

**AMERICAN
ECONOMIC
LIBERTIES
PROJECT**

Reforming the Utility System to Better Serve the American Public

September 2024



ACKNOWLEDGEMENTS

Thanks to those who helped contribute to this paper, including:

Michael J. Bernstein, Ph.D., Senior Global Futures Scientist, Arizona State University

Mark Ellis, Senior Fellow on Utilities, American Economic Liberties Project, and former Chief of Corporate Strategy, Sempra

Brian Deese, Institute Innovation Fellow, MIT, and Former Director, National Economic Council (2021-2023)

Anna Pasnau, Research Associate, MIT

Bharat Ramamurti, Senior Advisor for Economic Strategy, American Economic Liberties Project, and Former Deputy Director, National Economic Council (2021-2023)

Lily Bermel, Research Associate, MIT

INTRODUCTION

There are several problems with the current market structure and regulation of America's investor-owned electric utilities, which provide electricity to almost 75% of Americans.¹ For the past 30 years, these electric utilities have overcharged American consumers by an average of \$5 billion per year.² They pay out hundreds of billions of dollars to shareholders³ while systematically underinvesting in electric grid reliability, putting Americans at risk during severe storms and heat waves. And they exercise enormous influence over the state legislatures and regulators tasked with overseeing them, including by dedicating enormous sums to lobbying and then charging ratepayers for those lobbying expenses.

Addressing these and other issues in the electric utilities market should be a top priority for federal and state policymakers. Better governance can not only substantially lower costs for Americans on their electricity bills but also accelerate the transition to clean energy and deliver improved grid reliability to save money and lives. This brief explains how America's electric markets operate, identifies several problems with our current approach to regulating these markets, and offers recommendations for reform.

BACKGROUND

THE U.S. GRID AND ELECTRICITY GENERATION, TRANSMISSION, AND DISTRIBUTION

The U.S. electrical grid is the largest interconnected machine on Earth.⁴ In 2022, there were 25,378 electric generators at about 12,538 utility-scale electric power plants powering U.S. industry, commerce, and homes.⁵ To reach users, the power generated at these plants travels by wires. Lower-voltage lines — whether underground or on local neighborhood utility poles — are sufficient to distribute electricity to cities and towns. To travel long

-
- 1 U.S. Energy Information Administration, "Investor-owned utilities served 72% of U.S. electricity customers in 2017," Aug. 15, 2019, <https://www.eia.gov/todayinenergy/detail.php?id=40913>.
 - 2 Karl Dunkle Werner and Stephen Jarvis, "Rate of return regulation revisited," Energy Institute WP 329R, Haas, Berkeley, April 2024, <https://haas.berkeley.edu/wp-content/uploads/WP329.pdf>.
 - 3 Nicholas Lusiani, *supra*, p. 11.
 - 4 Darren Orf, "The Largest Machine in the World Isn't the Liebherr R9800 ... It's the North American Power Grid," Popular Mechanics, June 8, 2023, <https://www.popularmechanics.com/science/energy/a44067133/how-does-the-power-grid-work/>.
 - 5 "How many power plants are in the United States?," U.S. Energy Information Administration, Frequently Asked Questions (FAQs), Oct. 20, 2023, <https://www.eia.gov/tools/faqs/faq.php?id=65&t=2>.

distances, including across states, higher-voltage lines are needed to transmit electricity.⁶ Some 600,000 miles of transmission lines and 5.5 million miles of distribution lines crisscross the country.⁷

Transmission is necessary for connecting new energy sources to the grid and for bringing electricity long distances from the place it is supplied to the place it is used. Meeting fluctuations in demand and supply is easier and cheaper when drawing in energy from a larger geographic area. It is also important for grid reliability, especially during extreme weather events, which may see increased demand for electricity even while supply or distribution may be strained.

This physical infrastructure is governed by a patchwork of state, regional, public, private, cooperative, and federal entities. What we refer to as “the U.S. grid” is actually three separate power grids, with their buildout and maintenance managed by 12 separate planning regions, each with their own process and only half with the mandate to conduct transmission planning for their region.⁸ Planning regions where there are no transmission planning mandates — regions in the West and Southeast — are “loose associations of dozens of vertically integrated utilities,” each planning mostly in their own local territories.⁹ There are many oversight entities — including the Federal Energy Regulatory Commission (FERC), the North American Electric Reliability Corporation, state public utility commissions (PUCs), regional grid operators, and state legislators — who are largely in their own silos.

We are in a time of change for electricity markets. There are new sources of electricity generation — like solar and wind — that can generate electricity at little to no marginal cost but require upfront investment to build.^{10,11} Their dependency on variable inputs like sunshine or wind presents new challenges to U.S. electric grid management.¹² At the same time, these new sources of energy can help address challenges presented by fossil fuel energy. Recent geopolitical events have sent prices for natural gas, oil, and propane fuels up 50% in some parts of the country.¹³ Fossil fuel price volatility reduces energy security, with

6 “Explainer on the Transmission Notice of Proposed Rulemaking,” Federal Energy Regulatory Commission, April 21, 2022, <https://www.ferc.gov/explainer-transmission-notice-proposed-rulemaking>.

7 Darren Orf, *supra*.

8 Mathias Einberger, “Reality Check: The United States Has the Only Major Power Grid without a Plan,” RMI, Jan. 12, 2023, <https://rmi.org/the-united-states-has-the-only-major-power-grid-without-a-plan/>.

9 Mathias Einberger, *supra*.

10 Luiz Barroso and Hugh Rudnick, “The Growth of Renewables: Zero-Marginal-Cost Electricity Markets,” IEEE Power and Energy Magazine, 19:1, pp. 16-18, Jan.-Feb. 2021, <https://ieeexplore.ieee.org/abstract/document/9318595>.

11 Xavier Garcia-Casals and Emanuele Bianco “Potential limitations of marginal pricing for a power system based on renewables,” International Renewable Energy Agency, 2022, https://www.irena.org/-/media/irena/Files/Technical-papers/IRENA_Limitations_marginal_pricing_renewables_2022.pdf?rev=414bd062f7934aadae50db984e0f493a.

12 David Roberts, “Clean energy technologies threaten to overwhelm the grid. Here’s how it can adapt,” Vox, Nov. 11, 2019, <https://www.vox.com/energy-and-environment/2018/11/30/17868620/renewable-energy-power-grid-architecture>.

13 Rewiring America, *supra*.

50% to 60% swings in cost for home-heating fuels or gasoline over the past two decades,¹⁴ and disproportionately burdens low- and moderate-income families.¹⁵

Electricity demand is also rising for the first time in nearly two decades, the result of a boom in manufacturing, electrification, and demand related to artificial intelligence.¹⁶ In all, the scale of going fully electric in the U.S. by 2050 may mean delivery of as much as three times today's supply.¹⁷ At the same time, the U.S. faces an electric grid reliability investment shortfall of \$200 billion by 2029. And much of the grid is outdated. Some 70% of high-voltage transformers are aging (at least 25 years old), and 15% are more than 40 years old, the end of their intended design life.¹⁸

By 2050, U.S. transmission investment needs alone may reach upward of \$2.1 trillion.¹⁹ Investment needs include, for example, enhancing the capacity of inter-state (also referred to as regional) transmission to ensure that diversified, distributed energy sources can be effectively brought online and managed to power U.S. residential, commercial, and industrial activity. High costs could be exacerbated by elevated interest rates, which make it more costly to build infrastructure.

ELECTRICITY MARKETS AND THE GROWTH OF MONOPOLY POWER

There has been almost 120 years of electricity market regulation at state or federal levels to ensure Americans experience safe, reliable power at a just and reasonable cost. In exchange for the provision of reasonable, adequate, and efficient service to customers at just and reasonable prices, electric utilities were granted monopolies over huge service areas²⁰ and submitted to state regulation intended to ensure the just and reasonable standard.²¹

Almost 50 years after the first power station came online in New York City, it was clear that this plum deal for utilities was not adequately serving the public. By 1930, 90% of rural

14 Sam Calisch, Rachel Grace, Gabe Daly, and Ari Matusiak, *supra*.

15 In 2020, 34 million U.S. households reported having to forgo food or medicine to pay energy bills. Kayleigh Rubin, Molly Freed, and Ashna Aggarwal, "1 in 7 Families Live in Energy Poverty. States Can Ease That Burden," Rocky Mountain Institute, Dec. 18, 2023, <https://rmi.org/1-in-7-families-live-in-energy-poverty-states-can-ease-that-burden/>.

16 IEA, "Electricity 2024," Paris, 2024, <https://www.iea.org/reports/electricity-2024>.

17 Sam Calisch and Cora Wyent, "Electrification won't break the grid, it will make it smarter," Circuit Breakers: Debunking electrification myths. Rewiring America, July 4, 2022, <https://www.rewiringamerica.org/circuit-breakers/the-grid>. For context, between 1950 and 1960, U.S. electricity supply more than doubled. Then it more than doubled again between 1960 and 1970.

18 "2023 Long-term Reliability Assessment," North American Electric Reliability Corporation, Dec. 2023, https://www.nerc.com/pa/RAPA/ra/Reliability%20Assessments%20DL/NERC_LTRA_2023.pdf.

19 "Net-Zero America: Potential Pathways, Infrastructure, and Impacts," Princeton University, Oct. 2021, <https://netzeroamerica.princeton.edu/?explorer=year&state=national&table=2020&limit=200>.

20 Morgan Ricks, Ganesh Sitaraman, Shelley Welton, and Lev Menand, "Networks, Platforms, and Utilities: Law and Policy (1st Edition)," Lulu Press, Incorporated, 2022.

21 Morgan Ricks et al., *supra*.

farms and villages lacked access to electricity.²² Consequently, the government created the Tennessee Valley Authority,²³ passed the Rural Electrification Act (REA) of 1936,²⁴ and tamped down on holding company fraud and abusive monopoly power with the Public Utility Holding Company Act (PUHCA).²⁵ Competition, combined with loans, supervision, and assistance, ushered in a new era in national electrification: by 1956, 96% of rural farms and villages were electrified.²⁶

From the 1970s and throughout the 1980s and 1990s, the government restructured electricity markets — opening power generation to select competition while still protecting the monopoly status of transmission utilities.²⁷ Electricity markets began to emerge as states were granted the authority to create markets and the regional transmission organizations (RTOs) that operate them. Congress advanced transmission competition in the form of grid open access requirements through the Energy Policy Act of 1992.²⁸ This law gave FERC the authority to pass Order No. 888 in 1996, requiring utilities to transmit competitor power through their transmission lines without discriminatory pricing.²⁹ In 1998, FERC's Order No. 2000 created interconnection mandates to ensure that multiple independent enterprises would work together to create, in effect, a national system.³⁰ In 2007, noticing the lack of success of voluntary industry initiatives, FERC passed Order No. 890 to further transparency and consistency in open access tariffs and transmission planning, and reduce incumbent barriers to renewable generation sources.³¹

Utility market restructuring however, was also accompanied by FERC's shirking its responsibility to ensure electric utility mergers aligned with the public interest. Consequently, waves of consolidations have eroded market competition and allowed incumbent monopoly utilities to distort and abuse their privileged position at the expense of the public interest. Since the 1980s, mergers have reduced the number of independent retail utilities by 50%. Today, most utilities are part of massive, multistate conglomerates where serving electricity to ratepayers is only one of many business interests.³² By the end of 2000, the 10 largest investor-owned utilities (IOUs) owned 51% of all power production

22 Morgan Ricks et al., *supra*.

23 "The story behind America's electric cooperatives and NRECA," National Rural Electric Cooperative Association (NRECA), <https://www.electric.coop/our-organization/history>.

24 Public Law No. 94-570, Rural Electrification Act, 1936, <https://www.congress.gov/94/statute/STATUTE-90/STATUTE-90-Pg2701.pdf>.

25 Public Law No. 74-333, 49 Stat. 803.

26 Randall S. Thomas, Debra C. Jeter, Harwell Wells, "Democracy and Dysfunction: Rural Electric Cooperatives and the Surprising Persistence of the Separation of Ownership and Control," *Alabama Law Review*, 70:361, 2018, <https://scholarship.law.vanderbilt.edu/faculty-publications/1043/>.

27 David B. Spence, "Can Law Manage Competitive Energy Markets," *Cornell Law Review*, 93:4, May 2008, <https://scholarship.law.cornell.edu/cgi/viewcontent.cgi?referer=&httpsredir=1&article=3095&context=clr>.

28 Public Law No: 102-486, Energy Policy Act, 1992, <https://www.congress.gov/bill/102nd-congress/house-bill/776>.

29 Order No. 888, Federal Energy Regulatory Commission, <https://www.ferc.gov/industries-data/electric/industry-activities/open-access-transmission-tariff-oatt-reform/history-oatt-reform/order-no-888>.

30 Order No. 2000, Federal Energy Regulatory Commission, <https://www.ferc.gov/sites/default/files/2020-06/OrderNo.2000.pdf>.

31 Order No. 890, Federal Energy Regulatory Commission, <https://www.ferc.gov/sites/default/files/2020-06/OrderNo.890.pdf>.

32 Scott Hempling, "Inconsistent with the Public Interest,: FERC's Three Decades of Deference to Electricity Consolidation," *Energy Law Journal*, Nov. 2018, https://www.eba-net.org/wp-content/uploads/2023/02/15-233-312-Hempling_FINAL1.pdf.

capacity, and the 20 largest owned some 73% (up from 36% and 56%, respectively, in 1992).³³ By 2020, just 13 holding companies owned some 83 formerly independent IOUs.³⁴ These mergers have been driven not by any consideration of public interest, grid reliability, ratepayer experience, or cost reduction but by the strategic interest of investors to extract greater profits as investor-owned utility monopolies.³⁵ Resoundingly, these mergers do not deliver lower costs for ratepayers.³⁶

Taken together, this patchwork of organizations, regulations, and physical infrastructure — each with incentives that may or may not align with the public interest or even U.S. strategic interest — exhibits four structurally broken features, which need serious attention to ensure the reliability of the U.S. power grid in the 21st century and beyond.

STRUCTURAL ISSUES AND RECOMMENDATIONS FOR REFORM

STRUCTURAL ISSUE 1: DISTORTED INCENTIVES THAT RAISE COSTS FOR ELECTRICITY CONSUMERS

Distorted incentives warp monopoly utilities behavior at the expense of the American public. This happens in three ways. First, utilities profit in proportion to what they build, rather than in relation to the efficiency, resilience, or reliability of what they build, raising costs for consumers. Second, utilities' authorized rates of return often exceed their cost of capital, placing additional costs directly on captive ratepayers' bills. Third, for a given level of electricity demand, the price of electricity in the market as a whole is set by the price of the last, most expensive, generation technology to meet this demand, directly inflating ratepayer costs.

Being rewarded for capital expenditures, not performance, incentivizes overbuilding, reluctance to adopt cost-effective technologies, and a lack of focus on other regulatory policy goals.³⁷ Utilities have no incentive to build the most cost-effective generators or to run wide-scale, real-time demand response or basic efficiency programs if they can build

33 “The changing structure of the electric power industry: Selected issues, 1998,” Energy Information Administration, Office of Coal, Nuclear, Electric and Alternate Fuels, Report No. DOE/EIA 0562(98), July 1, 1998, <https://doi.org/10.2172/661564>.

34 Scott Hempling, “Regulating Mergers and Acquisitions of U.S. Electric Utilities: Industry Concentration and Corporate Complication,” Edward Elgar Publishing, Oct. 16, 2020, <https://www.elgaronline.com/monobook-oa/book/9781839109461/9781839109461.xml>.

35 Scott Hempling, 2018, *supra*.

36 John Kwoka and Michael Pollitt, “Industry Restructuring, Mergers, and Efficiency: Evidence from Electric Power,” EPRG 0708, Energy Policy Research Group, Cambridge Judge Business School, University of Cambridge, April 2007, <https://www.eprg.group.cam.ac.uk/wp-content/uploads/2008/11/eprg07081.pdf>.

37 Rewiring America and Linden Clean Energy, *supra*.

and profit from more expensive fossil energy-based infrastructure.³⁸ Essentially this means utilities earn profit when they spend money, at the expense of customers, and lose money when they save money to the benefit of customers and national strategic interests.³⁹ If investor-owned utilities faced the competitive discipline to profit in proportion to how well they met consumer needs, utilities might be more likely to invest in grid efficiency and other strategies to yield lower costs and performance benefits for consumers.

Second, the profit regulators allow utilities to earn on their investments, their authorized rate of return, exceeds their costs of capital. Cost allocation methods — the way the costs of building electricity infrastructure are allocated to ratepayers — govern costs for consumers. An annual cost of service provided by a utility, approved as a cost or as a formula by FERC, includes a “reasonable” guaranteed return of 10% to 12%; building, operation, maintenance, depreciation costs; other expenses, and income taxes; and less other revenue associated with the line (for example, if a telecommunications company uses line infrastructure for their own purposes).⁴⁰ Setting utilities’ authorized rate of return equal to their cost of capital is the widely accepted standard, but it is well known that no regulator — FERC or state — adheres to it. Instead, regulators let utilities earn rates on equity above their cost of capital, increasing costs for customers nationwide by billions of dollars per year.⁴¹

Finally, the price of electricity is set by the most expensive generating technology. In the merit order model, utilities deploy generators in order of how expensive they are to generate electricity, from least expensive to most. For a given level of demand, the price of electricity in the market as a whole is then set by the price of the last, most expensive generation technology to meet this demand.⁴² Today, when large amounts of electricity can be supplied with effectively no marginal cost due to renewables, this pricing model keeps costs for consumers elevated. If even 1% of peak energy demand is covered by expensive natural gas peaker plants, the high operating costs of these plants — and not the low operating cost of renewables — will set the price of electricity for the market.⁴³

Several reforms can help drive down costs and address these systemic problems. **First, key actors — from Congress and FERC to state legislators, regulators, and public utility commissions — should prioritize and enact policies to refocus the profit structure**

38 Oliver Milman, “US renewable energy farms outstrip 99% of coal plants economically - study,” The Guardian, Jan. 20, 2023, <https://www.theguardian.com/us-news/2023/jan/30/us-coal-more-expensive-than-renewable-energy-study>.

39 Cara Goldenberg and Rachel Gold, “For Ratepayers to Realize Savings from Clean Energy, Utility Business Models Need an Update,” RMI, Sept. 14, 2023, <https://rmi.org/for-ratepayers-to-realize-savings-from-clean-energy-utility-business-models-need-an-update/>.

40 “Formula Rates in Electric Transmission Proceedings: Key Concepts and How to Participate,” FERC, Office of Public Participation, July 5, 2022, <https://www.ferc.gov/formula-rates-electric-transmission-proceedings-key-concepts-and-how-participate>.

41 Karl Dunkle Werner and Stephen Jarvis, *supra*.

42 Kathryn Cleary and Karen Palmer, “US Electricity Markets 101,” Resources for the Future, March 17, 2022, <https://www.rff.org/publications/explainers/us-electricity-markets-101/>.

43 Kerstine Appunn, “Setting the power price: the merit order effect,” Clear Energy Wire, Jan. 23, 2025, <https://www.cleanenergywire.org/factsheets/setting-power-price-merit-order-effect>.

of utilities from cost-of-service to performance.⁴⁴ These policies include performance incentive mechanisms, revenue decoupling, multiyear rate plans, and profit sharing. FERC’s newly finalized Order 1920 takes a big step forward in solving this problem by requiring long-term planning that better anticipates and addresses regional grid needs, but more action is needed.⁴⁵

FERC should advance a policy on incentive rates of return for projects that demonstrate reliability and capacity improvements and support integration of more diverse generation sources.⁴⁶ FERC could further encourage competition by rewarding competitive procurement and adding cost-containment incentives.⁴⁷ Such efforts should be carefully designed to avoid perverse incentives and subversion by incumbents gaming results to protect their unearned monopoly advantages. Shrinking or removing electric utilities’ monopoly privileges and increasing competition offers an additional lever (covered below) to work in concert with performance-based measures. To ensure benefits actually accrue to ratepayers — and not simply utility investors — any cost-benefit approach should discard the outdated, insufficient, Kaldor-Hicks criterion of economic efficiency, which prioritizes wealth maximization of private economic actors (not the public interest).⁴⁸

State and federal regulators could work harder to keep rates of return equal to the cost of capital. Because current rates of return exceed the cost of capital, such changes could mean every dollar collected from customers might go as much as 25% further — in terms of contributing to infrastructure buildout — and rates could be lowered some 10%.⁴⁹ There is evidence of other countries — including the UK,⁵⁰ Australia,⁵¹ and Canada⁵² — keeping rates of return equal to the cost of capital and experiencing better outcomes. PUCs, with authorization by and greater support from state legislators, could require utilities

44 Paul L. Joskow, “The Expansion of Incentive (Performance Based) Regulation of Electricity Distribution and Transmission in the United States,” MIT Center for Energy and Environmental Policy Research (CEEPR), Working Paper Series, December 2023, <https://ceepr.mit.edu/wp-content/uploads/2024/01/MIT-CEEPR-WP-2024-01.pdf>.

45 Allison Clements, “FERC Order 1920 is a big step forward on transmission planning, but it is not the end game,” Utility Dive, May 15, 2024, <https://www.utilitydive.com/news/ferc-order-1920-transmission-planning-clements/716247/>.

46 Helen Kemp, “Revisiting FERC Order No. 1000 Should Maximize Investment in Regional Transmission Infrastructure,” Environmental, Natural Resources, & Energy Law Blog, Jan. 13, 2022, <https://law.lclark.edu/live/blogs/178-revisiting-ferc-order-no-1000-should-maximize>.

47 Paul L. Joskow, “Competition for Electric Transmission Projects in the U.S.: FERC Order 1000,” MIT Center for Energy and Environmental Policy Research, CEPR WP 2019-004, March 2019, <https://ceepr.mit.edu/workingpaper/competition-for-electric-transmission-projects-in-the-u-s-ferc-order-1000/>.

48 Eli Cook, “Efficiently Unequal: The Global Rise of Kaldor-Hicks Neoliberalism,” Global Intellectual History, 9:1-2, 2022, <https://cris.haifa.ac.il/en/publications/efficiently-unequal-the-global-rise-of-kaldor-hicks-neoliberalism>.

49 “Opening Testimony of Mark E. Ellis on Behalf of The Protect our Communities Foundation,” Public Utilities Commission of the State of California, Docket number A.22-04-008 et seq., Jan. 29, 2024, <https://docs.cpuc.ca.gov/PublishedDocs/SupDoc/A2204008;A2204009;A2204011;A2204012/7022/524233936.pdf>.

50 UK Regulators Network, “UKRN guidance for regulators on the methodology for setting the cost of capital,” March 2023, https://ukrn.org.uk/app/uploads/2023/03/CoC-guidance_22.03.23.pdf.

51 Australian Energy Council, “Rate of Return: What does it mean for consumers?,” March 9, 2023, <https://www.energycouncil.com.au/analysis/rate-of-return-what-does-it-mean-for-consumers/>.

52 Concentric Energy Advisors, “Economic Trends Shift Canadian Utility ROEs,” Feb. 6, 2024, <https://ceadvisors.com/economic-trends-shift-canadian-utility-roes/>.

to use dynamic retail rates that account for changes in energy prices — rather than the typical flat fee — enabling customers to purchase electricity when it’s cheapest and to use innovative technologies that help them do so.

Another route to incentivizing performance connects to disciplining monopoly utility investor behavior. **Congress should act to seriously curtail the ability of electric utilities to pump profits into millionaires’ and billionaires’ pockets in the form of excessive dividends and stock buybacks, instead of into grid investments.**⁵³ For example, in the past decade, annual shareholder payouts have increased 65% — far greater than any rate of increase in grid investments.⁵⁴ Creative approaches here could ensure more modest shareholder payouts — for example, capped at one-quarter to one-third of net income — with other portions directed toward ratepayers or financing grid investment. Alternatively, a lower return could be actively regulated by FERC. A lower return would better align utility returns with the incredibly low risk they face precisely because of their monopoly privilege (and compared to competitive markets).⁵⁵ In a time of high market volatility, such returns should still be highly desirable for investors. If IOUs object to lower returns on equity and threaten to withhold capital investment, they could be reminded of the public purpose they accepted in exchange for their monopoly privilege and ability to extract profit from ratepayers without competition. Public utilities and cooperatives offer highly viable alternatives to the IOU model and could be expanded if IOUs continue to prioritize investor returns over public benefit.

Finally, and related, **Congress could explore requiring a greater degree of fiduciary duty of investor-owned utilities as regards their public interest duties and obligations.** For networks, platforms, and utilities granted great powers by governments to create and service the basic infrastructure of American life, taxpayers and ratepayers deserve more accountability.⁵⁶ Fiduciary duties to performance in the public interest, rather than profit in shareholders’ interest, offer a further avenue to explore here.

STRUCTURAL ISSUE 2: UTILITY MONOPOLY MAINTENANCE

Today, one-third of the U.S. population is covered by monopolistic, vertically integrated utilities and, more generally, two-thirds by utility monopolies of any sort (e.g., publicly

53 Nicholas Lusiani, “Power Struggle: How Shareholder Primacy in the Electrical Utility Sector Is Holding Back an Affordable and Just Energy Transition,” The Roosevelt Institute, April 17, 2023, <https://doi.org/10.2139/ssrn.4410886>.

54 *Ibid.*

55 Ryan Foelske and Joe Danielh, “3 Reasons Why Climate Players Should Care About Utility Rate of Return,” RMI, April 22, 2024, <https://rmi.org/3-reasons-why-climate-players-should-care-about-utility-rate-of-return/>.

56 Nicholas Lusiani, *supra*.

or cooperatively owned).⁵⁷ Vertically integrated utilities increase generation costs.⁵⁸ Instead of investing in building a more resilient grid or serving ratepayers more reliably at lower costs, utility monopolies invest in safeguarding their exclusive territories and the incentives that allow them to overbuild for profit, without competition.⁵⁹ Over the past three years, investment in transmission by investor-owned utilities decreased,⁶⁰ contributing to the increasing wait time (interconnection queues) to bring electricity from new sources of power to people. Such wait times reached a median of five years in 2023. Investment is particularly low in transmission projects that cross state boundaries, which are approximately 7% less likely to reach completion than intra-state projects.⁶¹ It is also low in areas characterized predominantly by vertically integrated utilities, particularly in the Southeast and Northwest.⁶²

Avoiding building transmission benefits utilities' bottom lines at the expense of ratepayers because a more connected grid that can deliver cheaper energy from a longer distance for its customers translates into less revenue for the utility, which might otherwise exclusively power its service area. Entergy, for instance, is accused of deploying a wide range of tactics to prevent additional transmission in Arkansas and Louisiana, even though it would have saved customers an estimated \$1.1 billion in 2022 by enabling the transmission of low-cost wind power from surrounding areas.⁶³ The problem? The utility would have had \$900 million less in operating profits, as said wind power would have undercut the profitability of its own power plant fleet.

Electric utility monopoly efforts to maintain exclusive territories harm U.S. households, businesses, and industry. Today, some 40 corporations, together valued at over \$1 trillion, own most of the 600,000 miles of U.S. transmission lines.⁶⁴ These same monopoly actors sit on the boards of a range of independent system operators (ISOs) and RTOs, the federally regulated nonprofits operating transmission systems.⁶⁵ Unsurprisingly, with transmission planning conducted by RTOs, there is little hurry to open up regional transmission to

57 John Farell, "Upcharge: Hidden Costs of Electric Utility Monopoly Power," Institute for Local Self-Reliance, June 2024, <https://ilsr.org/wp-content/uploads/2024/05/upcharge-report.pdf>.

58 Severin Borenstein and James Bushnell, "The US Electricity Industry After 20 Years of Restructuring," Annual Review of Economics, Volume 7, 2015, <https://www.annualreviews.org/content/journals/10.1146/annurev-economics-080614-115630>.

59 Catherine Hausman, "Power Flows: Transmission Lines, Allocative Efficiency, and Corporate Profits," National Bureau of Economic Research, Working Paper 32091, January 2024, https://www.nber.org/system/files/working_papers/w32091/w32091.pdf.

60 John D. Wilson and Zach Simmerman, "The Era of Flat Power Demand is Over," Clean Grid Initiative, Grid Strategies, December 2023, <https://gridstrategiesllc.com/wp-content/uploads/2023/12/National-Load-Growth-Report-2023.pdf>.

61 Lewis (Zhaoyu) Wu, Abraham Silverman, Harrison Fell, and James Glynn, "A Quantitative Analysis of Variables Affecting Power Transmission Infrastructure Projects in the US," Columbia University Center on Global Energy Policy, April 5, 2024, <https://www.energypolicy.columbia.edu/publications/a-quantitative-analysis-of-variables-affecting-power-transmission-infrastructure-projects-in-the-us/>.

62 *Ibid.*

63 Catherine Hausman, 2024, *supra*.

64 Ari Peskoe, "Profiteering Hampers U.S. Grid Expansion Private utility companies are blocking new interregional transmission lines," IEEE Spectrum, Feb. 22, 2024, <https://spectrum.ieee.org/transmission-expansion>.

65 Alexandra Klass, Joshua Macey, Shelley Welton, and Hannah Wiseman, "The Key to Electric Grid Reliability: Modernizing Governance," Kleinman Center for Energy Policy, University of Pennsylvania, March 2024, <https://kleinmanenergy.upenn.edu/wp-content/uploads/2024/03/KCEP-Paper-15-Key-to-Electric-Grid-Reliability.pdf>.

competition when coordination can go toward sustaining exclusive monopoly territories and healthy profit margins.⁶⁶ Without transmission lines connecting across states and regions, incumbent utility monopolies don't have to compete to provide the best service at the lowest price. More transmission would allow us to move more quickly to retire uneconomic legacy assets, increase supply, lower costs, and support reliability.

Incumbent utilities favor regulatory approaches that grant them rights of first refusal (ROFR) as a key tool to maintain monopoly power. FERC passed Order No. 1000 in 2011, removing a federal requirement that had bestowed on monopoly utilities an exclusive right to build, maintain, and own transmission lines in interregional service territories (unless they waive said rights).⁶⁷ FERC's withdrawal of the federal ROFR was intended to spur competition for transmission development and better ensure grid reliability.⁶⁸ In the time since the 2011 Order, investments in interregional projects have been sparse. Competitive projects comprised only 3% of \$17 billion annual average transmission investments between 2013 and 2017.⁶⁹ Most of these investments have targeted local reliability needs in territories protected by state ROFR laws.⁷⁰ State ROFRs undermine FERC's ability to implement regional transmission siting. State ROFRs also discriminate against new entrants to transmission markets and obstruct projects in which new generation or distribution benefits would flow to people in neighboring states.⁷¹ In light of anti-competitive state ROFRs, FERC would be wrong to reinstate a general federal ROFR.⁷²

To further address these problems, policymakers should take additional steps to inject competition into electricity markets. Calls for greater competition in electricity markets have wide-ranging support.⁷³ Eight states and D.C. have urged FERC to reconsider its position on reinstating the federal ROFR.⁷⁴ The Electric Power Supply Association has voiced a similar stance,⁷⁵ as has the National Association of State Utility Consumer

66 *Ibid.*

67 Josiah Neeley, "Right of First Refusal Laws for Electric Transmission are Anti-Competitive in Interstate Commerce," The R Street Institute, June 2021, <https://www.rstreet.org/wp-content/uploads/2021/06/explainer27-1.pdf>.

68 Kristen van de Biezenbos, "The Case Against Regional Transmission Monopolies," Washington University Law Review, 101:69, Feb. 8, 2023, https://papers.ssrn.com/sol3/papers.cfm?abstract_id=4348932&download=yes.

69 Johannes P. Pfeifenberger, Judy Chang, Akarsh Sheilendranath, J. Michael Hagerty, Simon Levin, and Wren Jiang, "Cost Savings Offered by Competition in Electric Transmission: Experience to Date and the Potential for Additional Customer Value," The Brattle Group, Inc., April 2019, https://www.brattle.com/wp-content/uploads/2021/05/16726_cost_savings_offered_by_competition_in_electric_transmission.pdf.

70 State ROFRs proliferated after the 2011 Order No. 1000. Twelve states implemented their own ROFR laws: Montana, North and South Dakota, Minnesota, Nebraska, Iowa, Michigan, Indiana, Texas, Oklahoma, Mississippi, and Alabama.

71 Kristen van de Biezenbos, *supra*.

72 "Comment of United States Department of Justice and Federal Trade Commission to the Federal Energy Regulatory Commission in Docket No. RM21-17-000," Aug. 7, 2022, <https://www.ftc.gov/legal-library/browse/advocacy-filings/comment-united-states-department-justice-federal-trade-commission-federal-energy-regulatory>.

73 Devin Hartman, *supra*.

74 Ethan Howland, "8 states, DC urge FERC to reject EEL, Eversource call to drop competition for transmission projects," Utility Dive, Nov. 29, 2021, <https://www.utilitydive.com/news/state-utility-regulators-ferc-competition-rofr-transmission/610608/>.

75 "EPSCA Comments on FERC Transmission Regional Planning Proposed Rule," Electric Power Supply Association, Aug. 17, 2022, <https://epsc.org/filings/comments-on-ferc-transmission-regional-planning-proposed-rule/>.

Advocates, a voluntary association of 60 utility consumer advocate offices;⁷⁶ the Electric Power Supply Association;⁷⁷ and the Electricity Consumers Resource Council.⁷⁸ Competitive transmission projects contribute to cost savings of between 20% and 30%.⁷⁹ Sens. Martin Heinrich (D-NM) and Mike Lee (R-UT), in a bipartisan letter, noted that competitive bidding processes could yield region-specific savings as follows: MISO (Midwest region): 15-28%; Southwest region (Southwest Power Pool): 50-58%; Mid-Atlantic (PJM) region: 60-67%.⁸⁰ No prominent energy analysts or economists endorse ROFRs; only individuals and organizations affiliated with or funded by utilities do.⁸¹

At a minimum, FERC should act to rigorously prevent any further anti-competitive mergers. FERC is responsible for ensuring electric utility mergers and consolidations align with the public interest. Section 203 of the Federal Power Act (FPA) requires FERC to approve mergers only if the merger will “[n]ot result in cross-subsidization of a non-utility associate company.”⁸² Recent analyses of the harms caused by utility mergers suggest FERC’s lax enforcement of merger policy is inconsistent with this mandate.⁸³ FERC should intervene to prevent anti-competitive utility mergers and impose stronger public interest conditions on merger terms and post-merger behavior, including meaningful rate reduction and improved service, and prohibitions of utility revenues cross-subsidizing non-utility affiliates.⁸⁴

Second, FERC should use open rulemaking procedures to once and for all end confusion on the need to eliminate anti-competitive federal and state rights of first refusal in electric markets. FERC should eliminate exemptions for incumbents from competitive processes entirely⁸⁵ and expand the number of transmission projects subject to competitive processes.⁸⁶ As the Iowa Supreme Court stated in its injunction against a state-level ROFR initiative supported by incumbent utilities, rights of first refusals are “[q]uintessentially crony capitalism.”⁸⁷

76 “Initial Comments of The National Association of State Utility Consumer Advocates, Docket No. RM21-17-000,” Aug. 2022, <https://www.nasuca.org/wp-content/uploads/2022/08/NASUCA-FERC-Initial-Transmission-NOPR-Comments-RM21-17-000-8-17-22.pdf>.

77 “Comments of the Electric Power Supply Association, Docket No. RM21-17-000,” Aug. 2022, <https://epsa.org/wp-content/uploads/2022/08/EP-SA-Comments-NOPR-RM21-173663.pdf>.

78 “Comments of the Electricity Consumers Resource Council, Docket No. RM21-17-000,” 2022, <https://elcon.org/wp-content/uploads/RM21-17-Transmission-NOPR-Comments-FINAL.pdf>.

79 Johannes P. Pfeifenberger, *supra*.

80 Sen. Hon. Martin Heinrich and Sen. Hon. Mike Lee, *supra*.

81 Harvard Electricity Law Initiative, *supra*.

82 Federal Power Act Section 203(a)(4).

83 Scott Hempling, “Utility Mergers and The Modern (and Future) Power Grid,” *Energy Law Journal*, 42, May 5, 2021, p. 240, <https://www.eba-net.org/wp-content/uploads/2023/02/10-Macey237-248.pdf>.

84 Scott Hempling, *supra*.

85 Comment of the DOJ and FTC, *supra*., citing Initial Comments of the California Public Utilities Commission, FERC Docket No. RM21-17-000, 40, 49, Oct. 12, 2021.

86 Comment of the DOJ and FTC, *supra*., citing Comments of the N.J. Board of Public Utilities, FERC Docket No. RM21-17-000, 11-13, Oct. 12, 2021.

87 *LS Power Midcontinent LLC and Southwest Transmission LLC vs. State of Iowa, Iowa Utilities Board and Midamerican Energy Company and ITC Midwest LLC*, The Supreme Court of Iowa, N. 21-0696, 2023, p. 34, <https://www.iowacourts.gov/courtcases/15908/embed/SupremeCourtOpinion>. Temporary injunction granted; decision of court of appeals vacated.

When it comes to regional transmission, **Congress could encourage FERC’s preemption of state siting authority using the powers granted in the Energy Policy Act of 2005⁸⁸ by having the Department of Energy designate interstate areas with transmission congestion or capacity issues.** Doing so would create an opening for FERC to use its bright-line transmission siting authority to develop such areas through competitive processes. The Infrastructure Investment and Jobs Act of 2021 further grants FERC the authority to override state refusal in national “corridors of interest.”⁸⁹

In such circumstances, legal backlash would likely be strong. States have shown in many instances a willingness to reject innovative transmission projects by discriminating against non-incumbent projects, with strong IOU backing. When state ROFRs hand incumbents influence over regional transmission siting and construction — and thereby rates — these ROFRs impinge on FERC’s bright-line interstate transmission rate-setting authority⁹⁰ and may even be in violation of the Dormant Commerce Clause in their discriminatory and protectionist effects on interstate commerce.⁹¹ Any state efforts “aiming at”⁹² disrupting FERC’s rate-setting authority, or making it infeasible for FERC to enact policy in its regulatory domain, should be dismantled. In pursuing this avenue of action, FERC must be prepared to defend and assert its authority.

STRUCTURAL ISSUE 3: UNDERMINING INNOVATION

Incumbent monopolies systematically undermine the grid innovations needed to reach national decarbonization goals and deliver more power more reliably and cost effectively to ratepayers.

There are a range of ways to expand the capacity of the grid beyond building new generation, transmission, and distribution. Load can be reduced through efficiency gains (the same equipment demanding less power), load shedding (reducing demand at peak times), load shifting (changing the timing of demand), and power modulation (using batteries and other equipment to smooth out supply).⁹³ At the same time, advanced transmission technologies like high-performance conductors and dynamic line ratings can cost-effectively increase transmission capacity, and distributed energy resources (DERs, smaller generation technologies located on the consumer side, such as rooftop

88 Energy Policy Act of 2005, Pub. Law. No. 109-58, § 1221 (2005).

89 Pub. L. 117-58.

90 Matthew Christiansen and Joshua Macey, “Long Live the Federal Power Act’s Bright Line,” Harvard Law Review, Vol. 134, 2021, Cornell Legal Studies Research Paper No. 20-25, May 2, 2020, <https://ssrn.com/abstract=3591412>.

91 Walker Mogen, “The Dormant Commerce Clause as a Way to Combat the Anti-Competitive, Anti-Transmission-Development Effects of State Right of First Refusal Laws for Electricity Transmission Construction,” Michigan Journal of Environmental & Administrative Law, 12:2, 2023, <https://doi.org/10.36640/mjeal.12.2.dormant>.

92 *Ibid.*

93 “Electrification and the grid: Implementing rate design, grid upgrades, and load flexibility to support electrification,” Rewiring America and Linden Clean Energy, January 2024, https://assets.ctfassets.net/v4qx5q5o44nj/7wBJb3RJfH80IDZ3kL2Ukr/16a3e42a039831eb7c06a97212abd5c/RA_Grid_Project_Report_2024.pdf.

solar) can increase supply. For example, replacing old lines could double U.S. high-voltage transmission capacity by 2035 and save \$85 billion in buildout costs.⁹⁴ Yet despite these many solutions, incumbent utilities either avoid pursuing or actively undermine innovative options to improve grid reliability and lower costs for consumers.

Utility monopoly undermining of innovation extends to distributed energy resources as well. In California, the investor-owned utility PG&E pushed regulators to reduce by 75% the compensation for ratepayers with rooftop solar projects.⁹⁵ The Institute for Local Self-Reliance has found that utilities “play games with the connection process for rooftop solar across the country, with wide variations in the time and cost for projects to secure grid access. Some utilities have tampered with purportedly competitive bidding processes to favor their own power plant projects.”⁹⁶ These outdated regulatory structures and anti-competitive practices underwritten by incumbent monopolies inhibit more innovative ways to cut costs for ratepayers and deliver better and more reliable performance.

To support innovation, Congress or FERC could require capacity markets to compensate storage based on a storage facility’s effective load carrying capability (ELCC).⁹⁷ Effective load carrying capability accounts for the probabilistic nature of power system operation and compensates longer duration storage for its overall value to the grid. PJM and Idaho Power have switched to ELCC models.⁹⁸ Such models are critical to help deal with dispatchable storage, charged by cleaner, renewable sources, and minimize the necessity for peaker plants, which drive up electricity costs.

State and federal actors should explore and scale creative incentive structures that promote innovation. In Australia, households are paid for sending electricity back into the grid, cutting their annual energy bills — to zero in some cases. Australia today has the highest rate of rooftop solar panels per capita of any country.⁹⁹ Currently, utilities in Utah and Hawaii pay households to install batteries and send electricity back to the grid.¹⁰⁰

Another innovation comes in the form of advanced transmission technologies.¹⁰¹ **State and federal actors should incentivize utility uptake of advanced transmission**

94 Mike O’Boyle, Casey Baker, and Michelle Solomon, “Supporting advanced conductor deployment: barriers and policy solutions,” GridLab, Goldman School of Public Policy, University of California Berkeley, April 9, 2024, <https://www.2035report.com/wp-content/uploads/2024/05/5.3-Reconductor-policy-report.pdf>.

95 Julie Cart, “California’s residential solar rules overhauled after highly charged debate,” Cal Matters, Dec. 15, 2022, <https://calmatters.org/environment/2022/12/california-solar-rules-overhauled/>.

96 John Farrell, supra.

97 Mark Specht, “To Understand Energy Storage, You Must Understand ELCC,” Union of Concerned Scientists, The Equation, June 14, 2021, <https://blog.ucsusa.org/mark-specht/to-understand-energy-storage-you-must-understand-elcc/>.

98 Paul Denholm, Wesley Cole, and Nate Blair, supra.

99 Emi Bertoli, Vida Rozite, and Kartik Veerakumar, “Digital tools will help keep distributed solar PV growing strongly,” IEA, July 25, 2023, <https://www.iea.org/commentaries/digital-tools-will-help-keep-distributed-solar-pv-growing-strongly>.

100 Patrick Cooley, “Hawaiian Electric offers new incentives to customers with rooftop solar and battery storage,” Utility Dive, April 3, 2024, <https://www.utilitydive.com/news/hawaiian-electric-incentives-rooftop-solar-net-metering-battery-energy-storage/712215/>.

101 Ethan Howland, “21 states, DOE launch initiative to spur grid-enhancing technologies, advanced conductors,” Utility Dive, May 29, 2024, <https://www.utilitydive.com/news/states-doe-modern-grid-deployment-initiative-gets/717338/>.

technologies.¹⁰² FERC’s Order 1920, which requires the consideration of four advanced transmission technologies in long-term transmission planning, represents a step in the right direction.¹⁰³ The federal-state grid modernization deployment initiative, with 21 states on board so far, represents another step in the right direction.¹⁰⁴ The Advancing GETs Act, which would adopt a “shared savings incentive,” where utilities are compensated for saving consumers money with grid-enhancing technologies, would also promote adoption. State utility commissions should follow FERC’s lead and take steps to ensure that a more reliable, cost-efficient, and innovative U.S. electricity grid is maintained and built-out to meet 21st-century needs and strategic priorities.

STRUCTURAL ISSUE 4: CORRUPTION, FRAUD, AND ABUSE

In theory, regulators should check the abuses and failures of electric utility monopolies. But in practice, that doesn’t regularly happen. That is a result of a complex and byzantine system that is vulnerable to corruption and abuse by monopoly interests.¹⁰⁵ Utilities often use ratepayer funds to lobby against diversified renewable energy sources, further entrenching incumbent monopoly power, and advancing cost increases to pad profits.¹⁰⁶ Even worse, utilities have used captive ratepayer funds to pay for such political activities, which range from legal lobbying to illegal bribery.

This includes examples of illegal corruption and bribery. Take the case of Commonwealth Edison Company, the largest electric utility in Illinois and a subsidiary of the Exelon Corporation, which spent millions bribing the Illinois House Speaker in exchange for his support for legislation that raised consumers’ rates.¹⁰⁷ More common is the shockingly legal practice of monopoly utilities using money from American consumers’ electricity bills to lobby public utility commissions through payments to highly political trade associations.¹⁰⁸ For example, Dominion Energy in Virginia is seeking to charge customers \$9 million per year in trade association dues, even as in each of its last four rate cases, regulators have caught the utility trying to place lobbying or other impermissible costs into rates and required it to remove the costs.¹⁰⁹

102 Mike O’Boyle, Casey Baker, and Michelle Solomon, *supra*.

103 Claire Wayner, “Understanding FERC’s Order 1920,” RMI, May 23, 2024, https://rmi.org/wp-content/uploads/dlm_uploads/2024/05/understanding_FERCs_order_1920.pdf.

104 Ethan Howland, *supra*.

105 Alexandra Klass, Joshua Macey, Shelley Welton, and Hannah Wiseman, *supra*.

106 David Pomerantz, “Getting Politics Out of Utility Bills,” Energy and Policy Institute, Jan. 26, 2023, <https://energyandpolicy.org/wp-content/uploads/2023/01/Getting-Politics-Out-of-Utility-Bills.pdf>.

107 U.S. Attorney’s Office, Northern District of Illinois, “Commonwealth Edison Agrees to Pay \$200 Million to Resolve Federal Criminal Investigation Into Bribery Scheme,” July 17, 2020, <https://www.justice.gov/usao-ndil/pr/commonwealth-edison-agrees-pay-200-million-resolve-federal-criminal-investigation>.

108 David Pomerantz, *supra*.

109 Shelby Green, “Virginia bill would bar utilities from charging customers for politics, joining other states,” Energy and Policy Institute, Jan. 17, 2024, <https://energyandpolicy.org/virginia-bill-would-bar-utilities-from-charging-customers-for-politics-joining-other-states/>.

In the past five years, seven power companies have been accused of fraud or corruption. Seven industry executives and their appointed or elected official accomplices have been federally indicted or pled guilty. In Florida, Illinois, Mississippi, Ohio, and South Carolina, fraud and corruption have cost electricity customers at least \$6.6 billion.¹¹⁰ Electric utilities broker multimillion-dollar side deals with public officials and large industrial constituents to pass on rate increases to small businesses and residential consumers.¹¹¹

To make matters worse, the typical consequence for monopoly utility corruption, fraud, and abuse is simply requiring refunds to customers without any additional penalty.¹¹² For incumbent utilities confident in their monopoly power, breaking rules in this way is a virtually risk-free way of doing business.

Technically, utility regulators forbid utilities from charging customers to support direct spending on elections.¹¹³ **Congress and state legislators should act broadly to ensure this prohibition becomes more than a technicality and serves as a safeguard against monopoly powers' attempts to degrade democratic processes.** Most utility regulators say that they do not allow utilities to charge customers for lobbying costs.¹¹⁴ FERC is still examining incumbent utility rate recovery practices when spending ratepayers funds on association dues and political activities.¹¹⁵ Concurrently, Rep. Kathy Castor (D-FL), with co-sponsorship by Reps. Sean Casten (D-IL) and Jamaal Bowman (D-NY), introduced legislation to have FERC prohibit utility recovery of political expenses from ratepayers, while state legislatures in Colorado, Connecticut, and Maine have already passed similar bills.¹¹⁶ Policymakers should also significantly increase the penalties associated with these violations so that there is a more serious deterrent to corporate and individual actors.

110 Mario Alejandro Ariza and Kristi E. Swartz, "Utility fraud and corruption are threatening the clean energy transition," Mother Jones, March 1, 2024, <https://www.motherjones.com/politics/2024/03/utility-fraud-corruption-clean-energy-transition/>.

111 Jessie Balmert, "The art of the side deal: How large energy users get refunds that average Ohioans don't," Cincinnati Enquirer, Feb. 18, 2024, <https://www.dispatch.com/story/news/politics/2024/02/18/side-deals-how-large-energy-users-get-refunds-that-most-ohioans-dont/72587795007/>.

112 Matt Kasper, "Legislation introduced by Rep. Kathy Castor instructs FERC to ban utilities from using ratepayer dollars for political activities," Energy and Policy Institute, Aug. 2, 2023, <https://energyandpolicy.org/legislation-prohibits-utilities-recovering-political-expenses-ratepayers/>.

113 David Pomerantz, *supra*.

114 David Pomerantz, *supra*.

115 "FERC Seeks Comment on Recovery, Reporting of Industry Dues, Expenses," FERC Docket No. RM22-5 Item E-2, Dec. 16, 2021, <https://www.ferc.gov/news-events/news/ferc-seeks-comment-recovery-reporting-industry-dues-expenses>.

116 Matt Kasper, *supra*.

CONCLUSION

Fixing structural issues in electric utility markets to provide more reliable and lower-cost service to power our economy, industry, and democracy will require overcoming entrenched, anti-competitive practices through structural reform. Combining the forces of effective regulation and fair and open market competition is the surest route to fixing distorted profit structures and under-investment in transmission and innovation, and breaking incumbent monopoly habits like corruption, fraud, and abuse.

Congress and regulatory agencies have the authority and tools necessary to implement many of these changes. State supreme courts, circuit courts, and the Supreme Court recognize and have affirmed the authority of the federal government on numerous occasions to safeguard electricity markets in the public interest.¹¹⁷ We have highlighted four broad avenues for action to rein in the abuses of incumbent monopolies and realign electric utility market regulation and competition to benefit all Americans.

The U.S. Department of Energy estimates that regional transmission in the U.S. may need to expand fivefold to maintain reliability and improve resilience to extreme weather and provide access to low-cost clean energy.¹¹⁸ The historic scale of necessary investment to meet this challenge will have immense economic consequences. Jobs from electrification are expected to be well paying, widely distributed geographically, and difficult to offshore.¹¹⁹ Between 2020 and 2035, estimates suggest a peak¹²⁰ 25 million jobs would come with a commitment to electrification not only in terms of electricity grid overhaul and generation (supply-side measures) but also equipment installation and maintenance in household, transportation, commercial and industrial sectors (demand-side measures). Beyond the peak, some 5 million sustained jobs would be created — double the number currently directly and indirectly supported in the energy industry.¹²¹ It would also come with cost savings of \$1,000 to \$2,000 for households from lower energy costs. This corresponds with WWII-era levels of industrial mobilization in size, scope, and employment opportunities.¹²²

It would be a mistake to leave the transmission planning and grid development necessary to meet this opportunity in the hands of monopoly incumbents more concerned with

117 Morgan Ricks et al., *supra*.

118 Ari Peskoe, 2024, *supra*.

119 Saul Griffith, Sam Calisch, and Alex Laskey, “Mobilizing for a zero carbon America: Jobs, jobs, jobs, and more jobs,” *Rewiring America*, July 29, 2020, <https://content.rewiringamerica.org/reports/mobilizing-for-a-zero-carbon-america-technical-whitepaper.pdf>.

120 “Peak” meaning, for example, during a three- to five-year intensive manufacturing and installation ramp-up and 10-year buildout.

121 Compared with 2.7 million people working in the energy industry if gas station convenience store jobs are included — but about 1.8 million if they’re not.

122 Saul Griffith, Sam Calisch, and Alex Laskey, *supra*.

protecting their profits and market power. The “local purpose and local monopolies” granted to investor-owned utilities in the early 20th century shouldn’t shape 21st-century grid needs.¹²³

Federal and state regulators and officials must work together to limit monopoly power and better regulate utilities to safeguard the public interest and ensure fair and competitive electricity markets. Reforming profit structures to align electric utility incentives with the public interest, promoting electric utility market competition, preventing abusive monopoly power, supporting innovation, and addressing illegal monopoly attacks on our democratic and political processes represent foundational steps to establishing well-regulated, competitive electricity markets. These fair markets would help guarantee economic freedom and thriving for all Americans.



123 Ari Peskoe, 2021, *supra*, p. 58.

AMERICAN
ECONOMIC
LIBERTIES
PROJECT

AMERICAN
ECONOMIC
LIBERTIES
PROJECT

The American Economic Liberties Project is a non-profit and non-partisan organization fighting against concentrated corporate power to secure economic liberty for all.

We do not accept funding from corporations. Contributions from foundations and individuals pay for the work we do.

economicliberties.us

[@economicliberties](https://twitter.com/economicliberties)

info@economicliberties.us