



# Factors Impacting Retail Electricity Prices in the United States

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February 2026

*This work was funded by the U.S. Department of Energy under Contract No. DE-AC02-05CH11231. The views and opinions of the authors expressed herein do not necessarily state or reflect those of the United States Government or any agency thereof, or The Regents of the University of California.*

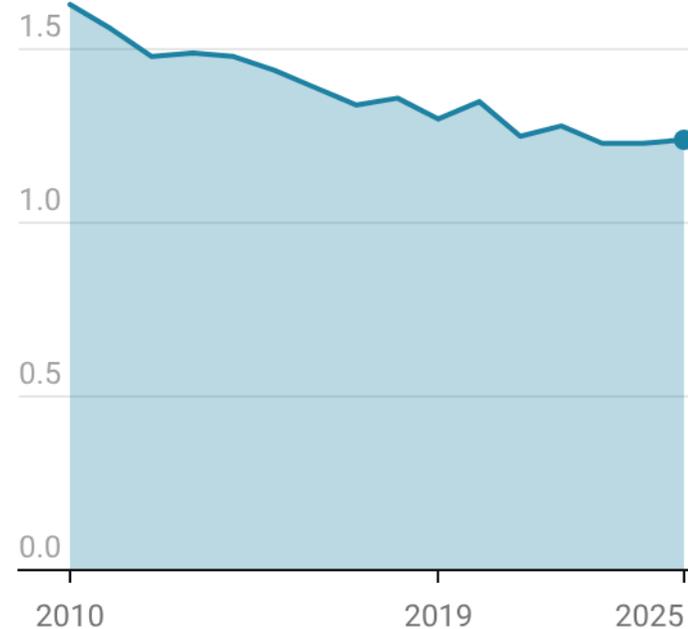
*Image source: OpenAI DALL-E*

# **Crisis – what crisis?** Adjusted for inflation, average retail electricity prices in 2025 were just 3% higher than 2019, and were 6% lower than 2010

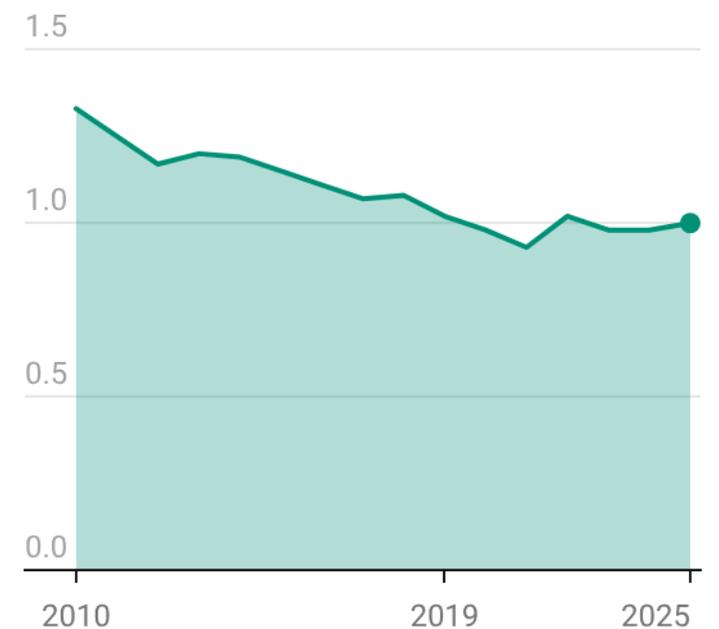
And... total residential electricity costs as a fraction of personal expenditure or income are close to all-time lows, though a tad higher in 2025 vs 2024

## Residential Electricity Costs as a Fraction of Personal Consumption Expenditures and Personal Income

Residential Electricity Costs as a Percentage of Personal Consumption Expenditures



Residential Electricity Costs as a Percentage of Personal Income



Source: EIA, BEA • Created with Datawrapper

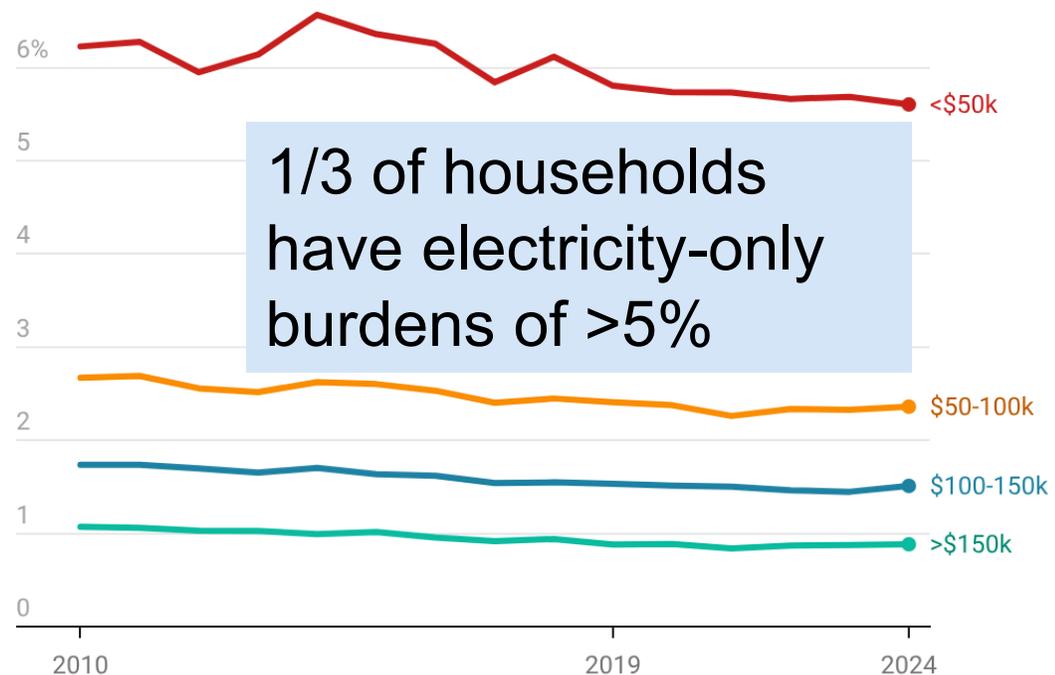
**Ah hah, here it is hiding behind national averages...**

**...and it may get worse in near-term based on IOU rate increase requests**

## Electricity burden

### Residential Electricity Bills as a Fraction of Income, by Household Income Bracket

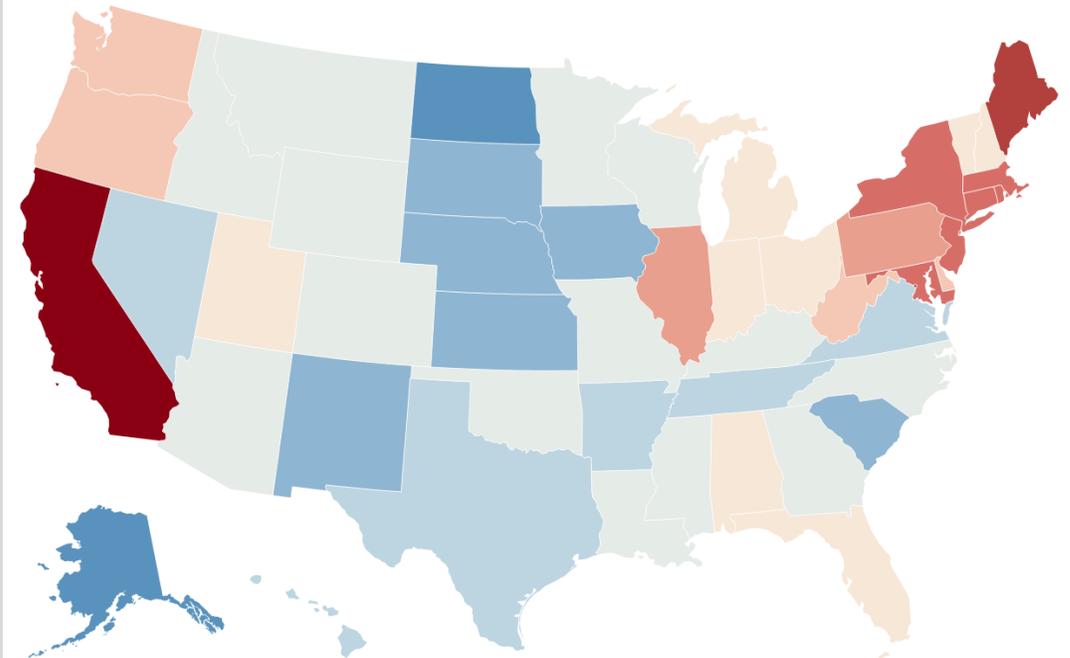
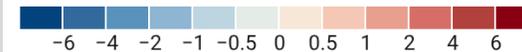
Electricity burden for average household in each income bracket



## Change in prices: 2019 to 2025

### Change in Average Retail Electricity Prices: 2019-2025

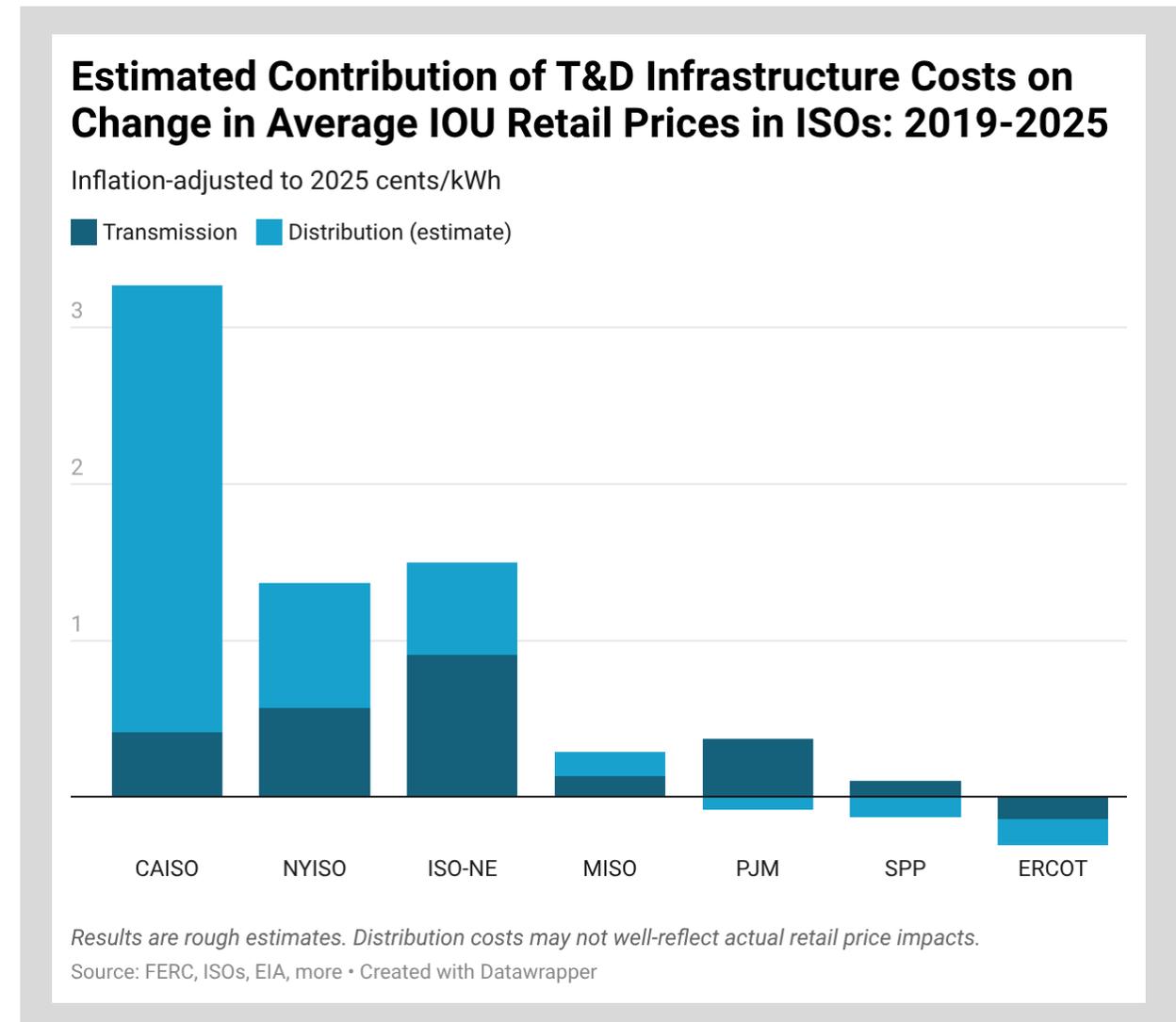
Real 2025\$ cents/kWh, inflation adjusted



Source: EIA • Created with Datawrapper

# Distribution and transmission expenditures were significant contributors to retail price increases in the regions that experienced those increases

- Major drivers:
  - Aging assets
  - Equipment hardening
  - Wildfire mitigation
  - Storm cost recovery
  - Expansion
  
- Price impact exacerbated by:
  - Elevated equipment costs
  - Load contraction

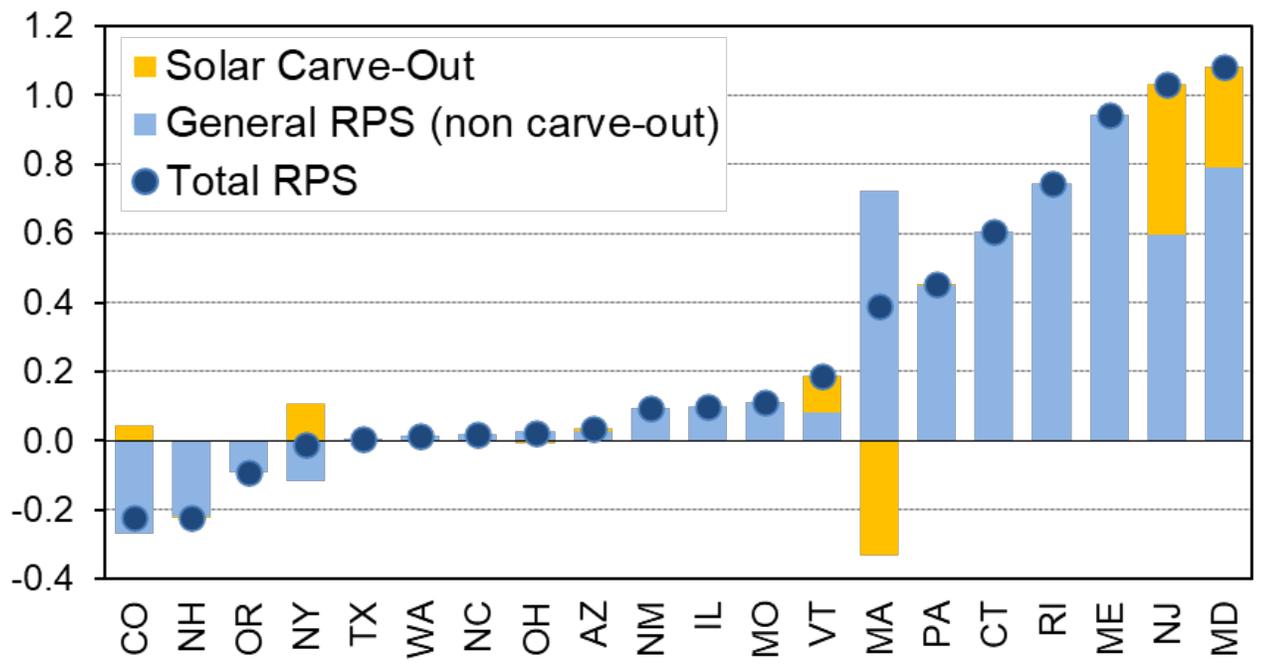


# State policies to require or encourage wind and solar deployment above what the competitive market would deliver have often increased prices

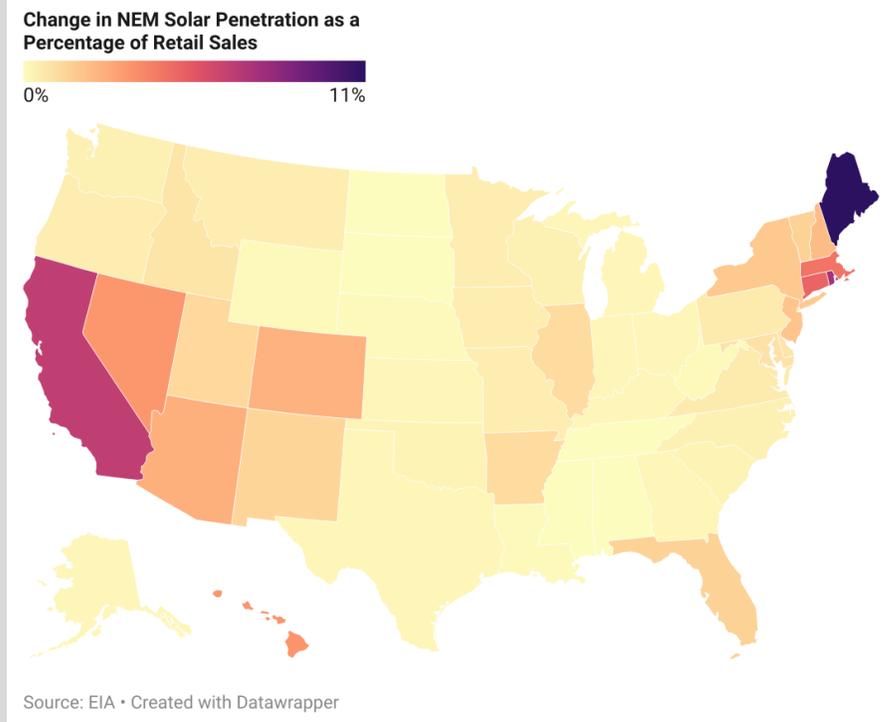
**State RPS:** Average impact ~0.25 ¢/kWh; in some states >1 ¢/kWh

**Net Metering:** Effects highly variable, as high as ~2 ¢/kWh in CA

**Change in RPS Compliance Costs from 2019-2024**  
(cents per kWh of retail sales)<sup>1</sup>

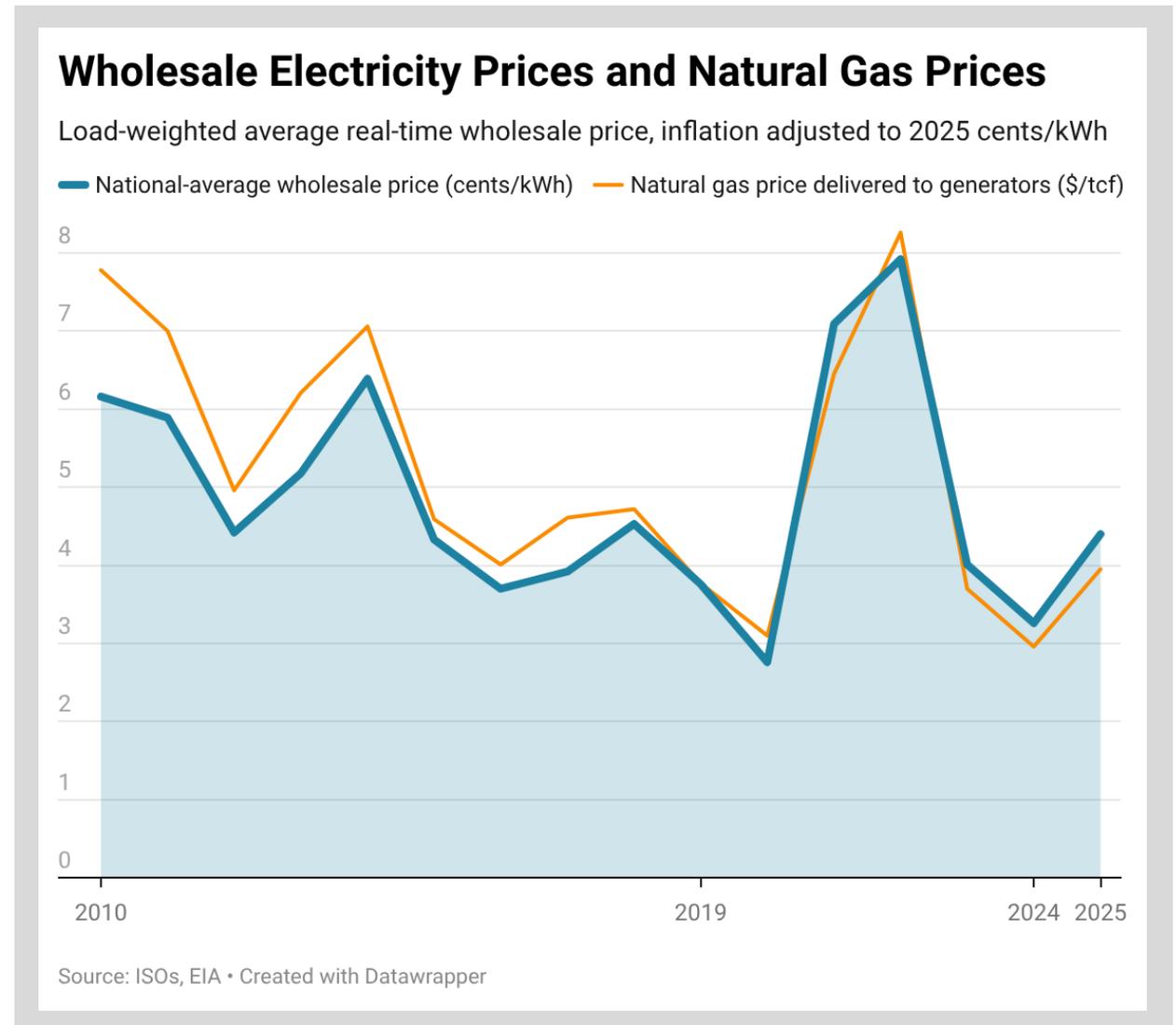


**Increase in NEM Solar Penetration from 2019-2024**



## The availability of low-cost natural gas has historically placed downward pressure retail rates – but greatly impacts price variability

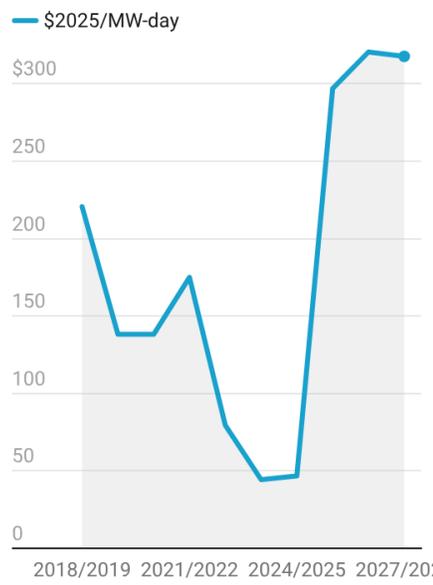
- Advancements have resulted in a long-term decline in inflation-adjusted natural gas prices, and therefore also wholesale prices
- Natural gas is also a driver of year-to-year volatility in wholesale (and retail), prices
- Examples: onset of Ukraine / Russia war, and increases in 2025 vs. 2024



# Load growth at the state level has (historically) been associated with decreased prices and load contraction with increased prices... BUT...

- Cost growth mostly driven by T&D in recent years and incremental supply was relatively inexpensive

### PJM Capacity Auction Clearing Price History

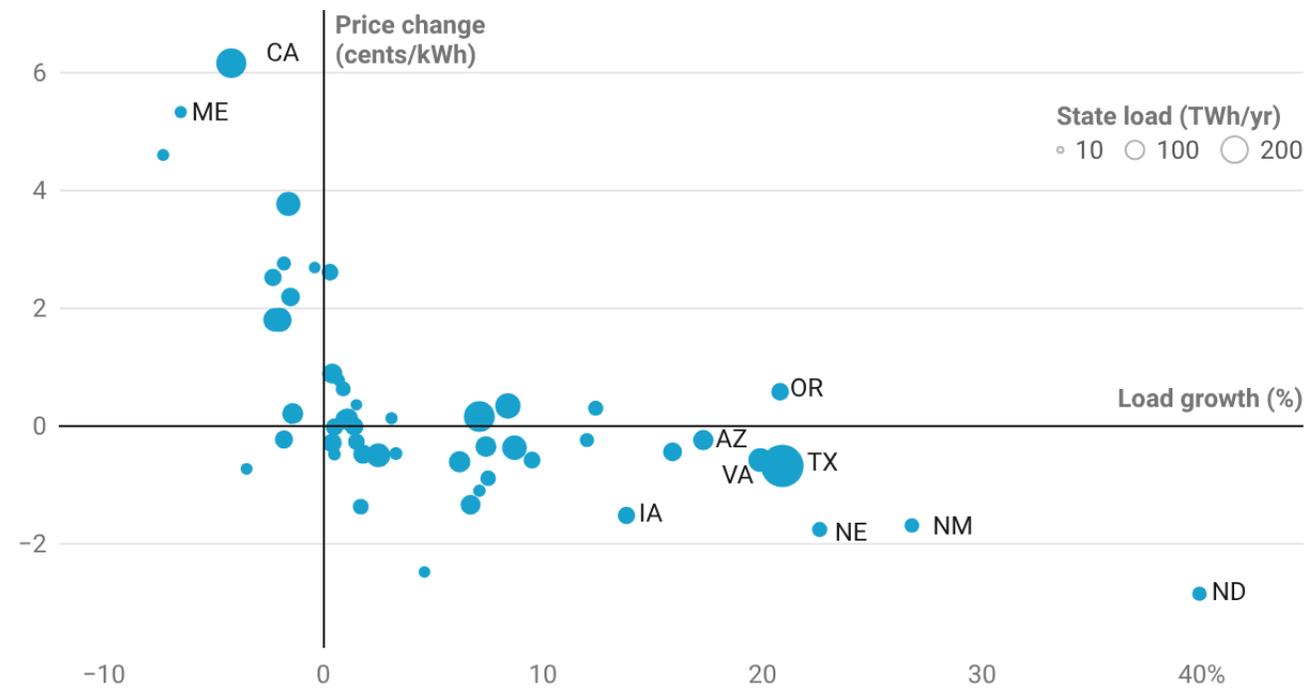


Source: PJM IMM • Created with Datawrapper

- And yet...  
...there is  
...PJM

### Load Growth vs. Retail Price Changes from 2019 to 2025

Price change in ¢/kWh, inflation adjusted to 2025\$. Load growth is percent change in retail sales.



Source: EIA • Created with Datawrapper

Data for 2025 are not final