

& Electric (PG&E) has also found this to be true and measured the benefit, reporting large load growth has enabled electric rate reductions four times over the past two years; it estimates that each gigawatt of new load can lower customer bills by 1%, but wildfire-related costs continue to put pressure on overall affordability.³⁴

In examining data centers in the aggregate, E3's study for the Virginia Joint Legislative Audit and Review Commission (JLARC) also found no evidence of a significant historical and present-day cost shift in the state which includes the world's largest data center market. The analysis concluded that Virginia's current retail rate structures appropriately allocate costs to the customer classes responsible for incurring them, with data center customers paying their proportional share of generation, transmission, and distribution costs.³⁵

The study emphasizes, however, that maintaining rate equity becomes more complex as load growth accelerates. Because cost allocation factors and revenue requirements are updated periodically through regulatory proceedings, rapid increases in large load demand can create temporary imbalances between cost incurrence and cost recovery. In such cases, regulatory lag may result in short-term under-collection from fast-growing customer classes and over-collection from others until rates are reset. The study further notes that large-scale demand growth is unlikely to place downward pressure on retail rates in the near term without substantial generation and transmission investments made in advance of, or concurrent with, load expansion.

Finally, the analysis identifies additional structural considerations that could influence retail prices even when cost allocation methodologies are conceptually sound. These include the magnitude of required capital investment and its implications for utilities' cost of capital, the potential for stranded costs if large load customers depart under competitive supply arrangements without appropriate indifference mechanisms, and localized wholesale price effects where concentrated load growth increases congestion and locational marginal prices. The overarching conclusion is that current regulatory frameworks are functioning as intended, but sustaining that outcome amid continued rapid data center expansion will require vigilant oversight, timely rate adjustments, and rate design mechanisms that appropriately align cost responsibility with cost causation.

A 2026 Georgia Institute of Technology working paper, *The Local Economic Effects of Data Center Entry*,³⁶ provides one of the most systematic retrospective analyses of local impacts following data center entry. Using a difference-in-differences approach, the paper estimates that data center entry can raise local electricity rates, although impacts are difficult to isolate because utility service territories often span multiple counties. In counties with lower "spillover exposure"—that is, counties sharing a utility with fewer neighboring counties—the paper finds statistically significant price increases of about 5.0% for total electricity prices; these are driven by larger estimated increases in industrial rates (6.6%) and smaller increases in residential and commercial rates (3.6% each). These results measure near to medium-term effects, comparing prices three years before and after data center activation between 2010-2024. In higher-spillover areas, the estimates are weaker or not statistically significant, which the authors interpret as a measurement problem rather than evidence of no effect. Because prices are measured at the county level while costs are recovered across wider utility territories, the paper may understate the full geographic reach of rate impacts even in cases where it detects statistically significant effects for individual counties, and the authors are careful in stating that the results should be interpreted with caution.

While informative, the study has limitations that are important to note. Its causal design compares counties with and without data center entry, but the authors acknowledge they cannot fully rule out selection bias if data centers are more likely to locate in areas already on stronger growth trajectories. Further, the finding in only low spillover counties points towards relatively small utility territories and the median data center entry is 10 MW, so it is not fully representative of general trends. More broadly, the study focuses on initial data center entry and cannot fully disentangle the effects of later clustering, local selection factors, or other unobserved differences in data center siting and economic outcomes. In addition, the study does not differentiate the effect of recently published utility rates designed to protect ratepayers from rising cost, nor does it evaluate how fairly costs are distributed across customer classes. As such, the findings may best be viewed as an early indication of possible price effects, rather than a definitive estimate, highlighting the need for further research, particularly in understanding the effects of today's rapidly expanding large load clusters.

³⁴ Penrod, E. (2026, February 17). *Data center growth has helped PG&E cut rates 11% since 2024, CEO says*. Utility Dive. <https://www.utilitydive.com/news/data-center-growth-has-helped-pge-cut-rates-11-since-2024-ceo-says/812230/>

³⁵ Patel, K., Steinberger, K., DeBenedictis, A., Wu, M., Blair, J., Picciano, P., Oporto, P., Li, R., Mahoney, B., Solfest, A., Bhandarkar, R., & Shah, A. (2024). *Virginia data center study: Electric infrastructure and customer rate impacts* (Presentation/technical report). Joint Legislative Audit and Review Commission. https://jlarc.virginia.gov/pdfs/presentations/JLARC%20Virginia%20Data%20Center%20Study_FINAL_12-09-2024.pdf

³⁶ Yue, Daniel and Zeng, Yiyang. *The Local Economic Effects of Data Center Entry* (March 30, 2026). Available at SSRN: <https://ssrn.com/abstract=6497238> or <http://dx.doi.org/10.2139/ssrn.6497238>