LAWRENCE BERKELEY NATIONAL LABORATORY

Brattle

Factors Impacting Retail Electricity Prices in the United States

Ryan Wiser, Galen Barbose, Peter Cappers, Jeffrey Deason, Sydney Forrester, Will Gorman, Eric O'Shaughnessy

Lawrence Berkeley National Laboratory

Ryan Hledik, Long Lam, Audrey Yan

The Brattle Group

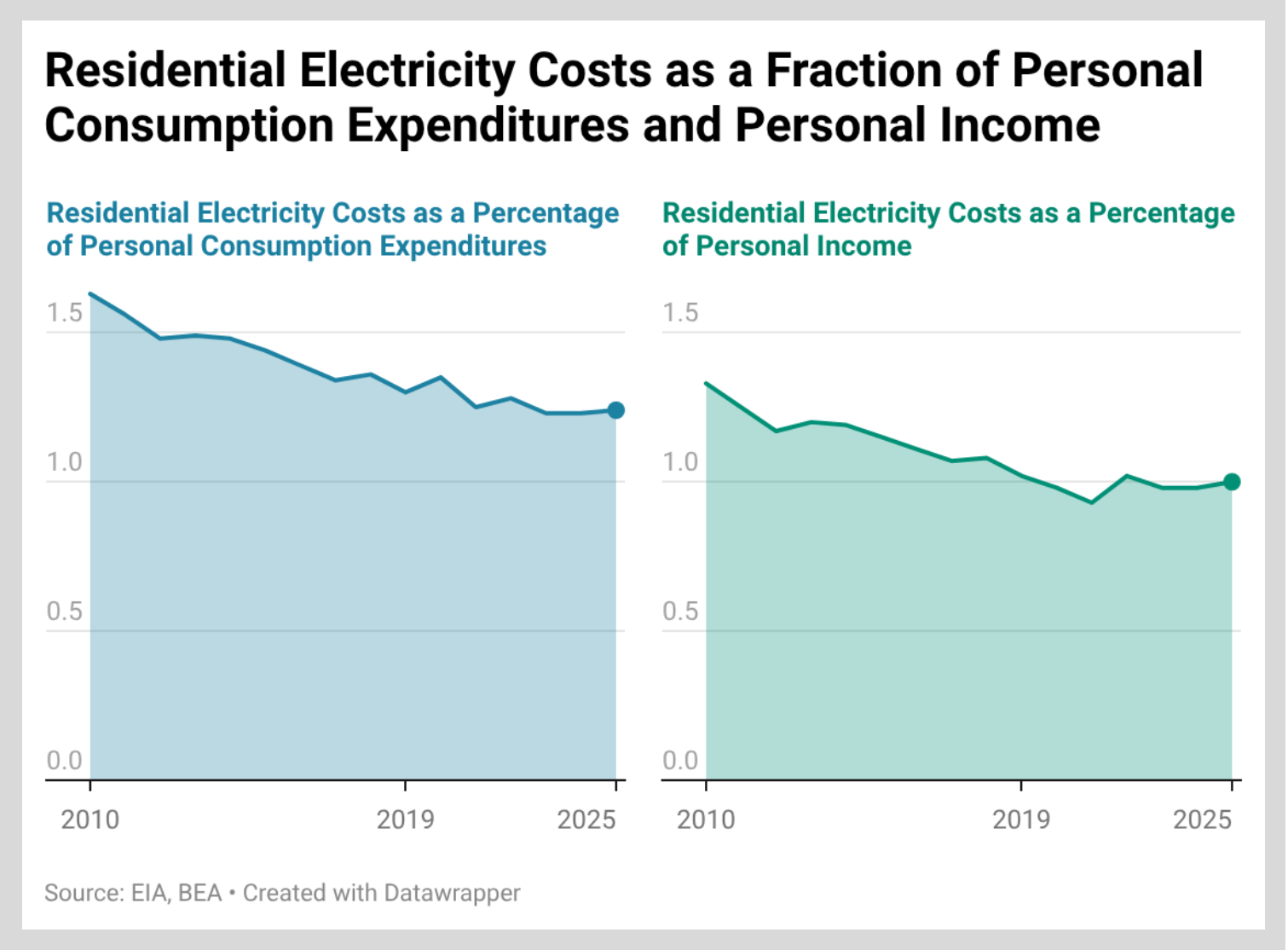
February 2026

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

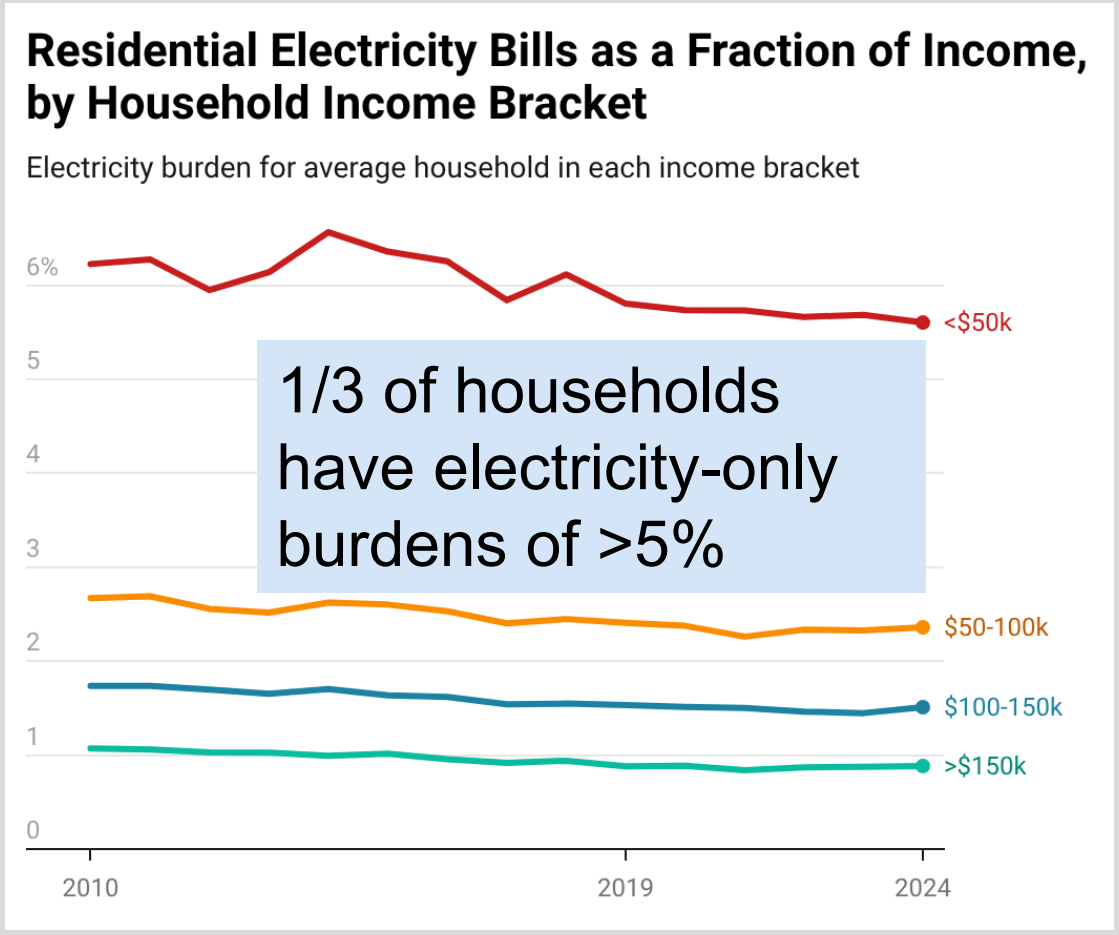
And… total residential electricity costs as a fraction of personal expenditure or income are close to all-time lows, though a tad higher in 2025 vs 2024



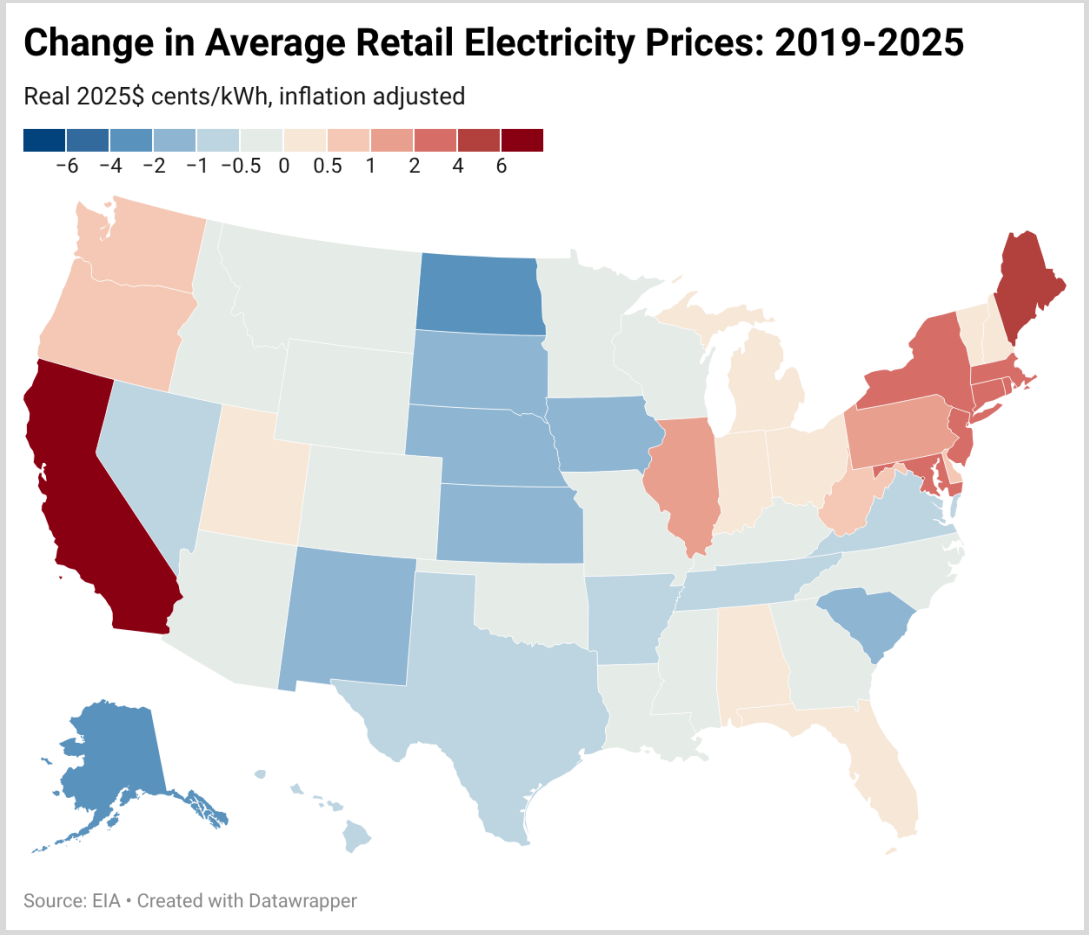
Data for 2025 are not final

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



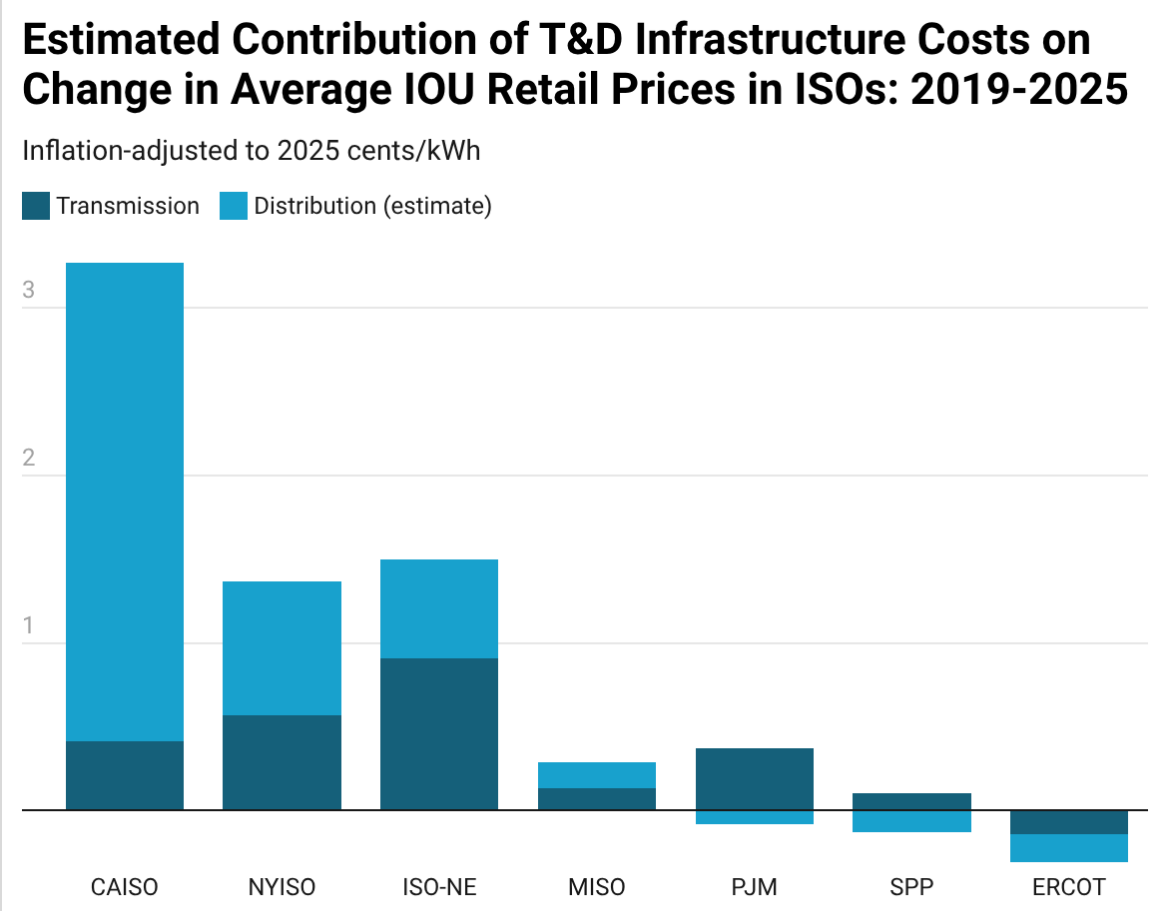
Change in prices: 2019 to 2025



Data for 2025 are through November

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

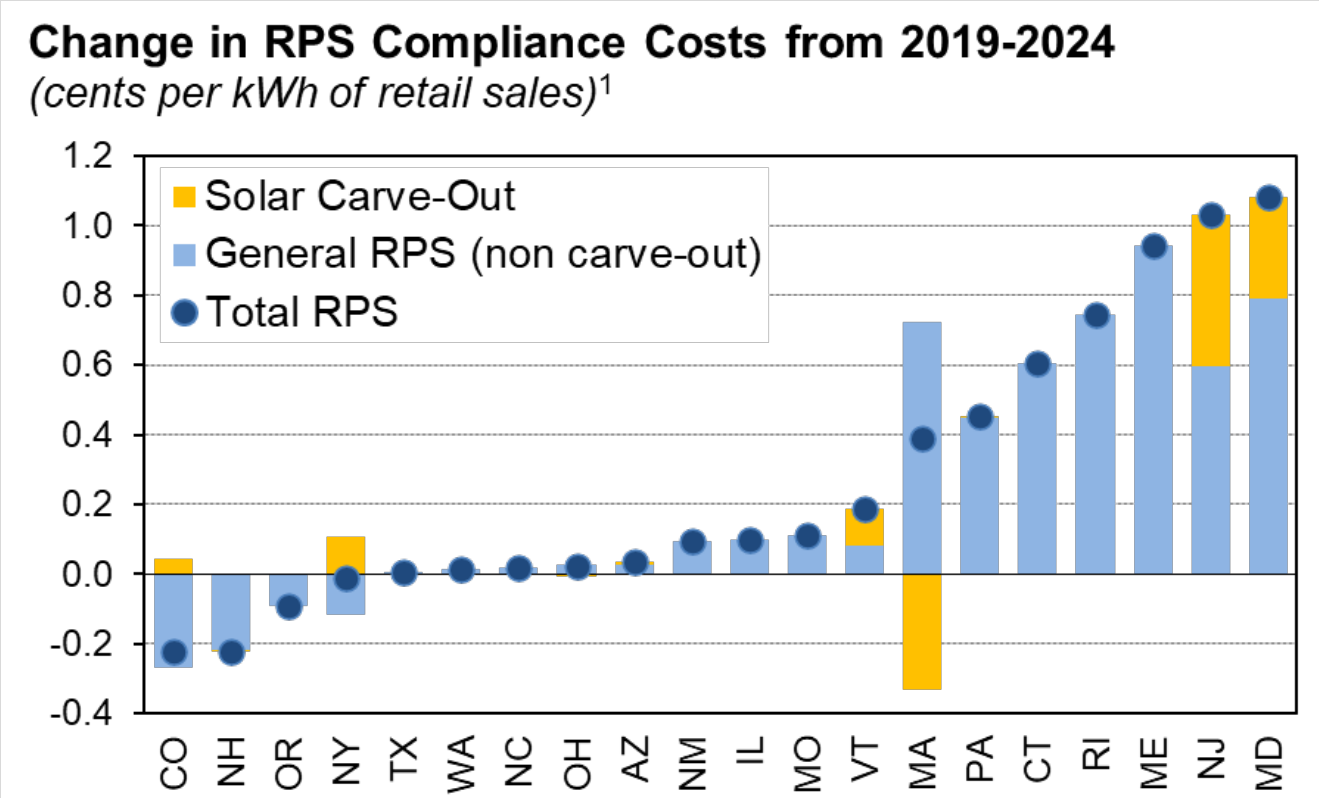
- Major drivers:
  - Aging assets
  - Equipment hardening
  - Wildfire mitigation
  - Storm cost recovery
  - Expansion
- Price impact exacerbated by:
  - Elevated equipment costs
  - Load contraction

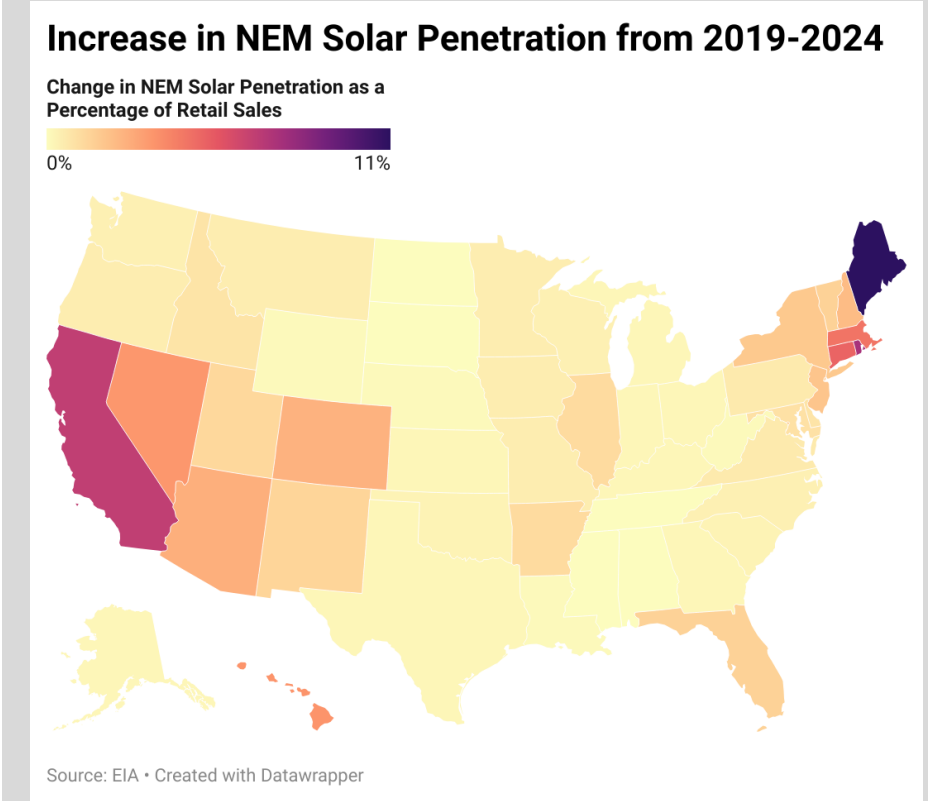


State policies to require or encourage wind and solar deployment above what the competitive market would deliver have often increased prices

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

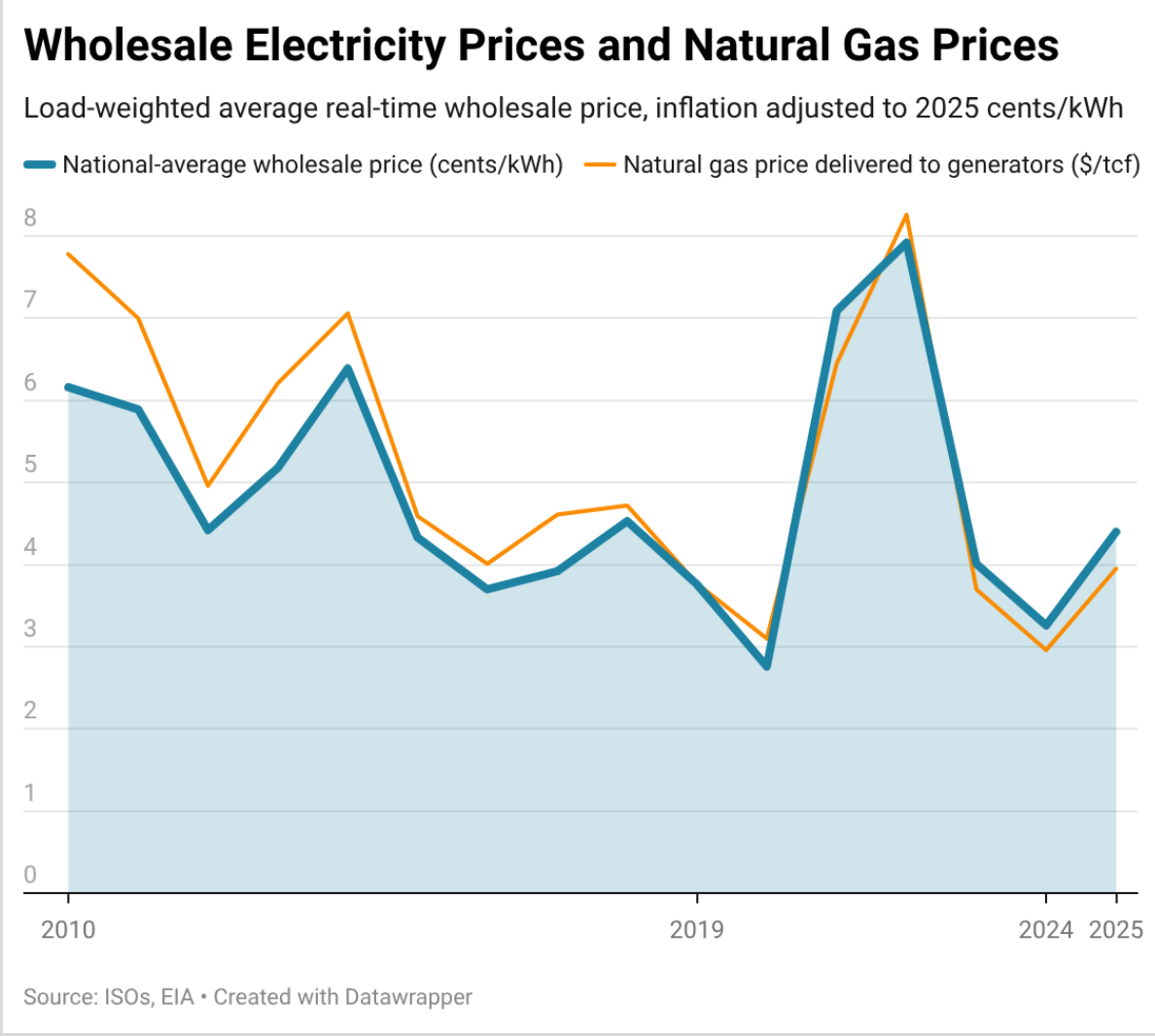
Net Metering: Effects highly variable, as high as ~2 ¢/kWh in CA





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

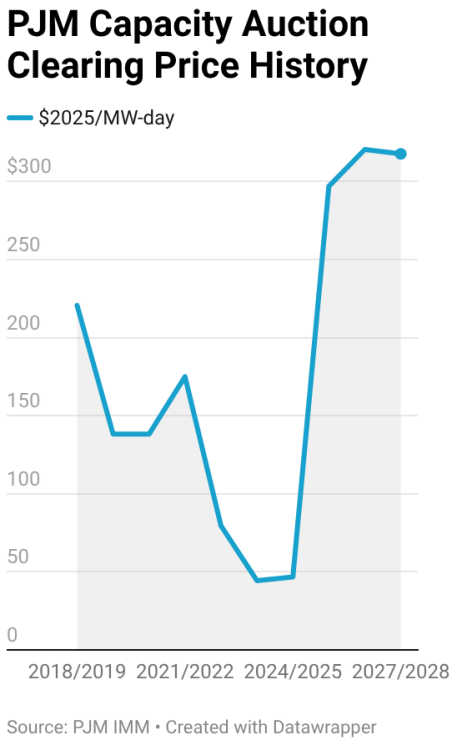


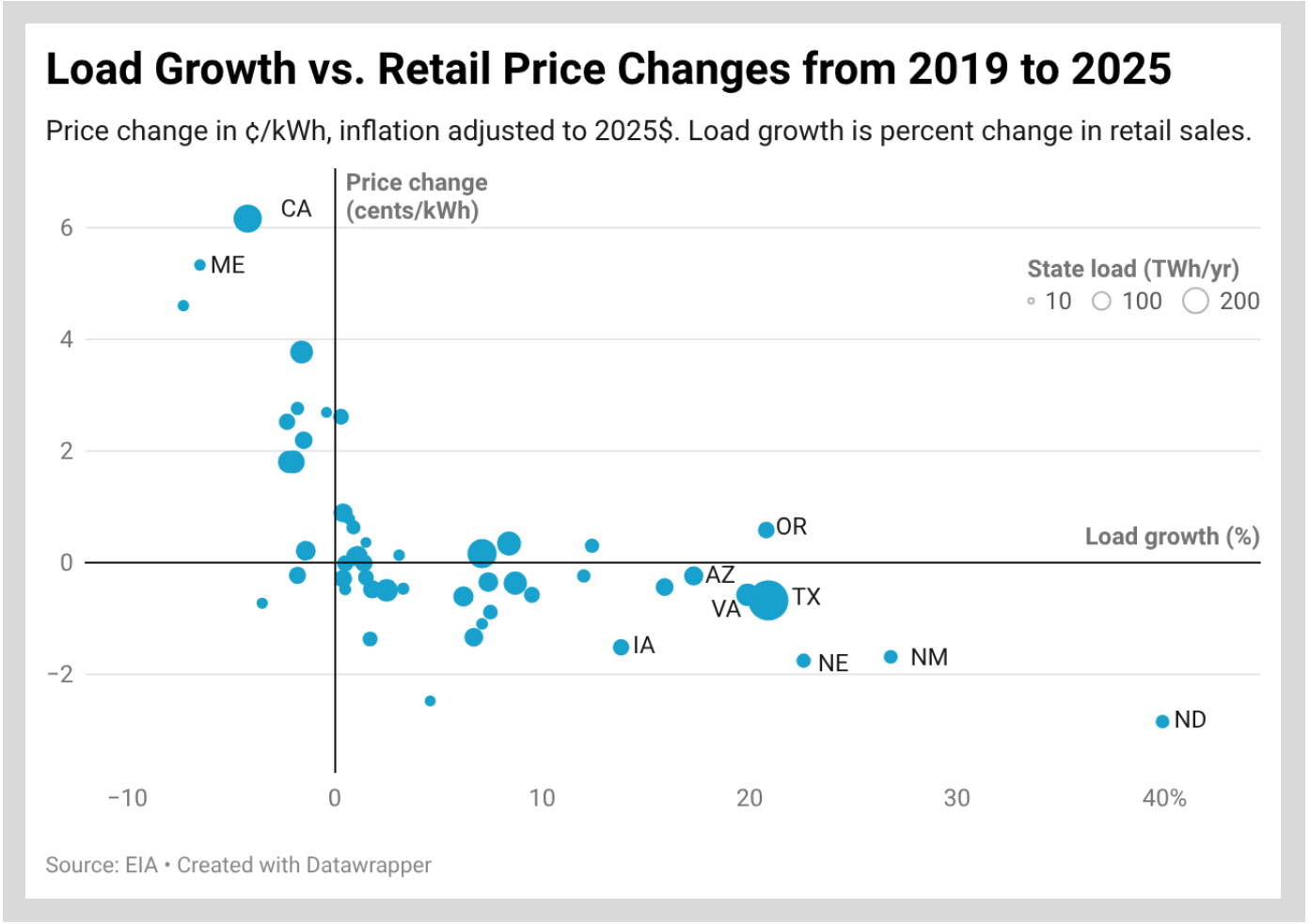
Load growth at the state level has (historically) been associated with decreased prices and load contraction with increased prices… BUT…

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

…there is

…**PJM**





Data for 2025 are not final