

Overcharged

The Rules of the Electricity
Affordability Crisis

Climate &
Community
INSTITUTE

PUBLIC 
 GRIDS

isaac sevier and Roshan Krishnan



The Climate and Community Institute (CCI) is a progressive climate and economy think tank. Our growing staff and network of over 60 academic and expert fellows create and mobilize cutting-edge research at the nexus of inequality and the climate crisis. We fight for a transformational agenda that will rapidly and equitably decarbonize the economy by focusing on material benefits for working people.

PUBLIC GRIDS

Public Grids is building a world where the electric utilities that light our communities and heat our homes serve the public and planet, not shareholder profits. We are a comprehensive research and strategy institute for the public power movement in the United States, providing capacity building resources to win public ownership of the electricity system.

Suggested citation

isaac sevier and Roshan Krishnan, "Overcharged: The Rules Of The Electricity Affordability Crisis,"
Climate and Community Institute and Public Grids, October 2025,
<https://climateandcommunity.org/research/overcharged>.

Acknowledgments

The authors would like to thank the tireless electricity policy advocates interviewed for this project who work every day to keep our electricity bills low and to keep people from being shut off. They shared their expertise and insights with us during an extraordinary time of instability and change. We thank Meagan Burton, Jackson Koeppel, Sonal Jessel, and Johanna Bozuwa for their review of this paper. Their feedback improved our project's clarity and any mistakes herein are ours. We thank Will Fraser for copy editing and Data4Change for design.

Contents

Executive Summary	3
Introduction	5
Background	8
Bonbright's Principles of Public Utility Rates	11
Fifty years of neoliberal policy evolution	13
An overview of ratemaking, rate design, and revenues	18
The false promises of utility restructuring	26
What can be done now while preparing for the future	40
Recommendations	43
Conclusion	48
Afterword	50

Executive Summary

One piece of paper reaches every single home in the United States every month: the utility bill. According to the last available utility affordability data collected by the US Census Bureau in 2024, 23 percent of all US adults cannot afford to pay when this piece of paper comes. That was the figure before the explosive growth of electricity prices caused by data center growth and before the dismantling of the Inflation Reduction Act, which provided some home improvement and clean energy incentives. We have no more recent data from this data series as a result of the new administration.

23% of all US adults cannot afford to pay their utility bill when it arrives.

The most vulnerable people in this situation regularly trade money for food or medicine and send that money to 1 of 168 companies.¹ These companies use a foundational set of economic principles from the 1960s, wielded within a regulatory system that they built for themselves, to guarantee a handsome profit. Each CEO of one of these companies makes millions of dollars annually, and the officials who have been appointed to regulate them say “the utility followed the rules” when a ratepayer dies for being too poor to afford service.²

Utility rules threaten the wellbeing of tens of millions of Americans. In this report, we review the origin of these utility rules, and present evidence that the economic principles used were created specifically to guarantee consistent and consistently increasing profits to the industry’s corporations. This report goes beyond rehashing the descriptive statistics about energy injustice and poverty and evaluates the claimed benefits of the law and policy reforms that have been used to enrich private corporations and obstruct energy affordability. We dissect the major theories and interventions of the 1970s that were implemented during the last energy crisis in the name of affordability, and share our findings from reviewing dozens of academic analyses that none of these interventions worked as promised.

¹ U.S. Energy Information Administration, “Investor-Owned Utilities Served 72% of U.S. Electricity Customers in 2017 – Today in Energy – U.S. Energy Information Administration (EIA),” www.eia.gov, August 15, 2019, <https://www.eia.gov/todayinenergy/detail.php?id=40913>.

² Sue Sturgis, “Utility CEOs Get Raises as Companies Roll Back Diversity, Environmental Pay Incentives and Rates Increase,” Energy and Policy Institute, April 23, 2025, <https://energyandpolicy.org/utility-ceos-get-raises-as-companies-roll-back-diversity-environmental-pay-incentives-and-rates-increase/>; Anne Ryman, “Regulators: APS Followed Rules in Power Shutoff of 82-Year-Old Arizona Woman,” ABC15 Arizona in Phoenix (KNXV), July 16, 2025, <https://www.abc15.com/news/local-news/investigations/regulators-aps-followed-rules-in-power-shutoff-of-82-year-old-arizona-woman>.

The regulation and ownership of the utility system as it is designed today cannot effectively provide an affordable or reliable public service while maximizing private sector returns.

We find that there is little evidence from energy economists and other scholars that restructuring the electric utility sector has had any economic benefit in the public interest. Restructuring and privatization has not lowered costs; has not reduced price volatility; has not increased competition; has not increased reliability; has not increased energy conservation; has not reduced investor-owned utility opposition to rooftop solar; and has not lowered the rate of redistribution of wealth upwards.

On the eve of the elimination of our national, threadbare social safety net, we show how ignoring the truth about these broken promises prolong the immiseration of the most vulnerable people in America. We use the specific example of how this has been carried out in the state of New York over the last decade. In New York, the poorest households spend more than 34 percent of their income on energy bills while the richest hold nearly \$7 trillion in wealth. The electricity policy reforms undertaken for the last decade deliberately avoided addressing this issue, instead preferring to construct new markets and chase more false promises.

The outcomes speak for themselves. The regulation and ownership of the utility system as it is designed today cannot effectively provide an affordable or reliable public service while maximizing private sector returns. When forced to deliver any result, the utility regulatory system prioritizes the latter. Our summary highlights rigorous academic evaluations and tireless advocacy by civil society groups over the last several decades which have built a comprehensive analysis supporting this statement. We invite a new, courageous discussion about the future of public utility service and ownership. At this critical time, we must invent new solutions and design for a responsible, economically sound, climate safe, and affordable utility system that can unlock and swiftly accelerate a just transition.

UC Berkeley
researchers
estimate
decarbonization is
impossible under
current conditions
for 59 percent of all
households in
California, an
average figure
which hides an even
higher proportion
for households of
color.

Introduction

US residents are being overcharged for energy. In September 2024, the US Census Bureau survey reported 52.2 million adults (23 percent of all US adults) could not pay their energy bills at least once in the previous year. In December 2024, American ratepayers were past due on over \$20.3 billion in payments.³ Worsening this energy burden crisis, the Republican administration cut the staff for the Low Income Home Energy Assistance Program, and a White House budget proposal eliminated the program's \$4 billion in funding altogether earlier this year. Congress has not yet aligned with this recommendation, but the future of the only national energy bill assistance program is highly uncertain at the time of publication.

To stop greenhouse gas emissions from energy use, we must completely electrify the entire world. This means everyone will consume more electricity, and we will need a grid that can carry this additional energy. At home, this would translate into higher bills: more expensive electricity service because of increased energy needed to fuel heating, cooling, cooking, water heating, and electric vehicle charging.

Yet, data produced by researchers and public officials shows that investor-owned utilities have failed to construct a distribution grid with equal capacity for everyone. UC Berkeley researchers estimate decarbonization is impossible under current conditions for 59 percent of all households in California, a figure which hides an even higher proportion for households of color.⁴ The Massachusetts Department of Public Utilities found extremely limited distribution system headroom in their system-wide review of electric-sector modernization plans, and the National Renewable Energy Lab produced similar findings about full electrification scenario limits in Highland Park, Michigan.⁵

³ "Press Release: States Call for Congress to Restore Funding for LIHEAP About 1.4 Million Households Could be Cut from the Program," Press Release, National Energy Assistance Directors Association, January 23, 2024, <https://neada.org/wp-content/uploads/2024/01/pr-recordhhbehind.pdf>.

⁴ This capability is measured in "grid quality" or the electrical capacity (measured in kilowatts, kW) of the distribution system required to support comprehensive adoption of electric vehicles, distributed energy resources, and building electrification. See Anna M. Brockway et al., "Inequitable Access to Distributed Energy Resources due to Grid Infrastructure Limits in California," *Nature Energy* 6, no. 9 (September 1, 2021): 892–903, <https://doi.org/10.1038/s41560-021-00887-6>.

⁵ "Electric Sector Modernization Plans (ESMPs) Information and Recommendations," Commonwealth of Massachusetts (Grid Modernization Advisory Council, 2023), <https://www.mass.gov/info-details/electric-sector-modernization-plans-esmps-information-and-recommendations>; Erik Pohl et al., "Distribution Grid Impact Study in Highland Park, Michigan: Understanding Rooftop Solar, Behind-The-Meter Energy Storage, Electric Vehicle Charging, and Building Electrification [Slides]," March 13, 2024, <https://doi.org/10.2172/2325028>.

Actions on energy affordability taken during the COVID-19 pandemic were rescinded, undermining social trust in regulators.

As a result, a bigger burden is on the horizon. Investor-owned utilities requested approval for \$18.13 billion in additional revenue in 2023 alone, a record-breaking sum.⁶ When approved by state utility commissions, around half of these increases are paid for by increases to residential customer rates.⁷ Residential electricity prices have nominally risen 35% in the last 10 years, the only group to have experienced real increases when adjusted for inflation.⁸ The projected energy demand of data centers is causing additional pressures on already skyrocketing residential bills.⁹

The recent failures of ordinary approaches to affordability—and more extreme utility failures resulting in fatality—are breaking public trust in utilities and regulators alike to use new revenues responsibly. Actions on energy affordability taken during the COVID-19 pandemic were rescinded, undermining social trust in regulators. Utility corporations cut service over 3.6 million times in the 33 states where this data is available.¹⁰ Where these shutoffs were prohibited by declarations of a state of emergency, the unpaid bills were converted into consumer debts and collections. Concurrently, it has been widely reported that a lack of proactive maintenance and repair has exacerbated the impact of wildfires and extreme weather events on grid reliability.

⁶ Dan Lowery, "Rate Requests by US Energy Utilities Set Record in 2023 for 3rd Straight Year," S&P Global, February 7, 2024, <https://www.spglobal.com/marketintelligence/en/news-insights/research/rate-requests-by-us-energy-utilities-set-record-in-2023-for-3rd-straight-year>.

⁷ According to EIA Form 861, 47 percent of all US utility revenues come from residential customers.

⁸ Brian Collins, "2024 US Electricity Price Growth," S&P Global Market Intelligence, April 29, 2025, https://pages.marketintelligence.spglobal.com/6359-EMC-250304-NA-EN-DR-CIQPro-ESGS-CIQProEnergyTransition_2024-US-electricity-price-growth--download-page.html.

⁹ "Data Center Build out Creates Unprecedented Risk to Hoosiers," Citizens Action Coalition, 2025, <https://www.citact.org/data-centers>.

¹⁰ Jean Su and Christopher Kuveke, "Powerless in the Pandemic 2.0" (Center for Biological Diversity, Bailout Watch, and Tiger Moth LLC, May 9, 2022), https://static1.squarespace.com/static/6407e05f15d65c5872636e09/t/6408f36e48d3d62281c63d1a/1678308207937/Powerless_Report2022_2.0_final.pdf.

The Four+ Pillars combine substantial governmental support, dedicated funding streams, economic diversity, and strong, diverse coalitions that include workers.

The existing implementation of utility regulation has created a dysfunctional system at an economic and political moment when it is critical that the grid and the electricity it creates and carries serves everyone while decarbonizing the economy. This moment of crisis in the utility sector is an opportunity to understand the fundamental contradiction of utility service as a commodity—especially in the presence of deep social and economic inequality—and put forward immediate and medium-term actions to begin transforming the regulation of the utility sector as a whole.

In this narrative report, we critically review the history of theory around electricity regulation with a racial and economic justice perspective. We review academic research about the promises of restructuring the electricity sector—such as lower power prices, increased energy conservation, a self-correcting regulatory system, and least-cost service—and present compelling evidence that those benefits have not materialized in fifty years of experiments. By applying our analysis to New York, we map out how the broader theory of restructuring has been applied to produce specific, state-level outcomes that hamper progress on climate, decarbonization, and equity.

Finally, we present a set of best practices for utility affordability and combine them with transformative, non-reformist reforms in the style of the Four+ Pillars framework for just transition developed by Mijin Cha.¹¹ The Four+ Pillars combine substantial governmental support, dedicated funding streams, economic diversity, and strong, diverse coalitions that include workers. Non-reformist reforms are not limited by “what is possible within the framework of a given system and administration,” Gorz writes, but are defined by “what should be made possible in terms of human needs and demands.”¹² Swiftly transforming our utility regulation to meet people’s needs today will prevent avoidable death throughout the ongoing economic and political crisis.

¹¹ J Mijin Cha, *A Just Transition for All* (MIT Press, 2024).

¹² André Gorz, *Strategy for Labor* (Beacon Press, 1967).

Background

Utility monopolists first established the regulatory system organized within state-level commissions to protect their own legitimacy and shield their businesses from more local, city-specific control.

Beginning with the establishment of the first private monopoly electric utility in 1907 by Samuel Insull, a vast majority of the electricity grid has been operated to maximize profits under narrow economic rules. These rules, designed by utility commissions, produce large investment returns for a shrinking number of investors in utility corporations over all other priorities including responsible reinvestment in the utility system's health or capacity. Per the Energy Information Administration, 3 out of every 4 US residents are now served by an investor-owned utility.¹³ Thus, regulatory design for investor-owned utilities deeply influences what utility policy is applied to *all* utility service providers, including publicly owned utilities and cooperative utilities.

Utility monopolists first established the regulatory system organized within state-level commissions to protect their own legitimacy and shield their businesses from more local, city-specific control.¹⁴ Since then, economists and policy influencers have continuously advocated for utility governance principles that exclude social goals while "imposing a specific set of terms for the legitimate conduct of the struggle over market rules" according to sociologist Daniel Breslau. He writes that these specific terms "thereby [limit] the kinds of *justifications* that are admissible, the kinds of *evidence* that can be brought to bear on market politics." In addition, these terms of conduct also exclude people by restrictively defining the "actors who can legitimately participate in struggles over market rules."¹⁵ In the context of US history, such exclusion is constitutively racialized, making this discussion critical for serious interlocutors in racial justice within climate and energy.

We suggest these terms first began to be standard practice for utility regulation beginning in the 1960s with the publication of *Principles of Public Utility Rates* by economist James C. Bonbright, which is referred to today within electricity policy circles as a foundational text.

¹³ U.S. Energy Information Administration, "Investor-Owned Utilities Served 72% of U.S. Electricity Customers in 2017 - Today in Energy - U.S. Energy Information Administration (EIA)," www.eia.gov, August 15, 2019, <https://www.eia.gov/todayinenergy/detail.php?id=40913>.

¹⁴ Richard F. Hirsh, *Power Loss: The Origins of Deregulation and Restructuring in the American Electric Utility System* (MIT Press, 2001).

¹⁵ Daniel Breslau, "Designing a Market-like Entity: Economics in the Politics of Market Formation," *Social Studies of Science* 43, no. 6 (August 5, 2013): 829–51, <https://doi.org/10.1177/0306312713493962>.

Bonbright placed the welfare of society above and outside of the concerns of public utility rate theory, writing that social welfare should be solved by “the country’s general price and wage system.”¹⁶ However, he issued one caveat: “Only if the ‘social considerations’ are deemed so pervasive that they cease to be thought of as exceptions or deviations does the public utility concept become a handicap rather than a useful tool of economic thought.”

We think present “social considerations” are indeed dire, given the extreme wealth inequality present today in which the richest 1 percent of households make over 139 times the income of the bottom 20 percent according to the Congressional Budget Office.¹⁷ To make matters worse, the US is on the brink of eliminating the pillars of the country’s social safety net, Medicaid and SNAP.¹⁸ Because people who experience high energy burdens often deprive themselves of needed food and medicine to make their energy bill payments, the loss of these programs that cover food and medicine costs will plunge people further into despair. Finally, lower-income residents are more likely to be part of another group disproportionately harmed by social immobility and climate change, whether by race, gender, sexual orientation, disability, or age than wealthier Americans, further deepening injustice of all kinds.¹⁹

Since Bonbright’s seminal publication, there has been a significant evolution from the foundation he provided, as outlined in the Regulatory Assistance Project’s comprehensive *Electricity Regulation in the US: A Guide*.²⁰ However, there has not been a total departure from the four functions of utility rates he set forth. We want to note that the concepts discussed in the guide—cost-plus regulation, revenue regulation, and performance-based regulation—are all modifications to

¹⁶ James C Bonbright, *Principles of Public Utility Rates* (Columbia University Press, 1961).

¹⁷ Inequality.org, “Income Inequality,” Inequality.org, 2019, <https://inequality.org/facts/income-inequality/>.

¹⁸ Katie Bergh, Dottie Rosenbaum, and Wesley Tharpe, “House Reconciliation Bill Proposes Deepest SNAP Cut in History, Would Take Food Assistance Away from Millions of Low-Income Families,” Cbpp.org, May 28, 2025, [https://www.cbpp.org/research/food-assistance/house-reconciliation-bill-proposes-deepest-snap-cut-in-history-would-take-;](https://www.cbpp.org/research/food-assistance/house-reconciliation-bill-proposes-deepest-snap-cut-in-history-would-take-) Mia Ives-Rublee and Kim Musheno, “The Truth about the One Big Beautiful Bill Act’s Cuts to Medicaid and Medicare,” Center for American Progress, July 3, 2025, <https://www.americanprogress.org/article/the-truth-about-the-one-big-beautiful-bill-acts-cuts-to-medicare-and-medicare/>.

¹⁹ This requires broadening our ideas about climate and energy justice, a process some call “pluralizing” energy justice. According to B.K. Sovacool et al., this means “incorporating feminist, anti-racist, Indigenous, and postcolonial perspectives.” See Benjamin K. Sovacool et al., “Pluralizing Energy Justice: Incorporating Feminist, Anti-Racist, Indigenous, and Postcolonial Perspectives,” *Energy Research & Social Science* 97, no. 102996 (March 2023): 102996, <https://doi.org/10.1016/j.erss.2023.102996>.

²⁰ Jim Lazar, “Electricity Regulation in the US,” Regulatory Assistance Project, 2016, <https://www.raponline.org/knowledge-center/electricity-regulation-in-the-us-a-guide-2/>.

cost-of-service regulation but bear a significant set of shared design criteria with Bonbright's original proposal: to cover the actual costs of the system, then produce profit for investors.

Instead of describing these small conceptual differences in depth, because a substantial volume of analysis exists in the literature, we want to describe some of the key ideas within ratemaking processes and critique some central claims that these ratemaking processes evolve to support. To do this, we first have to contextualize ratemaking with the ideological project of protecting and ensuring continued private ownership of essential utility services.

Bonbright's Principles of Public Utility Rates

In *Principles of Public Utility Rates*, Bonbright describes and advocates for using cost-of-service regulation as a minimum set of guidelines for designing utility rates. The design goal of cost-of-service regulation is to make sure that the total revenues collected by a utility rate design cover the total costs of providing the electric utility service. Then, he goes further. According to him, ratemaking under the *public utility regulation* model is about controlling the operations and investment decisions of a private monopoly with profit incentives, believing that a priority on ensuring profits for *private monopoly* firms could effectively guide their delivery of the utility service to stay aligned with the public interest.

Bonbright explicitly stated that rate designs that tried to evaluate and set maximums for upward income redistribution were unsuited for utility rate theory.

Bonbright explicitly stated that rate designs that tried to evaluate and set maximums for upward income redistribution—meaning from consumers to investors—were unsuited for utility rate theory. In other words, Bonbright was determined to ensure that investors could maintain their ownership of public utilities and rely on their ownership to generate revenues well above the operating costs for their own profits.

He summarized four original functions of rates in *public utility regulation* that needed to be balanced within this approach to ratemaking, and which have been generally used for all utility companies, both public and private, since:

1. **Capital attraction:** rates should be high enough to produce sufficient revenues to cover all legitimate operating expenses plus adequately cover the cost of debt service which is needed to maintain and expand the utility system.
2. **Efficiency incentive:** rates should act as a fiscal boundary that encourages utilities to minimize their own operating costs and make good decisions about construction projects in order to earn profits above their operating expenses.
3. **Consumer rationing:** rates should incentivize consumers to ration their own electricity use in order to keep overall system costs as low as possible.

4. **Income distribution:** rates should be set with an understanding that they perform a redistributive action—moving money from the consumer to the corporation—and that the standard should be set on its own merits. In other words, it is a social judgment to make about how much income redistribution to facilitate through utility rates.

Bonbright proposed these principles while also writing about his rejection of other socially-beneficial principles for public utility regulation debated in his time. He opposed the ability-to-pay principle, which, if adopted widely, would have acknowledged “public utility services [as] essentials rather than luxuries” and created a system where people “should not be deprived of essentials by any inability to pay” for service. He also opposed the diffusion-of-benefit principle, which posited that communities and even whole nations benefit when everyone in society can make “full use of the service,” which would justify providing service at less than cost, or even on a socialized basis, “like the public schools, [public] universities, and...the police, the courts, the navy, and the city-street departments.”²¹

He declared these ideas unsuitable for electricity. Whether one agrees with Bonbright’s point of view from 1961 or not, this set of principles is the primary foundation of ratemaking ideas today. We can use the historical evidence around these ratemaking principles and the policies that have evolved since then to evaluate whether these policies make for good governance or not.

💡 In the early days of the electricity system, some public power advocates rejected private monopoly in favor of public monopoly, demanding “service at cost” or service without a profit margin for shareholders and without an income redistributive effect. Public power advocates recognized that, without a private profit motive, cost-of-service regulation results in electricity prices that reflect the true costs of building, maintaining, and operating the utility system. Cost of service regulation is still the regulation style used for municipal utilities today.

²¹ Bonbright, *Principles of Public Utility Rates*, 112-115.

Fifty years of neoliberal policy evolution

Three-part crisis: fuel supply, engineering challenges, and business models in the mid-20th century

At the beginning of the 20th century, for-profit electric utility companies were being formed and shaped by wealthy businessmen in order to produce new streams of revenue.

At the beginning of the 20th century, for-profit electric utility companies were being formed and shaped by wealthy businessmen in order to produce new streams of revenue. While Canadian politicians and engineers successfully designed and implemented a wholly public electricity system, US industrialists used their influence to put the US on a different path. Utility barons fought against public ownership and eventually won, deciding in 1910 to begin advocating for the establishment of “public service commissions” to make it appear as though private ownership with public regulation was a reasonable alternative to democratically controlled, public ownership.

The success of the following era of utility regulation was not from the superior design of private ownership and public regulation, but due to three elements that together would become known as the throughput incentive, a structural design that encouraged utilities to maximize electricity sales to produce the highest possible profits for the energy utilities. These three elements were falling per-unit energy generation costs from steam turbine technological advancement; a rate structure that encouraged more consumption, not less; and cheap, abundant fossil fuels.

For 80 years between 1882 and 1962, making changes to improve the design or efficiency of the steam turbine resulted in being able to produce more electricity without more fuel or associated fuel costs.²² Eventually, due to the scientific limits of steam power with available materials, these engineering advances ran out. There were no significant design improvements available to keep upgrading the efficiency of the steam turbine, which began to weaken the throughput incentive that had contributed to the perceived success of the public regulation model.

²² Hirsh, *Power Loss*, 55–57.

This profit maximizing approach combined with the technology evolution discouraged any strategies that would conserve energy, as conserving energy would also lower revenues and profits paid to investors.

Layered on top of the physics of these technology gains was a rate structure to encourage increasing electricity consumption, to push demand higher and justify more investment in newer steam turbines. One widely used rate structure for this goal was the declining block rate, which provided lower prices to consumers the more electricity they consumed. This profit maximizing approach combined with the technology evolution discouraged any strategies that would conserve energy, as conserving energy would also lower revenues and profits paid to investors.

With this incentive structure in place, utilities were dependent on large, centralized energy generation sources as total electricity consumption in the US reached an all-time high. At the same time, the 1963 Clean Air Act's pollution standards shifted more electricity production to oil, which produced less pollution than coal when burned in power plants. This made electricity generation highly sensitive to the market price of oil imports, a connection especially prevalent in urban areas with large populations where most US residents had electrified their homes and joined the grid and supported cleaner electricity.

These conditions set the stage for a crisis. In 1973, the price for oil soared because of the embargo by the Organization of Arab Petroleum Exporting Countries (OAPEC) against the US and other countries for their involvement in the fourth Arab-Israeli War, an earlier episode linked to the ongoing genocide in Palestine today. When the oil embargo went into effect, the entire system went into shock. Fuel supply shortages caused blackouts and skyrocketed prices to deeply unaffordable levels. This crisis, concentrated in densely populated US cities, spurred Congressional changes to the laws and policies about how the US prices electricity, as well as the makeup of the energy generation supply itself.

💡 Being a vertically integrated utility is not what causes utility companies then or now to burn fossil fuels. Having a single owner of generation and distribution is not directly linked to the fuel preferences. Nor was a utility's being vertically integrated the cause of investor-owned utilities pursuing maximum returns: it is the private corporation's obligation to maximize profits. Because of the technologies available at the time, even if there had been hundreds of thousands of smaller, individual utility companies, they all would have designed their businesses in the same way to maximize profits while using the cheapest, most efficient technology.

Application of free-market fundamentalism to the electricity sector

Policymakers agreed that reforms were necessary, but with conservative politics rising in power, they rejected the opportunity to put public welfare above corporate profits.

Ratepayers were angry at the utility corporations and the government's failures to protect consumers through the public service commissions ostensibly designed to effectively regulate the utilities, much like they are again today. Policymakers agreed that reforms were necessary, but with conservative politics rising in power, they rejected the opportunity to put public welfare above corporate profits. Instead, economists and policymakers turned their attention toward the three elements of the throughput incentive, avoiding the common sense reforms of the utility industry that conservatives had successfully pared back in the decades after the New Deal. They presented arguments to introduce market competition for electricity generation as a favorable replacement for public utility regulation, claiming this would be a suitable alternative to returning to public monopoly.²³ This happened in parallel with other, similar efforts at restructuring regulations and facilitating market competition across other sectors of the economy including airlines, railroads, water utilities, and telecommunications.²⁴

In the time in between then and now, in some electricity circles, a shared mythology has developed that oversimplifies this period. The belief goes that it was the existence of vertically integrated utilities, organized as private monopolies, that was alone the biggest culprit of the utility crisis of the 1970s. Vertically integrated utilities owned all parts of the system from power generation, to long-distance transmission infrastructure, to the distribution grid in our cities and neighborhoods. This strong integration between the parts of the system is blamed for the suppression of renewables, energy justice, and more. The argument goes that weaker integration would open a market for competition in utility generation supply. This mythology is used as an ongoing justification for the restructuring of the electricity industry toward competition, ignoring the multiple features of the throughput incentive and the utility profit motives involved.

²³ Harold Demsetz, "Why Regulate Utilities?," *The Journal of Law and Economics* 11, no. 1 (April 1968): 55–65, <https://doi.org/10.1086/466643>.

²⁴ C.J. Polychroniou, "Neoliberal Policies Associated with Reaganomics Actually Started with Carter," *Truthout*, September 2, 2024, <https://truthout.org/articles/neoliberal-policies-associated-with-reaganomics-actually-started-with-carter/>.

Over time, this has become flattened into a critique of the “investor-owned utility monopoly” as well, which reduces multiple aspects of the system—private monopoly, public utility regulation’s inability to govern effectively, and the incentives of vertical integration—into one bogeyman. It’s important to unentangle these and examine their ills separately.

If the *private monopoly* form of the investor-owned utilities was a core causal factor, the decision makers at the time could have supported and expanded the goals set out during the New Deal in the Public Utility Holding Companies Act (PUHCA). They could have also converted or, in many cases, returned, electric utilities to local control and community ownership through public power. If the power of public utility regulation needed to be strengthened, then decision makers could have also enacted forthright mandates with more explicit public utility regulation laws, rather than leaving in place a federalist governance system. Similarly, if the rate design encouraged by vertical integration itself was an issue threatening people’s ability to afford the energy they needed, policymakers of the time could have addressed this cost concern directly with universally adopted lifeline rates or a mandate for utility ratemaking to use the ability-to-pay principle.²⁵ However, none of these occurred.

After their power being curbed by the political pressures of near-total economic collapse during the Great Depression, conservative forces held long-simmering resentment against the New Deal and the era of progressive policy in the US. Business leaders, economists, and policymakers of the day argued instead for new regulations to put forces of competition in control of regulating the utility companies’ behavior, exploiting the price shock for their own interests, using this economic shock as an opportunity to strengthen their control of the fate of utilities.²⁶ This evolution path cemented the link between restructuring (inaccurately called “deregulation” by some) and ratemaking throughout the 1960s and ’70s, triggered by this series of events concerning fuel supply, engineering evolution, and global politics.

²⁵ William Boyd, “Decommodifying Electricity,” *Southern California Law Review* 97, no. 101 (2024): 937–1027, <https://doi.org/10.2139/ssrn.4889020>.

²⁶ The theory of shock doctrine describes when political actors take advantage of crises of all types to push through policies that enable privatization and favor corporate interests over collective wellbeing. See Naomi Klein, *The Shock Doctrine: The Rise of Disaster Capitalism* (London: Penguin Books Ltd, 2008).

One part of this conservative-led coalition against state planning and management continued to attack the mandate of the Public Utility Holding Companies Act, which broke up private monopolies that contributed to the Great Depression and were addressed in the New Deal. They completed their goal in 2005 with the passage of the federal Energy Policy Act that year. Another part of this coalition began a multi-decade attempt to break up the vertically integrated utility and replace its form with a competitive market, with electricity priced on the fly, as-near real-time as possible. The final group inside the coalition, although not identifying wholly with the conservatives per se, came from the environmental movement. Those environmental group actors saw an opportunity to advance their pollution reduction goals and joined the coalition to advance energy conservation policy and programs alongside these other two goals.²⁷

This continues today. In nearly all energy utility policy circles today, these priorities still tend to define the “legitimate conduct of the struggle over market rules.”²⁸

²⁷ Hirsh details the nuances of the alliances made at the time between environmentalists who favored energy conservation and conservative economists who favored energy competition over regulation or public ownership, which delivered the combined political agenda marrying the early environmental movement with the conservative and neoliberal agendas of the era. See Hirsh, *Power Loss*, 136-154.

²⁸ Breslau, “Designing a Market-like Entity: Economics in the Politics of Market Formation,” 832.

An overview of ratemaking, rate design, and revenues

When applied to investor-owned utilities, the revenue requirement expands to include a chosen rate of return on equity for the utility's investors who provided the capital to pay the upfront costs for the utility's assets.

The Bonbright principles of cost-of-service regulation were widely adopted in the 20th century. Understanding foundational concepts surrounding cost-of-service regulation such as those named below as well as many others included in the Regulatory Assistance Project's "Electric Cost Allocation for a New Era" manual is a prerequisite to be able to engage in most utility policy discussions today.²⁹

Recall that the overall goal of public utility regulation broadly is to make sure that the total revenues collected by a utility cover the total costs of providing the electric utility service. This calculation of the utility's revenue requirement is designed to equal the total cost of owning and operating the utility's rate base (its generation, transmission, and distribution assets) and the cost of operating these assets, such as fuel, maintenance, labor, and administrative costs. This style of regulation is still in use by many utilities today, including public utilities and vertically-integrated utilities that still own all three types of assets. Determining how to estimate all of these costs is done in the ratemaking process and ultimately published as a final product called a rate design.

When applied to investor-owned utilities, the revenue requirement expands to include a chosen rate of return on equity for the utility's investors who provided the capital to pay the upfront costs for the utility's assets. This rate of return is set by every commission separately, and can be set much higher than is necessary.³⁰ In states where laws have been passed to restructure the utility - usually to both break apart vertically-integrated utilities and to establish a wholesale market for buying and selling electricity - ratemaking becomes more complicated. The process expands to include at least some dynamic pricing. This is typically the price of buying electricity in the wholesale market, but it is being expanded in some states to include the dynamic

²⁹ Jim Lazar, Paul Chernick, and William Marcus, "Electric Cost Allocation for a New Era: A Manual," ed. Mark LeBel (Regulatory Assistance Project, January 2, 2020), <https://www.raponline.org/knowledge-center/electric-cost-allocation-new-era/>.

³⁰ Mark Ellis, "Rate of Return Equals Cost of Capital: A Simple, Fair Formula to Stop Investor-Owned Utilities from Overcharging the Public" (American Economic Liberties Project, January 17, 2025), <https://www.economicliberties.us/our-work/rate-of-return/>.

pricing for providing transmission and distribution, too, on which we add more detail in following sections.

💡 A utility's rate, and all of its attendant components, cannot be clearly mapped onto a sample electricity bill. Even if a bill presented simply "fixed" and "variable" charges in two line items, the definitions of what qualifies in either category now vary. We do not recommend trying to start from the bill to understand ratemaking, because there are significant decisions made about a utility rate calculation in multiple venues above the state utility commission that will not perfectly match. Instead, we recommend first understanding the primary types of rate design, and then figuring out how one's local rate design landscape differs from these broad archetypes.

Brief summary of ratemaking paradigms.

	Cost-of-service rates	Dynamic pricing rates
How it works	Rates designed to recover in the aggregate the cost of owning and operating the utility's generation, transmission, and distribution assets plus a profit for investors.	Setting different utility rates throughout the day based on overall load on the grid. During peak hours, when demand on the grid is heaviest, rates are increased in order to incentivize energy conservation among consumers. When energy demand relaxes, rates are lowered.
Where it is in use	Still in use by some utilities today, especially integrated utilities outside of restructured states.	"Innovative" states that have restructured their electricity sector.
Its primary goal	To cover the utility's rate base and provide a scheduled rate of return on equity with a predictable price.	To provide as much information as possible continuously from the wholesale market clearing price and—moment by moment—instantaneously estimated or modeled costs of transmission and distribution to the end customer.

Components of rates

In their simplest form, and perhaps more accurately achieved in the early days of the electricity system, the monthly bill charges mapped to two types of charges: a fixed charge that covered equipment and metering costs and a variable charge for electricity use by the kilowatt-hour (kWh). (Sometimes this is called a volumetric charge, because it *varies* based on the *volume* of electricity used.) However, this oversimplifies the environment around ratemaking today. Since there is no uniformly, nationally enforced rule defining what is a fixed

charge and what is a variable charge, this early divide is no longer consistent anywhere. In this section we also briefly summarize demand charges, which have been a feature of industrial and some commercial rates and are beginning to be introduced in residential rates, too.

Fixed charges

Fixed charges are generally the costs associated with the grid that do not change based on how much electricity is used. This includes the costs of debt service or the rate of return on equity for the investments that paid for equipment that carries electricity from the large transmission system down to the meters.³¹ However, for over a decade “there has been a sharp increase in the number of utilities proposing to recover more of their costs through mandatory monthly fixed charges rather than through rates based on usage.”³² Synapse Energy Economics wrote that this adds stability from the perspective of the utility, because fixed charges are not affected by changes in “energy efficiency, distributed generation, weather, or economic downturns.”³³

Over the past several decades, many investor-owned utilities faced low growth in electricity sales due to energy efficiency improvements and the proliferation of distributed energy. Energy efficiency and distributed energy generation reduce electricity sales from the utility’s point of view, while the costs of operating the grid system remain intact; thus, shifting this cost recovery from usage-based rates to fixed rates insulates the utility’s topline revenues from the effect of other regulation goals. As a result, utilities have frequently attempted to push for increased fixed charges to maintain revenues.³⁴ Today, this fundamental assumption of low to no load growth is changing rapidly, too. New loads from electric heat pumps, electric vehicles, and data

Over the past
several decades,
many
investor-owned
utilities faced low
growth in electricity
sales due to energy
efficiency
improvements and
the proliferation of
distributed energy.

³¹ Lisa Wood et al., “Recovery of Utility Fixed Costs: Utility, Consumer, Environmental and Economist Perspectives,” *Future Electric Utility Regulation Report Series* FEUR Report No. 5 (June 2016), <https://emp.lbl.gov/publications/recovery-utility-fixed-costs-utility>.

³² Melissa Whited, Tim Woolf, and Joseph Daniel, “Caught in a Fix: The Problem with Fixed Charges for Electricity,” CR Advocacy (Synapse Economics, February 10, 2016), <https://advocacy.consumerreports.org/research/caught-in-a-fix-the-problem-with-fixed-charges-for-electricity/>.

³³ Whited et al., “Caught in a Fix: The Problem with Fixed Charges for Electricity,” 6.

³⁴ Karl R. Rábago and Radina Valova, “Revisiting Bonbright’s Principles of Public Utility Rates in a DER World,” *The Electricity Journal* 31, no. 8 (October 2018): 9–13, <https://doi.org/10.1016/j.tej.2018.09.004>.

Increases to fixed charges to make up for lower revenues from variable charges disproportionately impact low-income customers as well as low-energy-usage ratepayers.

centers are growing, and with this growth come new arguments about how to pay for the system fairly while keeping it stable.³⁵

From the perspective of producing energy justice, because fixed charges form a greater portion of smaller-volume electric bills, increases to fixed charges to make up for lower revenues from variable charges disproportionately impact low-income customers as well as low-energy-usage ratepayers. This creates common cause between both poor customers using coping strategies to make ends meet while keeping the lights on as well as wealthy customers who can afford technologies to reduce their grid energy usage.³⁶

Recently, some economists in California pursued another approach to modifying fixed charges with a stated goal of improving equity: in 2022, the state legislature passed Assembly Bill 205, an expansive energy bill that included a provision introducing income-based fixed charges, or charges that would be higher or lower based on proportional high or low household income levels.³⁷ This bill doesn't change the revenue requirement rules to reduce the power or profits of the investor-owned utility, but it did implement a modest move away from Bonbright's original principle to avoid income redistribution within the rate design itself.³⁸

Variable charges

Variable charges are generally considered to be other costs like fuel for energy generation, labor, and maintenance. The variation in the charges stemmed from the different prices of electricity generation by type of generating technology or different wages in different regions. Now, the term also has a temporal dimension. It still includes those initial ideas about fuel and operations charges and has expanded to cover the range of ways costs for generating electricity, operating the grid, and delivering electricity can change on a seasonal or even hourly

³⁵ These arguments include redesigning fixed cost allocation to match the ongoing evolution of the technology of the grid and communicating "marginal costs" more immediately to the end customer. A faithful discussion of the concept of "marginal cost" was left out of this brief, only because it adds another layer of complexity we deemed beyond the scope. More about this is available in Boyd's excellent history of pricing electricity as a commodity. See William Boyd, "Decommodifying Electricity," *Southern California Law Review* 97, (2024): 119, <https://doi.org/10.2139/ssrn.4889020>.

³⁶ Wood et al., "Recovery of Utility Fixed Costs: Utility, Consumer, Environmental and Economist Perspectives," 19–31.

³⁷ California Assembly Committee on Budget, "Assembly Bill No. 205, Energy" (2022), https://leginfo.ca.gov/faces/billTextClient.xhtml?bill_id=202120220AB205.

³⁸ Severin Borenstein, "Reality Checking California's Income-Graduated Fixed Charge," Energy Institute Blog, May 13, 2024, <https://energyathaas.wordpress.com/2024/05/13/reality-checking-californias-income-graduated-fixed-charge/>.

basis. This is present in its most extreme form under dynamic pricing rates, and in a simplified form with time-of-use rates.

Discussing variable charges for every kilowatt-hour that are time-sensitive requires understanding the difference between “peak” hours and “off-peak” hours for energy consumption. These hours in each day are defined on a seasonal schedule by each utility or utility commission, generally. “On-peak” and “off-peak” designate the hours when electricity demand is highest and lowest, respectively. During peak hours, rates are increased in order to incentivize energy conservation among consumers. When energy demand relaxes, rates are lowered. As a result, the season and the time of day at which the energy is used changes the price of the energy. Time-of-use rates have long been commonly applied to industrial customers; however, it is only in recent years that investor-owned utilities have begun offering them to other customers, usually but not always on a voluntary basis.

Another idea embedded in variable charges is that providing the same electricity unit of a kilowatt-hour to different types of customers has different costs, too, even for the same unit of energy. This is readily observed in the differences between publicly listed industrial, commercial, or residential rates. Some of the basis for this idea comes from the actual engineering costs of designing and constructing the grid physically. It is generally true that there are more miles of electric lines and more equipment needed to serve all residential ratepayers compared to a smaller number of industrial or commercial ratepayers.

However, the idea that it is fair to charge each ratepayer based on this generally true observation isn’t applied equally. Ratepayers whose facilities or homes are far away from the center of a utility’s service area don’t pay more than people who are close to the center, just like you don’t pay for a library’s service or for the postal service based on distance. The design of utility rates, in addition to reflecting engineering costs, is also being shaped by economic beliefs about the roles of different customer classes in the overall economy and what it means to share a system inside of a society.

Understanding electricity bills is already highly difficult and the public resentment toward the electricity system is producing real political challenges to any energy transition at all.

Demand charges

Demand charges have been a feature of the electricity rate structure for several decades, but they have previously been applied only to industrial customers. The thinking behind demand charges is that industrial customers requiring the highest power levels (measured in voltage) create unique costs of building and maintaining a transmission system that can support such high voltages. It is generally thought that it is those customers specifically that should pay for such additional voltage capacity. Now, with utilities seeking more ways to maximize their profits, in some places demand costs are now being proposed for residential users as well.

In theory, when the concept of demand charges is applied to residential customers, it would similarly require each customer to pay for providing electricity at specific voltages (say, if a customer has an electric vehicle or other relatively higher-voltage energy use compared to other grid users) and encourage energy conservation to avoid stacking multiple high voltage uses together at the same time. In practice, monitoring and minimizing this voltage need at home might look like charging your car at a different time than when you run your air conditioning or your washing machine.

During the mid-transition period, where some customers even within the same customer class are rapidly adopting new, high-voltage technologies to replace fossil fuel energy while others are not, this design might seem appealing.³⁹ In our view, it seems overly and unnecessarily complex. Understanding electricity bills is already highly difficult and the public resentment toward the electricity system is producing real political challenges to any energy transition at all. Present internal differences within a customer class seem negligible and not worth the cost of complexity, all the more so when compared to the rising disparity in electricity use between households and the rapid, unregulated growth of large industrial electricity utilization like at data centers.

Common justifications for fixed, demand, and variable charges.

³⁹ Emily Grubert and Sara Hastings-Simon, "Designing the Mid-Transition: A Review of Medium-Term Challenges for Coordinated Decarbonization in the United States," *WIREs Climate Change* 13, no. 3 (February 8, 2022), <https://doi.org/10.1002/wcc.768>.

	Charged per	Common justification
Fixed charges	Meter	Fixed charges pay for the cost of providing the grid itself—the wires, transformers, and other hardware that make up the infrastructure system—within each utility’s service territory.
Variable charges	Hourly use (kWh) based on a specific time of day	Variable charges are separated from the cost of providing the grid and cover the cost of providing the electricity itself. The charges change based on a number of factors, including the mix of resources used to deliver electricity hour by hour.
Demand charges	Peak voltage used (kV) or kW	Demand charges are an additional way to pay for the cost of providing the grid itself, proportional to each customer’s share of the total electricity capacity for the distribution and transmission system owned by the utility.

Disconnecting the revenue requirement from service usage

Replacing cost-of-service ratemaking is not simple, and has been dominated by attempts to enact revenue decoupling. The argument for this policy change is, in part, a reaction to the failures caused by the throughput incentive covered above. Revenue decoupling is carried out along with breaking apart vertically-integrated utilities, which is often referred to as restructuring. Once executed, revenue decoupling policy guarantees a specific revenue and specific profit to the utility company, regardless of the amount of electricity used by its ratepayers.⁴⁰ As of 2020, restructuring and revenue decoupling has been implemented in 18 states so far, with proposals pending at that time in 7 more.⁴¹

Revenue decoupling is also paired with new rate designs referred to as dynamic pricing. The outcome goal for dynamic pricing rate design is to provide instantaneous or nearly-instantaneous pricing to customers using smart meters and digital notifications to provide as much information as possible to the end user. This information would include

⁴⁰ Christina Simeone, “Rate Decoupling and Economic and Design Considerations,” *Kleinman Center for Energy Policy*, June 6, 2016, <https://kleinmanenergy.upenn.edu/research/publications/rate-decoupling-and-economic-and-design-considerations-executive-summary/>.

⁴¹ Dylan Sullivan and Donna De Costanzo, “Gas and Electric Decoupling,” NRDC, August 24, 2018, <https://www.nrdc.org/resources/gas-and-electric-decoupling>.

continuously updated pricing info from the wholesale market operator and from the utility company about the cost of energy generation and—literally moment by moment—about the instantaneously estimated or modeled costs of transmission and distribution services to the end customer.⁴² This is time-of-use rates on steroids: rather than change electricity prices season by season, dynamic pricing would change prices at least hour by hour.

In theory, dynamic pricing would allow customers to save money by moderating their consumption during peak hours. However, adoption remains low, and RMI notes that “there are significant knowledge gaps related to both time-based and demand charge rates” that are unaddressed.⁴³ While investor-owned utilities in 24 states and the District of Columbia offer time-of-use rates to their customers, only Commonwealth Edison, Duke Energy, and PG&E offer residential customers dynamic pricing as of 2019.⁴⁴ Recent history shows that this aversion to risk may be wise: in the wake of winter storms in Texas in 2021 that led to mass blackouts and skyrocketing wholesale electricity prices, retail electricity provider Griddy (which is not regulated like investor-owned utilities in the previous list) became infamous for saddling unlucky customers with bills of thousands of dollars due to their dynamic pricing model that passed wholesale energy costs directly to consumers. Following this debacle, the Texas legislature promptly moved to ban residential wholesale energy plans from the retail market.⁴⁵

⁴² Frank A Wolak and Ian H Hardman, *The Future of Electricity Retailing and How We Get There* (Springer International Publishing, 2021), 55-57, <https://doi.org/10.1007/978-3-030-85005-0>.

⁴³ Becky Xilu Li, James Sherwood, and Dan Cross-Call, “A Review of Alternative Rate Designs,” RMI, May 27, 2016, <https://rmi.org/insight/review-alternative-rate-designs/>.

⁴⁴ Wolak and Hardman, *The Future of Electricity Retailing and How We Get There*, 157.

⁴⁵ Mitchell Ferman, “Texas Legislature Approves Bill to Ban Residential Wholesale Electricity Plans — the First Major Winter Storm Bill Sent to the Governor,” *The Texas Tribune*, May 13, 2021, <https://www.texastribune.org/2021/05/13/texas-power-grid-failure-legislature/>.

The false promises of utility restructuring

Changes to the ratemaking process over the last five decades have been guided by energy policies that pursued the goals of undoing the regulation of the New Deal and advancing neoliberal ideas of a “free market.” These efforts promised to restructure the utility sector—in transmission, generation, and retail service—and in doing so produce lower costs and protect the American people from future price shocks. The results illustrate that this has not happened at all; some studies show that restructuring made the effect of historical events since the 1970s worse, not better. More than enough time has passed to critically evaluate the agenda of utility restructuring, and at this particular moment of extreme crisis, it is imperative to take a clear-eyed look at the results. Millions of lives hang in the balance if we continue to inherit and pursue the false promises of this agenda.

Millions of lives hang in the balance if we continue to inherit and pursue the false promises of this agenda.

Introducing competition for energy generation would bring down power prices

In 1978, Congress passed the Public Utility Regulatory Policies Act (PURPA) in order to create the preparatory conditions for a wholesale electricity market. This Act allowed private power generators (also called independent power producers today) to sell power on the grid for the very first time, cracking the vertical integration of the electric system.⁴⁶ Vertically integrated, investor-owned utilities were required to purchase power from these new power generators if the cost of purchasing power were to be lower than the cost of the vertically integrated, investor-owned utility generating the power itself.⁴⁷ While nominally successful in achieving this goal, antitrust analysis has shown that in many cases the new owners of power generation were not very diverse. In other words, this did not produce less concentrated

⁴⁶ “Public Utility Regulatory Policy Act (PURPA),” Union of Concerned Scientists, 2025, <https://www.ucs.org/resources/public-utility-regulatory-policy-act>.

⁴⁷ Public Utility Regulatory Policies Act, 16 U.S.C. § 46 (1978).

Under this restructured model, power producers have historically been able to profitably increase their own prices for selling energy to the utility companies.

ownership over who owned power generation, but simply different ownership than the investor-owned utilities.⁴⁸

To address this issue of concentrated market power, in 1992, Congress passed the Energy Policy Act, which attempted to further remove financial barriers to new power generators entering the market.⁴⁹ The Federal Energy Regulatory Commission (FERC) followed Congress's lead by increasingly looking to limit anticompetitive behavior among vertically integrated private monopolies in the electricity sector. The 1990s saw FERC's most ambitious regulatory edicts to this end: FERC Order 888 in 1995, followed by FERC Order 2000 in 1999.⁵⁰ Together, the Energy Policy Act and these Orders initiated a process of public utility restructuring which sought to eliminate vertically integrated utilities and transform them into restructured utilities. The promise of restructuring was that markets for wholesale electricity sales would produce an optimal energy generation supply at the lowest cost and "correct for the overbuilding supposedly endemic under state-owned and regulated cost-of-service systems" in the 1970s.⁵¹ As restructured utilities, corporations would own distribution infrastructure but purchase energy from generators through competitive wholesale markets administered by newly created independent system operators (ISOs) and regional transmission organizations (RTOs).

This created a much more complex and fractured system. Today, 18 states and Washington, DC exhibit some level of electricity restructuring that establishes regional markets, and it has not produced the stated results.⁵² In fact, it may have created the opposite effect. Under this restructured model, power producers have historically been able to profitably increase their own prices for selling energy to the utility companies. Then, the utility companies or retail providers have been able to pass those costs on to their customers,

⁴⁸ Alexander MacKay and Ignacia Mercadal, "Deregulation, Market Power, and Prices: Evidence from the Electricity Sector," *SSRN Electronic Journal*, 2021, <https://doi.org/10.2139/ssrn.3793305>.

⁴⁹ Jeffrey Watkiss and Douglas Smith, "The Energy Policy Act of 1992- a Watershed for Competition in the Wholesale Power Market," *The Yale Journal on Regulation* 10 (1993): 447-92, <http://hdl.handle.net/20.500.13051/7890>.

⁵⁰ FERC, Promoting Wholesale Competition Through

Open Access Non-Discriminatory Transmission Services by Public Utilities, Recovery of Stranded Costs by Public Utilities, 61 Fed. Reg. 21,540, 21,546 (May 10, 1996); FERC, Regional Transmission Organizations, 89 Fed. Reg. 61,285 (December 20, 1999).

⁵¹ Boyd, "Decommodifying Electricity," 160.

⁵² Sullivan and De Costanzo, "Electric and Gas Decoupling in the U.S."

Neoliberal policy implementation made it possible for two different corporations to extract rents from customers where previously there had been just one.

while also adding their own markup. Where this occurs, it creates cases of “double marginalization.”⁵³

Thus, instead of producing a perfectly competitive system that automatically falls to the lowest cost at all times, neoliberal policy implementation actually made it possible for two different corporations to extract rents from customers where previously there had been just one corporation, the vertically integrated utility company. California was the first state to implement this new system, resulting in the infamous 2000 electricity crisis that saw wholesale prices rise 800 percent through manipulated trading, which would hamper further restructuring efforts nationwide. One long-range study of the outcomes of the California wholesale market suggests that restructuring did not result in sufficient competition to lower prices at all compared to a non-restructured system.⁵⁴

By far the biggest factor affecting wholesale power prices over the last several decades has been fossil fuel prices, especially natural gas, making all other claims to restructuring cost savings irrelevant.⁵⁵ In a restructured environment, these costs are passed directly onto consumers because of wholesale markets setting prices for electricity without supervision. Consumers feel this immediately. For example, when Russia’s invasion of Ukraine in 2022 resulted in a global natural gas price spike, increased wholesale costs were passed through to New York ratepayers in the volumetric per-kWh portion of their bills.⁵⁶ Law scholars point out that this “can quickly become coercive during periods of great need, raising important political and ethical questions about the overall governance of key systems of provisioning.”⁵⁷

As a result of this poor set of outcomes, along with many others related to the failures of the wholesale market and RTO system, legal experts recommend that FERC reassert its authority and completely rebuild

⁵³ MacKay and Mercadal, “Deregulation, Market Power, and Prices: Evidence from the Electricity Sector,” 26.

⁵⁴ Ghazal Razeghi, Brendan Shaffer, and Scott Samuelson, “Impact of Electricity Deregulation in the State of California,” *Energy Policy* 103 (April 2017): 105–15, <https://doi.org/10.1016/j.enpol.2017.01.012>.

⁵⁵ Severin Borenstein and James Bushnell, “The US Electricity Industry after 20 Years of Restructuring,” *Annual Review of Economics* 7, no. 1 (August 2015): 437–63, <https://doi.org/10.1146/annurev-economics-080614-115630>.

⁵⁶ New York Independent System Operator, “Impact of National & Global Conditions on Electricity Prices in New York,” May 2022, <https://www.nyiso.com/documents/20142/2224547/Electricity-Prices-in-NY.pdf/ea6c1616-02a5-5bdd-9964-bfd6e98a2dc5>.

⁵⁷ Boyd, “Decommodifying Electricity,” 170.

the RTOs in design, governance, and function.⁵⁸ If FERC cannot successfully regulate their regulatory subjects, these experts go on to recommend creating an entirely new, federal planning authority which supersedes the RTOs and requires new forms of compliance.⁵⁹

Restructuring and revenue decoupling would lower rates and increase energy conservation

Recall that revenue decoupling is a regulation design which separates the total revenue a utility is guaranteed from its sales volumes, and was enacted along with the restructuring of the industry to break apart vertically-integrated utilities and introduce non-utility owned generation. In theory, this was intended to make investor-owned utilities indifferent to loss of electricity sales as well as advances in energy efficiency, which would reduce sales through avoiding energy use, or distributed generation, which would reduce sales through self-generation from rooftop solar.

A national study in 2022 found that changing power generation ownership structures and altering retail regulation had virtually no effect on lowering prices.

A national study in 2022 found that changing power generation ownership structures and altering retail regulation had virtually no effect on lowering prices. In the study, claims about the price effects of restructuring were shown to be time-sensitive and correlated to natural gas prices, meaning that restructuring produced lower power prices when power generation costs were lower due to changes in fossil fuel prices, with “almost no difference in the change in average rates for the two groups.”⁶⁰

Another study estimates that 64 percent of all revenue decoupling efforts resulted in increased bill charges.⁶¹ In fact, one study found that US investor-owned utilities consistently increased energy usage during the year that revenue decoupling baselines were measured, suggesting these utilities might be intentionally driving demand in order to induce higher baseline revenue requirements, effectively cheating the

⁵⁸ Joel B Eisen and Heather E Payne, “Rebuilding Grid Governance,” *BYU Law Review* 48, no. 4 (2023): 1057, <https://digitalcommons.law.byu.edu/lawreview/vol48/iss4/5/>.

⁵⁹ Shelley Welton, “Governing the Grid for the Future: The Case for a Federal Grid Planning Authority,” *The Hamilton Project* (The Brookings Institution, May 22, 2024), <https://www.brookings.edu/articles/governing-the-grid-for-the-future-the-case-for-a-federal-grid-planning-authority/>.

⁶⁰ Borenstein and Bushnell, “The US Electricity Industry after 20 Years of Restructuring,” 15.

⁶¹ Peter A. Cappers et al., “The Distribution of U.S. Electric Utility Revenue Decoupling Rate Impacts from 2005 to 2017,” *The Electricity Journal* 33, no. 10 (December 2020): 106858, <https://doi.org/10.1016/j.tej.2020.106858>.

system.⁶² There is little evidence demonstrating the claimed positive gains in energy efficiency or grid modernization either.⁶³

Perhaps worst of all, this march toward restructuring for restructuring's sake is correlated with the profit margin for all utilities—regardless of whether they are restructured or remain vertically integrated—rising. In 2019, a study noted that regulated rates of return on equity over a 38-year period rose significantly, spreading more and more over time from the actual cost of equity.⁶⁴ This observation was echoed by another study from 2024, which concluded that approved rates of return on equity always moved upwards with the underlying cost of equity, but often did not move downwards with diminutions in the cost of equity. This 2024 study estimated that the excess rates collected from consumers is around \$7 billion each year.⁶⁵ One set of researchers suggests that these excess rate increases are possibly caused by restructuring itself, the presence of two regulatory models in parallel, and the different standards applied by each regulating authority.⁶⁶

Performance-based regulation would finally fix this dysfunctional system

These effects have been under scrutiny for nearly a decade.⁶⁷ In this period, many state regulators have pursued performance-based regulation (PBR) to try inducing better outcomes from investor-owned utilities. PBR creates a system of financial incentives and penalties for investor-owned utilities, tying specific policy goals such as improved energy efficiency, reliability, cost control, or emissions reductions to potential utility revenues. Some believe this to be a more targeted

⁶² Victor von Loessl and Heike Wetzel, "Revenue Decoupling, Energy Demand, and Energy Efficiency: Empirical Evidence from the U.S. Electricity Sector," *Utilities Policy* 79 (December 2022): 101416, <https://doi.org/10.1016/j.jup.2022.101416>.

⁶³ Arlan Brucal and Nori Tarui, "The Effects of Utility Revenue Decoupling on Electricity Prices," *Energy Economics* 101 (September 2021): 105440, <https://doi.org/10.1016/j.eneco.2021.105440>; Steve Kihm, Janice Beecher, and Ronald Lehr, "Regulatory Incentives and Disincentives for Utility Investments in Grid Modernization | Energy Markets & Policy," *Future Electric Utility Regulation Report Series FEUR Report No. 8* (May 2017), <https://emp.lbl.gov/publications/regulatory-incentives-and->; Peter A. Cappers et al., "The Distribution of U.S. Electric Utility Revenue Decoupling Rate Impacts from 2005 to 2017," *The Electricity Journal* 33, no. 10 (December 2020): 106858, <https://doi.org/10.1016/j.tej.2020.106858>.

⁶⁴ David C. Rode and Paul S. Fischbeck, "Regulated Equity Returns: A Puzzle," *Energy Policy* 133 (October 2019): 110891, <https://doi.org/10.1016/j.enpol.2019.110891>.

⁶⁵ Karl Dunkle Werner and Stephen Jarvis, "Rate of Return Regulation Revisited," *Energy Institute at Haas*, 2025, <https://haas.berkeley.edu/wp-content/uploads/WP329.pdf>.

⁶⁶ Rode and Fischbeck, "Regulated Equity Returns: A puzzle."

⁶⁷ Borenstein and Bushnell, "The US Electricity Industry after 20 Years of Restructuring."

approach than broad revenue decoupling. In our view, this evolution continues to chase the ever-remote ideal outcomes of neoliberal electricity restructuring.

This regulation style encompasses a wide swath of initiatives (and for this reason there are a variety of estimates of how many states have implemented it), but incentive-based regulations have been introduced in the majority of US states.⁶⁸ There has been little empirical study of the overall effectiveness of performance-based regulation, so claims that it is superior to the existing model are based almost entirely on opinion. However, energy law scholars Joel Eisen and Heather Payne are skeptics. In a recent paper, they write:

PBR is the poster child for administrative dysfunction, as the repeated and successive attempts to improve regulatory oversight, requiring more reforms to correct them, are inevitable. And yet, utilities are pushing more states to adopt PBR, in part because it gives them the ability to constantly reshape acceptable targets and therefore demand rewards for what regulators could just order them to achieve.⁶⁹

Ongoing challenges to the advancement of PBR share this evaluation. For example, the Michigan Public Service Commission is currently deliberating a performance-based regulation mechanism to address persistent reliability issues among its investor-owned utilities, but the proposal has been strongly criticized by ratepayer advocates who object to the incentive standards. State advocates argue the standards proposed have been weakened by utility influence such that they will be ineffective in improving reliability.⁷⁰

In addition, performance-based regulation sets incentives at the state level, which means that they cannot scale or coordinate regionally to influence broader, federal concerns such as transmission planning or collective societal concerns. Chasing PBR continues to fracture the regulatory environment in the same pattern observed in the last

⁶⁸ Paul L Joskow, "The Expansion of Incentive (Performance-Based) Regulation of Electricity Distribution and Transmission in the United States," *Review of Industrial Organization* 65 (June 17, 2024): 455–503, <https://doi.org/10.1007/s11151-024-09973-x>.

⁶⁹ Eisen and Payne, "Rebuilding Grid Governance," 1095.

⁷⁰ Beth LeBlanc, "Ratepayer-Financed Incentive Fund Plan for DTE, Consumers Draws Ire of Cities, Advocacy Groups," *The Detroit News*, February 2, 2024, <https://www.detroitnews.com/story/news/politics/2024/02/02/ratepayer-financed-incentive-fund-plan-for-dte-consumers-energy-draws-ire/72453199007/>.

several decades of restructuring policy. This not only hinders local progress and dampens democratic control of our utility system: in aggregate it creates larger conflicts and misalignments with the policy goals governed by RTOs, ISOs, and FERC. In particular, the literature on PBR being used by several other advocacy organizations scarcely contain robust discussions on “imperfect and asymmetric information, adverse selection, managerial effort and moral hazard, rent extraction/efficiency tradeoffs” and other key issues in economic regulation of such a critical, interconnected system.⁷¹

Retail markets would promote ‘consumer choice’ and naturally lead to least-cost service

Last but not least, restructuring was also intended to introduce greater choice for ratepayers and encourage the development of multiple electricity retailers, companies who would sell you the service even if they didn’t own the utility assets. This was spurred by dedication to the belief that retail-level competition inherently creates benefits to consumers, particularly through offering better customer experiences and lower prices. These experiences might advertise that their agreement with the utility distribution system operators has greater reliability or their contracts with different energy generators includes tailored power procurement to consumer preferences (i.e. green portfolios). However, this type of price innovation has not occurred. In fact, retail choice rates have generally been higher and more subject to the volatility of the cost of electricity on the wholesale markets.⁷²

The most realized implementation of retail competition, which recall is designed to be paired with dynamic pricing that was discussed earlier, has proved to be predatory in New York, Connecticut, Illinois, Maine, Maryland, and Massachusetts. Billions of dollars of overcharges have been allowed by public utility commissions in these states compared to service from an integrated, monopoly-model utility. Consumer interest advocates and state attorneys general in all of these places are attempting to end the practice.⁷³ In New York, which we will focus on

⁷¹ Joskow, “The Expansion of Incentive (Performance-Based) Regulation of Electricity Distribution and Transmission in the United States,” 457.

⁷² Mathew J Morey and Laurence D Kirsch, “Retail Choice in Electricity: What Have We Learned in 20 Years?” (Electric Markets Research Foundation, February 11, 2016), https://hepg.hks.harvard.edu/sites/g/files/omnuum10586/files/hepg/files/retail_choice_in_electricity_for_emrf_final.pdf.

⁷³ Jenifer Bosco, “Retail ‘Choice’ in Electricity Markets: A Bad Deal for Consumers and the Climate” (National Consumer Law Center, March 20, 2023), <https://www.nclc.org/resources/retail-choice-in-electricity-markets-a-bad-deal-for-consumers-and-the-climate/>.

Utility affordability is ultimately being driven by these neoliberal policy design choices, yet utility affordability is treated as a separate problem from the rest of the regulation required to keep the grid running.

later in this report, successive reforms have been needed and are now in tension with major state climate and equity goals.

Energy equity would be fully addressed in separate but 'equitable' affordability proceedings

In many discussions about the electric utility system today across the country, from workshops to proceedings in front of regulatory agencies, racial and economic justice is not a central topic. However, an increasing number of states have passed laws or used existing statutory authority in the last decade to make meaningful advances for equity, including plans to reduce pollution and greenhouse emissions, to provide new investments for building upgrades or rooftop solar, or to define future systemwide designs like utility-level energy generation portfolio composition.⁷⁴ These make meaningful changes to the physical assets of the utility system, but they do not change the economic reality felt by consumers.

These new laws do not address the upward redistribution of wealth through the private-monopoly-dominated electricity system or the rejection by Bonbright of the ability-to-pay principle. When it comes to the ratemaking aspects of the utility system, academics studying energy equity have suggested a framework for measuring progress in terms of recognition ("is inequity acknowledged and adequately accounted for?"), procedural inclusion ("are those affected represented in decision-making processes?"), distribution of benefits ("are people who have been harmed receiving new investments and is that investment proportional to the harm incurred?"), and restoration ("has enough been done to overcome the cumulative impacts of harm?").⁷⁵

⁷⁴ States include California, Colorado, Connecticut, Hawaii, Illinois, Maine, Massachusetts, Michigan, New Jersey, New York, Oregon, and Washington. See Chandra Farley et al., "Advancing Equity in Utility Regulation," *Future Electric Utility Regulation Series* FEUR Report No. 12 (November 2021), <https://emp.lbl.gov/publications/advancing-equity-utility-regulation>.

⁷⁵ Energy Equity Project, "Energy Equity Framework: Combining Data and Qualitative Approaches to Ensure Equity in the Energy Transition" (University of Michigan School for Environment and Sustainability, 2022), https://seas.umich.edu/sites/all/files/2022_EEP_Report.pdf.

Without taking this fundamental contradiction seriously, bill affordability will continue to be in direct opposition to goals like decarbonization and resilience.

Utility affordability is ultimately being driven by these neoliberal policy design choices, yet utility affordability is treated as a separate problem from the rest of the regulation required to keep the grid running. The customary way to include issues about racial equity and economic inclusion in utility ratemaking discussions has been to create a separately contained proceeding or set of proceedings dedicated to affordability. This severs the social priorities from all other discussions about planning investments and operations of the grid. Then, inside this proceeding and isolated from the macro issues of the utility business, procedural inclusion in the process is emphasized, often leaving out questions of whether electricity can be considered a human right, something we should guarantee to everyone because of its necessity for survival in an electrified world.

For the better part of a decade, economists and other policymaking gatekeepers have designed policy this way. Their focus has been to continuously promise that with the right tweaks, the grid can be structured and governed as an idealized platform for competitive market transactions.⁷⁶ Across the electricity system there is an assumption that the electrical distribution and transmission grids paired with a web of internet-connected monitoring is close to realizing its ultimate form as a pure, real-time market exchange platform, not so different from the New York Stock Exchange.

The evidence in all cases has not matched this idealized design and should be thoroughly examined by advocates and regulators alike in this time of extreme crisis and inequality. Policymakers' myopic focus has excluded more important social questions of whether electricity should be guaranteed to everyone when every aspect of living—heating, cooling, cooking, and even personal transportation—will be tied to electricity service. Without taking this fundamental contradiction in necessity, affordability, and future investment seriously, bill affordability goals will continue to be set in direct opposition to other utility goals, like decarbonization and resilience, when they require new investment.

⁷⁶ Dan Cross-Call, "Platform-Based Electric Grids Are Coming, but the Transition Is Proving a Challenge," *Greentech Media*, May 12, 2017, <https://web.archive.org/web/20240416192747/https://www.greentechmedia.com/articles/read/the-promise-of-platform-based-grids>.

New York: a laboratory for market-based injustice

New York's claim to leadership on utility deregulation makes it a poster child for the issues we outline here. In the 2025 New York State legislative session (and the two sessions prior), the New York State Legislature declined to pass the NY Home Energy Affordable Transition (HEAT) Act.⁷⁷ Climate, environmental justice, and utility ratepayer advocates across the state of New York had broadly supported the bill, which would have implemented various policies aligning the mandate of New York's Public Service Commission (PSC) with the goals of the state's 2019 Climate Leadership and Community Protection Act (CLCPA), which aims for 100 percent zero-emissions electricity by 2040.⁷⁸

This bill was widely viewed as necessary to correct issues with the energy systems in the state that were not addressed clearly enough with CLCPA, including the managed decommissioning of the gas utility. With the intention to support neighborhood-scale transitions from gas to electricity, the HEAT Act emphasized the importance "to maintain the affordability of services for all utility customers," specifically "to provide affordable access to electricity for heating and cooling and to protect low-income and moderate-income customers from undue burdens as they decarbonize their buildings".⁷⁹

The HEAT Act included ratepayer protections: it would have instructed the PSC to work toward limiting utility bill costs to 6 percent of annual income⁸⁰—a broadly used standard by which "high energy burden"⁸¹ households are determined—for all low-to-moderate-income customers. The bill would have given the PSC one year to develop an implementation plan to achieve this goal, granting it latitude to use bill credits, discounts, and costs avoided through utility rate design, among other tools. This could not be more pressing: in New York, 1 in 4 residents experience a high energy burden from their existing energy bills. Although it is imperative that we decarbonize and "electrify everything" to address the ongoing climate crisis, doing so risks adding even more strain to these already unlivable electric bills.⁸²

⁷⁷ Julia Rock and Colin Kinniburgh, "Assembly Spikes Biggest Climate Proposal in New York Budget," *New York Focus*, April 19, 2024, <https://nysfocus.com/2024/04/19/new-york-heat-act-state-budget/>; Lucy Hodgman, "Remnant of Embattled NY HEAT Act Passes State Legislature," *Times Union*, June 17, 2025, <https://www.timesunion.com/capitol/article/remnant-embattled-ny-heat-act-passes-state-20381237.php>.

⁷⁸ "New York's Climate Leadership and Community Protection Act (CLCPA)," NYSEDA, n.d., <https://climate.ny.gov>.

⁷⁹ Liz Krueger, "NY Home Energy Affordable Transition Act," Pub. L. No. S2016B (2023), <https://www.nysenate.gov/legislation/bills/2023/S2016/amendment/B.>; Pat Fahy, "NY Home Energy Affordable Transition Act," Pub. L. No. A4592B (2023), <https://www.nysenate.gov/legislation/bills/2023/A4592/amendment/B.>

⁸⁰ Krueger, "NY Home Energy Affordable Transition Act."

⁸¹ Ariel Dreobl, Lauren Ross, and Roxana Ayala, "How High Are Household Energy Burdens?" (American Council for an Energy-Efficient Economy, September 2020), <https://www.aceee.org/research-report/u2006>.

⁸² Nadja Popovich and Brad Plumer, "How Electrifying Everything Became a Key Climate Solution," *The New York Times*, April 14, 2023, sec. Climate, <https://www.nytimes.com/interactive/2023/04/14/climate/electric-car-heater-everything.html>.

Without the HEAT Act, tens of thousands of families continue to lack relief.⁸³

Prioritizing market-based competition and price signals

The State of New York's public service law instructs the PSC to administer "just and reasonable" rates, recalling Bonbright's half-century-old principles. However, changes over the past several decades have turned the state's utility regulation and ratemaking processes into perhaps a prototypical example of the contemporary marketized approach resulting from utility restructuring and the advent of distributed energy generation. New York investor-owned utilities participate in a restructured wholesale energy market administered by the New York Independent System Operator (NYISO) and have been subject to revenue decoupling since 2007.

The most sweeping changes came in 2014, when then-governor Andrew Cuomo announced Reforming the Energy Vision (REV), a program aimed at redesigning the state's regulation of investor-owned utilities to prioritize demand response, energy efficiency, and distributed renewable energy rather than throughput.⁸⁴ REV was spearheaded by Department of Public Services chair Audrey Zibelman, who had played an integral role in utility restructuring as the COO of PJM, an RTO that covers a portion of the eastern US and administers one of the world's largest wholesale energy markets.⁸⁵ In keeping with the competition-motivated restructured approach, REV's adherence to competitive markets was demonstrated in the opening pages of its order on ratemaking, which stated that its purpose was to "remove barriers" so that markets may show that they can produce superior results.⁸⁶

REV's ratemaking reform recognized the aforementioned competing objectives of energy efficiency, distributed generation, cost recovery, and consumer costs for investor-owned utilities. REV's authors argued that reforming cost-of-service ratemaking alone could not adequately reconcile these objectives, and called for the creation of a "distributed system platform" (DSP) aimed at creating decentralized, competitive markets for electrical services such as distributed generation, electric vehicle charging, and demand response. This transition would be based on implementation of "earnings adjustment mechanisms" to provide revenue incentives to investor-owned utilities for energy efficiency and connection of distributed energy to the grid, as well as "platform service revenue" and "non-wires alternatives" incentivizing investor-owned utilities to support

⁸³ Max Shron and Juan-Pablo Velez, "NY HEAT Is a Win for Energy Affordability" (NY Renew, March 4, 2024), <https://www.nyrenews.org/news/2024/nyheatreport>.

⁸⁴ State of New York Public Service Commission, "Case 14-M-0101 - Proceeding on Motion of the Commission in Regard to Reforming the Energy Vision - Order Adopting Regulatory Policy Framework and Implementation Plan," February 26, 2015, <https://documents.dps.ny.gov/public/Common/ViewDoc.aspx?DocRefId=%7B0B599D87-445B-4197-9815-24C27623A6A0%7D>.

⁸⁵ Davide Savenije, "Inside the REV: Audrey Zibelman's Bold Plan to Transform New York's Electricity Market," Utility Dive, November 3, 2014, <https://www.utilitydive.com/news/inside-the-rev-audrey-zibelmans-bold-plan-to-transform-new-yorks-electricity/328700/>.

⁸⁶ State of New York Public Service Commission, "Case 14-M-0101 - Proceeding on Motion of the Commission in Regard to Reforming the Energy Vision - Order Adopting Regulatory Policy Framework and Implementation Plan."

distributed energy resources—essentially a performance-based ratemaking system whose incentives steer investor-owned utilities away from creating market barriers for distributed energy generators and toward greater energy efficiency.⁸⁷

Continuing to exclude social goals from electricity grid governance

A key 2015 staff report from the New York Public Service Commission about ratemaking and utility business models initiated the beginning of the regulatory design processes under the Reforming the Energy Vision initiative.⁸⁸ The report contains a list of principles that have guided the state's ratemaking theory for the past 10 years, and which mirror national best practices published by other regulatory think tanks like RMI.⁸⁹ These principles accompanied a vision of a competitive market for people who want to build and operate a small, home-based power plant using solar, batteries, and "demand response" technology, then sell the energy from these and other "distributed energy resources" in a real-time marketplace. The principles focused primarily on achieving the goal of establishing a financial market for distributed energy resources, not on whether establishing this market was necessary or capable of meeting the needs of all of New York's utility customers.

Rate design principles for New York's Reforming Energy Vision initiative.

Ratemaking principle	Description for REV
Cost causation	Rates should reflect cost causation, including embedded costs as well as long-run marginal and future costs.
Encourage outcomes	Rates should encourage desired market and policy outcomes including energy efficiency and peak load reduction, improved grid resilience and flexibility, and reduced environmental impacts in a technology-neutral manner.
Policy transparency	Incentives should be explicit and transparent, and should support state policy goals.

⁸⁷ State of New York Public Service Commission, "Case 14-M-0101 - Proceeding on Motion of the Commission in Regard to Reforming the Energy Vision - Order Adopting Regulatory Policy Framework and Implementation Plan."

⁸⁸ State of New York Public Service Commission, "Case 14-M-0101 - Proceeding on Motion of the Commission in Regard to Reforming the Energy Vision - Staff White Paper on Ratemaking and Utility Business Models," July 28, 2015, <https://documents.dps.ny.gov/public/Common/ViewDoc.aspx?DocRefId=%7B48954621-2BE8-40A8-903E-41D2AD268798%7D>.

⁸⁹ Li et al., "A Review of Alternative Rate Designs."

Decision-making	Rates should encourage economically efficient and market-enabled decision-making, for both operations and new investments, in a technology-neutral manner.
Fair value	Customers should pay the utility fair value for services provided by grid connection, and the utility should pay customers fair value for services provided by the customer.
Customer orientation	The customer experience should be practical, understandable, and promote customer choice.
Stability	Customer bills should be relatively stable even if underlying rates include dynamic and sophisticated price signals.
Access	Customers with low and moderate incomes or who may be vulnerable to losing service for other reasons should have access to energy efficiency and other mechanisms that ensure they have electricity at an affordable cost.
Gradualism	Changes to rate design formulas and rate design calibrations should not cause large, abrupt increases in customer bills.

Ignoring the evidence: the high costs to human welfare

A decade later, the results have been mixed. REV's Value of Distributed Energy Resources (VDER) crediting system, a sophisticated replacement for net metering, has been part of a community solar boom in the state: New York is now the largest community solar market in the country.⁹⁰ However, REV's DSP has not materialized. Because investor-owned utilities are the only actors with the institutional knowledge and power to execute distribution system planning and operations, creating independently administered grid services markets has been deemed infeasible, and investor-owned utilities are in line to administer them instead—a far cry from the open competition envisioned by REV's supporters. Implementation of earnings adjustment mechanisms has been spotty due to negotiation by investor-owned utilities in rate case proceedings, and adoption of non-wires alternatives has been slower than anticipated because investor-owned utilities largely have not considered them cost-competitive.⁹¹

In parallel to this dysfunction, energy burden eats up to 34 percent of household income for New York's poorest households. As of December 2024, over 1.3 million New York households were in arrears on utility bills for 60 days or more,

⁹⁰ Kelsey Misbrener, "New York Hits 2-GW Milestone for Community Solar Installations," Solar Power World, November 28, 2023, <https://www.solarpowerworldonline.com/2023/11/new-york-hits-2-gw-milestone-community-solar/>.

⁹¹ Herman K Trabish, "New York's Landmark Reforming the Energy Vision Framework Remains Both Vital and Unfinished, Analysts Say," Utility Dive, December 9, 2021, <https://www.utilitydive.com/news/new-yorks-landmark-reforming-the-energy-vision-framework-remains-both-vita/610015/>.

collectively owing more than \$1.8 billion.⁹² Despite multiple rounds of relief enacted through temporary COVID-19 utility bill assistance programs,⁹³ 1 in 4 households continue to suffer under high energy burdens above 6 percent of household income. In some regions, like in the North Country and in the Bronx, this statistic rises to 1 in 3.⁹⁴ This crisis of affordability is being used by New York regulators and politicians to justify delaying the adoption of renewable energy. In late 2023, the New York PSC, with the endorsement of Governor Kathy Hochul, rejected increased subsidies for wind and solar developers on the basis that they would increase rates—a decision that ultimately resulted in the scuttling of 79 onshore wind and solar projects.⁹⁵

Recall that ratemaking is designed to leave out a redistributive function, with the assumption that society at large will bear that responsibility. This is not the case. In 2022, the Institute on Taxation and Economic Policy reported that New York has the highest concentration of extreme wealth and the greatest income inequality in the United States.⁹⁶ Classifying households with over \$30 million in net worth as “ultra-rich,” the report details that New York’s “ultra-rich” hold \$6.7 trillion in wealth. Further, home to 78 billionaire households, New York State’s billionaires hold \$673 billion in wealth. In February 2024, the New York State Comptroller released a study on the housing insecurity crisis, reporting that 39 percent of all New Yorkers spend 30 percent or more of their income on housing costs, and 20 percent of all New Yorkers spend more than 50 percent of their income on housing. The crisis is worse for people of color: in December 2023, the New York City Comptroller released a study on the racial wealth gap, revealing that white New Yorkers have a median household net worth more than 14 times greater than Black New Yorkers.⁹⁷

Instead of using the opportunity to pass the HEAT Act and begin new discussions about ratemaking in the state’s energy systems broadly, Governor Hochul unveiled a new initiative at the PSC in April 2024 to develop the aspirationally titled New York Grid of the Future Plan. The scope, however, is narrow, and will not proactively address any of these outstanding issues, instead advancing ideas about new market construction and technology applications while not addressing social distribution problems at all. The plan’s first draft has been published under

⁹² Ian Donaldson and Laurie Wheelock to NY Assembly Committees on Ways and Means, Environmental Conservation, Energy, Corporations, Commissions and Authorities and NY Senate Committees on Finance, Environmental Conservation, Energy and Telecommunications, and Corporations, “Written Testimony for the SFY-2026 New York State Environmental Conservation Budget Hearing,” January 25, 2025.

⁹³ Galen Hall, Trevor Culhane, and J. Timmons Roberts, “Climate Coalitions and Anti-Coalitions: Lobbying across State Legislatures in the United States,” *Energy Research & Social Science* 113 (July 1, 2024): 103562, <https://doi.org/10.1016/j.erss.2024.103562>.

⁹⁴ Shron and Velez, “NY HEAT Is a Win for Energy Affordability,” 7.

⁹⁵ Marie J. French, “Why New York’s Ambitious Climate Goals Are Drifting Away,” *POLITICO*, February 7, 2024, <https://www.politico.com/news/2024/02/07/new-york-energy-climate-goals-00139979>.

⁹⁶ Nathan Gusdorf and Andrew Perry, “Inequality in New York & Options for Progressive Tax Reform” (Institute on Taxation and Economic Policy, November 10, 2022), <https://fiscalpolicy.org/inequality-in-new-york-options-for-progressive-tax-reform>.

⁹⁷ New York City Comptroller Brad Lander, “The Racial Wealth Gap in New York” (Office of the New York City Comptroller, December 6, 2023), <https://comptroller.nyc.gov/reports/the-racial-wealth-gap-in-new-york/>.

New York Department of Public Service Case 24-E-0165, the Proceeding on Motion of the Commission Regarding the Grid of the Future. The conclusion of the proceeding and its findings of fact about the affordability issues inside the docket are unwritten as of time of publication.⁹⁸

What can be done now while preparing for the future

Remaking our utility system is a matter of life and death for millions of Americans, and we must undertake this essential work in a time of great uncertainty. It's clear that today's utility regulation is designed to protect corporate profits above all else. After the last global affordability crisis, US lawmakers, regulators, and advocates tested several conservative-led theories about economic regulation of the utility system, and were all found to fail to deliver over the course of 50 years of implementation.

It's clear that today's utility regulation is designed to protect corporate profits above all else.

At this critical time, we must invent new solutions and design for a responsible, economically sound, climate safe, racially just, and affordable utility system that can serve as the backbone of the decarbonized energy system. Designing and transitioning to such a system and corresponding governance model will require sound analysis and advice from multiple perspectives. Fortunately, many groups with decades of are readily available because of decades of patient research and advocacy that has documented the structural designs and mechanisms used in utility regulation.

Racial, economic, health, and environmental justice intervenors

In 2017, NAACP published a policy analysis detailing the competing interests of the regulatory design for investor-owned utility companies and people's lives and safety, clearly outlining energy burden, inadequate shutoff protections, and racial and economic disparities.⁹⁹ Armed with utility shutoff data that the California State Legislature ordered to be made available, the Utility Reform Network (TURN)

⁹⁸ The proceeding's filed documents are available at <https://documents.dps.ny.gov/public/MatterManagement/CaseMaster.aspx?MatterCaseNo=24-e-0165>.

⁹⁹ Marcus Franklin and Caroline Kurtz, "Lights out in the Cold" (NAACP Environmental and Climate Justice Program, March 2017), <https://naacp.org/resources/lights-out-cold>.

presented seven years of continuous data on utility shutoffs in 2010, demonstrating a dramatic rise in shutoffs under regulatory orders to achieve meaningful reductions, even as the economy recovered after the Great Financial Crisis.¹⁰⁰ Despite legal requirements, utility shutoffs in California did not fall for all the utilities until the enforcement of a ban on utility shutoffs for the COVID-19 public health emergency. In contrast, where service was not guaranteed and enforced by local regulators during COVID-19's peak, just sixteen investor-owned utilities issued nearly 1 million shutoff notices while shamelessly taking \$1.25 billion in public funds.¹⁰¹

Public interest advocacy and legal theorists

At state and federal levels, an array of dedicated consumer and welfare rights advocates hold the line against the system's total abandonment of poor people, both in appointed government roles as the states' utility consumer advocates as well as in a patchwork of non-profit organizations dedicated to service. These latter include the Public Utility Law Project of New York, the Pennsylvania Utility Law Project, the Alliance for Affordable Energy in Louisiana, and the National Consumer Law Center, to name a few.

In a new, forward-looking paradigm of renewable energy and storage, energy markets may be inappropriate, leading law scholar William Boyd to suggest electricity should be decommodified at the point of generation rather than being left to regional wholesale markets at all.¹⁰² Shelley Welton et al. evaluated multiple, conflicting objectives within utility ratemaking design, spread across multiple jurisdictions, and concluded this makes investor-owned utility governance difficult if not outright impossible.¹⁰³ Elsewhere, Welton builds on this assessment, suggesting that a public option for the role of the regional transmission organizations may be needed after diagnosing their incompatible

¹⁰⁰ Gabriela Sandoval and Mark Toney, "Living without Power" (The Utility Reform Network, 2018), https://static1.squarespace.com/static/63c1c8c8e9c7381c9319452b/t/64d6badac0a93c195c86c626/1691794164104/2018_TURN_Shut+Off+Report_FINAL.pdf.

¹⁰¹ Jean Su and Christopher Kuveke, "Powerless in the Pandemic" (Center for Biological Diversity and Bailout Watch, September 2021), https://bailout.cdn.prismic.io/bailout/973caeea-9a3f-4b46-bc1c-68eb8cf63b33_Powerless_Report_v5.pdf.

¹⁰² Boyd, "Decommodifying Electricity."

¹⁰³ Alexandra Klass et al., "Grid Reliability through Clean Energy," *Stanford Law Review* 74 (May 2022): 1071-, <https://review.law.stanford.edu/wp-content/uploads/sites/3/2022/05/Klass-et-al.-74-Stan.-L.-Rev.-969.pdf>.

mandates and governance composition.¹⁰⁴ In California, the Public Advocates Office recommended in 2023 that the ownership of all new transmission assets should be public.¹⁰⁵

Joel Eisen and Heather Payne go further and conclude that existing electricity regulatory institutions, including many state utility commissions, are ineffective and should be removed entirely and reconstructed anew.¹⁰⁶ Alison Gocke describes, in contrast, how energy law and historical record in New York supports more decisive and deeper-reaching authority from state utility commissions than currently pursued.¹⁰⁷

Political economists and geographers

Rather than ratemaking being a purely economic exercise, Valery Yakubovich et al. describe how the decisions for setting electricity rates are decisions about social goals.¹⁰⁸ Connor Harrison finds that these goals prioritize several strategies to consolidate corporate ownership, control renewable energy generation, and increase utilities' influence over regulation, and are constantly being reshaped as new technology and political conditions change.¹⁰⁹ The racial distribution of these social goals is documented in places like Atlanta by Nikki Luke, who identifies that explicit white supremacy has played an integral role in defining the electricity system, a history which is amplified by the recent 2024 court decision to uphold the disenfranchisement of

¹⁰⁴ Shelley Welton, "Rethinking Grid Governance for the Climate Change Era," *California Law Review* 109, no. 1 (2021): 209–75, <https://doi.org/10.15779/Z381R6N18B>.

¹⁰⁵ The Public Advocates Office, "Public Investment in Infrastructure Is a Promising Option to Support California's Energy Transition and Reduce Ratepayer Costs" (California Public Utilities Commission, May 16, 2023), <https://www.publicadvocates.cpuc.ca.gov/-/media/cal-advocates-website/files/press-room/reports-and-analyses/230516-caladvocates-public-investment-in-infrastructure.pdf>.

¹⁰⁶ Eisen and Payne, "Rebuilding Grid Governance."

¹⁰⁷ Alison Gocke, "Public Utility's Potential," *The Yale Law Journal* 133, no. 8 (June 2023): 2773–2837, <https://www.yalelawjournal.org/feature/public-utility-s-potential>.

¹⁰⁸ Valery Yakubovich, Mark Granovetter, and Patrick McGuire, "Electric Charges: The Social Construction of Rate Systems," *Theory and Society* 34, no. 5–6 (December 2005): 579–612, <https://doi.org/10.1007/s11186-005-4198-y>.

¹⁰⁹ Connor Harrison, "Electricity Capital and Accumulation Strategies in the U.S. Electricity System," *Environment and Planning E: Nature and Space* 5, no. 4 (August 27, 2020): 251484862094909, <https://doi.org/10.1177/2514848620949098>.

Georgia's Black voters in issues of the Public Service Commission elections.¹¹⁰

Public power researchers and campaigners

Activists, public interest advocates, and progressive think tanks like Public Grids continue to build and advance the case for public ownership to respond to these conditions. A total of 68 percent of all voters support public ownership of the electricity system, including 67 percent of all Republican respondents.¹¹¹ Several active campaigns continue to grow, with 50 public power utilities established in the last 30 years.¹¹² Policy proposals and analysis have highlighted the opportunity for state and federal designs for ownership of electricity supply, transmission, and distribution and democratic governance to replace the investor-owned utility model.¹¹³

Across the country, support has grown for public power in the US climate movement, with campaigns for public power emerging around issues of affordability, grid reliability, resilience to extreme climate disasters, and reclaiming US ownership in New York, Michigan, Maine, California, and other states.¹¹⁴ New York State Assemblymember Shrestha and Senator Hinchey introduced a bill that would create a public Hudson Valley Power Authority capable of buying out the incumbent IOU, and would establish income-graduated rates including a free service tier for low-income residents.¹¹⁵ Rhode Island Representative Cotter proposed a legislature-led feasibility study of ending private ownership of energy utilities statewide.¹¹⁶ City leaders in

¹¹⁰ Nikki Luke, "Powering Racial Capitalism: Electricity, Rate-Making, and the Uneven Energy Geographies of Atlanta," *Environment and Planning E: Nature and Space* 5, no. 4 (June 17, 2021), <https://doi.org/10.1177/25148486211016736>.

¹¹¹ Catherine Fraser and Grace Adcox, "Putting the 'Public' in Power: Voters Support Having a Publicly Owned Utility," *Data for Progress* (blog), October 27, 2023, <https://www.dataforprogress.org/blog/2023/10/27/putting-the-public-in-power-voters-support-having-a-publicly-owned-utility>.

¹¹² American Public Power Association, "Public Power for Your Community," 2016, https://www.publicpower.org/system/files/documents/municipalization-public_power_for_your_community.pdf.

¹¹³ Thomas Hanna, Johanna Bozuwa, and Raj Rao, "The Power of Community Utilities" (Climate and Community Institute, April 2022), <https://www.climateandcommunity.org/power-of-community-utilities>; Johanna Bozuwa et al., "Building Public Renewables in the United States" (Climate and Community Institute, March 2023), <https://www.climateandcommunity.org/public-renewables-in-the-us>.

¹¹⁴ Emily Pontecorvo, "What Is Public Power and Where Might It Be Tried Next?," *Heatmap News*, December 18, 2023, <https://heatmap.news/politics/what-is-public-power-utilities-maine-ann-arbor-san-francisco>.

¹¹⁵ Colin Kinniburgh, "Public Power Push Spreads to the Hudson Valley," *New York Focus*, May 16, 2024, <https://nysfocus.com/2024/05/16/central-hudson-public-power-sarahana-shrestha>.

¹¹⁶ Cotter et al., "Joint Resolution Creating a Special Joint Legislative Commission to Study Public Ownership of Public Utilities," Pub. L. No. H5161(2025), <https://webserver.rilegislature.gov/BillText/BillText25/HouseText25/H5161.pdf>.

the City of Tucson are conducting a similar study as their municipal franchise agreement with the regional investor-owned utility expires.¹¹⁷

Recommendations

In the middle of an actively unfolding political and economic crisis in the US, we must put ideas forward and advocate for them constantly to eliminate as much harm as possible that we can see coming. These recommendations to regulators must blend current best practices on utility affordability with non-reformist reforms to change the rules about the system, especially where ratemaking and ownership are concerned, and design injustice out entirely, not incrementally.¹¹⁸

Below, we present ideas for how we can align existing interventions with the long-term change that this moment in history demands from us for our collective liberation.

Stop the bad: demand that policymakers take emergency actions to protect people and create substantial governmental support

- Ensure families and households have access to benefits without everyone in the household being processed by deportation databases managed by the Department of Homeland Security.
- Slow down or eliminate the accumulation of utility debt. Establish a bill discount program, and, where one is already in place, expand bill discounts up to as much as 100 percent of the bill for all low-income customers.
- Eliminate the administrative burdens of means testing and switch to universal programs for bill discounts for residential customers in need. At a minimum, seek to establish “categorical eligibility,” which allows enrollment based on prior enrollment in another program, like SNAP, Social Security, or some veterans’ benefit programs.¹¹⁹

¹¹⁷ City of Tucson, “Energy Sourcing Study: Scope of Work,” OpenGov, November 8, 2023, <https://procurement.opengov.com/portal/tucson-az/projects/62281/document?section=544542>.

¹¹⁸ Mark Engler and Paul Engler, “André Gorz’s Non-Reformist Reforms Show How We Can Transform the World Today,” *Jacobin*, July 22, 2021, <https://jacobin.com/2021/07/andre-gorz-non-reformist-reforms-revolution-political-theory>.

¹¹⁹ See LIHEAP Clearinghouse, “LIHEAP Categorical Eligibility: States and Territories” (National Center for Appropriate Technology, December 10, 2024), https://liheapch.acf.hhs.gov/delivery/income_categorical.htm.

- When bill discounts cannot reach 100 percent, avoid eliminating ratepayer funding of bill assistance programs, a legacy of the welfare and consumer rights movements. Use those ratepayer-funded programs to establish a “percentage of income payment plan.” Tie the ceiling of the percent of income payment to the statewide median energy burden to build a policy that ratchets down as energy burden is reduced. The State of Nevada started this in 2022, and in 2023, the energy burden cap there was 2.29 percent.¹²⁰ The State of Illinois set their cap at 3 percent in 2025.¹²¹
- When bill discounts cannot reach 100 percent, establish shutoff protections, and, where existing protections are in place, expand protections year-round. In Los Angeles, the public power utility ended utility shutoffs by requiring that anyone who would have been eligible for shutoffs instead be diverted to a discounted rate program and percentage of income payment plan for any accumulated debt.¹²²
- If establishing year-round protection from shutoffs is not possible, enact overlapping protections based on heat, cold, and high humidity standards with easily accessible enforcement mechanisms. Examples of how other states have designed their shutoff protections are catalogued at the LIHEAP Clearinghouse.¹²³
- Pursue interventions across the public utility commission that challenge the current approvals of rate of return on investments requested by investor-owned utilities, which studies show are far exceeding their actual capital costs.¹²⁴
- When rate cases are open at public utility commissions, propose an inclining, residential block rate with a universal, no-cost block that

¹²⁰ H Gil Peach, “SFY 2023 Evaluation: Energy Assistance and Weatherization Assistance Programs” (H. Gil Peach & Associates LLC, April 22, 2024), <https://dwss.nv.gov/uploadedFiles/dwssnv.gov/content/Energy/2023%20UEC%20Evaluation%20Report.pdf>.

¹²¹ National Consumer Law Center, “In Illinois, Cash-Strapped Utility Customers Get Much Needed Relief,” *Newsroom*(blog), August 11, 2025, <https://www.nclc.org/in-illinois-cash-strapped-utility-customers-get-much-needed-relief/>.

¹²² LADWP News, “LA Board of Water & Power Commissioners Approve Policy to End Water and Power Shutoffs for Low-Income Residential Customers Unable to Pay Their Utility Bill” (Los Angeles Department of Water and Power, November 16, 2022), <https://www.ladwpnews.com/la-board-of-water-power-commissioners-approve-policy-to-end-water-and-power-shutoffs-for-low-income-residential-customers-unable-to-pay-their-utility-bill/>.

¹²³ See LIHEAP Clearinghouse, “Disconnect Policies” (National Center for Appropriate Technology, December 10, 2024), <https://liheapch.acf.gov/Disconnect/disconnect.htm>.

¹²⁴ Dunkle Werner and Jarvis, “Rate of Return Regulation Revisited.”

provides a guarantee to a minimum amount of electricity for all residential customers.¹²⁵

Build the new: fight for new physical infrastructure, dedicated funding streams, and strong, diverse coalitions

- Establish federal and state powers to capitalize new investment funds, like public banks or other public finance authorities, which can be used to support termination of privately held franchise agreements and buy back the grid for public ownership and local control.¹²⁶
- Establish state powers to plan, develop, construct, own, and operate new renewable energy generation. In New York, the Build Public Renewables Act enables the New York Power Authority to build new renewable energy generation assets with unionized labor and environmental justice community benefits.¹²⁷
- Establish state powers to step in when all existing load serving entities, including community choice aggregators, municipal utilities, and investor-owned utilities, are failing to develop renewable energy resources in line with state climate or energy goals. In California, the 2023 Assembly Bill 1373 allows a state agency to construct necessary, cost-effective, and eligible energy resources that meet their statewide view of all the integrated resource plans from each load serving entity.¹²⁸
- Dedicate technical assistance support to local activists who are interested in building new municipalization efforts for different parts of the electricity system. Local electricity policy experts in tandem with grassroots campaigns can begin to build the trust and relationships necessary to win longer-term campaigns and goals.

¹²⁵ Read more about this design which is included in the Hudson Valley Power Authority Act: <https://hudsonvalleypowerauthority.com/>.

¹²⁶ Thomas Marois and Ali Riza Güngen, "The World of Public Banks" (McMaster University, Canada: Public Banking Project and Climate and Community Institute, February 2024), <https://climateandcommunity.org/research/brief-the-world-of-public-banks/>; Jackson Koeppel, Johanna Bozuwa, and Liz Veazey, "Community Ownership of Power Administration" (The Democracy Collaborative, February 1, 2019), https://thenextsystem.org/copa?mc_cid=793c5aa0ef&mc_eid=4af9442496.

¹²⁷ Akielly Hu, "After a Four-Year Campaign, New York Says Yes to Publicly Owned Renewables," Grist, May 4, 2023, <https://grist.org/energy/after-a-four-year-campaign-new-york-says-yes-to-publicly-owned-renewables-strong>.

¹²⁸ Garcia, "Energy," Pub. L. No. AB 1373 (2023), https://leginfo.ca.gov/faces/billNavClient.xhtml?bill_id=202320240AB1373.

Change the rules: use existing sectoral capacity to study and enact non-reformist reforms of the grid's ownership and regulation

- Use existing utility regulatory capacity to evaluate the full range of options available to society and the public interest, not just those that presume investor-owned utilities are a permanent fixture of the utility model. Require public utility commission staff and commissioners to evaluate a baseline for all costs of needed grid investments with public financing and a rate of return on equity set to the cost of capital available to the relevant state or local government authorities, as if the investments were made under public ownership, not private ownership.¹²⁹
- Use public utility commission capacity to explore public ownership of new infrastructure investments, like California's Public Advocates Office estimate that public ownership and development of new transmission would reduce costs to customers by 25 percent.¹³⁰
- Open new inquiries at public utility commissions to review the history of approved rates of return on investments, which studies show have historically been in excess of their actual capital costs, with the margin of premium growing over time, favoring the excess accumulation of wealth by investor-owned utilities under public utility regulation.¹³¹
- Publicly make the case —via the respective state-specific commissioner-appointing agency— that public utility commissions have authority to compel utilities to advance a just and equitable transition in the public interest without additional state laws, and can rely on their existing authorities to set utilities' rates, audit and review utilities' financial accounts, and regulate utilities' quality of service.¹³²

¹²⁹ Even changing the rate of return to be aligned with the utility's actual cost of capital would be an improvement. A thorough analysis of this opportunity is presented by Mark Ellis and the American Economic Liberties Project. See Mark Ellis, "Rate of Return Equals Cost of Capital: A Simple, Fair Formula to Stop Investor-Owned Utilities from Overcharging the Public" (American Economic Liberties Project, January 17, 2025), <https://www.economicliberties.us/our-work/rate-of-return/>.

¹³⁰ The Public Advocates Office, "Public Investment in Infrastructure Is a Promising Option to Support California's Energy Transition and Reduce Ratepayer Costs," 4.

¹³¹ Rode and Fischbeck, "Regulated Equity Returns: A Puzzle."

¹³² Gocke, "Public Utility's Potential."

Conclusion

Evidence is piling up to show how, both at present and historically, the policy agenda in the electricity industry to prompt restructuring and privatization has produced poor and damaging consequences for the grid, society, and people's wellbeing. Not only has this approach failed to produce the promised outcomes of lower costs, lower bills, and greater competition, but these outcomes have failed at a critical moment when the entire energy transition is at stake.

Through designs that favor increased privatization, the agenda has allowed for-profit corporations—investor-owned utilities, power producers, and others—to manipulate the public utility regulatory system, particularly its ratemaking processes, in order to deliver extraordinary returns to investors. In this report, we illuminated how ratemaking's convoluted and opaque processes assist in this manipulation. Rather than being regulated effectively, we shared evidence showing that rates in restructured states are higher than in regulated states and more volatile where electricity pricing is priced on the wholesale market, especially in times of great need. Even the most "cutting-edge" approaches like performance-based ratemaking merely trap advocates in endless cycles of "administrative dysfunction [...]" iterative, self-perpetuating regulatory reform whose own ineffectiveness requires yet more successive intervention.¹³³

We discussed how the crisis of utility affordability for the nation's poorest people is damaging both public health as well as public confidence in the green transition. This crisis is met with a uniform policy of utility shutoffs, which forces people into coping mechanisms that harm their health, safety, and, in some cases, their lives. Despite the best efforts to date of affordability advocates, high energy burdens remain prevalent across the nation, with a significant disproportionate effect on Black, Latino, Indigenous, and elderly households.

This is untenable and requires new analysis and approaches to correct. We hope the summary here of existing movement work illuminates other blueprints for the equitable and democratic utility of the future. We emphasized decommodification of electricity as a solution that addresses the root cause of energy insecurity and highlighted

Evidence is piling up to show how, both at present and historically, the policy agenda in the electricity industry to prompt restructuring and privatization has produced poor and damaging consequences for the grid, society, and people's wellbeing.

¹³³ Eisen and Payne, "Rebuilding Grid Governance," 1091.

economic democracy as an important framework for reconceiving such an essential system for our public health and well-being. We hope advocates can reorient their activities toward supporting long-term goals that put electricity back under democratic control so we can govern the grid for the public interest, not for private gains under any form of for-profit ownership.

Afterword

Most writing about utility rates is not written for beginners. Much of it is even difficult to grasp for people who are otherwise knowledgeable about the energy system but who have never before approached the ratemaking aspects of this vast network. This narrative analysis and educational resource was written in order to introduce readers to the broad history and theory packaged up in the term “ratemaking.” It is for a wide audience in order to increase the public’s ability to participate in discussions about the electricity system, especially those trying to advance energy justice who are new to electricity policy at this level of detail.

Ratemaking is central to debates about the future of the grid because it implicates ownership and operation. Pursuing socially equitable rate design in front of public utility commissions is an important task to mitigate the urgent struggles of low-income and working-class families beset by high rates. As we have outlined, however, partial successes cannot overcome the design principles used today at the foundation of utility regulation which were set out to absolve regulators of a duty to address poverty and broad societal well-being.

Instead, neoliberal policy prescriptions have failed to lower costs and bring down bills while always protecting the private corporations who control the utility system. This has undermined broad, enthusiastic support for infrastructure development at a time when it is urgently needed to address the climate crisis. Continuing to chase these policy ideas—despite plain evidence of their deleterious outcomes—contradicts a political goal of support for a just transition.

We must engage in broader and more inclusive discussions about what advocates for climate, environmental, and utility justice need to consider to unlock a just transition for all. Designing and implementing such a transformation is our collective work for the coming years, and a key pursuit no matter what shape of government we have by the time we are done.

For readers finishing this and seeking robust and in-depth training on the mechanics of contemporary rate cases in front of utility commissions in spite of the limitations we outlined here, we recommend beginning with the aforementioned handbook by Jim

Ratemaking is central to debates about the future of the grid because it implicates ownership and operation.

Lazar and published by the Regulatory Assistance Project, “Electricity Regulation in the US: A Guide (Second Edition)” and their companion “Electric Cost Allocation for a New Era: A Manual.” The Michigan State University Institute of Public Utilities offers an “Accounting and Ratemaking Course” in a remote-learning format that is eligible for their certificate of continuing regulatory education and is open to the public. The course is offered for a fee of \$795 per student at the time of publication.