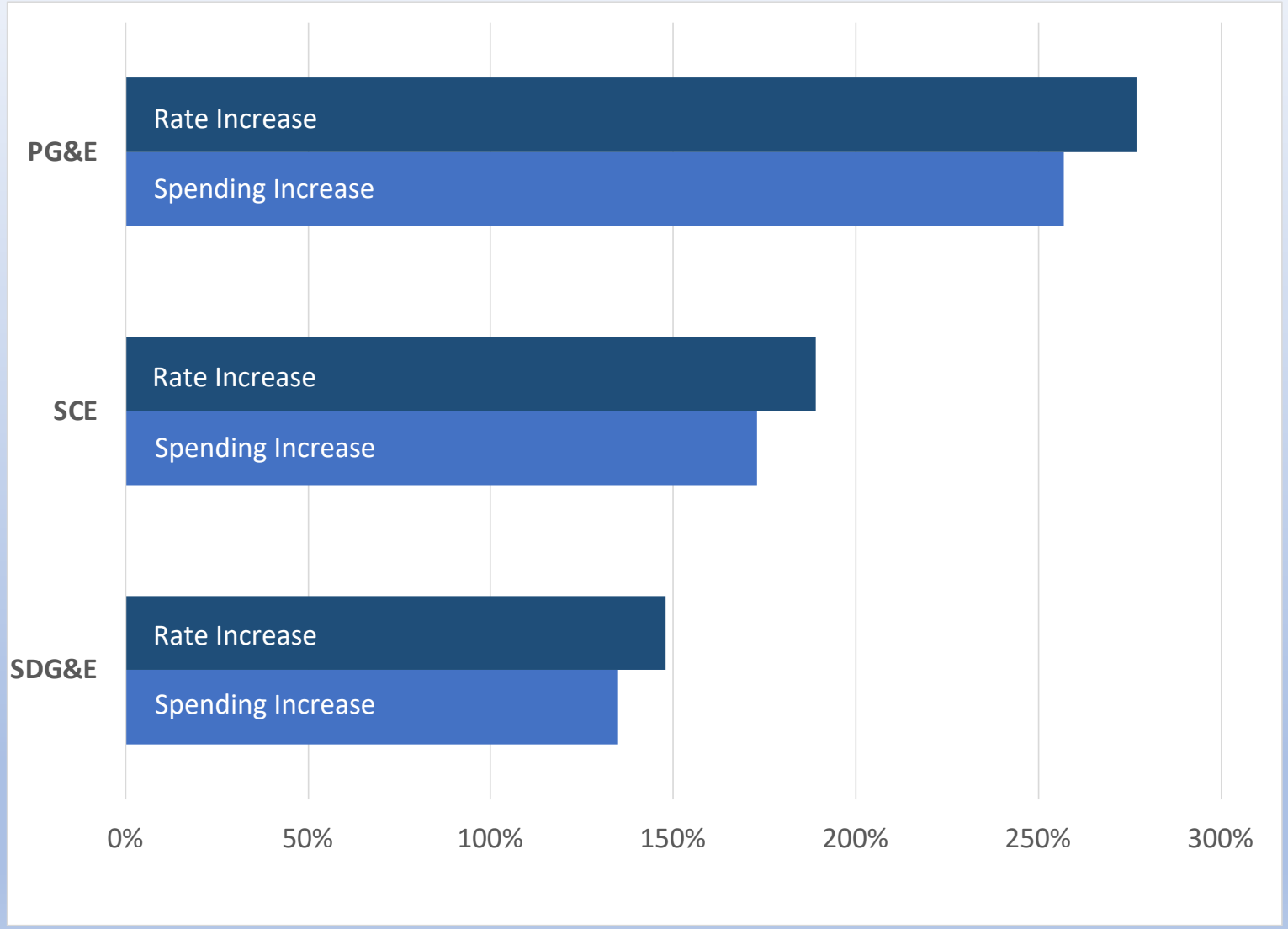
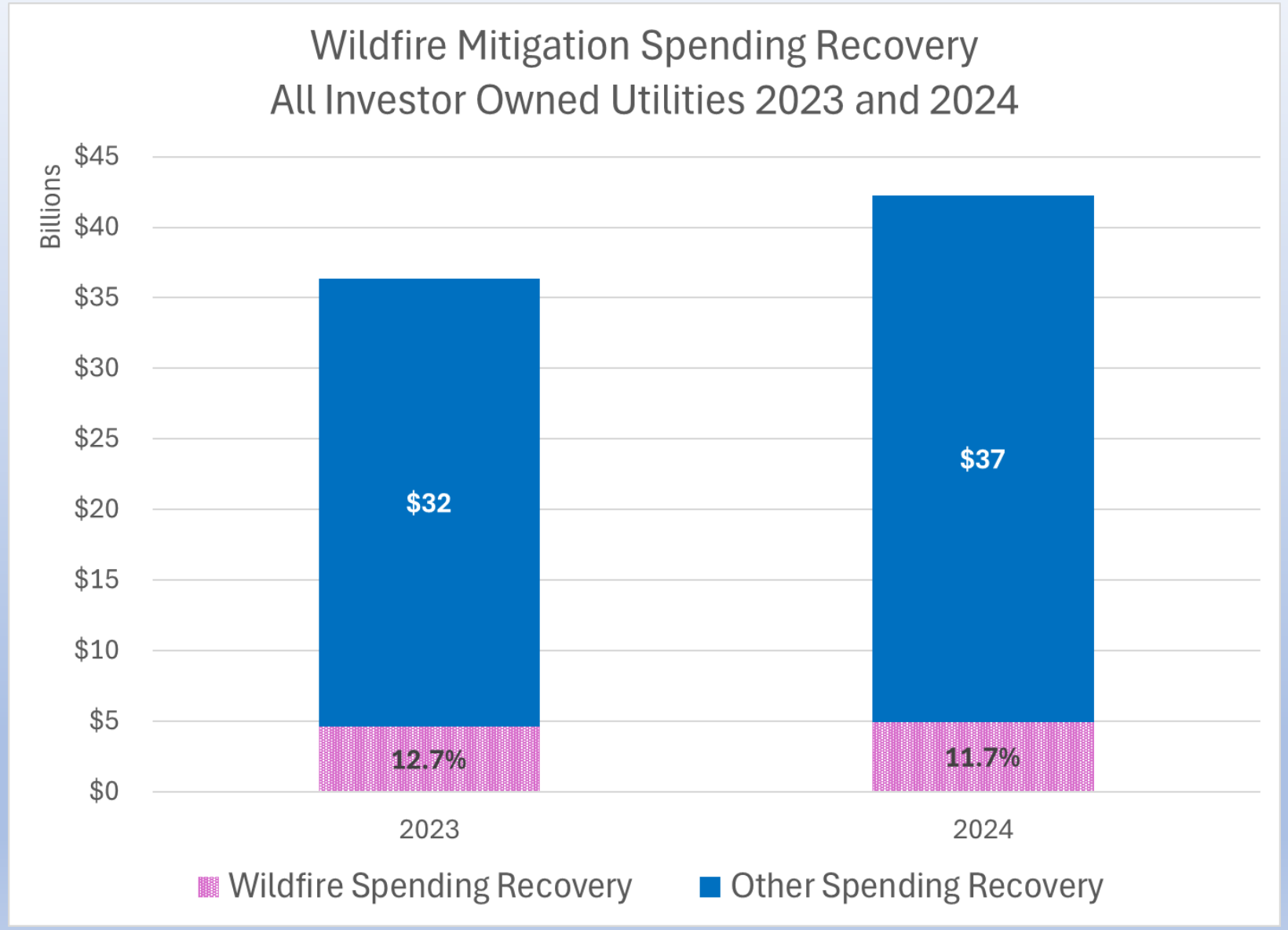
And, nearly all rate increases are due to spending increases, not "departing load"

- 91%-93% of the utilities' T&D rate increases are the direct result of their spending increases.
- The rest is due to customers reducing their usage through a variety of approaches including turning the lights off to save money.
- Costs aren't "fixed" if they are rising 300%.



Source: Richard McCann, M.Cubed Consulting. PG&E and SCE timeframe is 2014-2024. SDG&E timeframe is 2018-2024 because the utility did not previously report T&D spending separately.

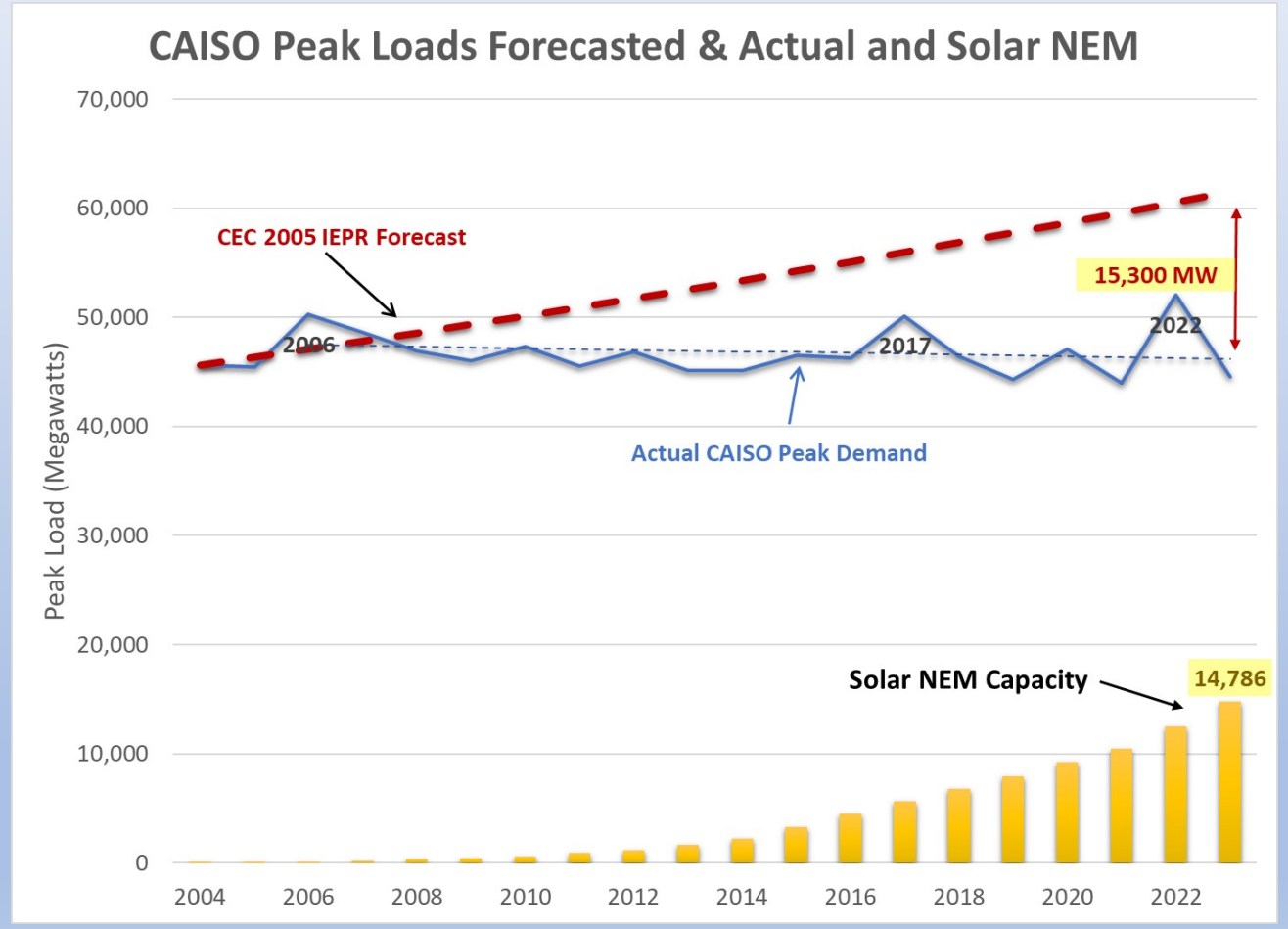
Wildfire mitigation costs are not the main reason for spending increases



Source: Richard McCann, M.Cubed Consulting

Rooftop Solar Has Kept Peak Electricity Demand Flat for Nearly 20 Years

- Utilities complain about solar as "departing load," as if the size of the pie never changes and solar customers only take away slices. But in reality, rooftop solar has kept the pie from growing saving everyone money.
- Defying to official projections, California's peak electricity loads have remained flat. That's because the growth in rooftop solar covered increased electricity usage.
- Rooftop solar enabled utilities to spend less money, but instead they spent more. The problem is not a shift of costs between customers; it is utilities being motivated to spend money even when they don't need to.

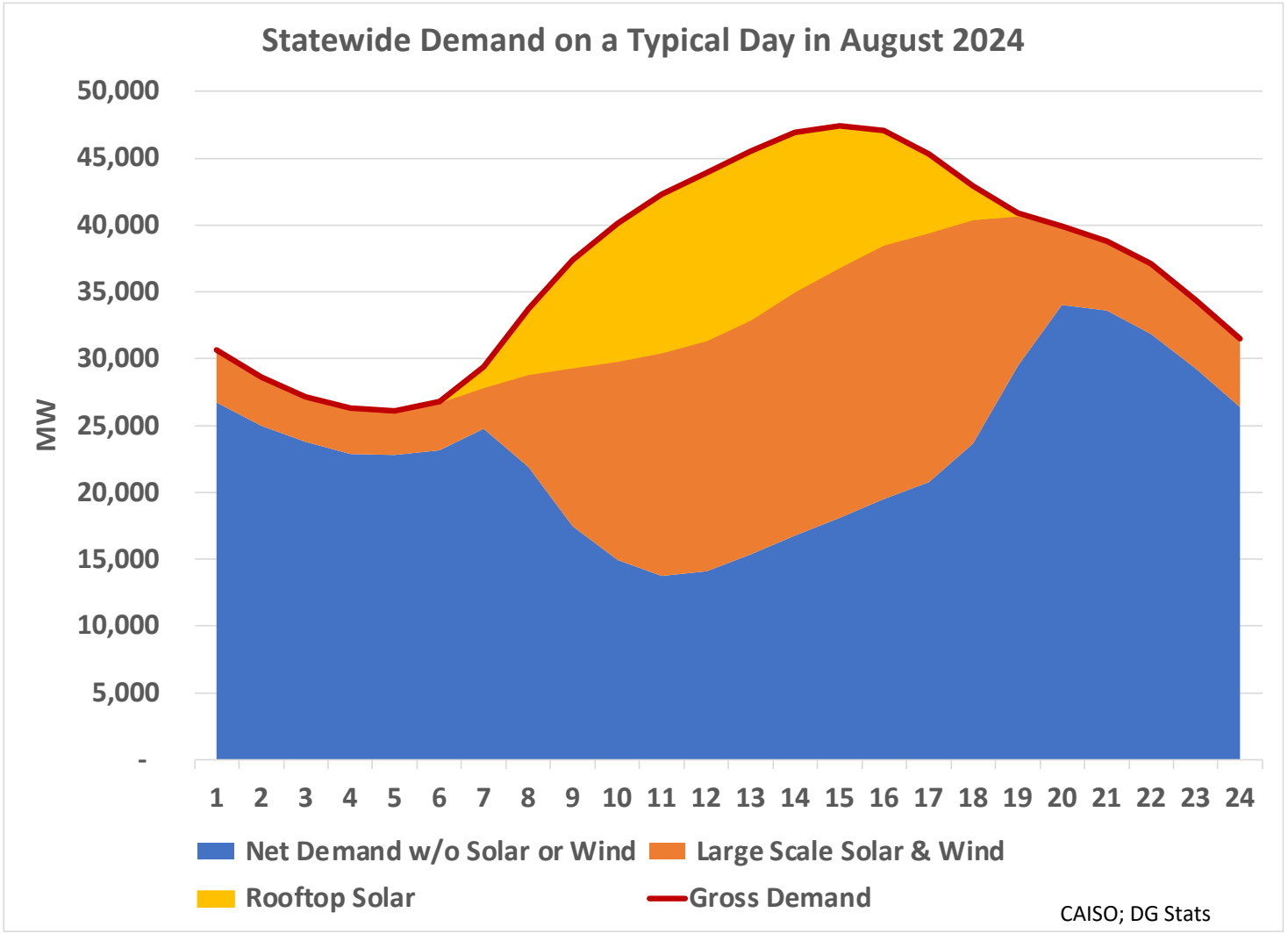


Energy planners expected peak loads to increase by 15,000 MW

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

Source: Richard McCann, M.Cubed Consulting

California's Peak Electricity Demand Is Still Mid-Day



CAISO; DG Stats

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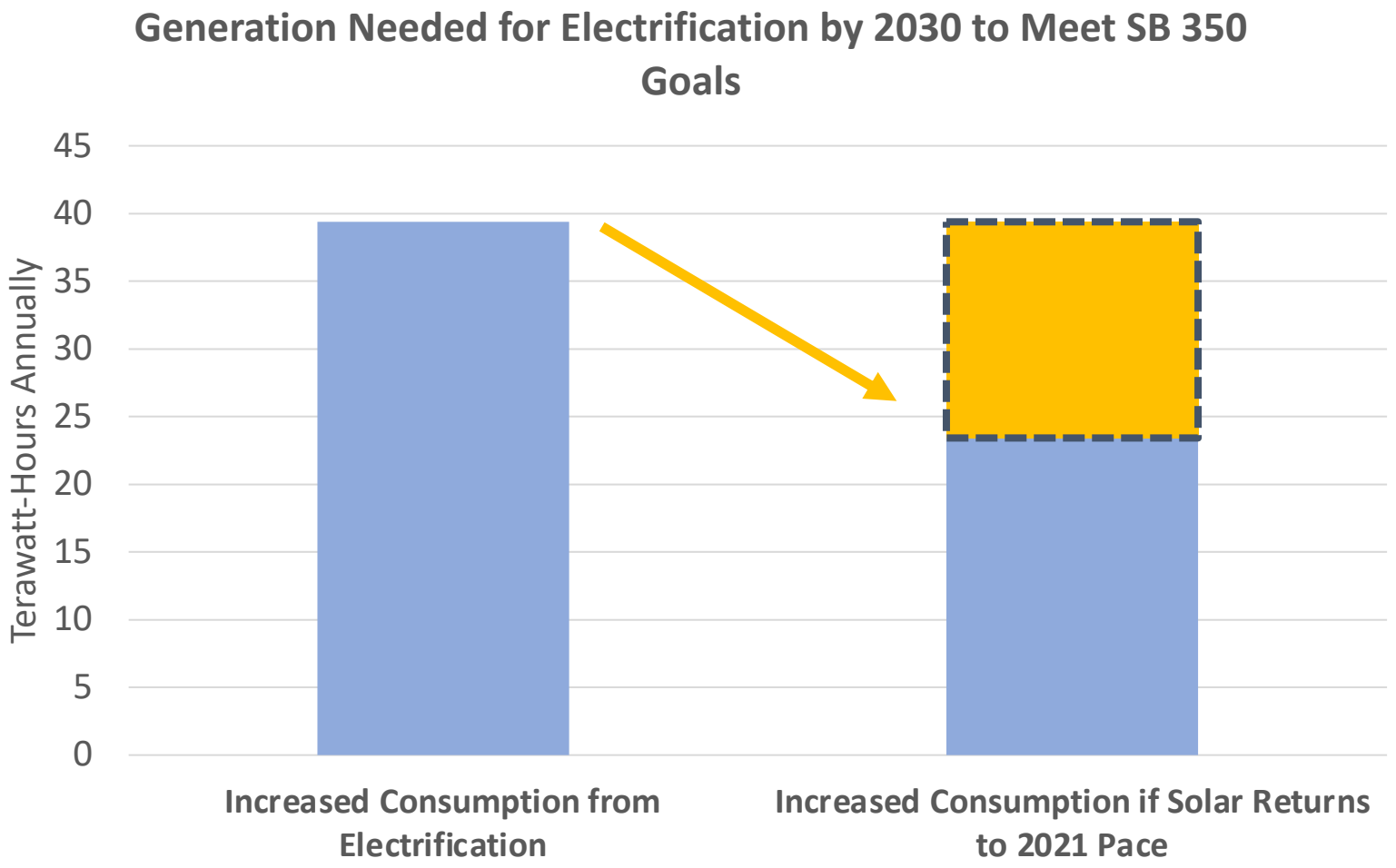
With Electrification, Rooftop Solar Is Even More Important



Source: CEC Integrated Energy Policy Report; California Distributed Generation Statistics

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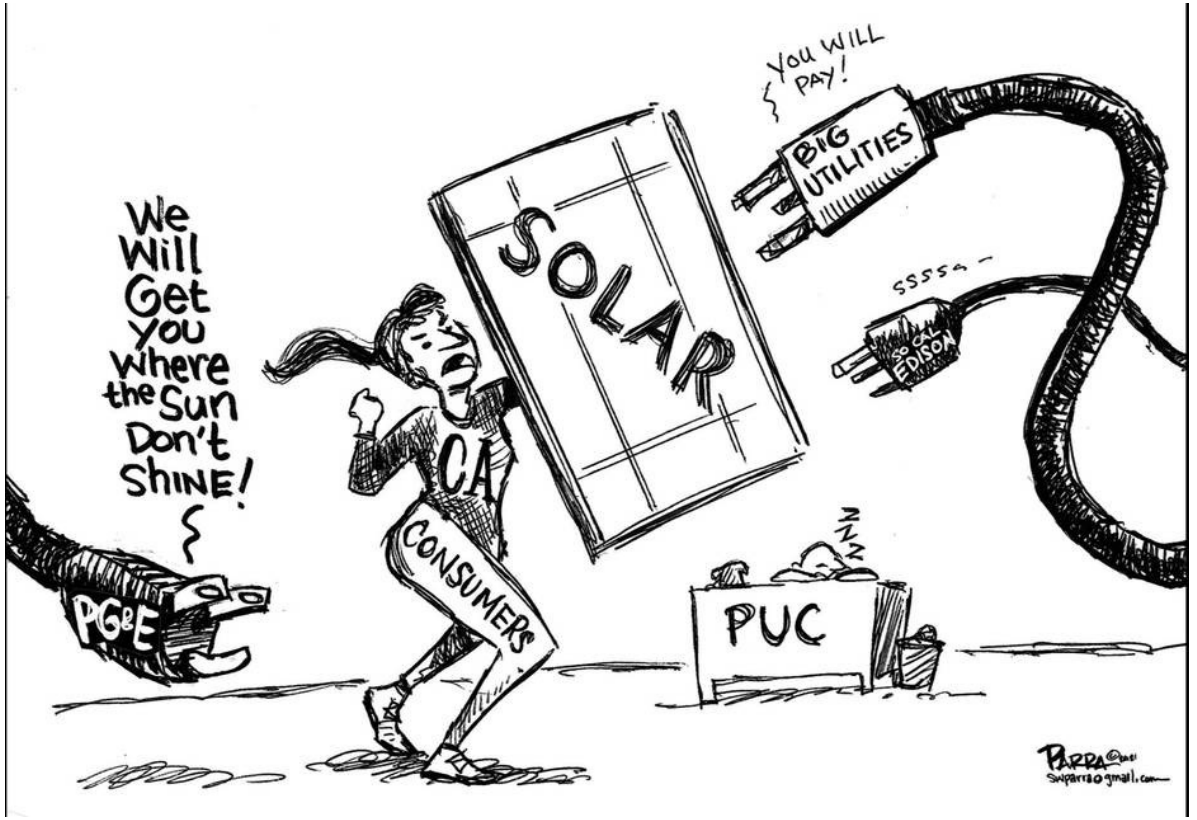
The "Cost Shift" Is a Lie Designed to Protect Utility Profits

Utilities use the cost shift narrative to **make solar a scapegoat** for rising energy costs.

The truth is, **they needed someone to blame** so they picked **their #1 competition.**

Regulators should do their job of **reining in unnecessary and out of control utility spending**, not blaming consumers for their own failure to do so.



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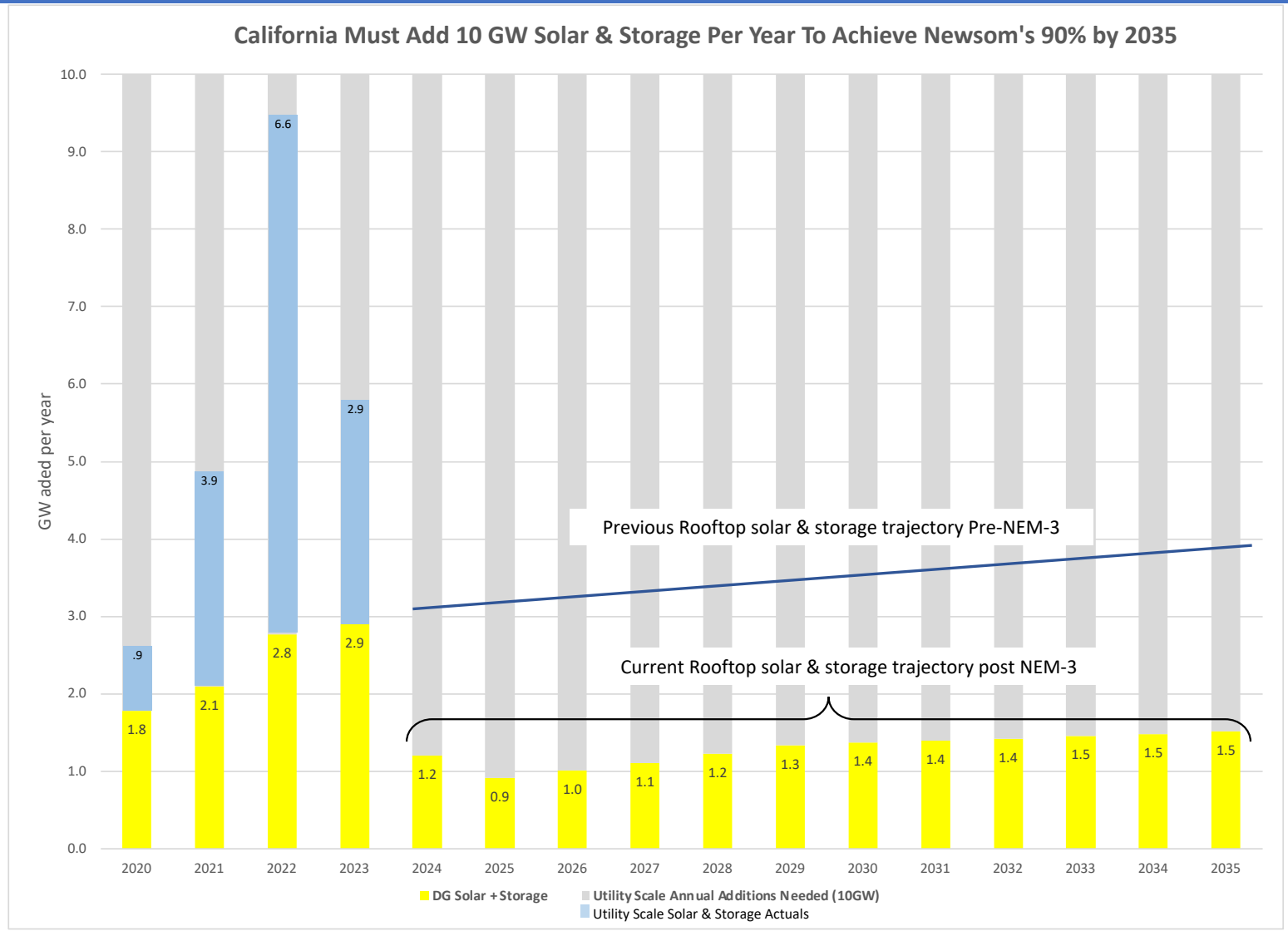
California Has a Long Way to Go to Get to 100%

In this chart, grey bars depict how much solar & storage California must build to meet its accelerated climate goals by 2035 (10 gigawatts added per year according to CARB).

The yellow and blue bars show actuals and projected MWs added each year.

California must accelerate *both* utility scale *and* rooftop projects.

Over the past four years, the rooftop solar and storage market has accounted for 40% of the capacity additions. The market has been severely cut back creating an unrealistic scenario for utility scale solar and storage to make up for the loss.



DG Stats; QFER Power Plant Annual Generation database, CARB 2022 Scoping Plan

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