

THE NEW VERTICALLY INTEGRATED UTILITY

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Abstract: Domestic energy demand is growing for the first time in decades, driven by energy-intensive data centers, reshoring of industry, and broad electrification. Regulatory hurdles and supply chain constraints render energy supply highly inelastic in the near term. In an energy-constrained environment, utilities have become attractive acquisition targets for well-resourced large-load energy customers. Such acquisitions create vertically integrated firms that operate in both competitive and monopolistic markets. Vertical integration of this sort raises antitrust concerns. Yet so far, the prevailing assumption has been that state and federal regulatory agencies, together with antitrust law, are sufficient to guard the public interest against problematic vertical mergers.

This Article shows that the modern iteration of vertical integration allows utilities to circumvent these guardrails. Forward vertical integration, a form of integration wherein a rate-regulated utility merges with a downstream large-load customer, creates perverse incentives for utilities to advantage their affiliate customer through (1) service prioritization; (2) changed procurement decisions; and (3) risk-shifting onto other customer classes. Utilities can pursue these ends through what regulators see as ordinary business decisions, rather than through the ratemaking process regulators are equipped to scrutinize. As such, regulators will struggle to rein in this non-price discrimination. This new form of vertical integration unmasks a persistent problem in integrated regulated monopolies: the ability to transfer value towards unregulated affiliates through ordinary business decisions, which regulators defer to.

Concurrently, modern antitrust doctrine surrounding this form of vertical integration suffers from a similar myopia by focusing primarily on price discrimination. Absent a recognition of utilities' ability to transfer value to affiliates without altering prices, antitrust is ill-prepared to guard the public interest. To prevent harm to consumers and competition, this Article proposes a set of solutions for regulators and courts to adopt. Specifically, the Article proposes that regulators adopt an ex ante skepticism towards forward vertical mergers; that FERC broaden its § 203 review to account for downstream consequences of forward mergers; that state PUCs broaden their definition of what constitutes "the public interest"; and that courts embrace a modernized antitrust posture that recognizes the unique market abuses made possible by forward vertical integration.

TABLE OF CONTENTS

INTRODUCTION.....	2
I. THE RATE-REGULATED UTILITY	5
A. STATE REGULATION	6
B. FEDERAL REGULATION & PUHCA	8
II. THE NEW VERTICAL INTEGRATION	14
A. VERTICAL INTEGRATION IN PUBLIC UTILITIES.....	15

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B.	ANTITRUST IN RATE-REGULATED INDUSTRIES	16
C.	EXEMPTIONS FROM ANTITRUST ENFORCEMENT	19
III.	HARMFUL EFFECTS OF FORWARD VERTICAL INTEGRATION.....	22
A.	HARMFUL EFFECTS OF VERTICAL INTEGRATION.....	22
B.	CONTEMPORARY EXAMPLES	31
C.	ABSENCE OF EFFICIENCIES FROM INTEGRATION	38
D.	UTILITY FORWARD VERTICAL INTEGRATION & ANTITRUST’S NORMATIVE AIMS	ERROR! BOOKMARK NOT DEFINED.
IV.	SOLUTIONS & POTENTIAL UPSIDES.....	43
A.	REQUIRE MITIGATING MEASURES BEFORE MERGER APPROVAL.....	43
B.	MODIFY FERC REGULATIONS GOVERNING REQUESTS FOR AUTHORIZATION UNDER § 203.....	44
C.	EMPOWER STATE PUCs TO BROADEN DEFINITION OF “PUBLIC INTEREST”	45
D.	LEVERAGE ANTITRUST LAW TO POLICE VERTICAL MERGERS	47
E.	SOCIALIZE UTILITIES TO AVOID INCENTIVE CONFLICTS	49
F.	UPSIDES TO LARGE-LOAD CUSTOMER GRID CONNECTIONS	50
	CONCLUSION	53

INTRODUCTION

In February 2026, the Federal Energy Regulatory Commission (FERC) authorized Blackstone’s acquisition of TXNM Energy—the owner of two regulated utilities that serve more than 800,000 customers across Texas and New Mexico—as consistent with the public interest.¹ The utility sector is a new area of investment for Blackstone, the world’s largest alternative asset manager.² The firm is much more familiar with investments in a different sector, which also happen to make up a growing customer class for electric utilities: data centers. Blackstone has been on an investment spree in the data center sector over the past decade, and today manages a \$85 billion data center portfolio, which it cites as the “fastest growing part” of its real estate portfolio.³ This year, it announced plans to launch a publicly traded AI data center acquisition company.⁴ The firm is bullish on this sector of the economy due to the presence of “barriers to new supply” safeguarding the value of their investments.⁵ In the firm’s words, it is “becoming harder every day to build new data centers.”⁶ That

¹ Order Authorizing Disposition of Jurisdictional Facilities, 194 ¶ FERC 61,134 (2026).

² Blackstone, *About the Firm*, <https://www.blackstone.com/the-firm/> (last accessed May 6, 2026).

³ Mike Forman, *Cutting Through the Noise: The Long-Term Case for Data Centers*, BLACKSTONE, <https://www.blackstone.com/insights/article/cutting-through-the-noise-the-long-term-case-for-data-centers/> (May 1, 2025) (“Today, Blackstone manages an \$85 billion global data center platform with a powered land bank that can support over \$125 billion of future growth.”)

⁴ Jack Sidders & Dawn Lim, *Blackstone Plans Public Company for AI Data-Center Buying Spree*, BLOOMBERG, <https://www.bloomberg.com/news/articles/2026-02-27/blackstone-plans-public-company-for-ai-data-center-buying-sprees> (Feb. 27, 2026)

⁵ Blackstone, *supra* note 3.

⁶ *Id.*

difficulty comes from one major bottleneck: power, or a lack thereof.⁷ Data centers are extremely energy-intensive to operate, and the American electric grid is not able to keep up with the rapid growth in energy demand caused by rising demand for data center compute. This creates apparent synergies for investors in the data center and utility space: Blackstone noted that its ability to invest in and procure power infrastructure at scale grants it a major competitive advantage in the data center market.⁸

The acquisition of TXNM grants Blackstone preferred access to energy—a crucial input to its data center business that has become increasingly difficult to secure. Although demand for energy is rising, supply is largely inelastic in the short- to medium-term due to long lead times in manufacturing, permitting, and construction. Gas turbine manufacturers, for example, have a seven-year backlog;⁹ and transmission lines that can connect quick-to-deploy renewables to data centers can take ten years to build.¹⁰ As a result, energy in the United States today is a scarce resource, and will remain so for some time.

When building energy infrastructure from scratch to meet demand takes too long, purchasing existing capacity and redirecting it to one's specific needs could be a more attractive option in theory. Blackstone is not the only firm reaching this conclusion. BlackRock, another major asset manager, acquired Allete in 2025, and agreed to purchase AES for more than \$33 billion in 2026.¹¹ Blackrock, too, holds significant investments in data centers.¹² Given how constrained energy supply remains, we can expect more investors to pour into the utility sector to generate synergies with their data center investments. This dynamic is producing a new type of vertical integration: Utilities and

⁷ See, e.g., Morgan Stanley Institute, *Energy Markets Race to Solve the AI Power Bottleneck*, <https://www.morganstanley.com/insights/articles/powering-ai-energy-market-outlook-2026> (Feb. 27, 2026) (“The boom in energy consumption [from data centers] comes after years of insufficient investments in electric grids that’s left data-center developers concerned they could face power shortages, particularly in 2027 and 2028”); Rafe Rosner-Uddin et al., *The power crunch threatening America’s AI ambitions*, FIN. TIMES, <https://ft.com/ai-power/> (Dec. 7, 2025); Jennifer Hiller, *AI Data Centers, Desperate for Electricity, Are Building Their Own Power Plants*, WALL ST. J., <https://www.wsj.com/business/energy-oil/ai-data-centers-desperate-for-electricity-are-building-their-own-power-plants-291f5c81> (Oct. 15, 2025) (“in some locations, data centers won’t be able to plug into the power grid until the 2030s because of the sheer backlog of projects and the fact that the nation’s high-voltage electric wires are running out of room.”)

⁸ Blackstone, *supra* note 3.

⁹ See Jared Anderson, *U.S. gas-fired turbine wait times as much as seven years, costs up sharply*, S&P GLOBAL, <https://www.spglobal.com/energy/en/news-research/latest-news/electric-power/052025-us-gas-fired-turbine-wait-times-as-much-as-seven-years-costs-up-sharply> (May 20, 2025)

¹⁰ Dep’t. of Energy, *Transmission Impact Assessment 5*, https://www.energy.gov/sites/default/files/2024-10/DOE_OP_2024_Report-Transmission_Impact_Assessment.pdf (Oct. 2024) (“new transmission takes, on average, around 10 years to complete, with some projects requiring 15 years or more to complete.”)

¹¹ Kristen van de Biezendos & Melissa Powers, *Private Equity, Public Utility*, 121 NORTHWESTERN U. L. REV. 3 (forthcoming 2027); Sumit Saha, *BlackRock, EQT-led group seals \$33.4 billion AES deal in bet on AI power boom*, REUTERS, <https://www.reuters.com/legal/transactional/blackrocks-gip-eqt-buy-aes-corp-334-billion-deal-2026-03-02/> (Mar. 2, 2026); Seher Dareen & David French, *US utility Allete goes private in \$6.2 billion deal*, REUTERS, <https://www.reuters.com/markets/deals/us-utility-allete-goes-private-62-bln-deal-2024-05-06/> (May 6, 2024).

¹² See, e.g., Jui Chakravorty, *BlackRock’s GIP Nears \$40 Billion Deal in AI Data Center Push*, BLOOMBERG, <https://www.bloomberg.com/news/newsletters/2025-10-03/blackrock-s-gip-nears-40-billion-deal-in-ai-data-center-push> (Oct. 3, 2025).

major utility customers will increasingly be part of a single corporate entity. This is a form of *forward* vertical integration, wherein a corporation expands downstream in the supply chain. In this case, the utility merges with a downstream customer.

The appearance of these mergers highlights the continued relevance of the “Bell Doctrine,” the theory that regulated monopolies have an incentive to monopolize related (competitive) markets in which their monopolized service is an input.¹³ The Bell Doctrine originally highlighted the threat of explicit price discrimination and overt cross-subsidization, two threats that modern utility regulation has largely addressed. This Article argues instead that utilities today can advantage affiliates and exercise market power through operational decisions that regulators struggle to police. State and federal regulators are largely deferential to any business decision that does not explicitly involve ratemaking. Antitrust doctrine is similarly focused on the price effects of mergers or acquisitions, but has not adequately addressed the potential of non-price discrimination.

As a result, a forward vertically integrated utility can advantage affiliate customers while avoiding regulatory scrutiny by justifying its actions under the guise of regular operational decisions. This form of non-price discrimination appears in three distinct ways: the utility can prioritize service and repairs for its affiliate, orient investment decisions around the needs of the affiliate, and shoulder investment risk on behalf of the affiliate. In each instance, regular ratepayers are treated as second-class customers, burdened with cross-subsidizing the utility owner’s favored data center investments. The potential for such behavior requires a fundamental rethinking of the existing approach to vertical integration within regulated industries, particularly now that data centers and regulated utilities stand to play an outsized role in the American economy.¹⁴

The issues this Article raises are not merely theoretical problems. Contemporary examples demonstrate that vertical integration has already created negative consequences for ratepayers that regulators were unable or unwilling to remedy. Forward vertical integration with data centers is a modality of this issue; one that both presents particular difficulties and also exemplifies the larger challenges of controlling a regulated monopoly’s behavior. Yet regulators are not powerless in this situation: utilities commissions’ existing authority can be construed to prevent acquisitions that would harm consumer interests.

In making this argument, the Article attempts to construct a path towards a constructive collaboration between data centers and regulated utilities. The arrival of these new large-load electricity customers has been met with concern by many, but the impact they will have on grid development and ratepayers does not need to be a negative one. On the contrary, our electric grid needs additional investment to meet the challenges of a rapidly electrifying economy that is shifting

¹³ William F. Baxter, *Conditions Creating Antitrust Concern with Vertical Integration by Regulated Industries: “For Whom the Bell Doctrine Tolls”*, 52 ANTITRUST L. J. 243, 244 (1983); see also Paul L. Joskow & Roger G. Noll, *The Bell Doctrine: Applications in Telecommunications, Electricity, and Other Network Industries*, 51 STANFORD L. REV. 1249, 1250 (1999).

¹⁴ According to one estimate, artificial intelligence-related investment drove 92% of American GDP growth in the first half of 2025. See Robert Armstrong, *Does GDP growth minus AI capex equal zero?* FIN. TIMES, <https://www.ft.com/content/603be7d5-13ac-4047-9854-24db5f0f0802> (Oct. 1, 2025) (citing analysis by Jason Furman).

towards new sources of generation. The influx of capital data centers are bringing with them can be a boon to these long-term grid development goals. Ratepayers, too, could potentially benefit. As large customers join the grid, the fixed costs of providing electricity will be split over a larger total customer base, which could drive costs down in the long run. If data centers are able to shift some of their energy use to non-peak hours—which for discretionary tasks such as model training, should be possible—they could pay for what is currently excess renewable generation, and drive down average rates even further.¹⁵ In addition, some data center developers have shown a willingness to pay outright not just for infrastructure that exclusively serves them, but also for more general grid investment such as substation and transmission line upgrades.¹⁶ These upgrades can also expand transmission capacity available to regular ratepayers, enabling more low-cost renewable generation assets to join the grid.¹⁷ And if data center demand ultimately fails to materialize, the benefits from these grid investments will still accrue to other grid users.

As such, data centers do not need to portend a crisis for ratepayers. Their arrival creates a generational opportunity to construct much-needed energy infrastructure and upgrade existing equipment. That is why the regulatory and legal context under which they enter the grid is so crucial: These rules will determine who benefits from, and who pays for, the investments that will follow.

To demonstrate why the current regulatory scheme is unprepared for forward vertical integration, Section I introduces the role of state and federal public utility regulation and the duty to maintain “just and reasonable rates.” It traces how public utility regulation developed as a response to concerns about utility market power abuses and discriminatory ratemaking practices, yet remained blind to the potential for non-price discrimination. Antitrust law has not filled this void, as Section II shows. Antitrust’s handling of vertical integration of regulated monopolies similarly suffers from a focus on price effects and allows for non-price discrimination to remain. The exact forms non-price discrimination can take—namely, service prioritization, changed procurement decisions; and risk-shifting onto other customer classes—are laid out in Section III, which additionally discusses contemporary examples of vertical integration harming utility customers and competition. Section IV proposes doctrinal and policy reform, and concludes by shining a light on the benefits data centers can generate for other ratepayers if these reforms are adopted.

I. THE RATE-REGULATED UTILITY

¹⁵ See Juan Ramon L. Senga, Shen Wang & Cristopher R. Knittel, *Flexible data centers reduce power system costs but can increase emissions*, 2026 ISCIENCE e116497, 12 (2026); Michael Terrell, *How we’re making data centers more flexible to benefit power grids*, GOOGLE, <https://blog.google/innovation-and-ai/infrastructure-and-cloud/global-network/how-were-making-data-centers-more-flexible-to-benefit-power-grids/> (Aug. 4, 2025) (discussing how Alphabet is implementing demand response and load flexibility in its data centers).

¹⁶ Isabelle Riu et al., *Tailored for Scale: Designing Electric Rates and Tariffs for Large Loads*, ENERGY & ENV’T’L. ECON 7 (2025), available at: <https://www.ethree.com/wp-content/uploads/2025/12/RatepayerStudy.pdf>.

¹⁷ *Id.*

Since the late nineteenth century, American utilities have primarily operated as rate-regulated monopolies. This model of regulating utilities arose out of both a recognition that electric service was akin to a natural monopoly, and a fear that utilities would abuse their monopoly powers if left unregulated. This Section discusses how the rate-regulated utility arose as a remedy to discriminatory practices by utilities, which used their market power to advantage affiliates, engage in predatory pricing schemes, and leverage discriminatory rates to cross-subsidize service territories. Subsequent regulation at both the state and federal level was meant to curb these abuses, but left open some paths for utilities to misuse market power. These gaps were left because regulatory frameworks specifically focused on price discrimination in the form of rates, but underestimated the possibility for non-price discrimination: Utilities remained firmly in charge of their own business decisions, which allowed for more subtle forms of discrimination to persist. Today, forward vertical integration creates a new opportunity for utilities to leverage their monopoly status for anticompetitive ends, largely because of this gap the regulatory regime left.

A. State Regulation

Public utilities in the United States were historically treated as natural monopolies, on the assumption that the capital-intensive nature of electricity distribution and transmission would lead to wasteful spending on duplicative infrastructure in a competitive market.¹⁸ To avoid that outcome, municipalities early on decided to grant exclusive franchises to specific utilities.¹⁹ By the early twentieth century, utilities were heavily regulated at the municipal level.²⁰

Wisconsin was the first state to regulate its utilities at the state level, creating a public utilities commission in 1907.²¹ By 1915, more than half the states had chosen to regulate public utilities at the state level.²² This appetite for public regulation of utilities was justified both legally and politically as necessary to guard the “public interest.” Under *Munn v. Illinois*, decided some ten years before Massachusetts would first regulate its utilities, the Supreme Court tolerated regulation of industries “clothed with the public interest.” *Munn* created an opening for regulation even as skepticism of economic regulation more broadly abounded in the early twentieth century.²³ Governmental interference in the operations of public utilities was deemed permissible because these utilities affected the public interest, and therefore regulation had to be used to protect the public from

¹⁸ See Harold Demsetz, *Why Regulate Utilities*, 11 J. L. ECON. 55 (1968).

¹⁹ R. Richard Geddes, *A Historical Perspective on Electric Utility Regulation*, 15 REGULATION 75, 76 (1992) (discussing how the arrived-upon market structure “is one in which the firm is given a regional monopoly by the government with prices set so that the firm earns a ‘fair rate of return’ on the ‘fair value’ of the property used by the utility.”); Gregg A. Jarrell, *The Demand for State Regulation of the Electric Utility Industry*, 21 J. L. ECON. 269, 270 (1978).

²⁰ Werner Troesken, *Regime Change and Corruption: A History of Public Utility Regulation*, in CORRUPTION AND REFORM: LESSONS FROM AMERICA’S ECONOMIC HISTORY 259, 260-61 (2006), Jarrell, *supra* note 19, at 270.

²¹ *An Act to create section 1797m-1 to 1797m-108, inclusive, statutes of 1898, giving the Wisconsin railroad commission jurisdiction over public utilities*, 1907 Wis. Laws ch. 499, 449 (“The railroad commission of Wisconsin is vested with power and jurisdiction to supervise and regulate every public utility in this state.”).

²² *Id.* at 228.

²³ *Munn v. Illinois*, 94 U.S. 113, 126 (1876); see generally Stephen A. Siegel, *Understanding the Lochner Era: Lessons from the Controversy over Railroad and Utility Rate Regulation*, 70 VA. L. REV. 187 (1984) (discussing judicial hostility to economic regulation during the *Lochner* era, and noting how regulated industries like railroads constituted an exception).

corporate misdeeds. Felix Frankfurter, writing in 1930, expounded on the crucial role government must play in “securing for society those essential services which are furnished by public utilities.”²⁴ *How* to regulate for the public interest, however, was an ongoing experiment.

In the area of utility regulation, regulators decided on a standard of “just and reasonable” rates as being in the public interest. This term survives to this day, and refers broadly to rates that are sufficient for the utility to maintain financial soundness without unduly burdening the public.²⁵ In Massachusetts, for example, the Commission was empowered to set the “just and proper” rate for natural gas and electricity upon complaint by either the mayor of a city or twenty individual customers that the extant rates were improper.²⁶ So too in New York,²⁷ Wisconsin,²⁸ and other states.²⁹

That regulatory formula dates back to common law England, and states that rates are just and reasonable if the party possessing monopoly power deal with all comers on *reasonable* and *nondiscriminatory* terms.³⁰ The “reasonable” part refers to regulators’ attempt to award regulated firms a rate of return on their assets that approximates a risk-adjusted competitive rate of return.³¹ More salient for this Article is the nondiscriminatory part of the formula. It reflects a fundamental assumption about competitive markets, namely, that no price discrimination among customers is possible within them. In contrast, absent regulation a monopolistic producer is free to charge different customers different prices in an effort to maximize its profits.³² Prohibiting discriminatory rates was meant to address this incentive to exploit customers’ varying willingness to pay for goods and services.³³ It also arose out of a fear that price discrimination would facilitate the cross-subsidization of unregulated goods with revenues from regulated goods sold by the same firm.³⁴ Regulation attempted to shape the monopolists’ behavior to be more akin to that of a competitive firm, on the assumption that a competitive market generally maximizes consumer welfare.³⁵

²⁴ FELIX FRANKFURTER, *THE PUBLIC AND ITS GOVERNMENT* 81 (1964).

²⁵ See *Bluefield Waterworks & Improvement Co. v. Pub. Serv. Comm’n of W. Va.*, 262 U.S. 679, 693 (1923).

²⁶ Mass. Ch. 314 of the Acts of 1885 § 9 (granting the power to set rates to the Board of Gas Commissioners); Mass. Ch. 382 of the Acts of 1887 (expanding the Board of Gas Commissioners’ authority to include electricity regulation).

²⁷ N.Y. Laws of 1907, Ch. 429 §§ 71-72.

²⁸ Wi. Laws of 1907, Ch. 499 § 1797(m)(3).

²⁹ See Troesken, *supra* note 20, at 262.

³⁰ Richard A. Epstein, *The History of Public Utility Rate Regulation in the United States Supreme Court: Of Reasonable and Nondiscriminatory Rates*, 38 J. SUPREME CT. HIST. 346, 348 (2013).

³¹ *Id.* (describing the use of “reasonable” as “an effort to move the regulated firm in the direction of a risk-adjusted competitive rate of return on the assets committed to its business.”)

³² ARTHUR C. PIGOU, *THE ECONOMICS OF WELFARE* 240 (1938).

³³ *Id.* at 349.

³⁴ *Report of the National Power Policy Committee*, H.R. Doc. No. 74-137, 5 (1935) (describing how, for example, utilities “take profits on the sale of materials to their subsidiaries . . . make profits from construction contracts which they negotiate and perform for their subsidiaries; . . . often control one or more construction companies to which is awarded most of the building work for the entire system, [and] take fees for handling the issue, sale, and exchange of securities for their subsidiaries.”)

³⁵ *Id.* at 361 (“the classical theory of rate regulation . . . is intended solely to limit the use of monopoly power so that the regulated firm behaves, to the extent possible, as if it were in a competitive marketplace.”)

Regulation was not just seen as desirable to the public. Utilities themselves had something to gain from regulation, and large utility companies at the time advocated for rate-regulated monopoly status. Under the prevailing method of regulation, utilities were granted regional monopolies by the state by way of a franchise agreement. In exchange, those utilities agreed to abide by state regulations fixing rates and service requirements in a way acceptable to both the utility and the state.³⁶ For the state, there are apparent benefits to protecting a utility's monopoly over its service territory. Given a captive customer base, utilities can procure financing at lower rates and do not have to worry about wasteful spending on infrastructure that may go unused if a competitor comes by. This brings down costs, and those savings can be passed on to ratepayers. The utility is guaranteed a captive market and the ability to wholly shift risk onto ratepayers, at the cost of a fixed rate of return.

As mentioned above, this bargain was as attractive to utilities as it was to states. Utilities gained a guaranteed customer base, affordable financing, guaranteed cost recovery, and elimination of competition. In fact, Samuel Insull—whose utility empire is discussed further *infra*—publicly advocated the adoption of state regulation as early as 1898.³⁷ In his view, unrestrained competition was a fundamental problem for the utility industry, as it “frightens the investor, and compels corporations to pay a very high price for capital,” which “must be reflected in the price paid by public and private users.”³⁸ According to Insull, “the best service at the lowest possible price” could only be obtained “by exclusive control of a given territory being placed in the hands of one [utility].”³⁹ So, the modern utility regulatory scheme was born.

B. Federal Regulation & PUHCA

The story of federal regulation of public utilities goes back to 1887, when Congress passed the Interstate Commerce Act (ICA) to regulate interstate railroads.⁴⁰ The ICA required all common carriers to file tariffs stating all rates and regulations or practices affecting those rates.⁴¹ Once filed, carriers were prohibited from deviating from those rates.⁴² The ICA also created a regulatory commission overseeing the operation of interstate railroads, which was empowered to judge rates

³⁶ William J. Hausman & John L. Neufeld, *The Market for Capital and the Origins of State Regulation of Electric Utilities in the United States*, 62 J. ECON. HIST. 1050, 1059 (2002); Troesken, *supra* note 20, at 260-61.

³⁷ Hausman & Neufeld, *supra* note 36, at 1057.

³⁸ *Id.* (citing Samuel Insull, *Standardization, Cost System of Rates, and Public Control* 44-45, in *CENTRAL-STATION ELECTRIC SERVICE* (1915)).

³⁹ Insull, *supra* note 38, at 45.

⁴⁰ Act of February 4, 1887 (Interstate Commerce Act), Pub. L. No. 49-41

⁴¹ *Interstate Commerce Act* § 6 (requiring “[t]hat every common carrier subject to the provisions of this act shall print and keep for public inspection schedules showing the rates and fares and charges for the transportation of passengers and property which any such common carrier has established and which are in force at the time upon its railroad.”)

⁴² *Id.* (“it shall be unlawful for such common carrier to charge . . . a greater or less compensation for the transportation of passengers or property, or for any services in connection therewith, than is specified in such published schedule of rates, fares, and charges as may at the time be in force.”)

and reject them if they were unjust or unreasonable.⁴³ This model, which would come to be known as the “filed rate doctrine,” arose out of public discontent with railroads’ discriminatory practices. Customers in post-Civil War America routinely faced unequal treatment by railroads, so much so that one government report stated that “discrimination in one form or another” was “the principal cause of complaint against the management and operation of the transportation system of the United States.”⁴⁴ Railroads competed for specific corporate customers by offering kickbacks or gratuities, paid for using rates charged to other customer classes.⁴⁵ The ICA required railroads to file their rates publicly and penalized deviation from stated rates. The Interstate Commerce Commission was empowered to review these rates and void them as unjust and unreasonable if deemed discriminatory. This drastically curbed the potential for abuses by the railroads.

The model set out in the ICA was soon copied to a number of other industries—both monopolistic and competitive—where government oversight was deemed necessary to ensure reasonable and non-discriminatory rates.⁴⁶ A throughline during these regulatory efforts was a worry about discriminatory treatment of customers as a way of gaining competitive advantage. Railroads, for instance, would charge higher rates on monopoly routes to subsidize lower rates on competitive ones and capture market share.⁴⁷ Meatpackers would exhibit preferential treatment to affiliated sellers and buyers until a consent decree restricted their ability to vertically integrate, and continued to engage in discriminatory practices subsequently until the Packers and Stockyards Act imposed strict rate controls.⁴⁸

As in the railroad context, market power abuses formed the impetus behind federal regulation of utilities, which began with the Public Utility Holding Company Act, or PUHCA. Passed in 1935, PUHCA required utilities to operate in contiguous geographic service territories, instituted disclosure requirements, and imposed limits on the types of business activities utilities could engage in.⁴⁹ The Act came in response to a wave of consolidation in the electricity industry that started around the Great Depression. By 1930, nineteen corporate groups controlled 90% of the private

⁴³ *Interstate Commerce Act* § 11; see also Joseph D. Kearney & Thomas W. Merrill, *The Great Transformation of Regulated Industries Law*, 98 COLUM. L. REV. 1323, 1331-32 (1998) (discussing the creation of the ICA).

⁴⁴ S. Rep. No. 46, Pt. I, 49th Cong., at 182 (1886); *id.* at 1332.

⁴⁵ *Id.* at 1333.

⁴⁶ By 1938, Congress had established similar regulatory oversight on the shipping, stockyard, telephone, telegraph, trucking, electric, gas, and aviation industries. See *id.* at 1334 (citing the Shipping Act; Packers and Stockyards Act; Communications Act of 1934; Motor Carrier Act; Federal Power Act; Natural Gas Act; and Civil Aeronautics Act).

⁴⁷ See Marc Levinson, Two Cheers for Discrimination: Deregulation and Efficiency in the Reform of U.S. Freight Transportation, 1976–1998, 10 ENTERPRISE & SOC. 178, 181 (2009).

⁴⁸ *United States v. Swift & Co.*, 189 F. Supp. 885, 892 (N.D. Ill. 1960) (“the decree confined their power, however, and prevented its exercise or extension in the meat industry either backward in the direction of livestock marketing, or forward in the direction of retail marketing. What is known as vertical integration was foreclosed thereby to a significant degree”); Michael C. Stumo & Douglas J. O’Brien, *Antitrust Unfairness vs. Equitable Unfairness in Farmer/Meat Packer Relationships*, 8 DRAKE J. AG. L. 91, 93 (2003).

⁴⁹ *Public Utility Holding Company Act of 1935* (“PUHCA”), Pub. L. No. 74-333, 49 Stats. 803 (1935); see also Aneil Kovvali & Joshua Macey, *Hidden Value Transfers in Public Utilities*, 171 U. PENN. L. REV. 2129, 2131 (2023).

electric output in the United States.⁵⁰ These groups were so complex that their financial health was a mystery to both outside observers and even their own officers.⁵¹ At the same time, holding companies were highly leveraged, and used profits from some service territories to support loss-making operations in others.⁵² This form of cross-subsidization echoed the discriminatory practices seen in 19th-century railroad operations,⁵³ and unduly disadvantaged some groups of customers so that utility holding companies could capture national market share.⁵⁴ The corporate complexity of these holding firms also injected a great deal of systemic risk into the utility sector—the financial health of the entire enterprise essentially depended on revenues from a select few profitable service territories.

The precarity of that system was shown by the bankruptcy of various entities within the Insull Utility group.⁵⁵ A drop of just six percent in electricity industry revenue during the Great Depression caused the highly leveraged Insull holding companies to default on their debt.⁵⁶ Forty-one subsidiary firms ultimately went bankrupt, causing billions of dollars of loss to shareholders.⁵⁷ This was but one egregious example of what Roosevelt termed the “multiplied evils which have arisen from the holding company system in the case of public utilities.”⁵⁸ Roosevelt, who had consistently decried the influence of monopolistic corporations, tasked Congress with reigning in the abuses of holding companies in the public utility sector.⁵⁹ The Public Utility Holding Company Act, or PUHCA, was passed in response.

PUHCA strengthened oversight of holding companies and limited their potential size by instituting geographic requirements.⁶⁰ In addition to regulating the corporate structure of utilities, Congress also

⁵⁰ Eugene Kandel et al., *The Great Pyramids of America: A Revised History of US Business Groups, Corporate Ownership and Regulation 12, 1930-1950*, ECGI Working Paper N° 449/2015 (2015).

⁵¹ *Id.* at 13 (discussing corporate complexity and creative accounting methods used by holding companies in the 1930s); Kovvali & Macey, *supra* note 49, at 2136.

⁵² Kandel et al., *supra* note 50, at 13 (“groups were established to take advantage of scarce managerial skills and to create internal capital markets for group-affiliated firms, which otherwise faced difficulties raising capital”); Martin G. Glaeser et al., *Public Utilities in the Depression*, 24 AM. ECON. REV. 10, 15 (describing the cause of utility failure as “rapid and often excessive expansion accompanied by financial pyramiding” and noting how holding companies entered the Depression with capital structures burdened with debt); Nidhi Thakar, *The Urge to Merge: A Look at the Repeal of the Public Utility Holding Company Act of 1935*, 12 LEWIS & CLARK L. REV. 903, 908 (2008) (“Due to the highly leveraged capital structure of the pyramidal holding companies, it was possible for Insull to control over half a billion dollars’ worth of capital by employing less than \$30 million worth of equity”).

⁵³ Matthew Buck, *Railroad Regulation Reinterpreted*, 134 YALE L. J. 2912, 2939 (2024).

⁵⁴ *See generally Report on the Relation of Holding Companies in Power and Gas Affecting Control*, H.R. Rep. No. 827, 73d Cong. (1933-35).

⁵⁵ Kovvali & Macey, *supra* note 49, at 2136.

⁵⁶ Richard D. Cudahy & William D. Henderson, *From Insull to Enron: Corporate (Re)regulation After the Rise and Fall of Two Energy Icons*, 26 ENERGY L. J. 35, 65-67 (2005).

⁵⁷ Arthur R. Taylor, *Losses to the Public in the Insull Collapse: 1293-1946*, 36 BUSINESS HISTORY REV. 188, 191-92 (1962) (estimating losses at \$2,647,000,000 in 1932 dollars, or roughly \$62 billion in today’s dollars).

⁵⁸ Franklin D. Roosevelt, *Message to Congress on Curbing Monopolies* (1938).

⁵⁹ *See* Franklin D. Roosevelt, *Message to Congress Recommending Regulation of Public Utility Holding Companies* (1935) (arguing that “no Government effort can be expected to carry out effective, continuous, and intricate regulation of the kind of private empires within the Nation which the holding company device has proved capable of creating.”).

⁶⁰ *Public Utility Holding Company Act of 1935* (“PUHCA”), Pub. L. No. 74-33, 49 Stats. 803 (1935).

felt it important to curb utilities' ability to engage in discriminatory ratemaking, which had funded much of the corporate alchemy seen in the heyday of utility holding companies. The Federal Power Act (FPA), amended that same year to more closely resemble the Interstate Commerce Act, gave the Federal Power Commission the power to oversee and regulate wholesale electricity rates, as well as the power to oversee mergers and acquisitions of businesses and facilities engaged in wholesale electricity sales.⁶¹ The Senate Report that accompanied PUHCA and the 1935 FPA amendments justified the bill as necessary to "control the holding company and eliminate it as an artificial corporate device inherently injurious to investors, consumers, and the general public."⁶² Its purpose, according to the report, was to halt "the concentration and monopolization in a few holding company systems of control of gas and electric utility companies to the detriment of investors, consumers, and the general public."⁶³

From its inception, federal regulation of the power sector was concerned with the ways in which vertical integration could enable discriminatory practices, though the structure regulators homed in on was *backwards* vertical integration: regulated utilities integrating with upstream generation owners and even fuel suppliers. Regulators were particularly concerned about corporate groups that owned both rate-regulated and non-regulated firms.⁶⁴ That concern followed from a quirk unique to regulated utilities. Rate-regulated utilities are safe investments, but they are definitionally limited in the returns they can generate for shareholders. State regulators oversee the rates utilities can charge and fix the return on equity they may receive.⁶⁵ The utility cannot generate outsize returns for shareholders under this structure, regardless of how efficiently it operates. When a rate-regulated utility is vertically integrated with non-regulated firms, however, an opportunity to transfer value and increase returns arises.⁶⁶ The regulated utility can offer favorable terms to the non-regulated affiliate—for example, by purchasing fuel at above-market rates if the affiliate is a supplier—thereby allowing the affiliate to generate outsize returns. In that example, the utility is guaranteed cost recovery of its fuel costs from ratepayers, so the above-market costs do not affect its bottom line.⁶⁷ Instead, the utility is able to pass on costs entirely to its customers, neatly transferring value from said customer base to its unregulated affiliate. The existence of an affiliate thus allows a rate-regulated utility to transfer value from captive ratepayers to unregulated affiliates.⁶⁸

⁶¹ See Matthew R. Christiansen & Joshua C. Macey, *Long Live the Federal Power Act's Bright Line*, 134 HARV. L. REV. 1360, 1372 (2021); 16 U.S.C. § 824(b).

⁶² S. Rep. No. 74-621, at 22.

⁶³ *Id.*

⁶⁴ See 15 U.S.C. § 79a(b) (1)-(2); Thakar, *supra* note 52, at 909n56.

⁶⁵ Heather Payne, *Private (Utility) Regulators*, 50 ENV'T L. 999, 1009-10 (2020); Kovvali & Macey, *supra* note 49, at 2134-35.

⁶⁶ Kovvali & Macey, *supra* note 49, at 2135 ("Rate regulated utilities have an incentive to transfer value to non-rate regulated affiliates. Regulators set the rates utilities can charge and closely scrutinize their investment decisions. Rate regulated utilities therefore are low-risk investments that offer stable but unremarkable returns. Shareholders that want to increase profits have to look outside the regulated business.")

⁶⁷ *Id.*; see also Harvey Averch & Leland L. Johnson, *Behavior of the Firm Under Regulatory Constraint*, 52 AM. ECON. REV. 1052, 1052 (1962).

⁶⁸ Averch & Johnson, *supra* note 67, at 1065, 1068 ("apprehension about the nature of competition in the industry is justified since a common carrier, regulated as described above, would (under certain conditions) have an incentive to

PUHCA reduced this risk somewhat by limiting the geographic scope of utilities—ending the era of sprawling corporate footprints wherein cross-subsidization was particularly difficult to track—but the Act stopped short of disallowing vertical integration outright.⁶⁹ Legislators were cognizant of the real synergies that could come from vertical integration in the sector, and wanted to allow firms to capture those.⁷⁰ As a result, PUHCA did not prevent firms from transferring value between regulated and unregulated subsidiaries within contiguous territories.

That is not to say that regulators did not attempt to police this behavior. Under PUHCA, the Securities and Exchange Commission was empowered to evaluate securities offered for sale by utilities, and could prevent their sale if it believed that a holding company's structure would not remain financially sound. In effect, this gave the SEC oversight over the corporate governance of utility holding companies that were publicly traded, which stymied improper affiliate transactions.⁷¹ In addition, the Federal Energy Regulatory Commission pursued a plethora of regulatory actions from the 1970s to early 2000s in an effort to further expose the electric sector to competition, but stopped short of ever requiring structural unbundling.⁷² Throughout these efforts, a focus on backwards vertical integration remained. FERC and the SEC looked upstream from the regulated utility, because at the time no downstream integration concerns were present. Regulation, accordingly, evolved to address the threat that did exist: abuses of market power through backwards vertical integration.⁷³

operate at a loss in competitive markets and to shift the financial burden to its other services . . . , regulatory practices that provide an incentive for the firm to operate in some markets even at a loss may constitute a convenient mechanism through which certain activities of the firm judged to be in the "public interest" can be subsidized."); *see also* Kovvali & Macey, *supra* note 49, at 2167-68.

⁶⁹ PUHCA, Pub. L. No. 74-333, 49 Stats. 803 § 10(c)(2), § 11(a) (allowing the acquisition of a utility company only if it will "[tend] towards the economical and efficient development of an integrated public-utility system" and limiting allowable corporate structures to those "necessary or appropriate to the operations of an integrated public-utility system")

⁷⁰ *See* PUHCA, 49 Stats. 803 § 2(a)(29)(A) (defining integrated public utility systems as "may be economically operated as a single interconnected and coordinated system confined in its operations to a single area or region, in one or more States, not so large as to impair (considering the state of the art and the area or region affected) the advantages of localized management, efficient operation, and the effectiveness of regulation," thereby acknowledging the potential advantages of vertical integration.)

⁷¹ Markian M.W. Melnyk & William S. Lamb, *PUHCA's Gone: What is Next for Holding Companies?* 27 ENERGY L. J. 1, 6 (2006) ("It is hardly an exaggeration to say that [this oversight authority] effectively made the SEC another board of directors over the investor-owned electric and gas registered holding companies")

⁷² *See* Joshua C. Macey & Elias van Emmerick, *Towards a National Transmission Planning Authority*, 49 HARVARD ENV'T'L. L. REV. 79, 89-95 (2025) (describing federal transmission regulation). A full description of FERC's regulatory approach to spurring competition, as done through the promulgation of Orders No. 888, 890, 1000, 2000, and 1920, among others, is beyond the scope of this paper. For more, *see, e.g.*, Ari Peskoe, *Is the Utility Transmission Syndicate Forever*, 42 ENERGY L. J. 1 (2021); Joel B. Eisen, *FERC's Expansive Authority to Transform the Electric Grid*, 49 U.C. DAVIS L. REV. 1783 (2016).

⁷³ *See, e.g.*, 18 C.F.R. § 33.4(a)(1) (only requiring vertical competitive analyses be conducted if a corporate entity seeking to merge with a regulated utility provides inputs to electricity products); *Order Conditionally Approving Jurisdictional Facilities* in Docket No. EC99-81-000 (Nov. 10, 1999) (approving the merger between Dominion and Consolidated Natural Gas Corporation (CNG), but noting its concerns with CNG providing an upstream input to Dominion's business).

In 2005, PUHCA was repealed after the Securities and Exchange Commission (SEC) declared it no longer necessary in the modern utility context.⁷⁴ From then on, mergers and acquisitions of utility companies were no longer reviewed by the SEC. Further, electric utilities that were not physically interconnected could now once again be owned by the same holding company.⁷⁵ In its place, the Energy Policy Act of 2005 created PUHCA 2005—a law meant to grant FERC and state utility commissions access to utility financial information. Thus, oversight over the electric sector was entrusted entirely to FERC and state commissions, who would now be the ones approving mergers and acquisitions in the sector.⁷⁶

The repeal of PUHCA did not signify an end to concerns about the negative effects of vertical integration or utility market power abuses. On the contrary, FERC had spent the three decades leading up to PUHCA's repeal promulgating orders meant to destabilize utilities' monopoly power and increase competition within the electric sector, as mentioned above. FERC's preferred approach to reducing market concentration, as outlined in some of its major orders,⁷⁷ was to create opportunities for competition, rather than regulate away monopolies outright.

That approach, as I and others have argued, has fallen short in crucial ways.⁷⁸ Utilities have defended their monopolies by exploiting loopholes in FERC's regulatory structure. For purposes of this Article, however, it suffices to point out that FERC has been highly concerned about backwards vertical integration, wherein retail utilities integrate with transmission or generation owners, or upstream suppliers of inputs to electricity. It has focused there for two reasons. One, FERC's authority is limited to wholesale sales of energy, and distribution is more closely aligned with the retail sector. Second, FERC appears to believe potential for market power abuse is concentrated upstream of distribution. The Commission has, for example, been concerned about abuses stemming from affiliate relationships with energy input suppliers, or from favorable contracts

⁷⁴ See Public Utility Holding Company Act Amendments: Hearings on S. 1869, S. 1870 and S. 1871 Before the Subcomm. On Securities of the Senate Comm. On Banking, Housing, and Urban Affairs, 97th Cong. (1982) (statement of SEC); H.R. 3406 and Repeal of the Public Utility Holding Company Act of 1935: Hearing Before the Subcomm. on Energy and Air Quality of the H. Comm. on Energy and Com., 107th Cong. (2001) (testimony of Isaac C. Hunt, Jr., Comm'r, Sec. & Exch. Comm'n) ("By the early 1980s, however, many aspects of the 1935 Act regulation had become redundant . . . The SEC therefore concluded that the 1935 Act had accomplished its basic purpose [and] unanimously recommended that Congress repeal the Act.").

⁷⁵ Melnyk & Lamb, *supra* note 71, at 18.

⁷⁶ *Id.* at 16, 18-19 (discussing EPA 2005's grant of authority to FERC and state utility commissions to examine the books and records of utilities in order to conduct rate oversight and evaluate the propriety of proposed mergers or acquisitions).

⁷⁷ See, e.g., FERC Order No. 888, Promoting Wholesale Competition Through Open Access Non-Discriminatory Transmission Services by Public Utilities, 61 Fed. Reg. 21540 (Apr. 24, 1996); Order No. 2000, Regional Transmission Organizations, 65 Fed. Reg. 810, 811 (Dec. 20, 1999); Order No. 1000, Transmission Planning and Cost Allocation by Transmission Owning and Operating Public Utilities, 21 Fed. Reg. 49,842 (Aug. 11, 2011), Order 1920, *supra* note **Error! Bookmark not defined.**; see also Peskoe, *supra* note 72, at 569-81 (tracing major FERC orders).

⁷⁸ See, e.g., Macey & van Emmerick, *supra* note 72; Elias van Emmerick, *Lessons from a National Transmission Planner*, 44 UCLA J. ENV'T'L. & POL'Y. (2026, forthcoming); Peskoe, *supra* note 72; Joshua C. Macey, Shelley Welton & Hannah Wiseman, *Grid Reliability in the Electric Era*, 41 YALE J. ON REG. 164 (2024); Shelley Welton, *Rethinking Grid Governance for the Climate Change Era*, 109 CAL. L. REV. 209 (2021).

between affiliated generation and transmission operators.⁷⁹ The possibility of market power abuses stemming from downstream integration with customers has not been a focus. Yet, as the next section of this Article details, there is reason to be similarly concerned about that form of vertical integration.

II. THE NEW VERTICAL INTEGRATION

This Article discusses how a specific form of vertical integration is especially likely to lead to adverse outcomes for ratepayers, and accordingly, should face heightened scrutiny by regulators. That form is *forward* vertical integration, wherein the utility either purchases one of its main customers, or is purchased by the owner of a main customer. Integration with data centers is a salient example of this for three reasons. One, data centers are a rapidly growing sector of the American economy that is attracting vast amounts of capital investment.⁸⁰ Industry analysts suggest that growth will not slow down for the foreseeable future, so designing an appropriate regulatory response to their emergence will remain a salient issue.⁸¹ Second, data centers are uniquely energy-intensive. No other utility customer class, save for perhaps metallurgy, demands as much energy per square meter of facility.⁸² As a result, utilities must expand generation capacity to meet projected energy needs for data centers.⁸³ Third, compute capacity (and the energy to support that compute) creates a noticeable competitive advantage in the industry.⁸⁴ Thus, firms that control the energy supply can pick downstream winners and losers if they are able to prioritize grid connections for some over others.

This Article will focus on integration between utilities and data centers as the operative example of forward vertical integration, but other examples can exist—large factories or aluminum-smelting plants, for example, could be another customer class that presents vertical integration concerns

⁷⁹ See, e.g., *Order Authorizing Disposition of Jurisdictional Facilities*, 194 FERC ¶ 61, 134 at ¶ 35.

⁸⁰ See, e.g., Satyam Panday & Paul Gruenwald, Data center investments are increasingly moving the macro needle. S&P GLOBAL, <https://www.spglobal.com/en/research-insights/special-reports/look-forward/data-center-frontiers/data-center-investment-moves-macro-needle> (Nov. 4, 2025) (“current estimates suggest that 80% of the growth in final private domestic demand — GDP less net exports, government and inventory — in the first half of 2025 came from data centers and high-tech-related spending”).

⁸¹ Maria Goodpaster et al., The \$7 trillion data center build-out: How industrials can capture their share, MCKINSEY & CO., <https://www.mckinsey.com/industries/technology-media-and-telecommunications/our-insights/the-7-trillion-dollar-data-center-build-out-how-industrials-can-capture-their-share> (Mar. 27, 2026) (estimating global spending on data centers will reach \$7 trillion by 2030).

⁸² See *Opening Brief of the Utility Reform Network 9 in Application of Pacific Gas and Electric Company (U39E) for Approval of Electric Rule No. 30 for Transmission-Level Retail Electric Service*, Application No. 24-11-007 (Oct. 24, 2025) (showing that data centers demand significantly more watts of energy per square foot than other industrial customer classes).

⁸³ See Lalit Batra et al., *Rising current: America's growing electricity demand*, ICF, <https://www.icf.com/insights/energy/impact-rapid-demand-growth-us> (2025) (projecting U.S. electricity demand will grow 25% by 2030 and 78% by 2050 from 2023 levels); Helen Kou & Nathalie Limandibhratha, *Power for AI: Easier Said Than Built*, BLOOMBERGNEF, <https://about.bnef.com/insights/commodities/power-for-ai-easier-said-than-built/> (Apr. 15, 2025).

⁸⁴ See, e.g., Martha Kammoun & Peter E. Scherer, *Data Center Investment in 2026: AI Demand, Power Constraints, and Private Equity Trends*, ROPES & GRAY, <https://www.ropesgray.com/en/insights/viewpoints/102mvfl/data-center-investment-in-2026-ai-demand-power-constraints-and-private-equity> (May 21, 2026) (“Power availability—not capital—is the primary constraint on data center development [because] electrical grid interconnections are often taking up to four years.”)

when owned by a corporate parent seeking to purchase a utility. This section will first outline how vertical integration has traditionally been understood to apply to vertical utilities, and how regulators have treated mergers and acquisitions presenting vertical integration concerns in the realm of antitrust. It will discuss the limitations of traditional antitrust scrutiny in the face of forward vertical integration. The section concludes by noting how antitrust's application to regulated industries is limited, but not precluded.

A. Vertical integration in public utilities

Utilities historically tended to be vertically integrated.⁸⁵ From the industry's inception, most utilities controlled generation, transmission, and distribution—three distinct products, integrated within one firm. It was only at the end of the twentieth century that this understanding of a utility as a discrete natural monopoly began to change.⁸⁶ First, PURPA recognized that generation was not necessarily a natural monopoly, and encouraged small independent power producers to join the market.⁸⁷ It did so by requiring electric utilities to purchase output from nonutility generators at favorable rates, which would then be wheeled to customers by way of utilities' existing infrastructure. Congress intended for the act to stimulate competition in the generation sector, and implemented ownership restrictions to achieve that end. Under PURPA, these independent power producers could not be majority-owned by existing electric utilities.⁸⁸ This provision was aimed at preventing utilities from exercising their market power to lock non-incumbents out of energy markets.⁸⁹

PURPA proved a successful experiment. Small power producers demonstrated that the economies of scale thought to exist within generation had an upper limit, and that dis-economies of scale were even possible in some circumstances.⁹⁰ These newfound efficiencies, combined with competitive pressure from upstart generators, drove down overall utility rates between 1982 and 1995 in real terms.⁹¹ On the heels of this result, which occurred during a period of deregulation across industries, states and federal regulators began questioning the concept of the vertically integrated utility more broadly.⁹² At the federal level, this resulted in a slew of orders requiring open access to transmission

⁸⁵ Payne, *supra* note 65, at 1001-02.

⁸⁶ *Id.* at 1003; see generally Graham Shuttleworth & Sally Hunt, COMPETITION AND CHOICE IN ELECTRICITY (1996) (discussing how technological changes rendered the conception of a natural monopoly outdated)/

⁸⁷ *Public Utility Regulatory Policies Act of 1978* ("PURPA"), Pub. L. No. 95-617 § 210(a), 92 Stat. 3117; see also Douglas Gegax & Kenneth Nowotny, *Competition and the Electric Utility Industry: An Evaluation*, 10 YALE J. REG. 63, 65 (1993).

⁸⁸ PURPA, Pub. L. No. 95-617 § 210(l); 16 U.S.C. § 796(17); 18 C.F.R. § 292.206 ("For purposes of this section, a cogeneration or small power production facility shall be considered to be owned by a person primarily engaged in the generation or sale of electric power, if more than 50 percent of the equity interest in the facility is held by an electric utility or utilities, or by an electric utility holding company, or companies, or any combination thereof").

⁸⁹ Thomas Hagler, *Utility Purchases of Decentralized Power: The PURPA Scheme*, 5 STAN. ENVTL. L. ANN. 154, 173 (1983).

⁹⁰ Richard F. Hirsh, PURPA: The Spur to Competition and Utility Restructuring, 12 ELEC. J. 60, 64 (1999).

⁹¹ *Id.*

⁹² See William Boyd, *Public Utility and the Low-Carbon Future*, 61 UCLA L. REV. 1614, 1661 (2014) ("Building on the forces unleashed by PURPA . . . Congress [and] FERC moved to further unbundle power generation from transmission and to establish an open-access, common carrier regime for interstate transmission"); Joseph D. Kearny & Thomas W. Merrill, *The Great Transformation of Regulated Industries Law*, 98 COLUM. L. REV. 1323, 1408 (discussing the regulatory "breakup into

infrastructure, competitive bidding for transmission projects, and deregulation in the wholesale generation sector.⁹³ A number of states went further and deregulated the retail energy sector entirely, giving retail customers a choice between competing utility offerings.⁹⁴

The trend towards deregulating generation reveals an assumption that competition should be introduced where possible in energy markets. Regulators believe that regulated utilities will not by default behave in a manner that maximizes either efficiency or consumer welfare. Instead, due to the unique manner in which they generate revenue, utilities have an incentive under the rate-regulated model to both gold-plate investments and thereby increase returns in absolute terms,⁹⁵ and to engineer value transfers from rate-regulated entities to non-regulated affiliates.⁹⁶

Regulators have separately attempted to mitigate utilities' incentive to gold-plate and to transfer value towards unregulated affiliates, to varying degrees of success. That effort is ongoing. What this Article argues is that vertical integration between utilities and large-load customers creates an opportunity for new forms of value transfers between affiliates that regulators are not as attuned to as they are to pure financial transfers. While the potential for financial cronyism remains, this form of integration allows for other forms of favorable treatment as well. This happens, as will be discussed in Section III, by way of service prioritization, investment choices, and improper risk appetite.⁹⁷ All three are forms of cross-subsidization from the utility to the affiliated customer. That cross-subsidization ultimately harms the financial health of the utility by depriving it of resources, harms competition in the large-load customer space by advantaging integrated players, and worsens service for other utility customers.

B. Antitrust in Rate-Regulated Industries

separate segments of what were formerly vertically and/or horizontally integrated public utility monopolies, so that the segments that are not natural monopolies can be opened to competition.”)

⁹³ See *supra* Section I.B.

⁹⁴ See Peter Fox-Penner & Greg Basheda, *A Short Honeymoon for Utility Deregulation*, 17 ISSUES IN SCI. & TECH. 51, 52 (2001) (“Today, 23 states and the District of Columbia have adopted some form of electric restructuring. Full competition is now in place or destined soon for 70 percent of U.S. residential electric customers.”)

⁹⁵ See Averch & Johnson, *supra* note 67, at 1068; Steve Cicala, *Restructuring the Rate Base*, 115 AM. ECON. ASSOC. PAPERS & PROCEEDINGS 363, 367 (finding empirical evidence of overinvestment in transmission & distribution capital expenditures after restructuring introduced competition in the generation sector); *but see* William Boyd, *Decommodifying Electricity*, 97 SOUTHERN CAL. L. REV. 937, 1013n347 (arguing that the empirical evidence of the so-called Averch-Johnson effect is mixed, but that the effect nevertheless has “become accepted as gospel by the critics of rate regulation.”) I take no position on the robustness of empirical evidence of the Averch-Johnson effect, but believe that the rate-regulated model certainly incentivizes gold-plating in theory. What the debate around Averch-Johnson shows is that it is easy to unearth problematic incentive structures *ex ante*—what is harder is discovering empirical evidence of problematic utility behavior *ex post*. This is in line with the argument this Article proposes, which is that it is easier for regulators to prospectively tackle incentive problems than it is to remedy misconduct after the fact.

⁹⁶ See *supra* § I

⁹⁷ See *infra* § III.A (discussing each of these forms of favorable treatment for affiliates).

PUHCA's repeal comes at a time of broader market deregulation, antitrust enforcement rollbacks, and embrace of laissez-faire economics.⁹⁸ It is worth examining why the pendulum has swung away from regulation at this time, and what advantages unregulated integration could create. This section briefly evaluates the canonical arguments for tolerating vertical integration, and discusses why the justifications for doing so are inapplicable in the context of vertical integration between a rate-regulated utility and a non-regulated affiliate customer. The complexities of vertical integration involving regulated monopolies have been recognized before, but—as this section discusses—prior work has focused on the effect integration may have on prices. Insufficient attention has been paid to ways in which vertical integration with a regulated monopoly may lead to non-price discrimination. This section discusses that shortcoming, and notes that even in the absence of direct price effects the potential for market power abuses counsels against adopting a laissez-faire attitude towards vertical mergers in the utility industry.

The canonical argument advanced by proponents of weaker antitrust regulation—specifically concerning vertical integration—emphasizes that the purpose of antitrust law is to maintain a competitive economy.⁹⁹ Vertical integration, in this view, generates less risk to competition than horizontal integration for a few reasons. Vertically integrated firms operate in different markets, and as such vertical integration does not necessarily increase the percentage of the market controlled by a given firm.¹⁰⁰ Nor does vertical integration necessarily affect a firm's pricing policy in the markets it is active in, alleviating the predatory pricing concern earlier antitrust cases cited.¹⁰¹ In theory, a firm will maximize overall profit by setting output at each vertical level as if the levels were independent; and only if a monopoly exists at the horizontal level can monopoly profit be extracted.¹⁰² In this view, only horizontal market power matters.¹⁰³ The threat of recoupment—wherein a vertically integrated firm cuts prices at one level to gain market share and offsets that loss by raising them at another level—is diminished where vertical integration is concerned. If both levels of the firm operate in a competitive market, prices can be raised at neither level; and if either level is monopolistic, then prices would already have been raised to the maximum they can bear.¹⁰⁴

A wrinkle to this theory exists in the case of a *regulated* monopoly integrating with a downstream firm active in a competitive market. This is because a regulated monopoly—such as a utility—does not

⁹⁸ See generally Lina Khan, *Amazon's Antitrust Paradox*, 126 YALE L. J. 710 (2017).

⁹⁹ Robert Bork, *Vertical Integration and the Sherman Act: The Legal History of an Economic Misconception*, 22 U. CHI. L. REV. 157, 194 (1954) (arguing for a conception of antitrust wherein “the purpose of the antitrust law is the preservation of a competitive economy”).

¹⁰⁰ *Id.* at 195.

¹⁰¹ *Id.* at 195-96; see also *United States v. Corn Products Refining Co.*, 234 F. 964, 1014 (S.D.N.Y. 1916) (discussing the recoupment theory of predatory pricing).

¹⁰² *Id.* at 196

¹⁰³ Richard A. Posner, *The Chicago School of Antitrust Analysis*, 127 U. PENN. L. REV. 925, 933 (1978) (Describing how under the Chicago position, “only explicit price fixing and very large horizontal mergers (mergers to monopoly) were worthy of serious concern.”)

¹⁰⁴ Bork, *supra* note 99, at 199; see generally A.P. Lerner, *The Concept of Monopoly and the Measurement of Monopoly Power*, 1 REV. ECON. STUDIES 157, 157 (1934) (explaining that “the monopolist [fixes prices] at the level at which he makes the greatest profit or ‘monopoly revenue.’ This monopoly revenue constitutes a levy upon the consumers that the monopolist is able to appropriate for himself purely in virtue of his restrictive powers *qua* monopolist.”)

exist within a competitive market, nor does it have monopoly pricing power.¹⁰⁵ This is the premise William Baxter developed in the Bell Doctrine: in the presence of a rate-regulated monopoly, canonical antitrust assumptions favoring vertical integration break down.

A rate-regulated monopoly is neither a traditional monopoly nor a competitive firm. It is regulated to approximate competitive pricing, but faces no competitors.¹⁰⁶ This destabilizes several of the views that have calcified in modern antitrust doctrine. As one example, a vertically integrated firm that maintains a regulated monopoly at one level and operates in an unregulated market at another does not have a strong reason to avoid recoupment. While the firm is blocked from extracting monopoly profits at the regulated level, it can leverage its regulated revenues to obtain or sell products to its unregulated affiliate at favorable rates. For example, a utility can purchase coal at above-market rates from an affiliated supplier, allowing it to cut prices for other customers and gain market share in the coal market. The utility can then pass along those costs to its customers without running afoul of regulation.¹⁰⁷ The presence of regulation thus allows for some form of recoupment to take place.

In fact, regulation that limits a monopolist's ability to charge monopoly prices can increase the monopolist's incentive to vertically integrate, regardless of whether integration is efficiency-enhancing.¹⁰⁸ This is because regulation constrains prices at the monopoly level, but does not prevent a monopolist from using its market power altogether. This creates an incentive for the monopolist to exercise market power at other, competitive levels in ways that are possible given its regulatory constraints. At the regulated level, the monopolist's profits are set by regulation, but that regulation does not reach downstream markets. As a result, a regulated monopolist is incentivized to also operate in a downstream competitive market, where it may exercise its market power to generate abnormal profits.¹⁰⁹ The existence of the downstream affiliate renders the monopolist's market power profitable in a way it would not be absent vertical integration.

Such market power abuses by regulated monopolies, deployed to favor a downstream competitive firm, are enabled by the reality of imperfect regulation. Regulation can constrain a monopolist, but in practice, can never prevent it from exercising market power altogether. The regulation of public utilities is no exception. What renders utility regulation imperfect, however, is somewhat different from the imperfections Baxter identified in telecommunications regulation in 1983.¹¹⁰ In the case of the Bell companies, there was a concern that regulators lacked the information needed to properly evaluate monopoly pricing.¹¹¹ Telecommunications firms had wide latitude in setting prices, and

¹⁰⁵ Joskow & Noll, *supra* note 13, at 1259.

¹⁰⁶ Herbert Hovenkamp, *Antitrust and the Regulatory Enterprise*, 2004 COLUM. BUS. L. REV. 335, 338-39 (2004).

¹⁰⁷ This is quite similar to a practice performed by PacifiCorp, *see infra* Section III.B.1.

¹⁰⁸ Joskow & Noll, *supra* note 13, at 1259.

¹⁰⁹ Referring to profits over and above the profit a firm would obtain in a fully efficient market, *see* JULIAN GOUGH & STEPHEN HILL, *FUNDAMENTALS OF MANAGERIAL ECONOMICS* 46 (1979).

¹¹⁰ Baxter, *supra* note 13, at 244.

¹¹¹ *Id.* ("If the regulator were able to determine with some degree of precision the prices at which goods or services or equipment were being transferred or supplied to the regulated enterprise by its "affiliates" - usually operating in

could use pricing for anticompetitive purposes without attracting much regulatory scrutiny.¹¹² Price regulation, in other words, was seen as imperfect.

This concern is less acute in utility regulation today. State and federal utility regulators are highly sophisticated entities, and set rates in public processes that attract engagement from a swath of motivated stakeholders. Such rate cases serve a strong information-forcing function, and offer regulators a factual basis for determining whether rates are set appropriately. In addition, regulators require utilities to offer rates on a non-discriminatory basis, so outright price discrimination to favor a downstream affiliate ought not to be possible. FERC and state public utility commissions were arguably designed to solve the problems identified by the Bell Doctrine.

That is not to say that utilities are devoid of opportunities to leverage their market power. In practice, today's regulatory apparatus remains imperfect, and integrated regulated utilities can still advance anticompetitive goals in downstream markets. Instead of through outright price discrimination, utilities today can exert market power through non-price discrimination: subtle operational decisions which regulators struggle to police.¹¹³

Mergers involving utilities and large-load customers are a contemporary example of the sort of integration the Bell Doctrine warns about. And as such, they warrant scrutiny from an antitrust perspective. Yet as the Article will discuss *infra*, the way in which this form of vertical integration can bring about harm is distinct from historical examples of integration between a regulated monopoly and a competitive firm. It is distinct in ways that the existing regulatory system is not designed to prevent. As such, reform is needed to prevent a modern-day Bell Doctrine problem.

C. Exemptions from Antitrust Enforcement

So far, this section has argued that vertical mergers involving regulated utilities are deserving of heightened antitrust scrutiny as compared to other vertical mergers. Yet the application of federal antitrust law to regulated utilities is itself fraught. Regulated industries are oftentimes shielded from antitrust enforcement, in recognition that some industries need to comply with state laws in ways that would otherwise be considered anti-competitive. An examination of this exemption, however, shows that controlling antitrust jurisprudence would allow for enforcement against forward vertical integration involving regulated utilities.

Rate-regulated utilities generally operate as regional monopolies. Within their service territory, they are granted a license that guarantees them an exclusive right to provide utility service. In return, utilities submit to public regulation of the rates they charge and the terms under which those rates

unregulated markets, but not necessarily so - exploitation of market power through diversification could be controlled through appropriate regulation of the

¹¹² *Id.*; see also Joskow & Noll, *supra* note 13, at 1260-61;

¹¹³ As this article discusses *infra* in Section III.A. See also T. Randolph Beard, David L. Kaserman & John W. Mayo, *Regulation, Vertical Integration and Sabotage*, 49 J. INDUSTRIAL ECON. 319, 329 (2001) (finding that "sabotage," i.e. providing a worse service to downstream rivals that raises their production costs, "can be a profitable strategy for a forward integrated dominant input supplier when regulation limits the ability of the firm to extract full rents from its dominant position.").

are charged, and agree to cap the rate of return they can receive on their investments at a level set by the public regulatory agency.¹¹⁴ This tradeoff is termed the “regulatory compact.”¹¹⁵

That grant of monopoly is only possible because utilities are considered exempt from antitrust laws under the Sherman Act. Initially enacted in a context of limited federal regulation of commerce, the Sherman Anti-Trust Act outlaws monopolistic business practices that function as a “restraint of trade or commerce among the several States”¹¹⁶ or that “monopolize any part of the trade or commerce among the several States.”¹¹⁷ The Act was passed in 1890, before the federal government even regulated interstate power sales. Once the Supreme Court held in *Wickard v. Filburn* that federal regulation could touch activities of a local character that substantially affected interstate commerce, the reach of federal regulation suddenly expanded dramatically.¹¹⁸ A number of industries that had traditionally been regulated by the states now fell within the ambit of the Sherman Act, and challenges to these schemes drove the Supreme Court to read an exception into the act for firms subject to state regulation.¹¹⁹

A concrete rule defining when firms could claim immunity from antitrust regulation remained elusive until *Cal. Liquor Dealers v. Midcal Aluminum*.¹²⁰ In *Midcal*, the plaintiff challenged a California law that required all wine producers and wholesalers to file price schedules with the state and established price floors based on those schedules as violative of the Sherman Act. The California law fixed prices charged between producers and wholesalers, preventing wholesalers from competing with one another on price. The Court created a two-part test to determine where state action offered a shield from antitrust enforcement. First, the challenged restraint on competition had to be “clearly articulated and affirmatively expressed as state policy.”¹²¹ Second, the policy had to be “actively supervised” by the State itself.¹²²

While *Midcal* clarified when firms would be immunized from antitrust enforcement, it did not offer blanket immunity to regulated industries. Today, utilities may still run afoul of the Sherman Act where their actions are not clearly articulated and affirmatively expressed as state policy. Two cases exemplify how courts evaluate utilities’ behavior under *Midcal*.

¹¹⁴ See *Duquesne Light Co. v. Barasch*, 488 U.S. 299, 307-08 (1989) (“if the rate does not afford sufficient compensation, the State has taken the use of utility property without paying just compensation and so violated the Fifth and Fourteenth Amendments.”)

¹¹⁵ *Jersey Cent. Power & Light Co. v. FERC*, 810 F.2d 1168, 1189 (D.C. Cir. 1989) (Starr, J., concurring) (“The utility business represents a compact of sorts; a monopoly on service in a particular geographical area (coupled with state-conferred rights of eminent domain or condemnation) is granted to the utility in exchange for a regime of intensive regulation, including price regulation, quite alien to the free market.”); Macey, *The Public Law of Public Utilities* at 220;

¹¹⁶ 15 U.S.C. § 1

¹¹⁷ 15 U.S.C. § 2.

¹¹⁸ *Wickard v. Filburn*, 317 U.S. 111, 124 (1942); see also Michael Wara, *Competition at the Grid Edge: Innovation and Antitrust Law in the Electricity Sector*, 25 N.Y.U. ENVTL. L.J. 176, 209 (2017).

¹¹⁹ Wara, *supra* note 118, at 209-210; *Parker v. Brown*, 317 U.S. 341, 350-51 (1943); *Cantor v. Detroit Edison Co.*, 428 U.S. 579, 592-598

¹²⁰ 445 U.S. 97 (1980).

¹²¹ *Midcal*, 445 U.S. at 105.

¹²² *Id.*

In 1973, a civil antitrust suit brought against Otter Tail Power Co. reached the Supreme Court. Otter Tail at the time sold electricity at retail throughout Minnesota, North, and South Dakota, and also operated wholesale transmission lines in those states.¹²³ Between 1945 and 1970, twelve of the towns in which Otter Tail operated retail distribution networks discussed replacing the utility with a municipal system. Just three of those towns ended up doing so. A major obstacle to municipalization was that municipal systems had to obtain access to wholesale transmission lines, all of which were owned by Otter Tail. Otter Tail, in order to protect its retail operations, repeatedly refused to sell energy at wholesale to the proposed municipal systems.¹²⁴ Where municipal systems had access to alternate transmission networks, Otter Tail brought lawsuits instead. The threat of pending litigation impaired municipalities' ability to issue bonds needed to build out a municipal utility, which either halted or slowed the progress of municipalization.¹²⁵ Facing an antitrust lawsuit, Otter Tail claimed it was exempt from antitrust regulation against its refusal to deal because it was regulated under the Federal Power Act, which permitted FERC to order interconnections. The Court unequivocally rejected this argument, clarifying that utilities are not insulated from antitrust enforcement merely because they are federally regulated at wholesale.¹²⁶

Utilities' susceptibility to antitrust regulation was confirmed three years later. In *Cantor v. Detroit Edison* (1976), the owner of a drugstore selling light bulbs brought an antitrust action against Detroit Edison, which had been distributing free light bulbs to residential utility customers.¹²⁷ Detroit Edison had a monopoly over electric service within its territory, and supplied roughly 50% of standard-size lightbulbs therein.¹²⁸ The utility folded the cost of providing light bulbs into its regular rates as a portion of its cost of providing service.¹²⁹ The plaintiff in *Cantor* argued that the provision of light bulbs foreclosed competition in the Michigan light bulb market, in violation of the Sherman Act.¹³⁰ The Court, in a six-to-three decision, agreed. *Cantor* held that a regulated firm may be exempt from antitrust concerns "insofar as it is exercising its natural monopoly power" sanctioned by state regulation, but may equally be required "to comply with antitrust standards to the extent that it engages in business activity in competitive areas of the economy."¹³¹

The jurisprudence in this area thus shows that regulated utilities may still be the target of antitrust action, especially where they are involved in competitive areas of the economy, or where their anticompetitive conduct is not affirmatively sanctioned by state policy. Accordingly, in the case of forward vertical integration, utilities may be susceptible to antitrust enforcement if their actions

¹²³ *Otter Tail Power Co. v. U.S.*, 410 U.S. 366, 370 (1973).

¹²⁴ *Id.* at 371.

¹²⁵ *Id.* at 372.

¹²⁶ *Id.* at 374.

¹²⁷ *Cantor*, 428 U.S. at 582.

¹²⁸ *Id.* at 583.

¹²⁹ *Id.* at 584.

¹³⁰ *Id.*

¹³¹ *Id.* at 595-96.

create anticompetitive effects in the downstream markets their affiliates are active in. As the next section shows, there are a number of ways in which utilities could do exactly that.

III. HARMFUL EFFECTS OF FORWARD VERTICAL INTEGRATION

Regulation may be well-suited to preventing forward vertical integration between a utility and large-load customers from directly affecting rates. Other harms, however, are more subtle and, accordingly, more difficult to remedy using regulation. In this section, I consider three ways in which vertical integration between a utility and a large-load customer may cause harm to consumers, competition, and state policy goals. I group harms into the following categories: service prioritization; investment choices; and improper risk appetite. After sketching out these categories, the section continues by discussing three contemporary examples of forward vertical integration in the utility context. It concludes by weighing potential advantages of vertical integration against the harms discussed.

A. Harmful Effects of Vertical Integration

1. Service Prioritization

A first potential area for harm is in the prioritization of service for the affiliate, at the cost of other customer classes. Energy is expected to be a scarce commodity for the foreseeable future, with demand growth forecast to outpace generation growth. In addition, a greater frequency of extreme weather events is straining the grid.¹³² In much of the Northeast, winters have grown more severe while the use of heat pumps has become more common. Summers are getting warmer, causing load growth from air conditioning. If the grid cannot keep up with these challenges, load shedding will become more common. Load shedding, also referred to as rolling blackouts, occurs where utilities temporarily shut off service in specific areas to prevent the overall grid from overloading. Some states have either already seen or only narrowly avoided rolling blackouts during peak demand events.¹³³ As electrification, reshoring of manufacturing, and demand growth from artificial intelligence continues, such instances may grow more common if grid investment continues at its current sluggish pace.¹³⁴ When grid overload happens, utilities have discretion on where to shed

¹³² See, e.g., Shah Saki et al., *A multi-year analysis of the impact of heatwaves and compound weather events on power outages*, 15 SCI. REPORTS e30846, 11 (2025).

¹³³ See, e.g., Jerry Potts et al., Enhancing power system resilience to extreme weather events: A qualitative assessment of winter storm Uri, 103 INT. J. DISASTER RISK REDUCTION e103409, 2 (2024) (“Over two-thirds of Texans lost power [during Winter Storm Uri] and, due to the high load shed requirements, many utilities could not consistently rotate these outages across their service area, resulting in an average outage of 42 hours”); Joshua C. Macey, Shelley Welton & Hannah Wiseman, *Grid Reliability in the Electric Era*, 41 YALE J. ON REG. 164, 209 (discussing how California narrowly avoided blackouts by sending out “Flex Alerts” requesting customers to conserve power by reducing nonessential uses”

¹³⁴ See, e.g., Stephen Ansolabehere et al., *How Grid Projects Get Stuck: Four Cases in Long-Distance Transmission Development in the United States*, SALATA INST. FOR CLIMATE AND SUSTAINABILITY, <https://salatainstitute.harvard.edu/wp->

load. In those instances, a vertically integrated utility would face a strong incentive to shed load from other customer classes but maintain service to its affiliated customer.

Consider, for example, *Morgan Stanley Capital Group v. Illinois Power Co.*¹³⁵ There, Morgan Stanley alleged that Illinois Power misrepresented the amount of transmission capacity available so that it could award that capacity to its own affiliate generators instead, in violation of Order No. 888's open access requirements.¹³⁶ This is different from retail service discrimination, but the incentive structure is broadly analogous. Illinois Power was selling a capacity-constrained service (transmission). When insufficient transmission capacity was available, the utility prioritized its affiliate over third-party customers. We should not expect to see anything different in the retail markets. In fact, the regulatory framework around load shedding is far less stringent than Order No. 888's requirements around nondiscriminatory transmission service, so stronger service prioritization effects should be expected.

While state regulators can direct utilities to specifically shed the load of large-load customers during times of crisis, they are relatively powerless to prevent discriminatory load shedding in practice. Take the example of Texas, where a 2025 Senate Bill directed the PUC to institute mandatory curtailment for large-load customers during emergencies.¹³⁷ Yet the bill explicitly exempted "critical load industrial customers," a status data centers can petition their utility to obtain. This designation ensures that a facility will remain last-in-line for load shedding, and is granted at the discretion of the utility.¹³⁸ It essentially lumps the facility in with industrial customers whose facilities cannot lose power without presenting an imminent danger to safety. But information on which facilities are classified as critical is confidential, which makes determining whether affiliates are unfairly granted this status difficult. Thus, an integrated utility could decide to grant critical load status to an affiliate data center but withhold it from competitors, forcing other data centers to shed load during energy emergencies while its affiliate remains unscathed.

The above are just a few examples of the many forms service prioritization could take. Another method would be for utilities to prioritize grid upgrades or repairs for its affiliates. They could be more responsive to the shifting needs of their affiliate customers and develop infrastructure where it is needed by the affiliate, while other customer classes are left to wait. On the flipside, utilities could schedule maintenance on lines used by competitors to the affiliate (for example, during a period of model training) to disrupt competitor operations.

Strategically delaying needed repairs is not uncharted territory in the energy world. In 2021, for example, NextEra chose to delay upgrading a crucial circuit breaker needed to build the New

content/uploads/2024/06/How-Grid-Projects-Get-Stuck-Report.pdf (Jun. 2024) (discussing the long development timeline of new grid infrastructure).

¹³⁵ 83 FERC ¶ 61,204 (1998).

¹³⁶ *Morgan Stanley*, 83 FERC at ¶ 61,912; see also Stephen Angle & George Cannon, Jr., *Independent Transmission Companies: The For-Profit Alternative in Competitive Electric Markets*, 19 ENERGY L. J. 229, 275 (1998).

¹³⁷ Tx. S.B. 6 (2025).

¹³⁸ See, e.g., Texas Pub. Utility Comm'n, Substantive Rule § 25.497; Oh. Admin. Code § 4901:1-10(I).

England Clean Energy Connect (NECEC) transmission line project. The line, which eventually finished construction in January 2026, transports hydroelectricity from Canada to New England. The low-cost energy NECEC delivers into the New England market competes directly with energy produced by the Seabrook Nuclear plant, a generation asset owned by NextEra. As a result, NextEra stood to lose significant revenues from the completion of NECEC.¹³⁹ NextEra, through Seabrook, controlled a specific circuit breaker that was unable to handle the additional power NECEC would introduce to the grid, and had to be upgraded to allow for NECEC's interconnection.¹⁴⁰ For more than two years, NextEra refused to perform the upgrade, which was estimated to last only seven to fourteen days.¹⁴¹ NECEC's developers a year attempting to convince NextEra before filing a claim with FERC, which was litigated over the course of an additional two years.¹⁴² After FERC ordered the upgrade, NextEra chose to appeal rather than comply. It was not until 2024, four years after a need to upgrade the substation was first identified, that the upgrade was finally completed.¹⁴³

While NextEra does not have forward vertical integration concerns of the sort this Article focuses on, its behavior shows how participants in the energy market can strategically delay infrastructure maintenance and upgrades to disadvantage competitors. FERC can intervene only after a lengthy hearing process. By the time the Commission can reach a decision, the competitive harm will likely be done.

As shown here, utilities have ample opportunity under existing regulations to prioritize service to specific customers, and worsen service for others. The danger lies in giving utilities an incentive to do so—the exact effect forward vertical integration is likely to have. Absent vertical integration, the utility does not have an incentive to give better service to any one customer. It is only after integration that the utility will see a reward from benefiting one customer and harming others.

2. *Investment Choices*

Due to the presence of affiliates, utilities will also be incentivized to change the sorts of investments they pursue. Generation is perhaps the most salient example. The load profile of data centers is different from that of residential or commercial customers—it is relatively consistent at every hour and day.¹⁴⁴ In contrast, residential use peaks in the afternoons and evenings, and dips significantly at

¹³⁹ *Order Denying Complaint in Part, Granting Complaint in Part, and Dismissing Petition for Declaratory Order*, 182 FERC ¶ 61,044 at ¶ 5 (Feb. 1, 2023) (hereinafter “NECEC Order”).

¹⁴⁰ *Id.* at ¶ 6.

¹⁴¹ *Id.* at ¶ 29.

¹⁴² See *Complaint and Request for Shortened Answer Period and for Fast Track Processing of NECEC Transmission LLC and Avangrid, Inc.* ¶50-51, in Docket No. EL21-6 (Oct. 13, 2020); NECEC Order.

¹⁴³ Ethan Howland, *In win for Avangrid, FERC orders NextEra to install Seabrook circuit breaker, opening path for NECEC line*, UTILITYDIVE, <https://www.utilitydive.com/news/-avangrid-ferc-nextera-seabrook-necec-transmission/641928/> (Jul. 10, 2026).

¹⁴⁴ See, e.g., North Carolina Utility Commission, *In the Matter of: Biennial Consolidated Carbon Plan and Integrated Resource Plans of Duke Energy Carolinas, LLC, and Duke Energy Progress, LLC* (Volume 24) (Testimony of Chris Edge) (claiming that data centers operate “at a consistent load factor [of 95-plus percent] 365 days a year, seven days a week, 24 hours.”); Stacy Sherwood, *Review of Large Load Tariffs to Identify Safeguards and Protections for Existing*

night, while commercial use is highest during the day. The types of generation assets that are well-suited to meeting residential and commercial demand can, as a result, be ill-suited to data center demand. Consider renewables: Solar and wind generate significant energy throughout the day and fall off at night. That generation profile, especially when combined with battery storage, can adequately meet residential and commercial demand in most cases. In contrast, data centers depend more on base load generation such as thermal or nuclear power plants. They require consistent generation to meet persistent demand.

In addition, speed-to-power has become a major concern for large-load customers who are racing to deploy compute capacity.¹⁴⁵ Speed to power refers to the rate at which a data center or other large load customer can secure electric power. Generation deployment time is only one factor of many that go into a customer's speed to power. Transmission and distribution investments are equally necessary to transport power from generation assets to the customer. These areas are particularly susceptible to lengthy delays due to siting difficulties, permitting requirements, environmental assessments, and so on. As a general rule, renewable resources require more substantial transmission investments than thermal resources do. This is because renewables are location-dependent, and must be sited somewhere that has both the room to accommodate utility-scale renewable buildouts and has sufficient technical renewable resource potential.¹⁴⁶ Locations that meet these twin criteria tend to be farther away from demand centers, creating a need for transmission investment to transport generated power.¹⁴⁷ Thermal power plants do not face those constraints—they can be built essentially anywhere, and fuel can be transported to power them. Customers who are biased towards speed rather than cost can thus reasonably prefer investment in thermal plants, which is likely to lead to faster capacity additions to the grid.¹⁴⁸

Ratepayers 7, ENERGY FUTURES GROUP, <https://energyfuturesgroup.com/wp-content/uploads/2025/01/Review-of-Large-Load-Tariffs-to-Identify-Safeguards-and-Protections-for-Existing-Ratepayers-Report-Final.pdf> (Jan. 28, 2025) (“an office building, which has low usage on weekends, can experience a load factor of 40-60% . . . A large load data center, since it is constantly active, will have a high load factor of 90-100%”).

¹⁴⁵ Timothy Gardner, *US launches effort to speed power grid projects for AI*, REUTERS, <https://www.reuters.com/legal/litigation/us-launches-effort-speed-power-grid-projects-ai-2025-09-18/> (Sep. 18, 2025)

¹⁴⁶ See, e.g., Lucas W. Davis, Catherine Hausman & Nancy L. Rose, *Transmission Impossible? Prospects for Decarbonizing the US Grid*, 37 J. ECON. PERSPECTIVES 155, 159 (2023)

¹⁴⁷ *Id.*

¹⁴⁸ See Andrew Tunncliffe, *Gas versus renewables: how will the power demand of data centres be met?* INVESTMENT MONITOR, <https://www.investmentmonitor.ai/features/gas-versus-renewables-how-will-the-power-demand-of-data-centres-be-met/> (Aug. 6, 2025). Note that the above does not have to be true. Renewable generation assets themselves are relatively easy to deploy, certainly easier than gas or coal plants. Co-located data centers, which are built next to a generation asset and thereby skip over the need to build transmission infrastructure, could thus see faster speed to power with renewables. The actual incentives faced by customers and utilities will depend largely on the regulatory landscape and particulars of the customer's location and needed investments. I and others have proposed various reforms that could speed up transmission deployment, which would reduce the comparative advantage thermal generation resources hold in deployment speed. That advantage is not inherent to the resource itself, merely to the current regulatory context. With that in mind, I merely wish to point out the potential for misaligned incentives between large-load customers, other customer classes, state policy goals, and utility investment decisions when affiliate relationships exist. See, e.g., Macey & van Emmerick, *supra* note 72.

In practice, this may result in investments that are suboptimal from other customers' point of view. Renewables are cost-competitive with natural gas today, and are expected to become substantially less expensive over time. They are already less expensive than nuclear or coal. Renewables are also insulated from price volatility caused by geopolitical events. Nevertheless, a utility will be incentivized to invest in thermal or nuclear generation, even at a higher cost, if that is what its affiliate customer needs. That need may conflict not only with what other customer classes need, but also with public policy demands. A number of states have committed to emissions reductions that depend on the deployment of renewables to the grid.¹⁴⁹ Utilities could stand in the way of public policy goals because of these misaligned needs.

In addition, utilities could slow-walk or outright refuse to build infrastructure needed to connect competitors to its affiliate to the grid. In *Otter Tail*, for example, the utility refused to offer interconnection services to municipal utilities seeking to compete with Otter Tail's retail arm.¹⁵⁰ By outright withholding service, Otter Tail managed to stave off numerous attempts to establish municipal utilities within its service territory.¹⁵¹ Otter Tail was quite blatant about this, and lost a Sherman Act action against it as a result.¹⁵² More subtle ways of delaying investments required by competitors, however, would be difficult to detect. Utilities may thus be incentivized not just to invest in different types of resources, but also to not invest in needed infrastructure at all.

3. *Improper Risk Appetite*

Finally, we may see utilities change their risk tolerance in response to affiliate needs, and as a result spend capital in an improper way. Rate-regulated utilities are guaranteed recovery of all prudently incurred costs under standard state regulations.¹⁵³ The prudence standard, sometimes coined the "used and useful" standard, is generous towards utilities. Public utility commissions are quite deferential to a utility's investment decision, so long as there seems to be a rational basis behind it. The role of the Commission, as it is currently interpreted, is not to decide what the optimal set of capital investments for a given utility is; it is only to evaluate whether the proposed investments are reasonable.¹⁵⁴ So too at the federal level, where FERC evaluates planned transmission investments solely on the basis of whether they lead to rates that are "just and unreasonable." In both situations,

¹⁴⁹ See generally State Climate Policy Dashboard, *Climate Action Plans*, <https://www.climatepolicydashboard.org/policies/climate-governance-equity/climate-action-plans> (last accessed Jun. 21, 2026).

¹⁵⁰ *Otter Tail*, 410 U.S. at 371 ("Otter Tail refused to sell the new systems energy at wholesale and refused to agree to wheel power from other suppliers of wholesale energy.")

¹⁵¹ *Id.* at 378 ("Otter Tail's refusals to sell at wholesale or to wheel were solely to prevent municipal power systems from eroding its monopolistic position.")

¹⁵² *Id.* at 377 ("The record makes abundantly clear that Otter Tail used its monopoly power in the towns in its service area to foreclose competition or gain a competitive advantage, or to [destroy] a competitor, all in violation of the antitrust laws.")

¹⁵³ William Boyd & Ann Carlson, *Accidents of Federalism: Ratemaking and Policy Innovation in Public Utility Law*, 63 UCLA L. REV. 810, 825-26 (2016).

¹⁵⁴ *Id.* at 827-28.

the Commission is placed in a fundamentally reactive role.¹⁵⁵ As a result, utilities can recover costs for suboptimal investments.

Nor are utilities penalized for investments that do not pan out. Under the long-standing “regulatory contract,” a utility takes on the obligation to serve all customers in exchange for a guarantee that its investors will be compensated for any risk incurred.¹⁵⁶ And utilities do incur risk. For example, in the 1980s, utilities poured billions into nuclear power plant investments that became undesirable after a meltdown at Three Mile Island. In the six years following the disaster at Three Mile Island in 1979, the construction of seventy-five planned nuclear power plants was cancelled,¹⁵⁷ twenty-eight of which were already in various stages of construction.¹⁵⁸ These investments were prudently incurred, but did not pan out. In a competitive market, that risk would be allocated to shareholders. Regulated utilities, however, receive compensation directly from ratepayers. In the 1980s, utilities were thus granted cost recovery for capital investments even though those investments were never used, nor generated any benefits to ratepayers.¹⁵⁹ In the years since, the consensus view appears to be that assigning these losses to ratepayers was the correct approach.¹⁶⁰ The alternative—shifting risk for investment losses to shareholders while retaining a capped rate of return on equity—would create a framework that disincentivized utility investment, or encouraged overly safe, inefficient investment.¹⁶¹

Today, data center developers claim the industry will experience astronomical growth over the next decade, and that investment in energy infrastructure must grow to accommodate that. In response, the industry has entered a capital expenditure “supercycle”¹⁶² and expects to invest a combined \$1.4 trillion by 2030.¹⁶³ This is a major change for a sector that has seen virtually no demand growth for the past two decades,¹⁶⁴ a change driven almost exclusively by expectations about the growth of artificial intelligence. This investment is a risky bet. It is difficult to predict today whether demand for computing power will increase to the degree the AI industry believes it will. This could be because demand for artificial intelligence tools fails to materialize; because advances in technology

¹⁵⁵ See Joshua C. Macey & Elias van Emmerick, *Utility Filing Rights and the Grid’s Governance Problem*, 136 YALE L. J. (forthcoming, 2027); see also *id.* at 828.

¹⁵⁶ Jim Rossi & Emily Hammond, *Stranded Costs and Grid Decarbonization*, 82 BKLYN. L. REV. 645, 650 (2017).

¹⁵⁷ See Paul Rodgers & Charles D. Gray, *State Commission Treatment of Nuclear Plant Cancellation Costs*, 13 HOFSTRA L. REV. 443, 443 (1985).

¹⁵⁸ *Id.*

¹⁵⁹ *Id.* at 467 (noting that project cancellation costs were assigned to ratepayers in most cases);

¹⁶⁰ Richard J. Pierce, Jr., *The Regulatory Treatment of Mistakes in Retrospect: Canceled Plants and Excess Capacity*, 132 U. PENN. L. REV. 497, 530-531 (1984).

¹⁶¹ *Id.* at 531 (“combining market-based sanctions for unwise investments with regulatory constraints on the rate of return that a utility can earn on particularly wise investments produces an asymmetrical framework for making investment decisions.”)

¹⁶² See, e.g., Arjun Murti, *Power Surge! The Third Energy Super-Cycle of Our Lifetime* 6, COMMODITY INSIGHTS DIGEST, <https://www.bayes-cid.com/pdf/newsletters/2025-12/CID-December-2025-Murti.pdf> (Dec. 2025); Robert Walton, *US electric utilities entering investment ‘super-cycle,’ says Morningstar DBRS*, UTILITYDIVE, <https://www.utilitydive.com/news/us-electric-utilities-investment-super-cycle-morningstar/803841/> (Oct. 27, 2025).

¹⁶³ Walton, *supra* note 162.

¹⁶⁴ U.S. Energy Information Administration, *After more than a decade of little change, U.S. electricity consumption is rising again*, <https://www.eia.gov/todayinenergy/detail.php?id=65264#> (May 13, 2025).

reduce the energy intensity of training and inference; or because a winner-takes-all outcome renders duplicative infrastructure currently being built unnecessary.¹⁶⁵ The ultimate effect on energy consumption is difficult to determine, as more efficient models may simply induce additional demand, leading to a net increase in energy use. If demand for compute increases, efficiencies in chip design may reduce the power draw of advanced computer chips. Here, too, the outcome on overall energy demand may not be materially affected if efficiency gains are offset by induced demand for cheaper compute.

This Article does not purport to add anything of substance to the vociferous debate concerning future energy demand estimates. It suffices to say these estimates are uncertain, and with that uncertainty comes investment risk. Utilities can choose to build capacity to meet the upper end of energy demand estimates, and incur the risk that that demand will fail to materialize. Yet as discussed above, that risk does not fall on utility shareholders—it accrues to ratepayers.

A traditional rate-regulated utility would already have an incentive to pursue the massive investments the tech sector is calling for. Absolute returns for utility shareholders are a function of the utility's net assets, because a utility's revenue requirement, i.e. the revenue a utility is allowed to collect from ratepayers over a given time period, is determined by the size of the utility's asset base. A simple representation of rate-regulated returns is given by $RR = (V - D) * r + E + d + T$, where RR is the utility's revenue requirement in a given year, V represents the utility's rate base, or total productive assets, D the cumulative depreciation on said assets, E the utility's operating expenses in that year, d the depreciation expenses in that year, and T represents taxes in that year. The small r represents the rate of return the utility receives on its net assets, as set by regulators. As this formula shows, the only way the utility can increase its revenue requirement by more than its costs is by increasing its rate base. Thus, a utility is already incentivized to invest.

A vertically integrated utility, however, has an additional incentive to take on excessively risky investments. Building electric capacity for a data center affiliate is effectively a way to transfer operational risk from the data center to ratepayers. To illustrate this, consider the two options after a utility decides to invest to meet projected demand growth from an affiliate data center. The first option is that the data center materializes and requires the capacity that was built. In this case, the data center gains, the utility gains, and ratepayers are neutral. The second option is that the data center does not materialize. In that case, the utility invested in unneeded capacity that now sits idle. Since the utility is guaranteed cost recovery, it still benefits from the increase in its asset base.¹⁶⁶ The

¹⁶⁵ Although reliable data is difficult to come by, it appears that many open-source models are vastly less energy-intensive while still providing a comparable level of quality to frontier models. This suggests that advances in system architecture could generate significant efficiency gains. See, e.g., Min Chen et al., *Steering open-source AI to accelerate the sustainable development goals*, 17 NATURE COMMUNICATIONS e4959 (2026) (claiming that “open-source AI reduces the energy and water footprints of downstream processes such as inference, fine-tuning, and model repurposing.”). Alternatively, one artificial intelligence model could so outperform others that it gains a monopoly on the market, which could reduce overall infrastructure needs as all inference and training consolidate to one firm.

¹⁶⁶ Though note that some commissions will require the utility to treat unused assets as an expense rather than as a capital investment, meaning they do not earn a rate of return on it. In that case, the utility would be neutral—not better nor worse off.

ratepayers, however, lose out. They must now compensate the utility for an investment that generated no benefits to them. In other words, a vertically integrated firm has an asymmetrical risk structure. It can capture the upside of investment risk through its unregulated affiliate (the large-load customer) but does not bear the downside risk. Ratepayers have an inverse risk structure: There is no upside to them, but they bear all downside risk.

All else equal, we would therefore expect a utility's risk appetite to increase if it has an affiliated large-load customer. Building out capacity creates an opportunity for the corporate group as a whole to earn outside returns if the affiliate customer ends up making use of the capacity, assuming the customer can use energy as an input to create returns in excess of the return rate awarded to the utility.¹⁶⁷ The utility can recover costs from its other customers in the event the affiliate customer fails, so the downside risk does not act to constrain the utility. We end up with an asymmetrical distribution of risk/reward that favors the corporate family and disfavors other customer classes.

There is also a threat of cross-affiliate debt guarantees. As Aneil Kovvali and Josh Macey have shown, regulated utilities are able to transfer value from ratepayers to shareholders by guaranteeing the debt of non-regulated affiliate firms. In doing so, they shift the risk of those debts away from the non-regulated firm and onto ratepayers, which gives the unregulated affiliate a competitive advantage other firms in the marketplace do not have access to.¹⁶⁸ Kovvali and Macey provide the example of a regulated utility guaranteeing the debt of non-regulated affiliate generators: By guaranteeing that debt, the capital costs of the non-regulated generators are artificially lowered,¹⁶⁹ which should translate to higher profits.¹⁷⁰ Aside from direct guarantees, a corporate group that contains both regulated and non-regulated subsidiaries could be incentivized to transfer funds from the regulated subsidiary to the parent, and then from the parent to the non-regulated subsidiary in cases where that non-regulated subsidiary is in financial distress. A regulated entity would not be able to move funds that should rightfully accrue to ratepayers, but it may transfer funds that would otherwise be used to invest in the regulated entity or kept as a financial cushion. This would weaken the regulated entity relative to where it would be absent the unregulated affiliate.¹⁷¹

Cross-guarantees of debt are particularly worrisome considering the leverage data center firms are taking on to scale their services, and the risk that demand for those services may fail to materialize. Data centers are using significant debt for financing. That is true for both single-tenant data centers developed by so-called "hyperscalers"¹⁷² and multi-tenant independent data centers. In the case of the former, hyperscalers increasingly ink financing agreements with private credit firms that incur debt but shift it away from their own balance sheets so as to maintain low leverage ratios, even as

¹⁶⁷ If the return generated by the affiliate is equal to or lower than that of the utility, the utility would not have any additional incentive to overinvest in infrastructure beyond what it faces under Averch-Johnson.

¹⁶⁸ Kovvali & Macey, *supra* note 49, at 2149.

¹⁶⁹ Since capital costs are tied to risk, *see generally* Robert C. Merton, *On the Pricing of Corporate Debt: The Risk Structure of Interest Rates*, 29 J. FIN. 449 (1974).

¹⁷⁰ Kovvali & Macey, *supra* note 49, at 2149.

¹⁷¹ *Id.* at 2150-51.

¹⁷² Referring to large cloud service providers such as Meta, Alphabet, Amazon, etc.

they could theoretically finance these projects with equity.¹⁷³ Independent data center developers are also reliant on private credit markets for the billion-dollar investments required to be competitive in the sector. Markets are at least somewhat aware of the risk involved in these investments. Some data center developers have needed to issue junk bonds to finance capital expenditures.¹⁷⁴ Unlike traditional asset-backed loans, where debt is guaranteed by stable assets like real estate, data centers' value is largely tied up in rapidly depreciating chips. Hyperscalers have changed accounting treatment of these chips in recent years, based on the assertion that they hold their value longer than was traditionally assumed.¹⁷⁵ Their actual useful life remains a subject of debate, and is directly tied to the risk of asset-backed debt.¹⁷⁶ Yet capital markets have started to judge that risk as rather high, which has increased data center's cost of borrowing.¹⁷⁷ This, too, creates incentives for the cross-guaranteeing of debts by a regulated utility—the higher the risk assigned to the affiliate, the more rewarding it is for the regulated utility to guarantee its debt and thereby reduce its borrowing costs.¹⁷⁸

So far, I have assumed that a corporate owner would seek to transfer value from a utility towards an unregulated customer affiliate. But the relationship does not need to function this way. An affiliate customer may also be used as a way to justify increased capital expenditures for the utility. As discussed above, a rate-regulated utility can increase absolute returns by increasing its net assets. That creates a risk of gold-plating: Utilities will invest in unnecessary infrastructure to inflate their asset base and increase total returns.¹⁷⁹ Utility regulatory commissions are tasked with policing the investment decisions of utilities to prevent exactly this. A utility would not be allowed to construct an expensive gas power plant if electricity demand in its territory had been stagnant for the past two decades. Affiliate customers, however, complicate this. An affiliated customer may claim that it expects significant energy demand in the future, perhaps as a result of the boom in data center demand. The utility can then use that projected demand to propose major capital investments to the utility commission, thereby increasing its net assets. If the affiliate customer ends up failing, the utility will still receive a rate of return on its enlarged asset base, potentially leaving the corporate

¹⁷³ Advait Arun, *Bubble or Nothing: Data Center Project Finance* 36-37, CTR. FOR PUB. ENTERPRISE, <https://publicenterprise.org/wp-content/uploads/Bubble-or-Nothing.pdf> (Nov. 2025).

¹⁷⁴ *Id.* at 37.

¹⁷⁵ See Jonathan Weil, *The Accounting Uproar Over How Fast an AI Chip Depreciates*, WALL ST. J., <https://www.wsj.com/finance/investing/the-accounting-uproar-over-how-fast-an-ai-chip-depreciates-6f59785b> (Dec. 8, 2025); Michael Cembalest, *Smothering Heights* 16, J.P. MORGAN, <https://am.jpmorgan.com/content/dam/jpm-am-aem/global/en/insights/eye-on-the-market/smothering-heights-amv.pdf> (2026) (discussing questions around GPU and networking equipment depreciation treatment).

¹⁷⁶ See generally M. Konrad Borowicz, *Coding AI Finance: How Lawyers Shape Debt Capacity in the Innovation Economy*, TILEC Discussion Paper DP 2026-03, https://papers.ssrn.com/sol3/papers.cfm?abstract_id=6176179

¹⁷⁷ See, e.g., Michelle Chan, *Investors push for higher yield on \$14bn of Oracle-backed data centre debt*, FIN. TIMES, <https://www.ft.com/content/e9682adb-f29a-4169-8bf0-19e299e906e2?syn-25a6b1a6=1> (Apr. 24, 2026) (“To compensate for [perceived] risks, some investors had demanded yields of more than 1 percentage point over Oracle’s publicly traded corporate bonds due in 2040”).

¹⁷⁸ Peter Rudegeair & Berber Jin, *Oracle’s Deluge of AI Debt Pushes Wall Street to the Limit*, WALL ST. J., https://www.wsj.com/tech/ai/oracle-ai-demand-debt-04977749?mod=lead_feature_below_a_pos1 (Apr. 23, 2026).

¹⁷⁹ See Averch & Johnson, *supra* note 67; see also *supra* Section II.A.

group as a whole better off. Hence, we may see artificially inflated demand from affiliate customers in vertically integrated contexts.

Public utility commissions are not experts in every industry, and as such they are not well-positioned to evaluate the credence of customers' demand forecasts. Affiliate customers can exploit this knowledge gap to present overly rosy demand projections as realistic. Utilities, in turn, can justify their investment decisions on the basis of those projections. Manufacturing demand to justify investment decisions is not a foreign concept to public utilities. As this Article discusses *infra*, in the gas sector, utilities use such affiliate precedent agreements to gain FERC siting approval for gas pipelines regardless of whether those pipelines are warranted by real market need.¹⁸⁰ When FERC reviews proposals for new gas pipelines, it must determine whether there is a market need for the project.¹⁸¹ If a precedent agreement exists, FERC will assume the demand is genuine and grant a certificate of public convenience and necessity (CPCN). A similar dynamic can arise here—utilities will cite their affiliate's growth projections as cause to invest in infrastructure, and regulators are likely to judge resultant infrastructure investments as just and reasonable.

B. Contemporary Examples

The specific type of vertical integration this Article is concerned with—downstream integration between a utility and a large-load customer—is rare today. The impetus to secure electricity supply for data center use is rather new, and acquisition activity has only begun picking up since 2025. Examples include Blackstone's purchase of TXNM, and Blackrock's spree of acquisitions including ALLETE; Minnesota Power; and the \$33.4 billion purchase of AES Corp.¹⁸²

The longer-term effects of these purchases remain to be seen. For now, this Article discusses three examples of vertical integration in the utility sector that do have an established track record to examine: Berkshire Hathaway's ownership of PacifiCorp and BNSF Railway; the natural gas procurement decisions of utilities in the United States; and increased post-acquisition risk appetite by NIPSCO. In all three instances, we see vertical integration generating incentives to extract value from non-affiliates to advantage affiliates.

1. *PacifiCorp*

PacifiCorp is an investor-owned utility active throughout the Pacific Northwest, wholly owned by Berkshire Hathaway Energy (BHE). BHE is an energy holding company and subsidiary of Berkshire Hathaway, the investment conglomerate headquartered in Omaha. The utility serves over two

¹⁸⁰ See *infra* Section III.B.2 (discussing how utilities leverage precedent agreements with affiliates to justify investment decisions).

¹⁸¹ Natural Gas Act of 1938, 15 U.S.C. § 717f (1988).

¹⁸² See *supra* Introduction

million customers, and operates the largest privately held transmission system in the Western United States.¹⁸³ An interesting hallmark of PacifiCorp's generation fleet, especially given its location in the more renewable-friendly West, is its dependence on coal power plants. As Kovvali and Macey have described in their paper, PacifiCorp owned or had an ownership stake in ten coal plants until 2020, accounting for nearly 6,000 MW of operating capacity.¹⁸⁴ The utility maintained these coal plants even against its own apparent economic interest. According to the utility's analysis, more than half of these units were uneconomic to operate by 2018 due to high fuel costs and availability of cheaper alternatives.¹⁸⁵ PacifiCorp did not volunteer this information: it tried to keep the economics of its generation fleet (and more specifically, the economics of its coal fleet) confidential even after pressure from public interest groups, though it was ultimately forced to disclose them by Oregon's Public Utility Commission.¹⁸⁶

Berkshire Hathaway also owns the Burlington Northern Santa Fe Railway Company (BNSF). BNSF is one of the largest freight transporters of coal in the United States, the hauling of which accounted for 13% of revenue in 2025.¹⁸⁷ It used to be far more—in 2010, coal transportation accounted for 27% of freight revenues.¹⁸⁸ BNSF invested significant sums in expanding rail line capacity from the Powder River Basin coal fields in Wyoming in the early 2000's,¹⁸⁹ in anticipation of rapid annual growth in coal demand. That demand largely failed to materialize. Coal consumption in the United States peaked in 2007, just one year after BNSF's line expansion. Demand for coal has steadily declined since 2008, due to a combination of environmental concerns, energy economics, and government policy.¹⁹⁰

BNSF's investment in coal may have been poorly timed. Yet the railroad was nevertheless able to generate a healthy stream of revenue out of its Powder River Basin investment, thanks to the steady demand for coal from its corporate sibling, PacifiCorp. PacifiCorp retained its coal plants far longer

¹⁸³ Berkshire Hathaway, *Our Businesses – PacifiCorp*, <https://www.brkenenergy.com/our-businesses/pacificorp> (last accessed May 20, 2026).

¹⁸⁴ Kovvali & Macey, *supra* note 49, at 2140.

¹⁸⁵ Lulia Gheorgiu, *PacifiCorp shows 60% of its coal units are uneconomic*, UTILITYDIVE, <https://www.utilitydive.com/news/pacificorp-shows-60-of-its-coal-units-are-uneconomic/543566/> (Dec. 5, 2018).

¹⁸⁶ Oregon Pub. Util. Comm'n., *Ruling in the Matters of PacifiCorp, 2017 Integrated Resource Plan and 2019 Integrated Resource Plan 2* (Aug. 7, 2018) (describing a challenge by Sierra Club to force PacifiCorp to disclose information about the economic viability of its coal resources).

¹⁸⁷ See, Burlington Northern Santa Fe, LLC, *2025 Form 10-K* 8, <https://www.bnsf.com/about-bnsf/financial-information/pdf/10k-llc-2025.pdf> (2025) ("The transportation of coal contributed 13 percent of freight revenues for the year ended December 31, 2025, with more than 90 percent of all of BNSF Railway's coal tons originating from the Powder River Basin of Wyoming and Montana")

¹⁸⁸ Burlington Northern Santa Fe, LLC, *2010 Form 10-K* 6, https://www.bnsf.com/about-bnsf/financial-information/pdf/10K_LLC_2010.pdf (2010).

¹⁸⁹ *Union Pacific, BNSF announce Joint Line expansion in Wyoming*, MRT, <https://www.mrt.com/news/article/Union-Pacific-BNSF-announce-Joint-Line-expansion-7654675.php> (May 7, 2006).

¹⁹⁰ See generally Lexie Ryan, *U.S. Coal Industry Trends*, CRS Report No. R48587 (2025) ("Demand for coal in the United States is experiencing a structural shift as natural gas and (to a lesser extent) renewables replace coal for power generation. In 2016, natural gas overtook coal as the number one energy source for power generation . . . Coal-fired power plants, which are often older than other electricity generators, are retiring at a higher rate than other kinds of plants, with 4.7% of the U.S. coal fleet planned for retirement in 2025").

than many of its regional competitors, who eagerly moved to cheaper sources of energy. In contrast, PacifiCorp only began retiring coal plants once some of the states the utility served began banning coal or otherwise instituting clean energy procurement guidelines. In other words, PacifiCorp continued using coal until it was forced to stop, even when the economics of coal no longer made sense.

This arrangement benefited not just BNSF, but also the mining companies active in Wyoming's Powder River Basin. One of those firms, Bridger Coal Company, happens to be two-thirds owned by PacifiCorp, and exclusively supplies coal to the Jim Bridger power plant—also two-thirds owned by PacifiCorp.¹⁹¹ Further afield, in Colorado, PacifiCorp holds a 29% stake in Trapper Mining Inc., a coal mining firm formed to supply coal to the Craig generating facility.¹⁹² One fifth of that facility is also owned by PacifiCorp.¹⁹³ Berkshire Hathaway thus controls the mining, the transport, and the use of coal. There is thus a clear economic incentive for the utility not to pivot away from coal.

As evidence mounted that coal was uneconomical and would become even more so over time, PacifiCorp signed long-term contracts with coal suppliers, locking itself into the resource for years to come. Today, the utility anticipates that it will continue operating at least some coal power plants past 2045.¹⁹⁴

By treating coal as a preferred resource, PacifiCorp increased profits for BNSF and its affiliate coal mines. In fact, it appears that some mines were only able to continue operating in the face of cheaper energy alternatives due to PacifiCorp's long-term contracts. Since PacifiCorp is rate-regulated and guaranteed to recover its fuel costs through fuel adjustment clauses, the utility itself is neutral in choosing between energy sources.¹⁹⁵ Its non-regulated affiliates, however, can receive unlimited upside from contracts signed with PacifiCorp. They are not capped by predetermined rates of return. Hence, PacifiCorp had a strong incentive to maintain coal plants, which required the utility to purchase coal and transport from affiliates. The utility also opted to lock in prices using long-term contracts with affiliates rather than purchase coal on the spot market, which resulted in it paying more for coal.¹⁹⁶ Those costs are ultimately borne by ratepayers. The tangled incentives

¹⁹¹ Berkshire Hathaway Energy, *RE: Narrative Description of the Service Company Functions 3*, in Docket No. HC25-7-000 (Apr. 25, 2025)

¹⁹² *Id.*

¹⁹³ *Id.*

¹⁹⁴ PacifiCorp, *2025 Integrated Resource Plan Vol. 1* 10, https://www.pacifiCorp.com/content/dam/pcorp/documents/en/pacifiCorp/energy/integrated-resource-plan/2025-irp/2025_IRP_Vol_1.pdf (Mar. 31, 2025) (showing more than 2 GW of coal capacity remaining online through 2045).

¹⁹⁵ In fact, the utility may be biased towards keeping coal assets online in order to avoid risking cost recovery, which is reserved for “used and useful” assets. *See* Kovvali & Macey, *supra* note 49, at 2143 (“Because PacifiCorp is likely concerned that PUCs will not allow it to recover the value of unused coal, it has an incentive to tell PUCs that the coal-fired units are needed and to refuse to retire them until ordered to do so.”). That said, PUCs are generally unwilling to deny cost recovery for investments that were prudent when incurred, so this is likely to be less of a motivating factor than the incentive to increase affiliate profits. *See generally* James J. Hoecker, “Used and Useful”: *Autopsy of a Ratemaking Policy*, 8 ENERGY L. J. 303, 314-315 (1987) (discussing the regulatory treatment of investments in cancelled nuclear power plant projects).

¹⁹⁶ Utah Public Service Comm’n, *Testimony of Kevin B. Cardwell for the Committee of Consumer Services in The Matter of the Application of PacifiCorp for Approval of its Proposed Electric Rate Schedules* 18-19, Docket No. 99-035-10 (Feb. 4, 2000) (“in

created by vertical integration led the utility to use a noneconomical generation asset, pay above-market rates for fuel on top of that, and resist closing plants even when state policy goals directed them to do so. In fact, the utility has had to pay millions in carbon allowance costs to the state of Washington due to its failure to cut emissions.¹⁹⁷ The utility commission in that state had previously recommended fining the utility for failing to submit energy transition plans that complied with the state's coal retirement goals.¹⁹⁸ PacifiCorp took actions that undoubtedly harmed ratepayers, and are impossible to explain without taking into account the firm's affiliate relationships.

State utility commissions were not blind to the conflicts of interest posed by Berkshire Hathaway's web of affiliates. In Oregon, the PUC scrutinized the prudence of the utility's coal investments and questioned whether the utility was overpaying for coal and adequately considering alternative generation sources.¹⁹⁹ In 2020, it disallowed cost recovery because it felt the prudence of these costs had not been adequately vetted. Yet the PUC was able to do that only because PacifiCorp's analysis was clearly lacking in rigor—the utility outright failed to consider the forward market price of gas when deciding whether to retire coal plants or retrofit them with expensive emissions control mechanisms. Those forward market prices had fallen 41% relative to the last analysis PacifiCorp had conducted, and would have shown that keeping the coal plants online was not economical.²⁰⁰ Even then, it took interventions by ratepayer advocates and environmental groups to secure a cost recovery disallowance.²⁰¹ In prior years, the PUC did not speak up when PacifiCorp continued to invest in coal resources, nor did it protest the prudence of PacifiCorp's take-or-pay agreements with coal suppliers that locked the utility into coal for years at a time. PUCs can step in where a utility is clearly doing something wrong, as was the case when PacifiCorp failed to look at falling natural gas prices in its models. It is much harder for utility commissions to scrutinize the prudence of business decisions that may look suboptimal, but are not clearly faulty. That gap explains how PacifiCorp was able to maintain its coal resources for so long.

2. Pipeline Purchase & Investment Decisions

some situations PacifiCorp is paying more for coal from its affiliates than it could obtain coal for on the open market. EVA believes that this is being done to maintain the affiliate sources of production for PacifiCorp's long-term strategic objectives.”)

¹⁹⁷ See *PacifiCorp v. Idaho Pub. Utils. Comm.*, 579 P.3d 904 (Idaho 2025) (Though here, costs were incurred due to PacifiCorp's operation of a natural gas plant).

¹⁹⁸ Wash. Utilities & Transport. Comm'n., *UTC staff recommend \$730,000-plus PacifiCorp penalty*, <https://www.utc.wa.gov/news/2022/utc-staff-recommend-730000-plus-pacifiCorp-penalty> (Jun. 7, 2022).

¹⁹⁹ Or. Pub. Util. Comm'n., *Order No. 20-473 In the Matter of PacifiCorp, Request for a General Rate Revision* 77-78 (Dec

²⁰⁰ *Id.* at 74, 76-78 (“[The PUC] determined that PacifiCorp conducted inadequate analyses and did not sufficiently consider alternatives to its chosen course of action . . . PacifiCorp's internal analysis demonstrates that falling gas prices from 2011 to 2013 consistently eroded the economic viability of the SCR investments. However, neither consistently declining value nor the presence of third-party gas price forecasts lower than the company's triggered any serious reevaluation by the company of the decision to proceed . . . We find that regardless of the gas price forecast used, the consistently declining trend in natural gas prices and corresponding erosion in the value of the SCRs should have caused PacifiCorp to consider a more thorough review of its investment in SCRs.”)

²⁰¹ *Id.* at 67-71.

Although this paper has so far focused primarily on electric utilities, the regulatory framework for natural gas utilities is substantially similar.²⁰² As a result, similar incentives to privilege affiliates exist for rate-regulated gas utilities. Both electric and gas utilities purchase natural gas as an input. Electric utilities do so for use in natural gas power plants, gas utilities to pass the product on to retail customers. Natural gas is distributed at wholesale by owners of interstate pipelines, who collect gas from numerous producers and transport it to local distribution companies.²⁰³ Under FERC Order 436 (issued in 1985), pipelines were incentivized to become open-access, allowing customers to purchase from different suppliers at spot prices.²⁰⁴ Thus, utilities have freedom of choice in how they procure their gas. They can choose to rely on fixed contracts or rely on spot markets. Pipelines are rate-regulated by FERC, and are generally guaranteed cost recovery.²⁰⁵

At times, demand for natural gas exceeds pipeline capacity. Wholesale pipeline operators will seek to build additional pipelines when that is the case, so as to serve all demand. Building a new pipeline involves a permitting process governed by FERC. Expansions of the wholesale natural gas system are regulated by FERC and evaluated on the basis of “public necessity.” In practice, FERC evaluates whether there is a market need for more pipeline capacity. If there is, the Commission will generally approve siting for a new pipeline.²⁰⁶ Market need, in turn, is largely determined by precedent agreements—agreements for future purchases of natural gas signed by a wholesale customer and a pipeline.

There are two mechanisms by which utilities may privilege affiliate pipelines. First, they can purchase gas through a fixed contract on terms favorable to the affiliate. Second, they can inflate projected gas purchases and sign precedent agreements based on those projections, allowing the affiliated pipeline to expand capacity. This, in turn, enables pipelines to increase their asset base. As discussed above, greater net assets translate to higher absolute returns for rate-regulated firms.²⁰⁷

There is some empirical evidence of the former method of value transfers. It seems that utility affiliates pay roughly 15% more to affiliated pipelines as compared to non-regulated, non-vertically integrated buyers. There is, however, significant evidence of the second method. Leila Safavi, using a comprehensive dataset of bilateral contracts between pipeline companies and utilities, finds that pipelines built as a result of rate-regulated utilities that sign a precedent agreement with an affiliate pipeline have far lower rates of utilization—between 23-25% lower—than pipelines built absent any affiliate relationship.²⁰⁸ In other words, affiliate demand is more likely to cause overinvestment in pipelines than non-affiliate demand.

²⁰² Compare 15 U.S.C. §§ 717-717w with 16 U.S.C. §§ 791a-828c.

²⁰³ See generally Jeffrey Leitzinger & Martin Collette, A Retrospective Look at Wholesale Gas: Industry Restructuring, 21 J. REG. ECON. 79 (2002).

²⁰⁴ *Id.* at 87.

²⁰⁵ See *Farmers Union Cent. Ex. V. FERC*, 734 F.2d 1486, 1530 (D.C. Cir. 1984).

²⁰⁶ Leila Safavi, *Can Vertically Integrated Firms Evade Pricing Regulation? Evidence from Energy Utilities 2*, HAAS WORKING PAPER NO. 344 (2023).

²⁰⁷ See *supra* Section III.A.3.

²⁰⁸ Safavi, *supra* note 206, at 23.

Vertically integrated purchasers of natural gas thus both overpay and overstate demand for affiliate suppliers. Notably, the former effect is more diffuse than the latter. Safavi hypothesizes that this is because utility commissions are better able to police whether a wholesale rate is excessive than they are able to determine whether pipeline expansions are needed. Thus, there is less opportunity for value transfers in the form of overpayment. Instead, utilities help their affiliate pipelines build unnecessary infrastructure upon which the affiliate is guaranteed cost recovery and a rate of return, increasing overall returns.

Again, this highlights a fundamental limitation of how utility commissions operate. Commissioners are skilled at determining the propriety of rates. The rate case system, wherein utilities have to present all the inputs that go into the rates they charge, allows for effective stakeholder oversight. While rate cases are technical, consumer advocate groups can and do actively engage with them. PUC staff is also capable of evaluating the assumptions utilities make in modeling rates. These assumptions can be stress-tested by looking at industry comparables, historical rates, and so on. The prudence of investments, on the other hand, is far more difficult to determine. All investments involve risk, require forward-looking projections, and rely on technical (and often confidential) data. Utility commissions are comparatively ill-suited to judge these business decisions. Nor would we necessarily want them to second-guess each investment decision a utility makes. After all, there is no reason to expect PUCs would be better at running a utility business than the utility itself. Nevertheless, this asymmetry does allow utilities to more easily favor affiliates at the cost of other customers when it comes to investment decisions. The remedy, as I will discuss *infra*, is to ensure that utilities do not have the incentive to favor any one customer or supplier in the first place, rather than relying on PUCs to second-guess opaque business decisions.

3. NIPSCO

The Northern Indiana Public Service Company (NIPSCO), owned by NiSource, is the second largest regulated electric utility in the state of Indiana.²⁰⁹ Roughly a fifth of the company—19.9%—is controlled by Blackstone.²¹⁰ Although a non-controlling share, NIPSCO has noticeably changed its behavior since Blackstone acquired its minority equity stake, which was ostensibly meant to aid the utility in transitioning to renewable generation.²¹¹ As one part of the investment, Blackstone promised to “help NiSource to identify and implement economic development opportunities.” In practice, this has meant a reorientation by NIPSCO to position itself as the utility partner of choice for data center developers in Indiana.²¹² Through an affiliate, NIPSCO plans to supply 2.6 GW of

²⁰⁹ NIPSCO, *About Us*, <https://www.nipsco.com/our-company/about-us> (last accessed Jul. 3, 2026).

²¹⁰ NiSource, *Sale of a 19.9% Ownership Interest in NIPSCO*, https://s1.q4cdn.com/829981032/files/doc_downloads/2023/06/NIPSCO-Minority-Sale-Presentation-Final.pdf (Jun. 20, 2023).

²¹¹ *Id.* at 5.

²¹² See Julien Dumoulin-Smith et al., *Initiating NI at Buy: Datacenter Darling with > \$10Bn Capex Upside*, JEFFERIES, OCT. 28, 2024 (included as Attachment BI-5 in *Direct Testimony of Benjamin Inskeep on Behalf of Citizens Action Coalition of Indiana, Inc.*

energy to data centers owned by Amazon, at a cost of roughly \$7 billion in capital investments—more than the 2.3 GW NIPSCO supplies for all non-data center customers. In the meantime, the utility is in talks to supply up to 3 GW to additional data center customers, with another 3 GW of “developing opportunities.” Thus, the utility plans to more than quadruple its total generation capacity to meet data center load. Instead of using renewables to meet this generation need, which the funds from Blackstone’s investment were ostensibly meant to support, NIPSCO will use data center-favored gas plants.²¹³

At the same time, bills in NIPSCO’s service area are rising faster than anywhere else in Indiana—average bills rose 91.71% between 2016 and 2026. Cost increases were driven by infrastructure investments in anticipation for future demand increases. For example, NIPSCO invested over \$600 million in a gas peaker plant to ensure reliability during peak demand times, meant to enable the utility’s ambitious scaling plans.²¹⁴ Even as NIPSCO spent billions on infrastructure investment, ratepayers continued to receive worst-in-class service—the average power outage duration experienced by NIPSCO customers was 58% higher than the next-worst performing Indiana electric IOU in 2023, for example.²¹⁵

NIPSCO’s pivot to serving data centers appears to be paying off. In 2025, data center operator QTS proposed to open two large data centers in Porter County, Indiana, to be served by NIPSCO.²¹⁶ QTS is a wholly owned subsidiary of Blackstone, yet that affiliation was scarcely disclosed.²¹⁷ Due to sustained community protest, the project was eventually withdrawn.²¹⁸ Nevertheless, the attempt to construct an affiliated data center in NIPSCO’s territory raises question about rate fairness and impact on other ratepayers, especially in light of NIPSCO and QTS’ failure to openly disclose their mutual affiliation with Blackstone.

in Cause No. 46210 (Dec. 19, 2024)) (describing NIPSCO as a “best in class data center utility story” and as “among the single best ‘data center’ picks”).

²¹³ See Kerwin Olson et al., *Data Centers in Indiana* 24, CITIZENS ACTION COALITION, <https://www.citact.org/sites/default/files/Data-Centers-in-Indiana-CAC-Webinar-slides-Aug-2025-1.pdf> (Aug. 2025) (showing planned 5.6 GW in additional gas generation by 2030 across NIPSCO and Indiana Michigan Power, 7.8 GW by 2035).

²¹⁴ *Id.* at 1.; see also Rebecca Thiele, *NIPSCO plans large natural gas plant to serve data centers through new subsidiary*, WFYI, <https://www.wfyi.org/public-affairs/2025-09-25/nipsco-plans-large-natural-gas-plant-to-serve-data-centers-through-new-subsiidiary> (Sep. 25, 2025).

²¹⁵ *Direct Testimony of Benjamin Inskip on Behalf of Citizens Action Coalition of Indiana, Inc.*, *supra* note 212, at 51.

²¹⁶ Matthew Gooding, *QTS cans data center scheme in Porter County, Indiana, after protests*, DATA CENTER DYNAMICS, <https://www.datacenterdynamics.com/en/news/qts-cans-data-center-scheme-in-porter-county-indiana-after-protests/> (Sep. 10, 2025).

²¹⁷ See Blackstone, *QTS Realty Trust to Be Acquired by Blackstone Funds in \$10 Billion Transaction*, <https://www.blackstone.com/news/press/qts-realty-trust-to-be-acquired-by-blackstone-funds-in-10-billion-transaction/> (Jun. 7, 2021); Nichole Heil, *Blackstone’s utility playbook: NIPSCO and the future of TXNM*, PRIVATE EQUITY STAKEHOLDER PROJECT, <https://pestakeholder.org/news/blackstones-utility-playbook-nipsco-and-the-future-of-txnm/> (Mar. 2, 2026) (“The relationship between Blackstone, NIPSCO, and QTS caught the attention of the Porter County Board of Commissioners ‘To date, the Porter County Board of Commissioners has not received a complete response from NIPSCO or QTS concerning this affiliation. To say that communication has been slow coming into our planning department would be an understatement,’ [the board noted].”)

²¹⁸ Gooding, *supra* note 216.

It is difficult to draw any definitive conclusions from NIPSCO's behavior so far. Since Blackstone acquired its minority stake, rates have increased, capital expenditures have gone up, gas generation instead of renewable investments have become favored, and the utility has aggressively pursued deals with data centers.²¹⁹ At the same time, service quality for non-data center customers has deteriorated. There thus seems to be evidence of service prioritization and shifting investment choices, as well as improper risk appetite. Yet no affiliated data center is currently under construction in its service territory (albeit not for lack of trying), so opportunities for the sort of misconduct arising from vertical integration this Article is concerned with have not arisen. That said, we could view NIPSCO's commitment to preparing its infrastructure for massive load growth as a way of laying the groundwork for affiliate data center entry to the state. The fact that Blackstone owns a significant stake in the utility raises concerns about the motives of these investments that otherwise would not be present. It remains to be seen if those concerns will be validated, but the presence of these concerns alone is already a negative consequence deriving from the stake Blackstone holds in NIPSCO.

C. Absence of efficiencies from integration

A possible retort to the argument advanced so far could be that, while vertical integration may produce some negative consequences, the efficiencies it creates outweigh the negative market effects. That retort is seemingly supported by the premiums being offered to acquire regulated utilities. In the abstract, we expect acquisition premiums to reflect efficiency gains that can be captured through integrating.²²⁰ This section demonstrates that there is reason to expect that true operational efficiencies from integration will be modest, given the unique nature of regulated utilities. From that conclusion, it follows that acquisition premiums reflect instead the value acquirers place on illegitimate benefits from integration—market power and the ability to unfairly advantage affiliates.

1. *Fixed rates of return*

An acquisition premium may be justified on the assumption that integration will generate some efficiencies that allow the acquisition target to operate more profitably. In other words, the premium could reflect efficiencies that accrue to the acquisition target. Yet in the case of a rate-regulated utility, gains in efficiency do not translate to growth in profitability. Per definition, the rate of return a regulated utility can generate is set by regulators, not by the firm's operations. A more efficient utility is not a more profitable utility. On the contrary, utilities that use capital less productively, meaning they need more assets to produce the same amount of energy, generate relatively higher

²¹⁹ See generally Heil, *supra* note 217.

²²⁰ See, e.g., Emilie R. Feldman & Exequiel Hernandez, *Synergy in Mergers and Acquisitions: Typology, Lifecycles, and Value*, 47 ACADEMY MGMT. REV. 549, 570 (2022) (discussing the relationship between acquisition premium and expected synergies in mergers & acquisitions).

returns as a percentage of energy produced. This dynamic underlies the traditional gold-plating concern identified by Averch & Johnson.²²¹

It has been widely discussed in the literature that the unique characteristics of rate-regulated utilities result in a lack of incentives to innovate or operate more efficiently for the utility.²²² This is because, under the rate-regulated model, the utility does not reap the rewards of that innovation. A prospective acquirer faces that same set of incentives and constraints. When it purchases a utility, it knows in advance what rate of return on assets it can expect to gain, and understands that any efficiency gains accruing to the utility as a result of vertical integration will not translate to higher profits for the newly formed corporate entity.

2. *Nondiscriminatory service*

A second explanation for the presence of an acquisition premium is possible. It may be that the acquirer does not expect efficiencies from integration to benefit the utility, but instead believes vertical integration will generate efficiencies for the acquirer's other companies. For example, a data center owner may believe efficiencies from integration will accrue to the data center, and that this justifies the acquisition premium offered for the utility.

Yet the extent to which such efficiencies can arise is doubtful, given the constraints placed on regulated utilities. As discussed *supra*, a core characteristic of contemporary utility regulation is the requirement that utilities offer service in a nondiscriminatory manner. All customers of a given customer class must receive service at the same rates and under the same conditions. This is part of the regulatory compact struck between utility and regulator. As such, an affiliated data center should not be able to receive markedly better service from an affiliated utility versus the service an unaffiliated data center would receive. In other words, a utility should offer service to an affiliated data center on the same terms as an unaffiliated data center.

There are some caveats to this. Utilities are barred from "undue discrimination." That leaves the door open for "due" discrimination, which in practice amounts to any price discrimination that can be supported by a degree of evidence and reasoning, not involving "a want of fairness, impartiality, or a lack of due process."²²³ So, some flexibility in rate design is possible, but a clearly partial rate design is unlikely to pass regulatory muster. Second, there are business reasons to suspect that vertical integration could generate some efficiencies that remain within the corporate group. For example, integration could reduce the transaction costs associated with planning for future demand. A utility could find it easier to account for the data center's prospective load if both are part of the same corporate group. Vertical integration may also present a solution to hold-up problems in

²²¹ See Averch & Johnson, *supra* note 67.

²²² See, e.g., *id.*; Joshua C. Macey, *Outsourcing Electricity Market Design*, 91 U. CHI. L. REV. 1243, 1269 (2024); Paul L. Joskow & Richard Schmalensee, *Incentive Regulation for Electric Utilities*, 4 YALE J. REG. 1, 13 (1986); Boyd & Carlson, *supra* note 153, at 814-15.

²²³ See Christopher C. Klein, *Price discrimination: what is 'undue' for a US utility?* 4 UTIL. POL'Y. 267, 268 (1994).

contract formation.²²⁴ Finally, utilities could arguably be a stabilizing force to a corporate group's balance sheet. Utilities' revenues are not affected by business cycles, since revenues are simply a function of cost of service. It will continue to provide revenue during economic downturns, dampening the effect of business cycles on the corporate group's balance sheet as a whole. I do not wish to discount these beneficial effects entirely, but instead argue that they are fairly minor. This is especially true in light of the harm forward vertical integration can cause to non-affiliate customers.²²⁵

A final explanation to justify the acquisition premiums seen in instances of forward vertical integration is that the acquirer may believe they can generate efficiencies so as to reduce rates for all customers, which would benefit the affiliate data center in addition to others. A better-run utility can generate energy more cheaply, and the acquirer's data center would benefit from this even absent discriminatory ratemaking. Yet this seems like a Pyrrhic victory for the acquirer. Other large-load customers could simply flock to the area and make use of the lower rates that would be on offer, and the acquirer would be left without a competitive advantage. In theory, benefits of such efficiencies would accrue to the market as a whole, rather than to any one specific firm. Unless we assume the acquirer holds prosocial preferences, it seems puzzling that this would justify the payment of a substantial acquisition premium.

Due to the characteristics of the rate-regulated utility, a potential acquirer cannot ensure that efficiency gains from forward integration will accrue solely to the acquirer—either in the form of higher returns for the utility, or in the form of gains for downstream entities. This is a characteristic unique to forward vertical integration. As the PacifiCorp example of backwards vertical integration discussed above shows, regulated utilities can favor upstream affiliate suppliers without necessarily running afoul of federal or state regulations. No regulation requires a utility to treat suppliers on a nondiscriminatory basis. Thus, backwards vertical integration allows for more transparent value transfers from the utility to its affiliate. This may explain why FERC reviews backward vertical integration with a heightened level of scrutiny.²²⁶ Yet the fact that there are few *permissible* ways for acquiring entities to benefit from the gains of forward vertical integration should raise more alarm, rather than less. The fact that these mergers remain appealing to owners of data centers implies that they see the ability to create value in some way. As I have discussed at the start of this section, the clearest way to create that value is by advantaging the affiliate at the cost of other utility customers.

Even where some legitimate efficiencies may be created through vertical integration, those efficiencies are more likely to accrue to the downstream affiliate. While this may not matter from an economic standpoint—which simply looks to the overall surplus created—this does cause issues from a utility regulatory point of view. In approving mergers and acquisitions, utility commissions

²²⁴ See generally Jean Tirole, *Procurement and Renegotiation*, 94 J. POL. ECON. 235 (1986); Paul A. Groot, *Investment and Wages in the Absence of Binding Contracts: A Nash Bargaining Approach*, 52 ECONOMETRICA 449 (1984) (both discussing potential of hold-up issues in contract formation in the presence of market power).

²²⁵ See *supra* Section III.A.

²²⁶ See *infra* Section IV.B.

must consider the public interest, and would not weigh efficiencies that will accrue only to the acquirer's firms rather than to the public as a whole. The existence of many potential negative effects of forward vertical integration, compared to the few potential efficiencies to be gained, counsels against approving forward vertical mergers of the sort discussed in this Article.

3. *Access to capital*

A final benign explanation for the pursuit of forward vertical integration is particular to the energy supply constraints facing the data center market today. An argument can be made that demand for compute is largely not price-sensitive today, and that profits for the data center industry as a whole are mostly supply-constrained.²²⁷ Lack of energy is one input causing that supply constraint.²²⁸ In this context, growing energy supply will lead to more profits for all participants in the data center industry. Data center owners thus do not necessarily need to secure energy at preferential rates, but rather secure more energy generally, in order to increase profits.

If we believe that energy supply is constrained partially because utilities cannot procure the capital necessary to expand their infrastructure,²²⁹ the acquisition of utilities by large data center owners may be justified as a way of increasing access to capital. Firms like Blackrock and Blackstone are well-capitalized and able to access deep equity and debt markets at favorable rates. An acquisition grants a utility access to that pool of capital, which could help it expand more rapidly, enabling it to meet growing demand for energy. From the acquirer's perspective, this is attractive both because capital investments increase the utility's absolute returns, and because additional capital enables the utility to meet demand from the acquirer's data center holdings.

While theoretically attractive, this explanation falls short in practice. There is reason to think few utilities are truly capital-constrained. Utilities are largely safe investments, and (with a few exceptions due to particular external circumstances) hold excellent credit ratings.²³⁰ Their rates of return are set by regulators with the specific goal of allowing them to access equity and credit markets without issue.²³¹ Where capital constraints are present, other ways exist to resolve these without resorting to

²²⁷ See, e.g., Lindsey Li et al., *Roadmap: The AI data center stack*, BESSEMER VENTURE PARTNERS, <https://www.bvp.com/atlas/roadmap-the-ai-data-center-stack> (May 19, 2026) (noting that demand for compute currently far outstrips supply).

²²⁸ *Id.* (describing how most component pieces of grid infrastructure now have long order lead times due to growing demand).

²²⁹ Which is a contestable proposition: large utilities today do not seem to struggle to access capital, but rather face upstream supply chain constraints on development. See, e.g., Boyu Yao & Yury Dvorkin, *Grid-Supporting Equipment Supply Chains Constrain the Feasible Pace of Power System Expansion* (arXiv working paper 2026), available at: <https://arxiv.org/html/2604.18411> (arguing that, based on an analysis of supply inputs, power grid development should be modeled as operating under endogenous infrastructure scarcity).

²³⁰ See Obioma Ugboaja, Pat Kerrigan & Gabe Grosberg, *Issuer Ranking: North American Electric, Gas, And Water Regulated Utilities, Strongest To Weakest*, S&P GLOBAL (Mar. 30, 2026) (summarizing credit ratings of North American utilities).

²³¹ See *Fed. Power Comm'n. v. Hope Nat. Gas Co.*, 320 U.S. 591, 603 (1943) (holding that a utility's rate of return "should be sufficient to assure confidence in the financial integrity of the enterprise, so as to maintain its credit and to attract capital.")

vertical integration of a type that will create market power concerns. For example, states may offer to provide upfront capital at favorable rates to utilities in order to finance investments that align with public policy goals. This is the approach California is taking to incentivize transmission and clean energy development.²³²

Nor should we expect regulated utilities to lack motivation to expand their asset base absent the incentives created by forward vertical integration. As I have mentioned throughout this paper, the one thing regulated utilities are reliably incentivized to do is to grow their asset base.²³³ On the margins there may be some question as to whether utilities would be incentivized to engage in more productive investments when vertically integrated, but there is no real disincentive for utilities to respond to customer needs as is. We see this in practice, too—utilities have been enthusiastic in their response to the boom in energy demand, with investor-owned utilities planning to spend upwards of \$1.4 trillion in capital expenditures between 2026-2030, up more than 21% from the prior five-year period.²³⁴ Investor-owned utilities located in states with high data center concentrations also show the highest proposed capital expenditures: Duke, NextEra, Southern Co., PG&E and AEP make up the five utilities with the highest proposed capital expenditures over this period,²³⁵ and all plan to host significant data center capacity within their footprint.²³⁶ It is difficult to see a lack of access to capital as a problem facing the industry, given the scale of planned capital investments by utilities absent forward vertical integration.

²³² See Cal. S.B. 254 §§ 1-2, 4 (Becker, 2025).

²³³ Due to the Averch-Johnson effect, see *supra* note 67.

²³⁴ See *Utility Spending is Rising: A Review of Utility Capital Expenditure Plans*, POWERLINES, https://powerlines.org/wp-content/uploads/2026/04/0413_PowerLines-CapEx-Report-1.pdf (Apr. 2026)

²³⁵ *Id.* at 7.

²³⁶ See, e.g., Jordan Blum, *Utility giant Duke Energy plans to spend industry record \$103 billion on growth as data centers and affordability take center stage*, FORTUNE, <https://fortune.com/2026/04/25/utility-giant-duke-energy-spend-industry-record-103-billion-growth-data-centers-affordability/> (Apr. 25, 2026) (“Duke counts Amazon, Microsoft, Google, and Meta as major data center customers”); Vallari Srivastava & Laila Kearney, *NextEra, Google accelerate US data center build-out with new deals*, REUTERS, <https://www.reuters.com/business/energy/nextera-energy-google-cloud-expand-deal-add-us-capacity-2025-12-08/> (Dec. 8, 2025) (“As part of the new deal, [NextEra and Google] will develop multiple new large-scale data center campuses in the U.S. that will be built with new power plants.”); Diana DiGangi, *As load grows, Southern raises spending plan to \$81B*, UTILITYDIVE, <https://www.utilitydive.com/news/southern-co-load-data-center-earnings/812681> (Feb. 20, 2026) (describing the \$81 billion capex plan as driven by substantial new growth infrastructure investments to meet industrial customer demand); Darrell Proctor, *PG&E Will Upgrade Infrastructure as Part of 5-Year, \$73-Billion Investment Plan*, POWER, <https://www.powermag.com/pg-e-will-upgrade-infrastructure-as-part-of-5-year-73-billion-investment-plan/> (Sep. 29, 2025) (“California utility PG&E announced a \$73-billion capital expenditure plan covering the next five years, with investments targeting infrastructure upgrades to support growing demand for electricity in its territory, particularly from data centers.”); Pooja Menon, *AEP raises capital spending plan to meet data center power demand*, REUTERS, <https://www.reuters.com/business/energy/utility-aep-raises-capital-spending-plan-meet-data-center-power-demand-2025-10-29/> (Oct. 29, 2025) (noting the increase in CapEx is required “to meet unprecedented power requirements driven by large-load customers such as data centers and industrials.”)

IV. SOLUTIONS & POTENTIAL UPSIDES

Forward vertical integration in utilities will likely become more common in the future, as large-load customers seek to secure energy as a competitive advantage in the well-capitalized data center industry. As discussed *supra*, such vertical integration creates incentives that manifestly go against consumer interests. This could lead to higher rates, worse service, and greater risk shifted onto ratepayers. Yet regulators are not powerless in this scenario. Both federal and state regulatory commissions have extant statutory authority to scrutinize proposed mergers and acquisitions. In this section, I propose five ways by which proposed vertical integration could be scrutinized to avoid the negative impacts described above. Broadly, these solutions involve reassessing extant regulatory authority; leveraging antitrust laws; and rethinking the structure of utility ownership altogether. If implemented, these proposals would not only mitigate harm from vertical integration, but pave the way for meaningful gains by ratepayers as a result of data centers entering the grid. This section therefore concludes by discussing the potential upsides data centers can generate if utilities are regulated properly.

A. Require mitigating measures before merger approval

The core proposition this Article makes is that both federal and state regulators are ill-positioned to evaluate the propriety of utility business decisions that may benefit affiliate customers. Vertical mergers that combine a utility with a large customer will create incentives for the utility to grant preferential treatment to the affiliate customer. That treatment can take a number of forms beyond pure rate discrimination, and may often take the form of regular operational choices.²³⁷ Regulators are not experts at running businesses and do not have access to the same information firms do. As such, the risk of overenforcement is high were regulators to start second-guessing business decisions.

For those reasons, regulators should not play the role of armchair quarterback to utility management. Yet as this Article discussed, forward vertically integrated utilities can engage in an array of anticompetitive, anti-consumer behavior to advantage affiliate customers if left unchecked. I propose that the optimal regulatory response to this conundrum is to ensure *ex ante* that utilities will not be in a position where they are incentivized to engage in such behavior. This avoids the need to police business decisions *ex post* and the risk of overenforcement that comes with it.

Thus, as a primary protection mechanism and in recognition of the knowledge issues that exist, regulators should adopt a position of caution towards proposed vertical mergers. The most effective and drastic measure would be to quarantine the regulated utility, and disallow these mergers altogether.²³⁸ This would, however, be difficult to implement politically. As a second-best alternative,

²³⁷ See Section III.

²³⁸ See, e.g., Lynne Kiesling & Joshua Macey, *Quarantining Electric Utilities* 5, NORTHWESTERN INST. FOR REG. L. ECON. (Nov. 2025).

regulators should recognize the unique challenges these mergers can create, and require applicants to agree to a set of mitigating measures meant to insulate the regulated utility from incentives to misbehave. One measure could be functional unbundling from the unregulated affiliate, similar to what is required by FERC from vertically integrated utilities regarding their regulated business practices today. Another may be the installation of a neutral oversight body within the utility, meant to evaluate whether its business practices remain nondiscriminatory. Regulators should place the burden upon merger applicants to show that the measures they are taking will adequately protect other ratepayers and competing large load customers. In other words, regulators must adopt an *ex ante* position of skepticism towards this category of mergers and act accordingly.

B. Modify FERC Regulations Governing Requests for Authorization Under § 203

At the federal level, FERC should amend the regulations governing review under § 203 of the FPA to take into account downstream consequences of vertical mergers.

After the repeal of PUHCA in 2005, FERC retained authority to review mergers and acquisitions affecting wholesale sales of electricity under § 203 of the Federal Power Act.²³⁹ The operative standard of review is that proposed mergers must be “consistent with the public interest.”²⁴⁰ Prior to 1996, FERC considered six factors—the so-called *Commonwealth Edison* factors—in evaluating whether a merger would satisfy that standard.²⁴¹ Post-1996, FERC has adopted federal antitrust guidelines and largely applies those.²⁴²

Today, applications for mergers under § 203 are evaluated according to the regulations set forth in 18 C.F.R. § 33. To guard against undue concentration of market power, FERC will ask for a competitive analysis from the applicant in specific instances it feels trigger heightened scrutiny. A competitive analysis, while not a panacea, at least gives both the Commission and stakeholders some insight into the anticipated competitive effects of a proposed merger. A competitive analysis must either include mitigation measures proposed to mitigate any adverse effects resulting from a merger or a detailed description of potential adverse competitive effects of the transaction.

In the instance of a vertical merger, FERC currently asks for a vertical competitive analysis only if “a single corporate entity has ownership or control over one or more merging entities that provides inputs to electricity products and one or more merging entities that provides electric generation products.”²⁴³ In other words, FERC does not require a competitive analysis where a utility chooses to merge with large-load consumers of electricity, or other entities downstream from the utility.

²³⁹ 16 U.S.C. § 824b(a) (“No public utility shall sell, lease, or otherwise dispose of the whole of its facilities subject to the jurisdiction of the Commission ... without first having secured an order of the Commission authorizing it to do so.”)

²⁴⁰ *Id.*

²⁴¹ *In re Commonwealth Edison Co.*, 36 F.P.C. 927 (1966).

²⁴² See Order No. 592, Inquiry Concerning the Commission’s Merger Policy Under the Federal Power Act, 61 Fed. Reg. 68595 (1996).

²⁴³ 18 C.F.R. § 33.4

As written, this rule fails to require a useful competitive analysis for a swath of transactions that could have negative downstream competitive effects. Nevertheless, these transactions may lead to unjust rates or practices just as much as mergers with upstream suppliers to electricity products might.²⁴⁴ As these transactions are likely to become more common, FERC should revise its regulations to require review for all transactions that raise concern about anticompetitive coordination.

To do so, FERC could rewrite 18 C.F.R. §33.4(a)(2) to require a competitive analysis unless the applicant can affirmatively demonstrate that the merging entities do not currently qualify—and are unlikely in the near future to qualify—as a large-load customer;²⁴⁵ and that the merging entities do not currently operate in a market where access to electricity can be used to provide a measurable competitive advantage and produce anticompetitive effects. Changing this regulation is within FERC’s statutory powers to secure the public interest under § 203.

FERC has been reluctant to consider downstream effects in part because “the Commission has consistently held that the examination of an FPA section 203 transaction’s rate impact does not concern the proposed transaction’s *retail rate* impacts.”²⁴⁶ Forward mergers would certainly produce downstream effects that impact retail rates, but they would do more than that. As I discussed *supra*, mergers with a large-load customer could incentivize utilities to change their investment decisions, which would impact wholesale rate payers to the degree that those investments are made in transmission infrastructure or in generation assets to be sold at wholesale.²⁴⁷ This is especially true in the context of data centers, whose projected load may require vast investments in additional transmission and generation infrastructure that would ultimately need to be recovered from other wholesale and retail ratepayers if the customer’s load fails to materialize. The public interest standard requires that the Commission evaluate a merger’s effect on wholesale ratepayers and transmission customers.²⁴⁸ It is flippant to say that forward mergers do not require such an evaluation simply because the first-order effects will primarily be felt by retail ratepayers.

C. Empower State PUCs to Broaden Definition of “Public Interest”

²⁴⁴ See *supra* Section III (discussing potential negative impacts from forward vertical integration).

²⁴⁵ The definition of “large-load customer” is not fixed yet, but a number of utility commissions have been able to define such customers based on their peak load and average load factor. FERC could borrow from those definitions. See, e.g., Kansas Corporation Commission, *Order Approving Unanimous Settlement Agreement 2*, in Docket No. 25-EKME-315-TAR (Nov. 6, 2025) (defining large-load customers as facilities with a peak load forecast reasonably expected to be equal to or in excess of a monthly maximum demand of 75 MW at any time during the term); Arizona Corporation Commission, *In the Matter of the Application of Arizona Public Service Company for a Hearing to Determine the Fair Value of the Utility Property of the Company for Ratemaking Purposes*, Decision No. 79293 (Mar. 8, 2024) (approving a large-load tariff for customers with a monthly demand of 5 MW or more and a load factor of 92% or more for a minimum of nine months of the prior 12-month period).

²⁴⁶ Order Authorizing Disposition of Jurisdictional Facilities, 194 FERC ¶ 61,134 at ¶ 44 (Feb. 20, 2026) (citing Upstate N.Y. Power Prods., Inc., 154 FERC ¶ 61,015 at ¶ 21).

²⁴⁷ See *supra* Section III.

²⁴⁸ Order No. 592, 61 Fed. Reg. 68595, 68603.

A merger involving a regulated utility must be approved both by FERC (if the utility sells energy at wholesale) and the state PUCs from the states in which the utility is active. Applicants seeking PUC approval to transfer control over their assets are generally asked to show that the proposed transfer is not adverse to the public interest.²⁴⁹ What constitutes the “public interest” is ambiguous, and each PUC has developed their own framework for evaluating the anticipated effects of a sale or transfer of assets on the public interest. Too often, those evaluations anchor on the near-term impacts of a proposed sale, and fail to consider longer-term downstream impacts. Consider, for example, the acquisition of TXNM by Blackstone in 2025. The Texas Public Utility Commission determined that the acquisition was in the public interest because it would create “tangible and quantifiable benefits to ratepayers.”²⁵⁰ The benefits in question constituted a \$45.5 million rate credit, to be paid to ratepayers over a period of 48 months. On a transaction of \$11.5 billion,²⁵¹ that figure was close to a rounding error for Blackstone. To be sure, a rate credit offers ratepayers a benefit in the near term. But the Commission failed to critically look beyond those 48 months and discuss the impacts this acquisition could have after that period.

I argue for a broader conception of what constitutes the public interest. To safeguard the interests of ratepayers, public utility commissions should take into account the long-run incentive issues that may arise from vertical integration of the kind I focus on in this article. This may involve weighing short-term benefits offered by the acquirer against longer-run market structure issues and future incentives that could disadvantage consumers. This evaluation is less straightforward than simply noting that a rate credit will be offered. But the issues raised by these mergers are not straightforward either. A complex, multi-pronged analysis by state PUCs is required to ensure that commissions meet their statutory duty of safeguarding the public interest.

In evaluating the future effects of a proposed merger, PUCs should recognize the knowledge issues they face in policing utility behavior *ex post*. As I discuss in Section III, much of the undesirable behavior utilities will be incentivized to engage in once they integrate with an affiliate customer—in the form of service prioritization, procurement decisions, and increased risk appetite—are difficult for a public utility commission to police. PUCs are limited in their ability to second-guess decisions that qualify as business judgment. Commissions should weigh this fact, and the bias towards caution that derives from it,²⁵² when evaluating a merger.

²⁴⁹ See, e.g., Cal. Pub. Util’s. Comm’n., Approving Sale and Transfer of Control of Assets and Relieving Mountain Utilities of its Obligation to Provide Public Utility Electricity Service 11-12, Decision No. 1106032 (Jul. 1, 2011); Ct. Pub. Util’s. Reg. Auth., *Application for Approval of Holding Company Transaction Involving Northeast Utilities and NSTAR* 30-31, in Docket No. 12-01-07 (Apr. 12, 2012).

²⁵⁰ Tx. Pub. Util. Comm’n., *Order in Joint Report and Application of Texas-New Mexico Power Company and Troy ParentCo LLC for Regulatory Approvals under PURA §§ 14.101, 39.26, and 39.915* ¶ 73-74, in Docket No. 58536 (Feb. 6, 2026)

²⁵¹ Blackstone, *TXNM Energy Enters Agreement to be Acquired by Blackstone Infrastructure*, <https://www.blackstone.com/news/press/txnm-energy-enters-agreement-to-be-acquired-by-blackstone-infrastructure/> (May 19, 2025).

²⁵² See *supra* Section IV.a

D. Leverage Antitrust Law to Police Vertical Mergers

Next, courts should leverage existing antitrust regulation to scrutinize proposed vertical mergers involving utilities without awarding excess deference to their status as regulated firms.

Courts today are wary of overzealous antitrust enforcement for at least two reasons, one general and one specific to regulated industries. First, Easterbrook's proposition that the costs of antitrust enforcement are likely to exceed its benefits has held great sway with judges.²⁵³ Worries that false positives could chill investment, prevent efficiencies, and harm consumers abound.²⁵⁴ The working theory in antitrust has been that markets can correct for underenforcement, but cannot respond effectively to overenforcement.²⁵⁵ Second, utilities are partially shielded from antitrust enforcement as a result of their regulated nature. Under *Midcal*, activities that are sanctioned by state regulation and actively supervised by the state are not subject to antitrust regulation.²⁵⁶ Untangling which actions fall under *Midcal*'s shield and which do not can be a fraught endeavor, one that courts understandably prefer to stay away from.

Cases of vertical integration involving regulated utilities avoid both concerns, and courts should not hesitate to scrutinize them under the lens of antitrust. First, as Macey & Rossi effectively demonstrate in a forthcoming article, regulated utilities sidestep many of the overenforcement concerns presented by Easterbrook. Utilities' monopoly power makes it impossible for markets to self-correct to underenforcement, as Easterbrook proposed they would. On the flipside, the risk of overenforcement by courts is relatively smaller given that utilities are already heavily regulated.²⁵⁷ Nor should courts worry that the effects of forward vertical mergers are shielded from antitrust enforcement. Under *Cantor*, a firm is exempt from antitrust enforcement only insofar as it is exercising its monopoly power, granted by state regulation.²⁵⁸ Yet regulated firms have to comply with antitrust standards where they operate in "competitive areas of the economy."²⁵⁹ Such is the case in the form of vertical integration this Article is concerned with. Large-load customers undoubtedly operate in a competitive area of the economy. Where a utility offers preferential service to an affiliate customer so as to advantage that customer in some way—be it by providing interconnection to the affiliate before doing so for competing firms, or by making investments that award the affiliate a competitive advantage as compared to competing firms—courts can and should consider those actions in light of antitrust regulation.

A broader rethinking of antitrust's purpose may be needed for it to effectively guard against market power abuses from this form of vertical integration. As it stands, antitrust law's lodestar has been

²⁵³ Frank H. Easterbrook, *The Limits of Antitrust* 3, U. CHI. L. OCCASIONAL PAPER NO. 21 (1985).

²⁵⁴ *Id.*; see also Joshua C. Macey & Jim Rossi, *A Framework for Antitrust in Regulated Utility Markets* 7 (forthcoming, 2027)

²⁵⁵ Macey & Rossi, *supra* note 254, at 7.

²⁵⁶ *Cal. Liquor Dealers Ass'n. v. Midcal Aluminum, Inc.*, 445 U.S. at 105.

²⁵⁷ Macey & Rossi, *supra* note 254, at 7-8.

²⁵⁸ *Cantor*, 428 U.S. at 595-96.

²⁵⁹ *Id.*

consumer welfare, with output as the relevant metric to maximize.²⁶⁰ This framework is insufficient to capture the harms that mergers of the sort I describe in this Article could generate. It is not difficult to imagine that forward vertical integration may allow affiliate data centers to offer better services at a lower cost, at least initially. Given a plentiful supply of energy, tech firms will be willing and able to engage in predatory pricing, i.e. subsidize the cost of running large language models in order to capture market share and gain an edge in the development of frontier models. After all, these firms are currently doing so.²⁶¹ This could result in lower prices for consumers and more output by the firm, in the form of more capable models. But price and output effects do not fully capture the threat to consumer welfare that vertical integration of this kind poses, and are at best a lagging indicator of market power abuses.²⁶² A focus on price and output misses the weakening of competition and accumulation of market power that can result from these mergers. Eventually, firms can exploit their newfound monopoly power to raise prices, harming consumer welfare in a way that is difficult to address effectively absent viable competitors.²⁶³

Instead, courts should embrace the guiding principle that antitrust laws are meant to promote competition. I adopt Lina Khan’s position that this requires a focus on “competitive process and market structure,” which necessarily involves an examination of the distribution of ownership and control.²⁶⁴ Applied to the context of utility mergers, this requires questioning whether, as a result of the merger, the newly formed firm will control industry bottlenecks or gatekeepers; can exploit entry barriers; and whether the firm’s structure creates anticompetitive conflicts of interest.²⁶⁵

Each transaction is unique, and there may well be mergers between utilities and large energy customers that do not raise these concerns. In other cases, we can imagine how a merger may allow the firm to act as a gatekeeper, for example by denying (preferential) access to much-needed energy infrastructure to new entrants in the data center industry. Mergers involving regulated utilities are also likely to involve regulatory barriers to entry—competing data center firms cannot build their own generation and transmission assets if regulators withhold siting permissions, which they are

²⁶⁰ Herbert Hovenkamp, *Progressive Antitrust*, 2018 U. ILL. L. REV. 71, 76 (2018) (advocating for a “neoclassical antitrust policy with consumer welfare, or output maximization, as its guiding principle”); Lina M. Khan, *The Ideological Roots of America’s Market Power Problem*, 127 YALE L. J. 960, 964 (2018).

²⁶¹ See Jai Vipra & Anton Korinek, *Market concentration implications of foundation models: The invisible hand of ChatGPT* 21, BROOKINGS CTR. ON REG. & MARKETS WORKING PAPER 9 (Sep. 2023) (discussing how “market leaders can strategically charge prices below cost to deter entry to the market” and noting how OpenAI has explicitly followed this strategy); Berber Jin & Nate Rattner, *An Inside Look at OpenAI and Anthropic’s Finances Ahead of Their IPOs*, WALL ST. J., <https://www.wsj.com/tech/ai/openai-anthropic-ipo-finances-04b3cfb9> (Apr. 5, 2026) (showing both frontier labs spending vastly more on training and inference than they receive in revenues).

²⁶² See Lina Khan, *supra* note 98, 737-38 (2017).

²⁶³ *Id.* at 738-739; see also Bruce A. Blonigen & Justin R. Pierce *Evidence for the Effects of Mergers on Market Power and Efficiency* 24, FED. RES. (2016) (showing that mergers and acquisitions tend to raise prices for consumers, yet do not produce efficiency gains for firms); Kevin McLaughlin & Aaron Holmes, *Anthropic Changes Pricing to Bill Firms Based on AI Use Amid Compute Crunch*, THE INFORMATION, <https://www.theinformation.com/articles/anthropic-changes-pricing-bill-firms-based-ai-use-amid-compute-crunch> (Apr. 14, 2020) (reporting that Anthropic hiked prices amid worse model performance once it faced compute issues, which it was able to do largely because Claude Code—an Anthropic product—had gained a near-monopoly on the enterprise market).

²⁶⁴ Khan, *supra* note 98, at 745.

²⁶⁵ *Id.* at 717, 746.

likely to do if another utility has previously been granted a monopoly. Conflicts of interest are likely to come up as well. The merged utility has an incentive to afford preferential treatment to its affiliate customer vis-à-vis other large-load customers, in particular under circumstances of constrained energy supply.²⁶⁶ These factors should be carefully considered in antitrust actions brought against proposed mergers or acquisitions.

That said, we should not expect antitrust to be a panacea. The antitrust enforcement process is slow and costly. Antitrust's reach into the operations of regulated industries may, at times, be restricted. The filed rate doctrine, for example, holds that utility rates filed with a regulatory agency are "just and reasonable," and may not be challenged in court.²⁶⁷ As such, an antitrust challenge against a rate agreed upon between a utility and its downstream affiliate would likely be barred under the doctrine. Antitrust enforcement is a useful tool, but it should be the last line of defense against utility abuses. The costs of preventing abuse by halting a problematic merger *ex ante* are simply much lower than attempting to enforce antitrust regulation *ex post*.

E. Socialize Utilities to Avoid Incentive Conflicts

The urge to pursue forward vertical integration derives from a few conditions. Regulated utilities are limited in the returns they can generate for their owners, which leaves transferring value to unregulated affiliates as the only way to generate outsize returns.²⁶⁸ Second, downstream customers of utilities operating in a power-constrained industry can gain a competitive advantage by procuring faster or more reliable service from the utility. Third, the presence of an affiliate customer facilitates gold-plating for the utility where the affiliate inflates projected energy demand, demonstrating a need for greater capital investment on the part of the utility. These conditions, in turn, derive from the unique incentives created by rate-regulating a for-profit entity that supplies a now-scarce public good needed by a rapidly growing industry.

The most drastic way to avoid these incentives is to take utilities public and move away from the rate-regulated model altogether.²⁶⁹ Socializing utilities is not a novel idea. Municipal utilities, which are publicly owned and run, operate throughout the United States. Investor-owned, rate-regulated utilities are already overseen by state agencies, who evaluate whether their investment choices, rate

²⁶⁶ Such circumstances are likely to occur, as I discuss in the introduction to this Article. *See, e.g.*, Rosner-Uddin, *supra* note 7; *see also* Cy McGeady et al., *The Electricity Supply Bottleneck on U.S. AI Dominance* 3, CTR. FOR STRATEGIC & INT'L STUDIES (2025) ("Today, access to electricity supply is the binding constraint on expanded computational capacity and therefore on continued U.S. leadership in AI"); Jeff St. John, *Lots of demand, too little grid: The state of the US power sector*, CANARY MEDIA, <https://www.canarymedia.com/articles/transmission/lots-of-demand-too-little-grid-the-us-power-sector-in-2024> (Jan. 2, 2025) (discussing the U.S.' failure to meet load growth).

²⁶⁷ *See Keogh v. Chicago & Northwestern Railway Co.*, 260 U.S. 156, 164 (1922); *see also* Jim Rossi, *Why the Filed Rate Doctrine Should Not Imply Blanket Judicial Deference to Regulatory Agencies*, 34 ADMIN. & REGULATORY L. NEWS 11, 11 (2008).

²⁶⁸ Note that the rate of return is capped by regulation, but the absolute return is not. Thus, a regulated utility can increase absolute returns by enlarging its asset base (on which it earns a rate of return), but can only increase the corporate group's rate of return by way of shifting value to an unregulated affiliate.

²⁶⁹ *See, e.g.*, Kovvali & Macey, *supra* note 49, at 2168.

of return, and prudence of expenses. Socializing utilities, thus, would not introduce government oversight into what was previously a haven of free market economics. Instead, it would alter some of the incentives faced by utilities—most notably, the incentive to maximize profit for both the utility and any affiliates—by changing the utility’s ownership structure.

I am not the first person to note that the step from regulated utility to publicly owned utility is not so large.²⁷⁰ Nor do I lend much credence to the traditional arguments against socialization—“lack of government capacity, inadequate expertise, and insufficient incentives to innovate”—in this context, given the large role the government already plays in energy regulation, the proven efficacy of municipal ownership models, and the existing absence of incentives to innovate for rate-regulated utilities.²⁷¹ In theory, public ownership of utilities would be a feasible and promising solution to the threat posed by forward vertical integration.²⁷² Politically, however, implementing public ownership at scale would be difficult.

Nevertheless, areas most at risk from incentive conflicts as a result of forward vertical integration—for example, places facing high data center interest such as Loudoun County in Virginia or Memphis, Tennessee—could consider public ownership of their utility as one response to undesirable actions by local utilities. The threat of public ownership itself could cause utilities to refrain from more egregious misbehavior. In California, for example, the state government leveraged the threat of a public takeover against Pacific Gas & Electric (PG&E) to push back on proposed rate increases and perceived poor safety practices.²⁷³ Thus, public ownership (and the threat thereof) could be another tool to guard the public interest, though it is unlikely to be a complete solution.

F. Upsides to Large-Load Customer Grid Connections

If left unchecked, forward vertical integration between data centers and utilities will generate incentive conflicts that likely will produce negative outcomes for other ratepayer classes. That is not to say that these sorts of mergers are necessarily bad for ratepayers, or even that the influx of large-load customers to the grid must be seen as a problem. On the contrary, if regulated properly, utilities can leverage the capital these customers provide to upgrade grid infrastructure, accelerate the transition to low-cost renewable generation sources, and spread fixed grid costs among a wider customer base, potentially leading to lower rates overall.

²⁷⁰ *Id.* at 2168-69 (arguing that “there may not be much daylight between public ownership and public utility regulation”); see also Shelley Welton, *Public Energy*, 92 N.Y.U. L. REV. 267, 275 (2017).

²⁷¹ Kovvali & Macey, *supra* note 49, at 2168; John E. Kwoka, *The comparative advantage of public ownership: evidence from U.S. Electric Utilities*, 38 CAN. J. ECON. 622, 635 (2005) (showing that public utilities deliver distribution at lower costs than investor-owned utilities, though IOUs have a slight advantage in generation costs).

²⁷² Nor would that be the only benefit of public ownership of utilities, which others have discussed in great detail. See, e.g., Welton, *supra* note 270; Boyd, *supra* note 92; Demsetz, *supra* note 18, at 63 (advocating for public ownership of the distribution system and introducing competition in the generation sector); Shelley Welton, *Rethinking Grid Governance for the Climate Change Era*, 109 CAL. L. REV. 209, 272 (2021).

²⁷³ Judy Lin, *What happens if California takes over PG&E*, CALMATTERS, <https://calmatters.org/politics/2020/02/what-happens-if-california-takes-over-pge/> (Feb. 5, 2020); Cal. S.B. 875 (Wiener, 2026).

The need to modernize our electric grid is not driven solely by the advent of data center demand. Ageing infrastructure was strained by an increasingly electrified economy and state policies favoring distributed renewable resources before the commercial release of the generative artificial intelligence tools that grab headlines today. In 2020, it was estimated that the U.S. would face a \$208 billion shortfall in grid infrastructure investment by 2029.²⁷⁴ Lagging investment over the past decades has caused increasingly costly outage events, transmission congestion, and delayed renewables deployment.²⁷⁵ Infrastructure investment has been slow partly due to a lack of available capital, and partly due to a lack of utilities' incentive to engage in productive investments.²⁷⁶ Large-load customers present a real opportunity to accelerate infrastructure upgrades and construction. They are far less constrained in how they can deploy capital than regulated utilities are, which need approval from regulators prior to making investments. The deep capital markets large-load customers have access to allow them to deploy capital not just rapidly, but at scale. In addition, these customers have an incentive to complete construction quickly, and to build infrastructure that actually lowers electricity costs and increases reliability. This is compared to incumbent utilities, which can face incentives to gold-plate infrastructure or build infrastructure that mainly benefits their own generation assets, regardless of cost to ratepayers.²⁷⁷ If asked to, large-load customers have proven willing to fund upgrades to the grid in their entirety, even if those upgrades would benefit other ratepayer classes in addition to the customer.²⁷⁸ In essence, the willingness of the large-load customer to pay for the grid upgrade can generate an avoided cost for other ratepayers, since infrastructure would have had to be upgraded eventually.

With the proper regulation in place, data centers may also increase renewable energy penetration. Newly constructed data centers today frequently look to gas turbines as their power source. These turbines have a key advantage: they are easy to site and require little in the way of transmission construction. Since transmission lines are so slow to build, simply building on-site gas generation is attractive to data centers looking to come online quickly. That trend is likely to change in the future, especially if regulatory streamlining is able to accelerate transmission development.

A first driver for change is the growing backlog in gas turbine production. GE Vernova, one of the larger turbine manufacturers, reported a backlog of 100 gigawatts in the Spring of 2026, which was anticipated to grow to 110 gigawatts by the end of the year. As backlogs have grown, so has the price per kilowatt—GE reported price growth of 10-20% as compared to 2025. This erodes two of the key advantages of natural gas: speed to deploy, and cost-competitiveness with renewables.

²⁷⁴ EBP, *Failure to Act: Electric Infrastructure Investment Gaps in a Rapidly Changing Environment* 3 (2020), available at: <https://infrastructurereportcard.org/wp-content/uploads/2021/03/Failure-to-Act-Energy-2020-Final.pdf>.

²⁷⁵ *Id.* at 20, *see also* Catherine Hausman, Transmission Lines, Allocative Efficiency, and Corporate Profits, 115 AM. ECON. REV. 2574, 2607-08 (2025).

²⁷⁶ Hausman, *supra* note 275, at 2608 (noting that incumbent, fossil fuel generation-owning utilities have an incentive to block productive investments to reduce competition from renewable resources); Davis, Hausman & Rose, *supra* note 146, at 169 (discussing the challenges involved in financing transmission development).

²⁷⁷ Hausman, *supra* note 275, at 2608.

²⁷⁸ *See, e.g.,* Riu et al., *supra* note 16, at 7 (noting how there may be downward pressure on rates from infrastructure investments by large-load customers in some scenarios).

Second, large tech firms have begun to expressly prefer renewable generation, perhaps because it is more in line with the public image they wish to portray.²⁷⁹ This, too, should grow renewable deployment, as well as construction of the transmission infrastructure needed to support that deployment, over time. That said, streamlining the transmission construction process will be crucial to capture these tailwinds to renewable energy investment. Speed remains a primary concern, and companies will not be willing to wait the seven to ten years it currently takes to build high-voltage transmission. The construction of more renewable energy, as well as the transmission infrastructure supporting it, will benefit ratepayers. Aside from the environmental benefits, renewables are simply the lowest-cost generation source available today. If more renewables have adequate transmission capacity available to connect them to the grid—which is often the challenge—ratepayers will receive lower-cost energy compared to the status quo.

Finally, the entry of large-load customers can drive down costs by spreading fixed costs over a larger customer base. Electricity rates depend not just on the (variable) cost of fuel that generation assets use. They depend in large part on the fixed costs of infrastructure required to keep the grid operating. Yet customers pay for energy (largely) on a per-kilowatt basis. Thus, holding all else equal, more demand for energy will reduce the share of rates made up by fixed costs. Large-load customers will require additional fixed costs to be served, however. As discussed above, major investments in infrastructure are needed to serve the additional demand they represent. But so long as the revenue generated by the customer exceeds the additional fixed costs needed to serve that customer, overall rates will come down. It is within public utility commissions' power to design rates in a way that ensures revenue from large-load customers exceeds the marginal cost of serving them. If they do so, other ratepayer classes stand to benefit.²⁸⁰

Securing these benefits depends on the ability of federal and state regulators to craft rates and regulations that incentivize productive investments, accelerate construction timelines, and charge large-load customers at a rate above the marginal cost of serving them. That is certainly easier said than done, but the opportunity does exist. I offer this to show that the growth of data center demand should not cause regulators to reflexively punish this one class of customers so as to safeguard others. A mutually beneficial arrangement is possible, though it will require thoughtful regulatory action for that arrangement to appear.

²⁷⁹ See, e.g., Google, *Operating sustainably*, <https://datacenters.google/operating-sustainably/>, last accessed Jul. 1, 2026; Meta, *Data Centers – Sustainability*, <https://datacenters.atmeta.com/sustainability/>, last accessed Jul. 1, 2026; Amazon, *Inside Amazon's approach to data center sustainability: a conversation with Brandon Oyer*, <https://sustainability.aboutamazon.com/stories/inside-amazons-approach-to-data-center-sustainability> (Jun. 12, 2026).

²⁸⁰ Riu et al., *supra* note 16, at 7.

CONCLUSION

Demand for computing power, driven by the adoption of artificial intelligence tools, has led to an unprecedented capital investment supercycle in the utility sector. Amidst long construction times, supply chain delays, and regulatory constraints, investors in the data center industry have begun looking to utilities as prime acquisition targets. Acquiring regulated utilities offers a shortcut to power, which constitutes a competitive advantage in the data center industry today. This interest in regulated utilities as acquisition targets stands to create a new wave of forward vertical integration, wherein utilities and large-load customers will be part of the same corporate entity.

Neither federal nor state regulators are, under current regulatory schemes, well-equipped to deal with the incentive conflicts this form of vertical integration creates. The traditional remedy to market power abuses equally falls short. Canonical antitrust doctrine does not account for the unique issues vertical integration between a regulated monopoly and an unregulated downstream affiliate raises.

Forward vertical integration will create incentives for the regulated utility to prioritize service and grid investments to serve affiliates; skew the shape capital investments take, and shift investment risk from the unregulated affiliate onto the regulated utility's ratepayers. Ratepayers stand to be on the hook for billions in unneeded investments, all the while suffering from worse service, while competing large-load customers are at risk of being locked out of the market altogether.

Three categories of reforms can prepare our regulatory and legislative scheme to face this modern threat. At the federal level, FERC must broaden its § 203 review to account for downstream consequences of mergers and acquisitions. State public utility commissions should adopt an expansive definition of the "public interest" so as to fully capture the suite of costs and benefits forward vertical integration stands to create. Our legal system, too, must adapt. Courts must wield a more aggressive antitrust posture that adequately accounts for the unique harms forward vertical integration in a regulated industry can create.

The good news is that these reforms do not require legislative reform. FERC and state PUCs possess the authority to adapt their interpretation of their governing statutes. Courts, too, can leverage the expansive language of the Sherman Act to strengthen oversight over potential anticompetitive practices resulting from forward vertical integration.

The data center and utility industries are both changing at a breakneck pace, and a seemingly endless inflow of capital is enabling corporations to rapidly scale up their acquisition strategies. Blackstone and Blackrock are likely to be just the opening salvo to a spree of similar acquisitions in the utility sector. It is substantially more challenging to effectively police the conduct of utilities after it becomes vertically integrated with one of its large customers. Rapid reform, and perhaps more importantly, increased awareness of these issues, is needed before ratepayers are locked into a system designed to serve corporate interests rather than the public good.