The Corporate Governance of Public Utilities

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Rate-regulated public utilities own and operate one-third of U.S generators and nearly all the transmission and distribution system. These firms receive special regulatory treatment because they are protected from competition and subject to rate caps. In the past decade, they also have been at the center of high-profile corporate scandals. They have bribed regulators to secure subsidies for coal-fired generators and nuclear reactors. They have caused wildfires and coal-ash spills that resulted in hundreds of deaths and billions of dollars in liability. Their failure to maintain reliable electric service has contributed to catastrophic blackouts. Perhaps most consequentially, they have emerged as powerful opponents of state and federal climate action.

This Article describes the unique corporate governance challenges public utilities face and argues that these governance challenges contribute to the pervasive inefficiencies and the frequency of corporate misconduct that characterize utility industries. American corporate law provides special protections to shareholders, such as the right to elect corporate boards and the requirement that directors and managers owe fiduciary duties to shareholders. The economic justification for these protections is that shareholders are the residual claimants of corporations: because they receive any value a corporation generates beyond what it owes to its fixed claimants, they have the appropriate incentives to pursue value-enhancing investments.

But the theoretical premise that underlies the American system of corporate governance does not apply to public utilities. Rate regulation limits the value shareholders receive when a firm innovates or reduces costs. It therefore converts shareholders into fixed claimants with the same incentives creditors have in non-utility industries. Because ratepayers, not shareholders, receive the residual value the firm generates beyond what it owes to its fixed claimants, standard corporate law theory suggests that public utilities should be run to advance ratepayer and not shareholder interests. The implication is that managers and directors of public utilities should owe fiduciary duties to their ratepayers, that ratepayers should be represented on the corporate boards of

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public utilities, and that managers of public utilities should receive less deference on business decisions than they do in other industries. As we discuss, however, these reforms are difficult, and perhaps impossible, to implement effectively. That, in turn, highlights the need for strong regulatory oversight and offers additional reasons to be skeptical of the utility model.

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Introduction

Rate-regulated public utilities supply one-third of the electricity in the United States and own nearly all of the transmission and distribution lines that transport electricity to meet customer needs. Recently, they have also been at the center of high-profile corporate scandals. FirstEnergy and ComEd, for example, have been accused of bribing regulators to receive favorable treatment for coal-fired generators and nuclear reactors. PG&E pled guilty to eighty-four counts of manslaughter for its role in California wildfires. Utilities across the country have emerged as powerful opponents of state and federal climate action.

While none of these scandals can be attributed to a single cause, they are all, at least in part, a failure of corporate governance. Corporate governance mechanisms are generally designed to encourage directors and officers to focus on generating financial returns for shareholders.⁵ That is because shareholders are normally considered the "residual claimants" on the corporation: shareholders have a claim on what is left over after the corporation has collected revenue from its customers and met its legal obligations to regulators, creditors,

^{1.} See Kathryne Cleary & Karen Palmer, U.S. Electricity Markets 101, RESOURCES FOR THE FUTURE, https://www.rff.org/publications/explainers/us-electricity-markets-101/ [https://perma.cc/3ML3-K5MH] ("Today, only one third of US electricity demand is serviced by these integrated utility markets because many states have abandoned this system in favor of deregulation."); see id. (stating that "transmission and distribution utilities . . . continue to be rate regulated"); FED. ENERGY REG. COMM'N, ENERGY PRIMER: A HANDBOOK FOR ENERGY MARKET BASICS 39 ("Major parts of the country operate under more traditional market structures, notably the West (excluding California) and the Southeast. Two-thirds of the nation's electricity load is served in RTO/ISO regions."); id. at 59 ("Cost-based rates are used to price most transmission services.").

^{2.} See Jake Zuckerman, FirstEnergy Fired Its CEO Amid Bribery Scandal but Let Him Keep Millions, OHIO CAPITAL J. (June 23, 2022, 4:00 AM), https://ohiocapitaljournal.com/2022/06/23/firstenergy-fired-its-ceo-amid-bribery-scandal-but-let-him-keep-millions-documents-show/ [https://perma.cc/CBK7-GTNU]; Press Release, United States Att'y's Off. N. Dist. Ill., Commonwealth Edison Agrees to Pay \$200 Million to Resolve Federal Criminal Investigation Into Bribery Scheme, (July 17, 2020), https://www.justice.gov/usao-ndil/pr/commonwealth-edison-agrees-pay-200-million-resolve-federal-criminal-investigation [https://perma.cc/NLT6-8UUS].

^{3.} See Lily Jamali, PG&E Will Plead Guilty To 84 Counts Of Involuntary Manslaughter During 2018 Wildfire, NPR (Mar. 23, 2020, 4:12 PM ET), https://www.npr.org/2020/03/23/820293479/pg-e-will-plead-guilty-to-84-counts-of-involuntary-manslaughter-during-2018-wild [https://perma.cc/X2TY-IIRN9]

^{4.} See David Anderson, Matt Kasper & David Pomerantz. Utilities Knew: Documenting Electric Utilities' Early Knowledge and Ongoing Deception on Climate Change From 1968-2017, ENERGY & POL'Y INST. at 68 (July 2017), https://www.energyandpolicy.org/wp-content/uploads/2021/09/Utilities-Knew-Documenting-Electric-Utilities-Early-Knowledge-and-Deception-on-Climate-Change.pdf [https://perma.cc/3VYF-GTSK].

^{5.} See infra Part I. For a recent discussion of the interlocking formal and cultural mechanisms supporting shareholder control, see Dorothy S. Lund & Elizabeth Pollman, The Corporate Governance Machine, 121 COLUM. L. REV. 2563 (2021). As noted below, the view that corporations should focus exclusively on shareholder interests is controversial. See, e.g., Aneil Kovvali & Leo E. Strine, Jr., The Win-Win That Wasn't: Managing to the Stock Market's Negative Effects on American Workers and Other Corporate Stakeholders, 1 U. CHI. BUS. L. REV. 307, 307 (2022). For the most part, we bracket such arguments here. Even if shareholder primacy is the best organizing principle for corporate governance at ordinary companies, our analysis reveals problems with applying it in the public utilities industry.

and workers.⁶ Because they are entitled to the firm's residual value, shareholders normally internalize the consequences of corporate decisions. If a corporation delivers better products or invests in a more efficient technology, the shareholders profit. If the corporation loses market share to competitors that offer better or cheaper service, or if it experiences increased costs due to its failure to meet regulatory obligations or invest in efficient technologies, the shareholders are the first to take a financial loss. Creditors, by contrast, cannot collect more than they are contractually owed, and they lose the value of their investment only if the firm experiences financial distress. For these reasons, corporate governance mechanisms focus managers and directors on *shareholder* concerns. Shareholders elect the board of directors, which hires managers that—like the directors—owe fiduciary duties to the shareholders. The market for corporate control focuses on shareholder interests.

But the economic theory that justifies this model of corporate rights does not apply to public utilities.⁷ For a variety of historical and economic reasons, public utilities typically possess exclusive franchises to sell and transport electricity.⁸ They operate monopoly franchises in their service territories and are limited—and often entitled—to a set rate of return on their investments.⁹ These two features mean that ratepayers, not shareholders, receive whatever value utilities generate beyond what regulators allow the utility to deliver to its shareholders.¹⁰ When this value manifests in the form of reduced costs, whatever residual value exists beyond what shareholders are owed goes to ratepayers in the form of lower bills. When value manifests in the form of innovative products that reduce carbon emissions or increase grid reliability, it is again ratepayers who benefit in the form of cleaner air and a more reliable supply of electric energy. For these reasons, ratepayers are the residual claimants of public utility

^{6.} See, e.g. Frank H. Easterbrook & Daniel R. Fischel, The Economic Structure of Corporate Law 67-68 (1991) ("[S]hareholders are the residual claimants to the firm's income. Creditors have fixed claims, and employees generally negotiate compensation schedules in advance of performance. The gains and losses from abnormally good or bad performance are the lot of the shareholders, whose claims stand last in line . . . They therefore have the right incentives to exercise discretion."); Eugene F. Fama & Michael C. Jensen, Agency Problems and Residual Risk, 36 J.L. & Econ. 327, 328 (1983).

^{7.} See infra Part II. We note that there may be other reasons to support alternative ownership or governance structures at public utilities. See HENRY HANSMANN, THE OWNERSHIP OF ENTERPRISE 168-76 (2000) (discussing rural electricity cooperatives); GRANT M. HAYDEN & MATTHEW T. BODIE, RECONSTRUCTING THE CORPORATION: FROM SHAREHOLDER PRIMACY TO SHARED GOVERNANCE 170 (2021) (briefly suggesting that ratepayer representation may be warranted based on democratic theory grounds).

^{8.} See William Boyd & Ann E. Carlson, Accidents of Federalism: Ratemaking and Policy Innovation in Public Utility Law, 63 UCLA L. REV. 810, 836-37 (2016); Conor Harrison & Shelley Welton, The States That Opted Out: Politics, Power, and Exceptionalism in the Quest for Electricity Deregulation in the United States South, ENERGY RES. & Soc. Sci., Sept. 2021, at 1, 7-9.

^{9. 66} PA. CONST. STAT. § 1501 (1978) ("[E]very public utility may have reasonable rules and regulations governing the conditions under which it shall be required to render service."); Jersey Cent. Power & Light Co. v. FERC, 810 F.2d 1168, 1189 (D.C. Cir. 1987) (Starr, J., concurring) ("The utility business represents a compact of sorts; a monopoly on service in a particular geographical area . . . is granted to the utility in exchange for a regime of intensive regulation, including price regulation, quite alien to the free market.").

 $^{10.\}quad$ See Alfred Kahn, The Economics of Regulation 25-32, 53-54 (1970) (describing rate regulation).

companies. Utility shareholders, by contrast, are properly understood as creditors by another name. Like creditors, their losses are limited to the value of their investment while their recoveries are capped by regulatory price controls. While corporate governance mechanisms ensure that public utility companies are managed for the benefit of shareholders, it is the ratepayers who internalize the consequences of utilities' decisions.

Utilities' misaligned governance incentives contribute to the corporate misconduct and regulatory challenges that exist in wholesale power markets. Because creditor returns are capped at the value of the debt, creditors do not have an incentive to engage in risky or speculative ventures that might generate significant value. Price caps in utility industries have a similar effect, since they prevent shareholders from receiving any value above what the regulator will allow. In fact, utility shareholders arguably have even less incentive than creditors of non-utility firms to take risks, since their legal right to a monopoly means they do not need to innovate to avoid losing market share. The two characteristics of rate-regulated public utilities thus explain, at least partially, their risk aversion, their reluctance to decarbonize, and their unusual incentives to curry favor with (or bribe) their regulators.

To address these misaligned incentives, we suggest three governance reforms that would improve utility performance. First, the mechanisms of corporate governance should be modified at public utilities so that decisions are aligned with *ratepayer* interests instead of shareholder interests.¹¹ These modifications should include ratepayer representation on the board of directors, along with modifications to fiduciary duties and the business judgment rule. Second, regulators should rework governance mechanisms so that managers do not seek only to maximize financial returns to shareholders.¹² Third, regulators should quarantine utilities from other business enterprises to prevent firms from using utility franchises to subsidize their activities in non-rate-regulated industries.¹³

We recognize that the reforms we propose are difficult, if not impossible, to implement, and that they do not resolve many of the administrative and governance challenges posed by public utilities. There is reason, for example, to think that ratepayers would not be able to diligently monitor the representatives they elect to utility boards, and that ratepayers will be unable to evaluate when a would-be acquirer will generate value. It is not even clear how ratepayers and regulators would go about assessing the value of a proposed merger or acquisition, since the value of the combined enterprise is determined by rates that are set by a regulator, not the acquirer's view about cost savings and other efficiency gains. But it is also not clear when mergers should be approved or who should conduct merger review, since the price offered by the acquirer reflects the acquirer's expectations about future rates and not the firm's market value. That

^{11.} See infra Part III.A.

^{12.} See infra Part III.B.

^{3.} See infra Part III.C.

all highlights the need to tighten external regulations that narrow the scope of managerial discretion in public utilities, regardless of whether managers represent shareholders or ratepayers.

Our observations could also suggest that policymakers should reduce barriers to entry in the electric, water, and gas industries. ¹⁴ Such reforms may be desirable, but they would also require that policymakers entertain fundamental changes to these industries. That is something regulators seem disinclined to do, ¹⁵ and, in any event, the merits of restructuring involve many factors and cannot be resolved simply by observing that utility regulation leads to misaligned governance incentives. ¹⁶ We therefore assume that regulatory and scholarly interest in utility regulation is here to stay, and we suggest governance reforms that would improve utility performance within that framework.

Our analysis has practical significance given the crucial role utilities play in providing electricity and addressing climate change. But the insights we develop also have broader theoretical and practical implications. Policymakers have tolerated and even promoted monopoly power in other areas of the economy, and legal scholars are increasingly optimistic that utility regulation can solve many of the ills associated with these large concentrations of economic

^{14.} *Cf.* Harold Demsetz, *Why Regulate Utilities?*, 11 J.L. & ECON. 55, 63 (1968) (suggesting that the pathologies of monopoly and regulation could be addressed through public ownership of distribution assets and private competitive bidding to operate those assets). Greater public ownership or control would be another theoretically inviting but politically infeasible approach. *See, e.g.*, Shelley Welton, *Public Energy*, 92 N.Y.U. L. REV. 267, 272 (2016); Shelley Welton, *Rethinking Grid Governance for the Climate Change Era*, 109 CAL L. REV. 209, 272-74 (2021).

^{15.} Cf. Alexandra Klass, Joshua Macey, Shelley Welton & Hannah Wiseman, Grid Reliability Through Clean Energy, 74 STAN. L. REV. 969, 1005 (2022) ("Attempts to force institutions such as NERC and RTOs to be wholly public would face major political hurdles and might eliminate some of the nimbleness that often accompanies privatized, less bureaucratic forms of decisionmaking.").

The pros and cons of such an approach are well outside the scope of this paper. What Paul Joskow and Richard Schmalensee observed thirty-five years ago remains as true today as it was then: "Some will no doubt argue that the best way to increase the efficiency with which electricity is supplied is to deregulate the electric power industry, relying on competition rather than regulation . . . The economic effects of deregulation in this industry is uncertain and political enthusiasm for radical experiments is not great. It seems reasonable to assume that commission regulation of retail sales of electricity will continue for the foreseeable future; but it also seems likely that there will be continuing interest in reforming the regulatory process to enhance the performance of electric utilities." Paul Joskow & Richard Schmalensee, Incentive Regulation for Electric Utilities, 4 YALE J. ON REGUL, 1, 2 (1986). Still, our critique of utility governance arrangements offers reason to be skeptical of the basic structure of utility regulation, which grants a monopoly to a private company and attempts to control the resulting problems with rules on prices and investment. We agree with this skepticism, but because a comprehensive critique of utility regulation is outside the scope of this paper, we bracket that question here. We assume that utility regulation is here to stay, at least in some industries, and at least in the United States. We also assume that the critiques that have already been leveled at utility regulation will not convince scholars who defend it. But it is worth noting that one solution to the problems of utility governance is to introduce competition or turn to public ownership. Still, both competition and public ownership would raise serious issues which should not be understated. An extreme variant of our proposals, in which shareholders are completely excluded from governance as opposed to being deemphasized relative to ratepayers, would have some of the characteristics of public ownership; as noted below, there would be meaningful drawbacks to that variant. See infra Part III.A.1.

power.¹⁷ Our analysis shows that these arrangements raise difficult regulatory and governance challenges.¹⁸ How, for example, should merger review be conducted in utility industries, where the market for corporate control cannot be expected to discipline? Or should the business judgment rule apply when returns are set by regulators? More fundamentally, our analysis raises questions about how and for whose benefit economic activity should be coordinated, at least in domains where uncoordinated market transactions are inadequate.¹⁹

This Article proceeds in three parts. Part I describes corporate governance at ordinary companies and explains why the mechanisms of corporate governance are generally designed to advance the interests of shareholders instead of other groups like creditors. Part II describes public utility regulation and its effects on corporate governance. By limiting risk and reward, public utility regulation makes utility shareholders more like creditors of the enterprise, reducing their incentive to make real investments and potentially contributing to a host of scandals. Part III suggests corporate governance reforms for utilities and lays out ways that external regulation can provide useful support.

^{17.} See, e.g., MORGAN RICKS, GANESH SITARAMAN, SHELLEY WELTON & LEV MENAND, NETWORKS, PLATFORMS, AND UTILITIES 13-17, 19-21 (2022); William Boyd & Ann Carlson, Accidents of Federalism: Ratemaking and Public Policy in Public Utility Law, 63 UCLA L. REV. 810, 816 (2016) (describing utilities investments in low-carbon technologies); William Boyd, Public Utility and the Low-Carbon Future, 61 UCLA L. REV. 1614, 1616 (2014) (arguing public utilities can facilitate decarbonization); K. Sabeel Rahman, Infrastructural Regulation and the New Utilities, 35 YALE J. ON REGUL. 911, 933-36 (2018); K. Sabeel Rahman, The New Utilities: Private Power, Social Infrastructure, and the Revival of the Public Utility Concept, 39 CARDOZO L. REV. 1621, 1678 (2018).

The literature has begun to explore aspects of this problem, particularly in the context of financial regulation. See, e.g., Lev Menand & Morgan Ricks, Federal Corporate Law and the Business of Banking, 88 U. CHI. L. REV. 1361, 1383 (2021) (suggesting that unique body of federal corporate law governing national banks exists "to solve a governance problem—to establish a governmental monetary system that would be relatively immune from inflation and corruption"); Yair J. Listokin & Inho Andrew Mun, Rethinking Corporate Law During a Financial Crisis, 8 HARV. BUS, L. REV. 349, 353 (2018) ("Shareholder primacy in corporate law assumes that shareholders are the residual claimants of a corporation. But the failure of a systemically important corporation does not only harm shareholders; failure also has large negative externalities on the rest of the economy."); Andrew Verstein, The Corporate Governance of National Security, 95 WASH. U. L. REV. 775, 785 (2018) (describing the elaborate set of corporate governance arrangements imposed on defense contractors that are foreign owned, controlled, or influenced, in part because shareholders do not internalize full consequences of leaks or sabotage); John Armour & Jeffrey N. Gordon, Systemic Harms and Shareholder Value, 6 J. LEGAL ANALYSIS 35, 38-39 (2014) (proposing revisions to the corporate governance of systemically important companies because of the nondiversifiable risks that they can create); cf. Jonathan R. Macey & Maureen O'Hara, The Corporate Governance of Banks, ECON. POL'Y REV. 91, 102 ("[A] clear case can be made for bank directors being held to a broader, if not a higher, standard of care than other directors."). Related problems affect many other important areas of the economy. See, e.g., Aneil Kovvali, Essential Businesses and Shareholder Value, 2021 U. CHI. LEGAL F. 191, 196-201 (describing governance issues at firms deemed essential during the COVID-19 pandemic). And Congress arguably acted on the core insight in the context of labor, permitting unions to exercise market power, but requiring that they operate on a non-profit basis. See 15 U.S.C. § 17 (2018) (stating that labor organizations must be "instituted for the purposes of mutual help, and not having capital stock or conducted for profit"); Aneil Kovvali & Jonathan R. Macey, Toward a "Tender Offer" Market for Labor Representation, 63 B.C. L. REV. 2111, 2125 (2022) (critiquing this limitation).

^{19.} See Aneil Kovvali, Stakeholderism Silo Busting, 90 U. CHI. L. REV. 204, 250-51 (2023); Sanjukta Paul, Antitrust as Allocator of Coordination Rights, 67 UCLA L. REV. 378, 384-95 (2020).

I. Corporate Governance at Non-Utility Companies

Corporations affect and are affected by a broad range of stakeholders. They raise financial capital by collecting equity investments from shareholders and borrowing from creditors, employ managers and workers to create products and services, sell products and services to customers, and meet obligations to political communities by interacting with citizens and regulators.

According to the traditional account, shareholders have a distinctive role in this structure. The corporation has specific obligations to every other constituency: it must satisfy specifically enumerated contractual obligations to creditors, workers, customers and suppliers, and it must meet specific regulatory requirements intended to protect stakeholder groups. The corporation must meet those specific obligations, but is not required to go any further on their behalf. Shareholders collect any residual that remains after the other constituencies have received what they are owed.

This legal structure is normally traced to the vulnerabilities and difficulties that shareholders face in protecting their interests. Holders of fixed claims are in a better position to protect their investments than shareholders. As Eugene Fama and Michael Jensen have observed, "[t]he contract structures of organizations limit the risks undertaken by most agents by specifying either fixed payoffs or incentive payoffs tied to specific measures of performance." To the extent that other constituencies need additional protection, courts can read contracts

^{20.} See, e.g., EASTERBROOK & FISCHEL, supra note 6, at 67-68; Dodge v. Ford Motor Co., 170 N.W. 668, 684 (Mich. 1919) ("A business corporation is organized and carried on primarily for the profit of the stockholders."). For challenges to this approach, see, e.g., Kovvali & Strine, supra note 5; HAYDEN & BODIE, supra note 7; LYNN STOUT, THE SHAREHOLDER VALUE MYTH 2-8 (2012); Margaret M. Blair & Lynn A. Stout, A Team Production Theory of Corporate Law, 85 VA. L. REV. 247, 250-51 (1999) (arguing that "corporate assets belong not to shareholders but to the corporation itself" and that "[w]ithin the corporation, control over those assets is exercised by an internal hierarchy whose job is to coordinate the activities of the team members, allocate the resulting production, and mediate disputes among team members over that allocation").

^{21.} Eugene F. Fama & Michael C. Jensen, Agency Problems and Residual Claims, 36 J.L. & ECON. 327, 328 (1983). See also N. Am. Catholic Educ. Programming Found. v. Gheewalla, 930 A.2d 92, 100-01 (Del. 2007) (holding that creditors do not require protection from fiduciary duties because of "the protections afforded by their negotiated agreements, their security instruments, the implied covenant of good faith and fair dealing, fraudulent conveyance law, and bankruptcy law"); Douglas G. Baird & Robert K. Rasmussen, Private Debt and the Missing Lever of Corporate Governance, 154 U. PA. L. REV. 1209, 1248 (2006) ("Lenders, as we have seen, are quite capable of taking care of themselves. Rather than adding ill-defined fiduciary duties to the contracts that they write, a better course may be to ensure that such duties do not impede the exercise of contractual rights for which creditors have bargained."); Jonathan R. Macey, An Economic Analysis of the Various Rationales for Making Shareholders the Exclusive Beneficiaries of Corporate Fiduciary Duties, 21 STETSON L. REV. 23, 25 (1991) ("[F]iduciary duties are owed to residual claimants and residual claimants alone because this is the group that faces the most severe set of contracting problems with respect to defining the nature and extent of the obligations owed to them by officers and directors."). But see Jared A. Ellias & Robert J. Stark, Bankruptcy Hardball, 108 CALIF. L. REV. 745, 762-71 (2020) (arguing that creditors are unable to protect themselves through contracting because it is difficult to anticipate and preclude opportunistic conduct); Kenneth Ayotte & Christina Scully, J. Crew, Nine West, and the Complexities of Financial Distress, YALE L.J. F. 363, 365 (2021) ("Contracts drafted by the most sophisticated parties are, nevertheless, imperfect.").

broadly,²² and policymakers can impose new rules.²³ Because other constituencies protect themselves through contracts and regulations, shareholders are left with the residual.

As residual claimants, shareholders internalize the marginal impact of corporate decisions. Suppose that a public corporation with \$1 million in equity value has an opportunity to invest \$1 million in a project that has a fifty percent chance of failing and returning \$0 in value and a fifty percent chance of generating returns with a present value of \$4 million. The shareholders would prefer that the corporation make the investment. They receive the benefit from the project. Because they can diversify away risks, they can value the project risk neutrally: the project is worth \$2 million (\$2 million = 0.50×4 million + 0.50×4 million + 0.50×4 million and they do not apply a discount to account for a fear of failure or loss. Since the benefit is greater than the cost (\$1 million), they would prefer that the corporation take the risk and proceed.

By contrast, the creditors would, at best, be indifferent about the project. Creditors loan money and are contractually entitled only to repayment at a specific rate of interest. The creditors will not receive the benefit from the project, so to them it represents nothing but a risk that could potentially jeopardize the corporation's ability to pay them back. If the creditors or other groups like them are in control, the corporation will forego the valuable investment.

The argument that shareholders are the residual claimants on the corporation has been criticized.²⁵ But it is a powerful and influential justification for giving shareholders residual authority—ensuring that once explicit legal

^{22.} See Macey, supra note 21, at 25 (suggesting that courts read "employment contracts, collective bargaining agreements, bond indentures, and covenants" in a way that advances the interests of non-shareholders).

^{23.} *Id.* ("Any grievance felt by the community should be taken up with local political officials."); see also Frank H. Easterbrook, The Race for the Bottom in Corporate Governance, 95 VA. L. REV. 685, 700-01 (2009); Jill E. Fisch, Measuring Efficiency in Corporate Law: The Role of Shareholder Primacy, 31 J. CORP. L. 637, 664 (2006) ("Why do shareholders need recourse to the judicial system to address the management-shareholder conflict? A key reason is the limited power of shareholders, relative to management, with respect to legislative lawmaking."). This rationale has been sharply contested. See, e.g., Kovvali & Strine, supra note 5.

^{24.} See Dan Lovallo, Tim Koller, Robert Uhlaner & Daniel Kahneman, Your Company Is Too Risk-Averse, HARV. BUS. REV. (Mar. 2020), https://hbr.org/2020/03/your-company-is-too-risk-averse [https://perma.cc/8YTX-YDAB]("In economic theory, unless a failed investment would trigger financial distress or bankruptcy, companies should aim to be risk-neutral, because investors can diversify risk across companies."); RICHARD A. BREALY, STEWART C. MYERS & FRANKLIN ALLEN, PRINCIPLES OF CORPORATE FINANCE 645 (10th ed. 2011); EASTERBROOK & FISCHEL, supra note 6, at 99-100 ("Shareholders . . . readily diversify risk through capital markets. They want managers to take the projects with the highest mean returns, which may entail high risk.").

^{25.} See, e.g., STOUT, supra note 20, at 33-45; Lucian Arye Bebchuk & Jesse M. Fried, The Uneasy Case for the Priority of Secured Claims in Bankruptcy, 105 YALE L.J. 857, 874 (1996) (noting that shareholders may pursue inefficient "higher-risk, higher-return projects" since some of the risks would be borne by creditors). Cf. Jonathan R. Macey, An Economic Analysis of the Various Rationales for Making Shareholders the Exclusive Beneficiaries of Corporate Fiduciary Duties, 21 STETSON L. REV. 23, 24 (1991) ("The conclusion that only residual claimants deserve the benefit of fiduciary duties does not logically follow from the premise that they are the group that places the highest value on the legal protection afforded by fiduciary duties.").

obligations to other constituencies have been satisfied, corporate directors and officers make decisions for the benefit of shareholders. Although shareholders have other attractive characteristics, ²⁶ the idea that their status as residual claimants entitles them to residual authority looms large in corporate theory. All other constituencies are expected to either bargain for contractual protections ²⁷ or use the political process to obtain regulatory protections. ²⁸

Even if one rejects the theoretical justification for the shareholder primacy view, it has had an important influence on corporate law doctrine and a complex corporate governance machine has developed to ensure that officers and directors focus exclusively on shareholder interests.²⁹ The legal machinery depends on three mechanisms.

First, shareholders alone are entitled to cast votes for corporate directors.³⁰ The directors who sit on the board are charged with authority over the business and affairs of the corporation.³¹ Because the directors represent and are

For example, most shareholders hold diversified portfolios. As a result, they internalize many of the consequences of bad corporate behavior. A diversified shareholder may profit from lax environmental policies through their stake at a polluting firm, but suffer losses through their stake at a firm that is sensitive to environmental disasters. See Madison Condon, Externalities and the Common Owner, 95 WASH. L. REV. 1, 6 (2020); cf. Armour & Gordon, supra note 18 at 38-39. That effect should encourage shareholders to push the polluting firms in their portfolios to do better. The human beings whose capital is invested in shares often also experience the effects of corporate policy in their capacity as workers, as consumers, and as people who breathe air or drink water or are exposed to weather. See Leo E. Strine, Who Bleeds When the Wolves Bite? A Flesh-and-Blood Perspective on Hedge Fund Activism and Our Strange Corporate Governance System, 126 YALE L.J. 1870, 1884-85 (2017). Moreover, such human beings often invest for the long term, with the goal of saving for distant goals like retirement or a child's education. Id. at 1884. They have little reason to encourage firms to forgo investment for a quick payoff, or to attempt to juice share prices temporarily through financial shenanigans. At least in principle, these points can make shareholders a relatively attractive group to wield authority. Other groups, such as workers, may act on more parochial, short-sighted, or risk averse interests. See Jens Dammann & Horst Eidenmueller, Codetermination: A Poor Fit for U.S. Corporations, 2020 COLUM BUS L REV. 870, 932-34.

^{27.} For example, sophisticated creditors bargain for covenants that address a variety of issues bearing on their financial interest in the firm. See Tomer Stein, Debt as Corporate Governance, HASTINGS L.J. (forthcoming 2023), https://ssrn.com/abstract=4054898 [https://perma.cc/3ZZS-MSBU] (suggesting that debt covenants play an integral role in the governance of the firm); Anthony J. Casey & M. Todd Henderson, The Boundaries of 'Team' Production of Corporate Governance, 38 SEATTLE U. L. REV. 365, 368 (2015) (suggesting that firm governance emerges from a number of relationships, including bargains with creditors). By contrast, shareholders face distinctive problems in protecting their interests through contracting. Macey, supra note 21, at 36-39.

^{28.} See Jill E. Fisch, Measuring Efficiency in Corporate Law: The Role of Shareholder Primacy, 31 J. CORP. L. 637, 664 (2006) (suggesting that shareholders need protection in corporate governance because other groups have greater access to the political system); Macey, *supra* note 21, at 25, 42-43.

^{29.} See Lund & Pollman, supra note 5, at 2565 (describing the "complex governance system in the United States composed of law, institutions, and culture that orients corporate decisionmaking toward shareholders").

^{30.} See, e.g. Leo E. Strine, Jr., The Dangers of Denial: The Need for a Clear-Eyed Understanding of the Power and Accountability Structure Established by the Delaware General Corporation Law, 50 WAKE FOREST L. REV. 761, 766 (2015) ("In the corporate republic, no constituency other than stockholders is given any power.").

^{31.} DEL. CODE ANN. tit. 8, § 141(a) (2020).

electorally accountable to shareholders, directors have an incentive to further shareholder interests.³²

Second, a market for corporate control disciplines managers. Dispersed shareholders with small stakes may lack the financial capital or financial incentives to advance their interests through the electoral process. An outsider that purchases a large equity stake can position itself to advocate for changes through activism. This might entail putting up candidates for board seats that demand changes, rallying shareholders to vote against management's slate of director candidates or for a set of proposals, rallying shareholders to vote against pay packages, mounting a public pressure campaign encouraging changes, or demanding meetings with management and advocating for changes directly. ³³ Alternatively, the outsider can purchase the entire firm and enact changes itself. ³⁴ Managers are aware that if they fail to deliver adequate financial returns or otherwise fail to serve shareholder interests, an outsider could purchase control and constrain or remove them. As a result, the threat that an activist or acquirer might materialize forces managers to take the steps that an activist or acquirer would want. ³⁵

Third, officers and directors owe fiduciary duties to the corporation. In business relationships, fiduciary duties require directors and officers to put their principals' interest ahead of their own. The core imperative is to maximize the value of the corporation for the benefit of its shareholders.³⁶ The primary fiduciary duties are the duty of care, which requires the fiduciary to diligently consider and investigate how decisions affect the business; and the duty of loyalty, which requires the fiduciary to put the company's interests ahead of other interests.³⁷ In principle, a director or officer who acts disloyally or without adequate care can be held personally liable for that failure.

^{32.} There is considerable debate about whether shareholder voting meaningfully constrains managerial discretion. See, e.g. Lucian A. Bebchuk, The Myth of the Shareholder Franchise, 93 VA. L. REV. 675, 688-94 (2009) (discussing the challenges facing shareholders who wish to change the composition of boards). But courts and commentators have stressed the importance of the voting mechanism and work to defend it. See, e.g., Blasius Indus. v. Atlas Corp., 564 A.2d 651, 662 (Del. Ch. 1988) (emphasizing the "transcending significance of the franchise to the claims to legitimacy of our scheme of corporate governance"); Leo E. Strine, Jr., The Story of Blasius Industries v. Atlas Corp.: Keeping the Electoral Path to Takeovers Clear, in CORPORATE LAW STORIES 243 (J. Mark Ramseyer ed. 2009).

^{33.} See Strine, supra note 26, at 1902-03 (discussing activist tactics).

^{34.} For one analysis of the difference between activism and acquisitions, see Zohar Goshen & Reilly S. Steel, Barbarians Inside the Gates: Raiders, Activists, and the Risk of Mistargeting, 132 YALE L.J. 411, 416-17 (contrasting activism with acquisitions).

^{35.} According to some, the market for corporate control is itself a problematic means of disciplining management and can lead acquirers to make short-term business decisions and squeeze non-shareholder groups. See, e.g. Mark R. DesJardine & Rodolphe Durand, Disentangling the Effects of Hedge Fund Activism on Firm Financial and Social Performance, 41 STRATEGIC MGMT. J. 1054, 1054-55 (2020).

^{36.} See N. Am. Catholic Educ. Programming Found. v. Gheewalla, 930 A.2d 92, 101 (Del. 2007) ("The directors of Delaware corporations have the legal responsibility to manage the business of a corporation for the benefit of its shareholders owners.").

^{37.} See, e.g. Stone ex rel. AmSouth Bancorporation v. Ritter, 911 A.2d 362, 369-70 (Del. 2006).

In practice, courts are generally deferential to the decisions of directors and officers.³⁸ Judicial deference to the business judgment of directors and officers is justified by the desire to create shareholder value. Managers would be reluctant to make risky investments if they faced the threat of a lawsuit (and the prospect of being judged with the benefit of hindsight) if the investment failed to pay off.³⁹ As a result, courts normally insulate managers from this form of accountability, and instead primarily use it to preserve the mechanisms of voting and the market for corporate control.⁴⁰

In sum, corporate governance theory considers shareholders to be uniquely positioned to wield authority because they internalize the risks and rewards generated by corporate decisions. As a result, the mechanisms of corporate governance—voting, the market for corporate control, and fiduciary duty litigation—have been designed to empower shareholders.

^{38.} Courts are less deferential to managerial decisions when fiduciaries have acted to frustrate voting or the market for corporate control. *See Blasius*, 564 A.2d at 659-60 (holding that deferential business judgment review does not apply where directors act to frustrate shareholder voting); Unocal Corp. v. Mesa Petroleum, 493 A.2d 946, 954 (Del. 1985) (arguing that in the takeover context, "the omnipresent specter that a board may be acting primarily in its own interests" warrants additional judicial scrutiny of directors' decisions). In recent years, courts have come to rely more heavily on the voting mechanism, allowing uncoerced votes to insulate directors from litigation on other issues. *See* Corwin v. KKR Financial Holdings LLC, 125 A.3d 304 (Del. 2015); Kahn v. M & F Worldwide Corp., 88 A.3d 635 (Del. 2014). Corporations can also insulate their directors (and, due to a recent legislative change, their officers) from liability for breaches of the duty of care. *See* DEL. CODE ANN. tit. 8, § 102(b)(7) (2020).

^{39.} EASTERBROOK & FISCHEL, supra note 6, at 93-100; Einer Elhauge, Sacrificing Corporate Profits in the Public Interest, 80 N.Y.U. L. REV. 733, 776 (2005) ("[T]he optimal level of agency costs requires some tradeoff between monitoring costs and the costs of permitting agent discretion even if one assumes shareholder profitability is the only goal."); William T. Allen, Jack B. Jacobs & Leo E. Strine, Jr., Realigning the Standard of Review of Director Due Care With Delaware Public Policy: A Critique of Van Gorkom and its Progeny as a Standard of Review Problem, 96 Nw. U. L. REV. 449, 449 (2002) ("If law-trained judges are permitted to make after-the-fact judgments that businesspersons have made 'unreasonable' or 'negligent' business decisions for which they must respond in monetary damages, directors may, in the future, avoid committing their companies to potentially valuable corporate opportunities that have some risk of failure."); Michael C. Jensen & William H. Meckling, Theory of the Firm: Managerial Behavior, Agency Costs and Ownership Structure, 3 J. Fin. Econ. 305 (1976).

One emerging exception to the general trend of deference to managers has been the revitalization of Caremark claims. Under In re Caremark International Inc. Derivative Litigation, directors are expected to build systems to monitor key compliance and other risks to the corporation. 698 A.2d 959, 970 (Del. Ch. 1996) ("[A] director's obligation includes a duty to attempt in good faith to assure that a corporate information and reporting system, which the board concludes is adequate, exists, and that failure to do so under some circumstances may, in theory at least, render a director liable for losses caused by non-compliance with applicable legal standards."); see also Stone v. Ritter, 911 A.2d 362, 370 (Del. 2006) ("We hold that Caremark articulates the necessary conditions predicate for director oversight liability: (a) the directors utterly failed to implement any reporting or information system or controls; or (b) having implemented such a system or controls, consciously failed to monitor or oversee its operations thus disabling themselves from being informed of risks or problems requiring their attention. In either case, imposition of liability requires a showing that the directors knew that they were not discharging their fiduciary obligations. Where directors fail to act in the face of a known duty to act, thereby demonstrating a conscious disregard for their responsibilities, they breach their duty of loyalty by failing to discharge that fiduciary obligation in good faith."). Delaware courts were once so strict with the claims as to essentially eliminate them. See Caremark, 698 A.2d, at 967 (describing the "theory here advanced" as "possibly the most difficult theory in corporation law upon which a plaintiff might hope to win a judgment"). But recently Delaware courts have allowed Caremark claims to proceed. See, e.g., Marchand v. Barnhill, 212 A.3d 805, 824 (Del. 2019); Hughes v. Hu, C.A. No. 2019-0112-JTL, 2020 WL 1987029, at *18 (Del. Ch. 2020); In re Clovis Oncology, Inc. Deriv. Litig., C.A. No. 2017-0222-JRS, 2019 WL 4850188, at *17 (Del. Ch. 2019).

II. Ratepayers, Not Shareholders, Are Utilities' Residual Claimants

While shareholders of non-utility firms typically have an incentive to pursue projects that will generate value and meet consumer demand, that is not the case with the shareholders of rate-regulated utilities. Rate regulation and protection from competition distort the incentives of public utilities' shareholders, leaving them essentially indifferent to various costs and to the benefits of innovation. As a result, it is instead ratepayers who absorb the consequences of public utilities' decisions. For that reason, ratepayers should be understood to be the residual claimants of public utilities.

A. Public Utility Regulation

At the beginning of the twentieth century, state and federal regulators turned to public utility regulation to manage large swaths of the U.S. economy. ⁴¹ In that period, federal agencies and state public utility commissions (PUCs) were created to oversee railroads, gas, electric, telecommunications, and airline companies. ⁴²

Public utility regulation differs from ordinary regulatory oversight in two respects.⁴³ First, public utilities are generally shielded from competition.⁴⁴ Prospective new entrants cannot decide to enter a market unilaterally.⁴⁵ Nor will they receive regulatory approval to enter a market simply by showing that they

^{41.} See Werner Troesken, Regime Change and Corruption: A History of Public Utility Regulation, in CORRUPTION AND REFORM: LESSONS FROM AMERICA'S ECONOMIC HISTORY 259, 259 (2006), https://www.nber.org/system/files/chapters/c9986/c9986.pdf [https://perma.cc/JS96-6CD8].

^{42.} *Id.* at 260-63; ALFRED E. KAHN, THE ECONOMICS OF REGULATION: PRINCIPLES AND INSTITUTIONS 10 (1988). For example, the Interstate Commerce Commission, which regulated railroads and later trucking, was created by the Interstate Commerce Act of 1887. Interstate Commerce Act of 1887, ch. 104, 24 Stat. 379. The Federal Power Commission, which preceded the Federal Energy Regulatory Commission, was established in 1920 and given jurisdiction over interstate gas pipelines and wholesale transactions in 1938. Federal Water Power Act, ch. 285, 41 Stat. 1063 (codified as amended at 16 U.S.C. §§ 791a-828c). The Federal Communications Commission was established by the Communications Act of 1934. Communications Act of 1934, ch. 652, 48 Stat. 1064 (codified in scattered sections of 47 U.S.C.). And the Civil Aeronautics Board was formed by the Civil Aeronautics Act of 1938. Civil Aeronautics Act of 1938, ch. 601, 52 Stat. 973

^{43.} A number of other features characterize public utility regulation. For example, historically utilities have been required to provide nondiscriminatory service and prices to their customers. Regulators have typically required utilities to file rates and services with the agency and to make those rates public. Deviations from the filed rate are prohibited.

^{44.} See KAHN, supra note 42, at 20 ("The essence of regulation is explicit replacement of competition with governmental orders as the principal institutional device for assuring good performance. The regulatory agency determines specifically who shall be permitted to serve; and when it licenses more than one supplier, it typically imposes rigid limitations on their freedom to compete."); Joseph Kearney & Thomas Merrill, The Great Transformation of Regulated Industries Law, 98 COLUM. L. REV. 1323, 1329-50 (1998).

^{45.} See William Jones, Origins of the Certificate of Public Convenience and Necessity: Developments in the States 1870-1920, 79 COLUM. L. REV. 426, 427 (1979) ("Among the powers frequently exercised by agencies regulating public service companies is control over the entry of new companies and the expansion of existing ones. In most cases, entry and expansion may not be undertaken without a certificate of public convenience and necessity."); RICKS ET AL., supra note 17, at 29 ("In some [utility] industries, the law imposes entry restrictions that limit the ability of other firms to compete with incumbent providers.").

are able to comply with all relevant licensing requirements such as environmental laws and zoning restrictions. Instead, new entry is permitted only once the regulator finds that the market can accommodate an additional supplier.⁴⁶

Second, regulators set the rates utilities are permitted to charge their customers.⁴⁷ Because utilities are protected from competition and often enjoy a legal right to a monopoly franchise, they would charge monopoly prices if they were not subject to price controls. To mitigate market power abuses, regulators impose service requirements and limit the prices utilities can charge customers.⁴⁸ These restraints amount to a limit on return on equity ("ROE").

Regulators have developed different financial techniques to calculate utility rates. The traditional approach is for regulators to determine a utility's revenue requirement in a rate case.⁴⁹ The revenue requirement is designed to allow the utility to recover its costs and earn a reasonable profit on its capital investments. PUCs examine and ultimately authorize the utility's business plan.⁵⁰ That plan describes the capital investments the utility will make to provide adequate service.⁵¹ In the case of electricity, these capital investments would consist of new generators and transmission lines the utility plans to construct to provide reliable service to its customers. It would also likely include upgrades to the existing generation units and transmission lines. The PUC allows the utility to recover its capital investments (net depreciation) and earn a return on those investments.⁵² The PUC also allows the utility to pass its day-to-day expenses onto its ratepayers (think the price of fuel) but prohibits the utility from earning a return on those expenses.

Regulations also affect payoffs from investment and innovation. The Supreme Court has held that utilities are entitled to a fair return on their investments.⁵³ Utilities that experience financial distress can challenge the authorized rate of return as a regulatory taking.⁵⁴ While utilities are not always protected from bad investments,⁵⁵ the Supreme Court has held that utilities are constitutionally entitled to a fair opportunity to recover their costs.⁵⁶ If a utility makes a risky investment that results in cost overruns or fails to get to market,

^{46.} The certificate of public convenience and necessity is the means by which regulators control entry. Regulators typically prohibit entry unless the new entrant receives a certificate of public convenience and necessity. The regulator grants a certificate only if it finds that the market can accommodate and additional supplier. *See* Jones, *supra* note 45, at 427.

^{47.} See Joskow &. Schmalensee, supra note 16, at 6.

^{48.} See KAHN, supra note 10, at 20-21.

^{49.} See id. at 28.

^{50.} See id.

^{51.} See id.

^{52.} PAUL JOSKOW & RICHARD SCHMAELENSEE, MARKETS FOR POWER: AN ANALYSIS OF UTILITY DEREGULATION 12-23 (1983).

^{53.} Smyth v. Ames, 169 U.S. 466, 469 (1898); Fed. Power Comm'n v. Hope Nat. Gas, 320 U.S. 591, 596 (1944); Duquesne Light Co. v. Barasch, 488 U.S. 299, 308 (1989); Jersey Central Power & Light Co. v. Fed. Energy Reg. Comm'n, 768 F.2d 1500, 1503 (D.C. Cir. 1985).

^{54.} See sources cited supra note 53.

^{55.} See sources cited supra note 53.

^{56.} See Jersey Central Power, 768 F.2d at 1503.

the regulator can claim that the investment was not "prudently incurred" or "used and useful." Doing so can give the regulator legal grounds for denying the rate of return. But a utility that provides electricity or water or gas at the price the regulator authorized has a legal right to recover those costs. Attempts at innovation thus expose the utility to the possibility of losses.

Utilities are also not entitled to the full upside of valuable investments.⁵⁹ When utilities make outsized profits, regulators often require that they provide refunds to their customers. While one might think utilities should be rewarded for generating value, it is difficult to implement this in practice. Utilities benefit from information asymmetries. They know more about their business than the regulators charged with overseeing them. It is of course possible for a utility to earn a large profit by adopting efficient business practices or developing innovative technologies. But it is also possible that the utility inflated its cost during its rate case,⁶⁰ or that it concealed profitable business items from its regulators,⁶¹ or that it overcharged its customers.⁶² To prevent utilities from charging excessive rates, courts and regulators typically do not permit utilities to earn "significantly excessive earnings."⁶³ When a utility's earnings are found to be too high, "it must return the excess to its customers."⁶⁴

There have been proposals to modify various features of rate regulation. At least thirteen states have adopted performance-based regulations that are intended to encourage utility companies to improve outcomes along a number of dimensions including reliability, safety, and decarbonization. It remains unclear whether regulators will be able to define and measure the relevant metrics or have the political will to actually punish utilities for failures.

^{57.} See id.

^{58.} See id.

^{59.} In re Determination of Existence of Significantly Excessive Earnings for 2017 Under the Elec. Sec. Plan of Ohio Edison Co., 162 Ohio St.3d 651, 2020-Ohio-5450.

^{60.} See id.

^{61.} See Mark Gillespie, FirstEnergy Agrees To \$306 M Refund to Ohio Customers, FOX Business (Nov. 1, 2021, 11:12 PM EDT), https://www.foxbusiness.com/energy/firstenergy-agrees-to-306m-refund-to-ohio-customers [https://perma.cc/YC45-6UST] (describing a multi-million-dollar refund in Ohio for excessive profits tied to excluding grid modernization revenue when calculating profits).

^{62.} See Zachary F. Vasile, Third-Party Electric Suppliers To Rebate Overcharges, J. INQUIRER (July 21, 2020), https://www.journalinquirer.com/business/third-party-electric-suppliers-to-rebate-overcharges/article_0422ff4a-9695-11e9-ac44-07d969a7f2d6.html [https://perma.cc/WFX2-U7V4] (describing a refund to Connecticut residents for being overbilled).

^{63.} In re Determination of Existence of Significantly Excessive Earnings for 2017 Under the Elec. Sec. Plan of Ohio Edison Co., 166 N.E.3d 1191 (Ohio 2020).

^{64.} *Id*.

^{65.} See Herman K. Trabish, Upheaval in Utility Regulation Emerging Nationally as Hawaii Proves a Performance-Based Approach, UTILITY DIVE (July 5, 2022), https://www.utilitydive.com/news/upheaval-in-utility-regulation-emerging-nationally-as-hawaii-provesa-perfo/625529/ [https://perma.cc/VWV4-VJDK].

B. Impact on Shareholder Incentives

Economists have long recognized that this regulatory model generates perverse business incentives. The overall structure encourages utilities to develop competence in political rent-seeking, as opposed to operational excellence. Utilities do not internalize benefits from cost reductions. They also face risks but do not collect full benefits when they innovate. Utilities' monopoly status and protection against losses also create a divergence between shareholders' interests and customers' interests.

1. Shareholder Returns Are Set by a Political Process

Most directly, regulators set rates, and those rates determine shareholder returns. All else equal, if a utility can convince regulators to permit a rate increase, the increase flows directly to shareholders. This creates an obvious incentive for utility companies to invest in capturing regulators.⁶⁶

This type of activity may increase shareholder returns, ⁶⁷ but it also destroys social value. The rate increase itself at best creates no value for society—it is a simple transfer of value from one group (ratepayers) to another (shareholders). Indeed, given the structure of rates, it is likely to be net negative, operating as a broad and regressive tax. The rate increase is achieved through costly activity—making contributions, hiring lobbyists and lawyers—that creates no value for society. And the behavior decouples the political process from the real interests of the citizenry, creating other costs. ⁶⁸ The shareholder incentive to support this type of behavior is thus at odds with other goals.

2. Shareholders Do Not Internalize Costs

Utilities are rewarded for making additional capital investments. If a utility is entitled to a ten percent return on equity, it will make \$10 if it incurs \$100 in costs ($$100 \times 0.1 = 10). It will earn \$100 if it incurs \$1000 in costs ($$1000 \times 0.1 = 100). Utilities are therefore rewarded for increasing—or, more cynically—inflating their rate base, at least so long as they can convince their

^{66.} See George Stigler, The Theory of Regulation, 2 BELL J. OF ECON. MGMT. 3, 4 (1971).

^{67.} But see Dorothy S. Lund & Leo E. Strine, Corporate Political Spending Is Bad Business, HARV. BUS. REV. (Jan. 2022), https://hbr.org/2022/01/corporate-political-spending-is-bad-business [https://perma.cc/UH86-Y7B8] ("Even the classic justification that corporate donations maximize shareholder wealth is on shaky ground: emerging evidence suggests that they can destroy value by suppressing innovation and distracting managers from more-pressing tasks."). Scholars have also noted that corporate political spending raises difficult questions for shareholders that existing corporate governance machinery may be ill-equipped to handle. See, e.g., Lucian A. Bebchuk & Robert J. Jackson, Jr., Corporate Political Speech: Who Decides?, 124 HARV. L. REV. 83, 84 (2010) ("[P]olitical speech decisions are substantially different from, and should not be subject to the same rules as, ordinary business decisions."); Elizabeth Pollman, Constitutionalizing Corporate Law, 69 VAND. L. REV. 639, 643 (2016).

^{68.} Contributions from public utility firms flow to politicians who support rate increases, even if they hold views that are odious.

regulators to approve the capital investments. This is known as the Averch-Johnson effect (it is colloquially known as gold plating).⁶⁹

In addition, utilities have only limited incentives to reduce their costs. A utility may be able to earn higher profits in the short term if it reduces its costs, but the benefits of doing so may be fleeting. A utility that reduces its costs discloses to regulators that it is able to provide service at a lower price.⁷⁰ That creates an incentive for regulators to lower the rates the utility can charge customers during the next rate case, since the regulator will realize that the utility was operating inefficiently.⁷¹ Thus, a decision to reduce costs now may result in lower revenues in the future.

Even when a utility is offered a premium for reducing its costs, the utility may still refuse to do so out of concern that the regulator will reduce rates in the future. Py reducing its own costs, the utility discloses to the regulator that the utility could keep costs down in the future. Shareholders' inability to capture cost reductions discourages them from making the attempt.

Shareholders also typically do not absorb operating, maintenance, and fuel expenses, as regulators generally allow utilities to pass those costs through to the consumer. Even if a utility could reduce fuel expenses, such as by transitioning from coal or natural gas to solar or wind, the shareholders would not have a direct incentive to support the effort because the shareholders do not absorb the relevant expenses. As a result, utility shareholders are indifferent to broader trends, such as the declining cost of clean technologies relative to fossil fuels, and to efforts to increase the price of fossil fuels. Of course, regulators could attempt to limit a utility's ability to pass through costs in an effort to force shareholders to internalize the impact. But the strategy would be limited by the obligation to allow the utilities to get a fair rate of return on investments.

^{69.} See Charles Needy, The Gold-Plating Controversy: A Reconciliation, S. ECON. 576, 577 (1978); Harvey Averch & Leland L. Johnson, Behavior of the Firm Under Regulatory Constraint, 52 AM. ECON. REV. 1052, 1059 (1962) ("[T]he firm has an incentive to acquire additional capital if the allowable rate of return exceeds the cost of capital.").

^{70.} See Jean-Jacques Laffont & Jean Tirole, The Dynamics of Incentive Contracts, 56 Econometrica 1153, 1155 (1988) ("The focus of this paper is the ratchet effect: an agent with a high performance today will tomorrow face a demanding incentive scheme. He should thus be reluctant to convey favorable information early in the relationship.").

^{71.} See id.

^{72.} See id.

^{73.} See id.

^{74.} See Duke Energy, Duke Energy Progress Submits Annual Update for Fuel, Renewable Energy, Energy Efficiency Program Charges in North Carolina (June 16, 2022), https://news.duke-energy.com/releases/duke-energy-progress-submits-annual-update-for-fuel-renewable-energy-efficiency-program-charges-in-north-carolina [https://perma.cc/3ZBP-AJ3G].

^{75.} See Joe Daniel, Sandra Sattler, Ashtin Massie & Mike Jacobs, Used, But How Useful? How Electric Utilities Exploit Loopholes, Forcing Customers To Bail Out Uneconomic Coal-Fired Power Plants, UNION OF CONCERNED SCIENTISTS (May 2020), https://www.ucsusa.org/sites/default/files/2020-05/Used% 20but% 20How% 20Useful% 20May% 202020.pdf [https://perma.cc/9YKE-RL94].

^{76.} See Smyth v. Ames, 171 U.S. 361, 363 (1898).

3. Shareholders Internalize Risks But Not Rewards from Innovation and Investment

Moreover, a utility that innovates will often increase the likelihood that its regulators will not authorize it to recover the costs it incurred trying to innovate. A utility might try to bring costs down by experimenting with new technologies, hiring less experienced employees, or otherwise making risky decisions. If those decisions prove costly or do not work out, the regulator may prevent the utility from recovering the costs associated with them. After all, regulators may lack the information required to distinguish between a good-faith but failed attempt at innovation and a bad-faith attempt at gold plating through expenditures on doomed experiments.⁷⁷ This agency problem, which affects the relationship between *shareholders* and managers at ordinary companies, affects the relationship between *ratepayers* (and their representatives at regulators) and managers at public utilities.

And if innovative investments *do* work out, the regulator may deny shareholders the benefits. Regulators are suspicious of high profits, as they may lack the information required to distinguish between successful innovation and successful deception. If a public utility is delivering outsized profits to its shareholders, it may mean that the utility had previously inflated costs, hidden profits, or overcharged. As a result, regulators are likely to respond by lowering rate caps.

Utility shareholders thus have a number of reasons to be risk averse. They receive a return that is calculated based on a regulatory assessment of their costs. If a regulator or court determines that a utility has earned "excessive" profits, it can order the utility to rebate its customers. As a result, even when utilities do innovate, their shareholders capture only a fraction of the value generated from the innovation. Entry restrictions further reduce utilities appetite for risk, since they eliminate the need for utilities to protect their market share by offering cheaper or better-quality products than potential rivals. For those reasons, utilities' shareholders may rationally prefer a steady profit to a risky venture, even one expected to result in a higher profit, that could result in significant losses.

Of course, regulators can try to increase utilities' incentives to reduce costs by increasing the rate of permissible utility profits if the utility manages to

^{77.} This may be a particular concern in the environmental context, where advances will often depend on new technologies. The resulting "green plating," in which firms run up compensable costs and justify the activity with specious environmental arguments, may also be exacerbated by "greenwashing," in which polluting firms whitewash their activities by taking trivial environmentally friendly steps then marketing them heavily.

^{78.} See In re Determination of Existence of Significantly Excessive Earnings for 2017 Under the Elec. Sec. Plan of Ohio Edison Co., 166 N.E.3d 1191, 1195 (Ohio 2020) ("If the commission finds that the [electric security plan] resulted in 'significantly excessive earnings' compared to similar companies, the utility must return the excess to its customers.").

innovate,⁷⁹ but so long as there is a cap on public utilities' ROE, any value that the utility generates beyond that is remitted to the company's ratepayers. Regulators' decisions to increase or decrease the return utility shareholders receive based on utilities' performance thus does not mean that utility shareholders become residual claimants. It instead simply ties compensation to specific measures of performance. Capping utilities' ROE still ensures that under any form of rate regulation, it is ratepayers—not shareholders—that are entitled to whatever value remains after the utility pays its fixed claimants, which includes its shareholders.

Various ratemaking strategies might induce shareholders to make valuable investments despite the cap on ROE. But their actual effects seem to be limited, and none of these strategies changes the basic fact that shareholders are fixed claimants and ratepayers are the residual claimants of public utilities. The Supreme Court has repeatedly held that utilities that possess exclusive franchises are legally entitled to recover prudent costs.⁸⁰ Excessively low or punitive revenues are regulatory takings. As a result, a utility is most likely to take a loss when it makes an investment decision that was not authorized by the regulator or that does not end up supporting its customers' needs. That is why so much litigation surrounded costs that utilities incurred building nuclear reactors that were ultimately abandoned because of cost overruns and safety concerns. But when a utility receives regulatory approval to invest in new gas- and coal- fired power plants—the types of infrastructure it has experience building and operating—there is little risk that the investments do not work out. Because external regulators lack the knowledge to distinguish between good and bad faith efforts to innovate, it is unlikely that they will be able to improve on these incentives at acceptable cost. And no matter what, so long as there is a price cap, any value the utility generates beyond its authorized ROE goes to ratepayers.

4. Shareholders Do Not Internalize Impacts on Customers

Because public utilities are monopolists, shareholders are also insulated from the economic consequences of utilities' decisions. In a competitive market, a firm has no impact on the total level of production or price level, ⁸¹ meaning that its decisions have no impact on consumer welfare. When a firm is able to monopolize a market, it can extract higher profits by constricting production and driving up prices. This increases profits but leads to a decline in consumer

^{79.} See Herman K. Trabish, Upheaval in Utility Regulation Emerging Nationally as Hawaii Proves a Performance-Based Approach, UTILITY DIVE (July 5, 2022), https://www.utilitydive.com/news/upheaval-in-utility-regulation-emerging-nationally-as-hawaii-provesa-perfo/625529/ [https://perma.cc/T9QZ-NJLF].

^{80.} See sources cited supra note 53.

^{81.} In a competitive market, prices and quantity are set by the intersection of market demand and market supply. If a firm chooses to produce less and charge higher prices, another firm will produce more and drive prices back down.

welfare and deadweight losses for society.⁸² The analysis is somewhat more complicated in the utilities space, where demand is relatively inelastic (at least in the short run) and regulators impose price controls. But a similar dynamic might lead a utility to protect the value of its investments in generation by refusing to build additional generation or transmission capacity.⁸³ In effect, the utility can use its power in one market to create power in another market.

Shareholders also face limited consequences if utilities do not make adequate investments in reliability. Even when utilities fail to provide adequate service, constitutional doctrine limits regulators' authority to force utilities to take losses for failing to meet their service obligations. So long as the utility acted reasonably, it is legally entitled to be able to levy charges sufficient to cover its costs.

Regulators can also be reluctant to impose consequences on utilities that fail to perform. As a general matter, regulators are often reluctant to impose penalties on corporations because the penalties will injure innocent stakeholders, such as customers and workers.⁸⁴ That effect is likely to be amplified in the public utilities space because public utilities are monopolists. If regulators impose costs on a public utility, or if the threat of liability to the company increases its cost of capital, the public utility is likely to defend its shareholders and push the costs onto innocent ratepayers. Whether or not regulators stay their hand in response, the result is the same: shareholders will not internalize social impacts.⁸⁵

^{82.} See Richard A. Posner, Natural Monopoly and Its Regulation, 21 STAN. L. REV. 548, 550 (1969).

^{83.} For example, it seems that Entergy, a public utility in New Orleans, is reluctant to build transmission because doing so would allow generation from other areas to sell to New Orleans, which would reduce the value of prior investments and potentially undermine Entergy's ability to justify building new gas generation facilities. Entergy has cited transmission constraints when asking for approval to build a new gas plant, despite being responsible for blocking transmission development between MISO North and MISO South. See Aneil Kovvali & Joshua C. Macey, Hidden Value Transfers in Public Utilities, 171 U. Pa. L. Rev. (forthcoming 2023) (manuscript at note 155-160 and accompanying text) (on file with authors); Joshua Macey, Why Climate Regulations Fail, 91 U. CHI. L. Rev. (forthcoming 2024) (manuscript at 48-50) (on file with authors).

^{84.} For some recent works suggesting that regulators are failing to enforce corporations' legal responsibilities adequately, *see* JOHN C. COFFEE, JR., CORPORATE CRIME AND PUNISHMENT: THE CRISIS OF UNDERENFORCEMENT (2020); JESSE EISINGER, THE CHICKENSHIT CLUB: WHY THE JUSTICE DEPARTMENT FAILS TO PROSECUTE EXECUTIVES (2017); BRANDON L. GARRETT, TOO BIG TO JAIL: HOW PROSECUTORS COMPROMISE WITH CORPORATIONS (2016); Dorothy S. Lund & Natasha Sarin, *Corporate Crime and Punishment: An Empirical Study*, 100 Tex. L. Rev. 285, 291 (2021) ("We find that larger firms tend to be recidivists; firms that offend only once are much smaller (as measured by market capitalization and number of employees) than recidivist firms. In addition, although recidivist firms bear fines that are, on average, twice the size of those borne by non-recidivist firms, these penalties are miniscule when scaled by the company's assets or employees.").

^{85.} Shareholders may also be somewhat indifferent to the risk of a fine or a disaster. Shareholders have the ability to diversify away the idiosyncratic risks at particular companies. *See* Lovallo et al., *supra* note 24 ("In economic theory, unless a failed investment would trigger financial distress or bankruptcy, companies should aim to be risk-neutral, because investors can diversify risk across companies."); BREALY, MYERS & ALLEN, *supra* note 24, at 645; EASTERBROOK & FISCHEL, *supra* note 6, at 99-100 ("Shareholders... readily diversify risk through capital markets. They want managers to take the projects with the highest mean returns, which may entail high risk.").

Regulators might try to address this problem by introducing competition, forcing utilities to service customers better to protect their market share. Even the creditors of ordinary firms have incentive to keep costs down and develop innovative products. Although creditors are not entitled to the full value generated by these investments, the possibility of losing market share to a competitor means that creditors, too, feel pressure to innovate to keep costs down and develop more attractive products. Because utilities have a legal right to a monopoly and captive customers, they are much less concerned that that their competitors will take their market share. ⁸⁶

For the reasons described above, shareholders of rate-regulated utilities do not have a claim to the company's residual value. If the utility makes an unexpectedly large profit,⁸⁷ regulators often require that the utility refund the value they generate to their customers, and, even if they permit the utility to earn high profits in the short term, they may update rates in the future to prevent the utility from earning outsize profits in the future.

Rate regulation thus transforms shareholders into fixed claimants. In a competitive market without price caps, a firm that reduces its costs takes market share from its competitors and boosts profits. Those profits go to the firm's shareholders and can be used to pay dividends or invest in additional ventures. However, because rate regulation places a limit on the profits available to shareholders of public utilities, a utility that reduces its costs creates value for its ratepayers by allowing them to receive cheaper service. Nor will the utility boost its profits—at least not significantly—by lowering its costs or innovating. It already has a monopoly, so it will not be able to increase its market share by operating more efficiently or developing higher-quality products. Moreover, the regulator has set a ceiling on the utility's profits by setting a price cap and limiting the profits the utility is legally entitled to earn. From a financial perspective, it is therefore ratepayers—not shareholders—who are the residual claimants of rate-regulated utilities.

^{86.} Of course, this is not complete. Ratepayers can go off the grid entirely or move. But those are extremely costly ways of avoiding transacting with a utility.

^{87.} See FERC Judge Says Entergy Overcharged Customers, REUTERS (Dec. 13, 2010, 8:31 PM), https://www.reuters.com/article/utilities-entergy-idCNN1323283620101214 [https://perma.cc/P93S-MA2S]; Bridget Reed Morawski, Conn. Regulator Orders Power Suppliers To Pay Back Overcharged Ratepayers, S&P GLOBAL INTEL. (Mar. 4, 2020), https://www.spglobal.com/marketintelligence/en/news-insights/latest-news-headlines/conn-regulator-orders-power-suppliers-to-pay-back-overcharged-ratepayers-57417583 [https://perma.cc/2TQY-YXYB]; Federal Decision Orders Electric Companies to Issue \$30 Million Refund, NBC CONN. (Oct. 20, 2014), https://www.nbcconnecticut.com/news/local/federal-decision-orders-electric-companies-to-issue-30-million-refund/1959782/. [https://perma.cc/VCL8-8KKR].

C. Utility Misconduct

The past decade has seen a series of high-profile scandals involving rate-regulated utilities. Electric utilities have bribed regulators to secure subsidies for coal and nuclear reactors. Regulators and courts have held that utilities were responsible for coal ash spills and wildfires that resulted in hundreds in deaths. Perhaps more prosaically but just as consequentially, public utilities have worked aggressively to block state climate policies. Policies.

This behavior is consistent with the incentives rate regulation creates for shareholders. Across the country and in a variety of regulatory environments, utilities have refused to decarbonize, and they have done so even when regulators have offered to increase their profits for reducing emissions. And when utilities have agreed to reduce emissions, they have lobbied and litigated aggressively to protect themselves against the risk that climate investments will not work out. Our argument is not that utilities will refuse to decarbonize or prepare for climate change, but that the current governance model contributes to their reluctance to do so.

1. Bribery and Rent-Seeking

Scholars have long pointed out that utility regulation can be understood as a form of corporatism that serves the interests of the utilities. In fact, utility regulation emerged in part because large railroads and energy companies recognized that utility regulation served their interests and lobbied for regulators to turn to it.⁹¹

In the past two years, electric utilities have been plagued by bribery scandals. ComEd executives are being sued for bribing Illinois regulators to

^{88.} See Stephanie Haney, Explaining the FirstEnergy Bribery Scandal as the Larry Householder Trial Continues: Legally Speaking with Stephanie Haney, WKYC (Feb. 2, 2023), https://www.wkyc.com/article/life/legally-speaking/explaining-firstenergy-bribery-scandal-larry-householder-trial-legally-speaking-ohio-politics-bribery-matt-borges-trial/95-16d119a7-510f-44bf-9b52-4c5fbab80f47 [https://perma.cc/V4VW-8FRS]; Jaclyn Diaz, An Energy Company Behind A Major Bribery Scandal In Ohio Will Pay A \$230 Million Fine, NPR (July 23, 2021, 6:20 AM ET), https://www.npr.org/2021/07/23/1019567905/an-energy-company-behind-a-major-bribery-scandal-in-ohio-will-pay-a-230-million-. [https://perma.cc/QF35-BRC6].

^{89.} See Ivan Penn, PG&E Faces Criminal Charges Over Fatal 2020 Wildfire in California, NYTIMES (Sept. 24, 2021), https://www.nytimes.com/2021/09/24/business/pge-wildfire-criminal-charges.html [https://perma.cc/D34B-GHF7]; Sonal Patel, Duke Energy Reaches \$1.1B Deal to Resolve North Carolina Coal Ash Cost Issues, POWER MAGAZINE (Jan. 28, 2021), https://www.powermag.com/duke-energy-reaches-1-1b-deal-to-resolve-north-carolina-coal-ash-cost-issues/. [https://perma.cc/KQ97-XDEE].

^{90.} See Kate Yoder, Utilities Use Customer Dollars To Pay for Their Lobbying. Here's How Lawmakers Can Stop It, GRIST (Jan. 26, 2023), https://grist.org/regulation/utilities-lobbying-corruption-climate-change-report/ [https://perma.cc/79UA-3L98].

^{91.} See RICHARD SCHMALENSEE, THE CONTROL OF NATURAL MONOPOLIES 13 (1979); George Priest, The Origins of Utility Regulation and the 'Theories of Regulation' Debate, J.L. & ECON. 289, 290 (1993).

oppose legislation designed to help low-income customers.⁹² In 2021, the Department of Justice announced that FirstEnergy paid Ohio Legislators \$64 million to secure their support for coal and nuclear subsidies.⁹³ And bribery is only the most extreme example of how utility regulation drives rent-seeking. Utilities frequently enjoy cozy relationships with their regulators. The Georgia Public Service Commission recently redrew district lines to exclude a PSC candidate who had been critical of a utility's billing practices.⁹⁴

The regulatory environment created by utility regulation gives utilities an incentive to invest in currying favor with their regulators. Companies in every industry support regulations that are in their financial interest and oppose regulations that raise their costs. But that incentive is stronger for rate-regulated utilities. In non-utility industries, companies can only charge a price that the market will bear. No matter how favorable a regulatory environment they face, if they cannot produce goods at a competitive price, they will not be able to survive. Utilities, by contrast, can charge essentially whatever price their regulators authorize, 95 and their regulators determine what is considered a reasonable profit. No matter how much a utility cuts costs or improves service, those improvements will be reflected in higher profits only if the regulator approves them.

Utilities therefore have an especially large incentive to maintain a good relationship with their regulators. If it is easier to retain regulatory favor by bribing them than providing better service, the utility may be inclined to do so.

For similar reasons, utilities have also worked to avoid decarbonizing. The Edison Electric Institute (EEI), an industry group that lobbies on behalf of the utility industry, has an annual budget of \$90 million. EEI's budget comes from utility donations, some of which amount to costs that are passed on to customers. EEI has been involved in litigation challenging state and federal

^{92.} See Jason Meisner & Ray Long, 'We've Gotta Kill It. Period.' New Details on ComEd Bribery Probe Emerge in Latest Unsealed Search Warrants, CHI. TRIB. (June 10, 2022, 5:17 PM), https://www.chicagotribune.com/news/criminal-justice/ct-michael-madigan-comed-probe-search-warrant-unsealed-20220610-zabzmxr3lfgxlbh3gjruoqifgy-story.html [https://perma.cc/79VS-7KAE].

^{93.} See Jake Zuckerman, FirstEnergy's CEO and SVP Ordered \$64 Million Bribery Scheme, Shareholders Say, ENERGY NEWS NETWORK (Mar. 24, 2022), https://energynews.us/2022/03/24/firstenergys-ceo-and-svp-ordered-64-million-bribery-scheme-shareholders-say/ [https://perma.cc/A4GH-58WZ].

^{94.} Molly Taft, *Utility-Backed Republicans May Have Gerrymandered Against One Democrat*, GIZMODO (July 7, 2022), https://gizmodo.com/georgia-public-service-commission-election-patty-durand-1849100054 [https://perma.cc/Q7L4-TBNU].

^{95.} Utilities' ability to impose prices is not completely unfettered, at least in the long run. People can conserve energy, move, or install microgrids. Demand for electricity is relatively inelastic, which means that, absent price caps and competition, utilities would have significant discretion to set prices. *See* Paul J. Burke, *The Price Elasticity of Electricity Demand in The United States: A Three-Dimensional Analysis*, 137 ENERGY POL'Y 87, 88 (2017) (finding that demand for electricity in the United States is "very inelastic").

^{96.} David Anderson, Matt Kasper & David Pomerantz, *Paying for Utility Politics: How Utility Ratepayers Are Forced to Fund the Edison Electric Institute and Other Political Organizations*, ENERGY AND POL'Y INST. 4, (May 2017) https://www.energyandpolicy.org/wp-content/uploads/2017/05/Paying-for-utility-politics-ratepayers-funding-the-Edison-Electric-Institute.pdf [https://perma.cc/5UK9-56ND].

^{97.} See id

authority to regulate climate change. Perhaps more directly, utilities themselves frequently try to convince regulators to allow them to invest in fossil generation instead of renewables.⁹⁸

In fact, even when utilities do decarbonize, they work to minimize the financial risk they face by reducing emissions. Consider Xcel Energy, which is often considered a pioneer in reducing climate emissions. ⁹⁹ Xcel has recently announced some of the country's most ambitious climate plans in Colorado and Minnesota. ¹⁰⁰ Advocates and policymakers have heralded Xcel's plans as a triumph for climate policy and as evidence that utilities can be convinced to take aggressive climate action.

But Xcel's climate plan is virtually risk-free. Xcel's announcements in Colorado and Minnesota came after years of lobbying against climate action and negotiations with their state regulators. ¹⁰¹ Xcel agreed to reduce its emissions in Colorado and Minnesota only after its regulators shielded the company's shareholders from the risk that the company might be unable to decarbonize. In Minnesota, for example, Xcel agreed to decarbonize only after the Colorado and Minnesota Commissions allowed the company to earn a return on the undepreciated plant balances in its coal and gas generators. ¹⁰² Xcel also

^{98.} See Tyler Fitch, Carbon Stranding: Climate Risk and Stranded Assets in Duke's Integrated Resource Plan, ENERGY TRANSITION INST. ii (2021), https://energytransitions.org/report%3A-carbonstranding [https://perma.cc/QF5M-JRX8] ("[T]his analysis finds that carbon stranding costs from existing and proposed investments in these Integrated Resource Plans will be \$4.8 billion, or \$900 in present-value costs for every residential Duke Energy customer in the Carolinas.").

^{99.} See Shaymus McLaughlin, 'A Bold Step': Environmental Groups Praise Xcel Energy's Plans To Close Coal Plants, Bolster Renewables, BRING ME THE NEWS (Feb. 8, 2022), https://bringmethenews.com/minnesota-news/a-bold-step-environmental-groups-praise-xcel-energys-plans-to-close-coal-plants-bolster-renewables [https://perma.cc/3SWQ-KBDD].

^{100.} See Our Energy Future, XCEL ENERGY, https://mn.my.xcelenergy.com/s/environment/our-energy-future [https://perma.cc/MZK3-EKHL].

^{101.} See Karlee Weinman, Xcel Energy Funding Climate Opposition in Minnesota, ENERGY AND POL'Y INST. (May 9, 2022), https://www.energyandpolicy.org/xcel-supports-minnesota-republicans/[https://perma.cc/536A-NVNA].

See Kiera Zitelman & Jasmine McAdams, The Role of State Utility Regulators in a Just and Reasonable Energy Transition, NAT'L ASSOC. OF REGULS. UTIL. COMM'RS 28-30 (Sept. 2021), https://pubs.naruc.org/pub/952CF0F2-1866-DAAC-99FB-0C6352BF7CB0 [https://perma.cc/PR22-43K4] (describing coal-fired power plant retirements in Colorado); id. at 30-33 (describing coal-fired power plant retirements in Minnesota); see also Xcel Energy, First Quarter 2018 Earnings Report, at 13 (Apr. 26, 2018) (describing "[e]arly retirement of 660 MWs of coal-fired generation at Comanche Units 1 (2022) and 2 (2025)" and proposing "[a]ccelerated depreciation for the early retirement of the two Comanche units and establishment of a regulatory asset to collect the incremental depreciation expense and related costs"); Xcel Energy, Current Report (Form 8-K), Exhibit 99.01, at 11 (Apr. 29, 2021) (describing accelerated depreciation proposals at Colorado coal-fired power plants). Put differently, Xcel successfully obtained a right to include the plant balances in its rate base—the capital base to which its guaranteed rate of return applied. Depreciation "refers to the periodic allocation of costs to reflect the use of tangible fixed assets such as buildings and equipment." See Energy Division, Center for Environment, Energy, and Infrastructure, Bureau for Development, Democracy, and Innovation, DEPRECIATION EXPENSES: A PRIMER FOR UTILITY REGULATORS, UNITED STATES AGENCY FOR INT'L DEV. 10 (May https://pubs.naruc.org/pub.cfm?id=6ADEB9EF-1866-DAAC-99FB-DBB28B7DF4FB [https://perma.cc/9WK7-B6P9]. Rate-regulated utilities are allowed to recover depreciation expenses in tariffs. See id. at 10-11.

convinced Minnesota regulators to authorize construction of new gas plants.¹⁰³ Thus, while Xcel will eventually retire most of its fossil resources, it will earn a profit for doing so, and, in the interim, it will increase the profits it makes from these resources. Other utilities have only agreed to decarbonizing after convincing state regulators to explicitly limit the downside risk that they face.¹⁰⁴

In other words, Xcel did not agree to decarbonize because shareholders sensed an opportunity to increase profits or faced financial pressure from competitors that would jeopardize their profits. Instead, its decarbonization commitment was the result of a series of negotiations that allowed the company to socialize the risk of its climate plan onto its captive ratepayers. Other utilities that have announced ambitious climate policies have also socialized the risks these policies create onto their ratepayers.

2. Failure to Control Costs and Reluctance to Innovate

Because public utilities are generally permitted to pass operating costs through to consumers, they have no incentive to reduce the fuel costs that they incur. This fact may help account for their reluctance to invest in clean technologies, despite the significant recent decline in the costs of clean energy. ¹⁰⁵

Public utilities are also able to claim a reasonable rate of return on their investments. Because regulators have limited ability to police the utilities' costs, the utilities have little reason to control costs on any approved project. For example, Georgia Power's Plant Vogtle nuclear project has reached \$28.5 billion in cost, more than twice the original estimate. ¹⁰⁶

Utilities have also resisted investing in low-carbon resources. It is not immediately clear why utilities would prefer to invest in fossil resources. They are entitled to an administratively determined return. If they feel that rates do not allow them to recover their costs, they can challenge them as confiscatory. From that perspective, one might think that utilities would be indifferent between fossil and clean energy investments. They want to make capital investments. They should not care if they invest in gas or solar. In fact, if decarbonization is more expensive than investing in additional fossil resources, it would seem to offer an attractive way for utilities to increase their rate bases.

^{103.} See Rod Walton, Xcel Energy Revises IRP To Include Four Gas-Fired Projects, Keep Nuclear, POWER ENGINEERING (Jun. 25, 2021), https://www.power-eng.com/emissions/xcel-energy-revises-irp-to-include-four-gas-fired-projects-keep-nuclear/ [https://perma.cc/G3EL-LCHS].

^{104.} See, e.g. Energy Transition Act, S.B. 489, 54th Leg., 1st Sess. (N.M. 2019) (providing full cost recovery for retirement of San Juan power plant); Virginia Clean Energy Economy Act, 2020 Leg., Reg. Sess. (Va. 2020) (providing increased returns for energy-efficiency programs and guaranteeing that utilities that meet the enacted climate standard will retain at least sixty-five percent of the market).

^{105.} Mike Hewett, Xcel Unveils Goal of Carbon-Neutral Gas by 2050, STARTRIBUNE (Nov. 1, 2021, 11:52 AM), https://www.startribune.com/xcel-unveils-goal-of-carbon-neutral-natural-gas-by-2050/600112044/ [https://perma.cc/7R25-MFLT].

^{106.} Jeff Amy, 'Outrageous' Price Tag: Plant Vogtle Cost Doubles to \$28.5 Billion as Other Owners Balk, AUGUSTA CHRONICLE (Nov. 4, 2021, 3:23 PM ET), https://www.augustachronicle.com/story/news/2021/11/04/georgia-power-nuclear-reactors-plant-vogtle-cost-doubles-energy-costs/6286729001/ [https://perma.cc/T3S9-UDYN].

But that does not explain the significant lengths to which utilities have gone to avoid decarbonizing. Utilities across the country have lobbied against climate regulations. ¹⁰⁷ They have pushed back against regulatory proposals to build solar and wind. They have objected to transmission plans that would connect renewables to densely populated parts of the country. And they have objected to state and federal regulations that would make it easier for storage to participate in wholesale markets.

Here, too, utilities are acting in a manner that is consistent with the incentives their corporate governance structure creates. In theory, utilities should have no preference between different capital expenses. But that indifference applies only when fossil and clean energy resources generate the same risk. Utilities' reluctance to decarbonize may reflect the fact that reducing emissions exposes utilities to the possibility that the regulator will not allow it to recover some of the costs if the utility struggles to keep costs down or maintain reliable electric service. Utilities have experience operating coal and gas units. While the costs of solar and wind are now competitive with gas, utilities do not have expertise building and operating these resources. And while studies have shown that renewables' market share can increase significantly without reducing grid reliability or increasing costs, 108 utilities do not have experience operating a grid with that resource mix. Utilities know that they will recover costs if they provide reliable power. If investing in renewables leads to cost overruns or contributes to blackouts, regulators may find that the utility did not make a prudent investment.109 Thus, the relative uncertainty associated with making major changes in utilities' operating portfolios may leave them concerned that regulators would not allow them to recover their costs if clean energy investments do not work out.

Even when regulators offer a premium to utilities that invest in carbon-free resources and energy efficiency, utilities still try to block these policies. Regulators across the country have offered utilities higher profits for investing in clean technology. Yet utilities in these states have refused to make these

^{107.} See, e.g. Mary Ellen Klas & Mario Ariza, Florida's Largest Electric Utility Conspired Against Solar Power, Documents Show, TAMPA BAY TIMES (Dec. 20, 2021), https://www.tampabay.com/news/florida-politics/2021/12/20/floridas-largest-electric-utility-conspired-against-solar-power-documents-show. [https://perma.cc/5URM-7728]; Jeff St. John, Duke Energy's solar plan questioned by North Carolina attorney general, CANARY MEDIA (Mar. 23, 2022), https://www.canarymedia.com/articles/policy-regulation/duke-energys-solar-plan-questioned-by-north-carolina-attorney-general [https://perma.cc/X9QH-HQKN]; Karlee Weinman, Xcel Energy Funding Climate Opposition in Minnesota, ENERGY AND POL'Y INST. (May 9, 2022), https://www.energyandpolicy.org/xcel-supports-minnesota-republicans/ [https://perma.cc/45XW-KDH6].

^{108.} See Jesse Jenkins, Max Luke, & Samuel Thernstrom, Getting to Zero Carbon Emissions in the Electric Power Sector, 2 JOULE 2498 (2018) (providing an overview of studies that show that increased use of renewables need not reduce reliability); Klass et al., supra note 15, at 978 (suggesting that "the perceived clash between clean energy and grid reliability" is caused by "segmentation of energy policy" and not an inherent conflict, and proposing reforms that would eliminate segmentation).

^{109.} See Duquesne Light Co. v. Barasch, 488 U.S. 299, 302 (1989) (allowing a state legislature to deny rate recovery for nuclear assets that were not "used and useful").

investments.¹¹⁰ Utilities are again acting in a manner that is consistent with the shareholders' incentives. All things equal, the utility would prefer a higher profit to a lower one. But if the utility thinks that these investments increase the risk that regulators will deny it cost recovery, it may rationally prefer a lower but more certain recovery to a higher return with an increased risk of loss. And of course, price caps that limit the utility's upside decrease their enthusiasm for innovative changes.

3. Lack of Reliability and Inattention to Consumers

Utilities' failure to invest in the transmission system has left the grid unprepared for extreme weather events. The resulting outages have badly damaged customers. According to one study, the United States faces a \$500 billion investment gap in transmission investment. This crumbling infrastructure is already contributing to reliability crises, and those reliability issues are set to worsen as climate change increases the frequency and severity of extreme weather events.

While utilities' failure to build and maintain the transmission system results from multiple economic and regulatory factors, it is worth noting that shareholders of utilities have only limited incentives to make investments to improve reliability and resilience.

Nor do utilities face a significant financial penalty for failing to prevent blackouts. Because they have exclusive franchises, dissatisfied customers cannot look for alternative providers. And if the regulator approved the transmission system that failed to provide electricity during a winter storm or summer heat wave, the utility can plausibly argue that it acted prudently. After all, the regulator charged with trying to penalize the utility for failing to maintain the transmission system was the same one that approved the utility's integrated resource plan.

In theory, utilities should be eager to build more transmission. Transmission is a large capital expense that could increase their rate bases. But utilities have no reason to build transmission until they receive regulatory approval to recover costs. A utility that makes a large investment might encounter a PUC that is skeptical of new investments designed to address reliability issues that, from the PUC's perspective, are speculative or may not manifest for years. The utility is

^{110.} See, e.g., Kevin Cross, Groups Decry Xcel Energy's Move To Slow Down Climate Action in Colorado, COLO. COAL. FOR A LIVABLE CLIMATE (Dec. 9, 2020), https://colivableclimate.org/groups-decry-xcel-energys-move-to-slow-down-climate-action-in-colorado/ [https://perma.cc/9467-EALG]; Karlee Weinmann, Xcel Energy Funding Climate Opposition in Minnesota, ENERGY AND POL'Y INST. (May 9, 2022), https://www.energyandpolicy.org/xcel-supports-minnesota-republicans/[https://perma.cc/WVN5-DCEC]; Sammy Roth, SoCalGas Shouldn't Be Using Customer Money To Undermine State Climate Goals, Critics Say, L.A. TIMES (Nov. 22, 2019, 6:00 AM PT), https://www.latimes.com/environment/story/2019-11-22/socalgas-climate-change-customer-funds. [https://perma.cc/VZZ7-LDAS].

^{111.} The shortfall in transmission investment has a number of causes, including parochial siting laws, regulations that incentivize utilities to invest in local upgrades rather than high-voltage regional lines, and a Kafkaesque interconnection process.

not assured of recovering the costs of new transmission until it receives approval to do so. The utility also has no reason to proceed with the investment unless the PUC approves the project and guarantees a return: even if a lack of investment puts the system at serious risk, it is unlikely that the utility will incur a financial penalty for failing to invest without having received regulatory approval to do so. And if the need for transmission becomes more apparent as the frequency of blackouts increases, utilities will find it easier to convince their regulators to authorize major transmission investments. While the costs of transmission investments are likely to increase over time, that is a desirable outcome from the utilities' perspective, since it will increase their rate base. The utilities' incentive is thus to wait for regulatory approval to pass transmission costs onto ratepayers.

D. Ratepayers Are Utilities' Residual Claimants

Utility shareholders enjoy the same governance rights and legal protections as shareholders of other types of firms. If a utility files for bankruptcy, its shareholders are entitled to recover only if the firm's creditors are paid in full. Shareholders elect corporate boards, and managers and board members owe fiduciary duties to those shareholders.

But the economic and theoretical justification that underlies this corporate governance regime does not apply to rate-regulated utilities. As discussed in Part I, corporate law in the United States gives shareholders special protections because they are the residual claimants of the firms in which they invest. As Frank Easterbrook and Dan Fischel have explained:

As the residual claimants, the shareholders are the group with the appropriate incentives . . . to make appropriate decisions. . . . [A]ll of the actors, except the shareholders, lack the appropriate incentives. Those with fixed claims on the income stream may receive only a tiny benefit (in increased security) from the undertaking of a new project. The shareholders receive most of the marginal gains and incur most of the marginal costs. They therefore have the right incentives to exercise discretion. ¹¹²

Fixed claimants such as creditors protect their investments through contract. Shareholders are entitled to whatever value is left over after the firm honors its fixed obligations.

Shareholders' claim to residual cash flows at ordinary companies gives them an interest in pursuing socially-valuable business ventures. If the firm develops a valuable product, the creditors do not receive the full value of the product, because their returns are capped at the interest rate on the debt. The shareholders receive whatever value the product generates beyond what is owed to creditors. But as shown above, shareholders do not internalize important impacts of public utilities' decisions.

Instead, *ratepayers* are the true residual claimants at public utilities. First, ratepayers experience consequences without mediation by regulators. Of course, regulators set the prices that are charged to ratepayers. But ratepayers also experience broader consequences, including the consequences if regulators set rates too low and drive out investment. And ratepayers in their capacity as citizens experience the full consequences of utilities meddling in the political process. A utility's shareholders might be happy to help the campaign of a politician with eccentric views on a range of issues simply because the politician will support rate increases, but it is the ratepayers who will live with the full range of the politician's eccentricities.

Second, unlike shareholders, ratepayers do internalize risks and costs, along with the impact of innovation. Shareholders do not internalize costs precisely because utilities are allowed to push the costs onto ratepayers. Utilities are permitted to recover the cost of investment, plus a reasonable rate of return, by charging ratepayers. And utilities are allowed to pass operations and maintenance expenses through to ratepayers. 113

Similarly, if a public utility develops better, cheaper, or cleaner service, ratepayers will benefit directly. At present, ratepayers do not fully internalize the risks of innovation, because regulators appear likely to refuse to cover the costs of unsuccessful attempts at improvement. But that is largely a result of shareholder control—regulators are unwilling to bear those costs because they are concerned that utilities acting on behalf of shareholders are using claims of innovation to siphon off value.

Admittedly, shareholders may be relatively good at bearing any risks associated with innovation. Because they are able to diversify their financial interests, shareholders are essentially indifferent to the idiosyncratic performance of particular companies. 114 As long as the failure of an innovative project would only affect one firm, diversified shareholders are essentially indifferent to the risk. By contrast, ratepayers have relatively little capacity to diversify away their financial exposure to the performance of the utility company that serves them. But clientele effects may limit the impact of this difference: the shareholders who choose to invest in utility companies are generally looking for safe, reliable returns from firms protected by deep regulatory moats, not rapid technological innovation. The current system of rate regulation also does little to take advantage of this attribute of shareholders, and much to squelch it.

Third, ratepayers *are* the customers, and internalize a broad range of impacts from public utility behavior. If a utility company fails to invest in

^{113.} This point extends to macroeconomic risks. If a recession causes demand for electricity to decline, a utility can petition for a rate increase to ensure that its shareholders get their promised returns. See YAIR LISTOKIN, LAW AND MACROECONOMICS 177 (2019). As a result, utility shareholders are insulated from the risk of recessions, while ratepayers are exposed.

^{114.} See supra note 85 and accompanying text; Jens Dammann & Horst Eidenmüller, supra note 26, at 932-39 (presenting evidence that U.S. firms where shareholders dominate are more willing to undertake risky attempts at innovation than German firms where power is shared with workers, and suggesting that this is partly a consequence of shareholders' unique appetite for risk).

reliability and therefore experiences outages, ratepayers experience the impact directly. If a utility company fails to invest in safe operation, triggering disasters, ¹¹⁵ ratepayers are most likely to bear the brunt of them. When customers lose power, utilities may be unable to charge people for a short period of time, but it is the customers who experience the most significant harms when they lose access to water and power. ¹¹⁶ And when public utility behavior contributes to crises like climate change, human beings like ratepayers experience the effects. Of course, shareholders also experience some of these effects, and have an interest in avoiding crises like climate change. ¹¹⁷ But the mechanisms of shareholder control do not always translate this interest into effective action. ¹¹⁸

More fundamentally, ratepayers represent a broader and often more vulnerable swathe of the population. Almost everyone uses electricity, but only relatively wealthy people own a meaningful amount of stock. Relatively wealthy people are better able to insulate themselves from disasters, including those created by climate change, and are less likely to live near a coal-fired plant that affects air quality. Ratepayers as a group are thus relatively vulnerable to the effects of climate change and air pollution, while shareholders are relatively immune.

^{115.} See Kurtis Alexander, PG&E Proposes Another Rate Hike in 2023—18%—To Boost Wildfire Safety, SAN FRANCISCO CHRON. (June 30, 2021, 5:58 PM), https://www.sfchronicle.com/bayarea/article/PG-E-proposes-another-rate-hike-in-2023-to-boost-16285643.php [https://perma.cc/44H3-V2BH].

^{116.} See Robert Bryce, Texas Ratepayers Are Being Saddled With Nearly \$38 Billion In Excess Energy Costs From Winter Storm Uri, FORBES (June 11, 2021, 10:54 AM EDT), https://www.forbes.com/sites/robertbryce/2021/06/11/texas-ratepayers-are-being-saddled-with-nearly-38-billion-in-excess-energy-costs-from-winter-storm-uri/?sh=2f0ac0976785 [https://perma.cc/4U59-Z78H].

^{117.} Strine, *supra* note 26, at 1884-85; Condon, *supra* note 26, at 6.

^{118.} A diversified shareholder may want a particular company to take steps to avoid climate change because it would avoid costs elsewhere in their portfolio, but a shareholder with a concentrated position in the company is likely to resist such measures. Shareholders with concentrated positions are likely to have a disproportionate voice in corporate decisions. *Cf.* Marcel Kahan & Edward Rock, *Systemic Stewardship with Tradeoffs*, (NYU Law & Econ. Working Paper No. 22-01, Mar. 11, 2022), https://papers.ssrn.com/abstract=3974697 [https://perma.cc/X3F5-WLBX]. *But see* Oliver Hart & Luigi Zingales, *Companies Should Maximize Shareholder Welfare Not Market Value*, 2 J.L., FIN. & ACCT. 247, 250 (2017) (observing that shareholders may be motivated to act on prosocial considerations when decisions are made through woting, even if financial considerations might cause them to take different actions when decisions are made through market transactions). In addition, the human beings whose capital is invested often do not make decisions about the use of that capital. Asset managers may act in ways that are contrary to the true interests of underlying human savers. *See* Strine, *supra* note 26, at 1873 (discussing the "separation of ownership from ownership"); DAVID WEBBER, THE RISE OF THE WORKING-CLASS SHAREHOLDER: LABOR'S LAST BEST WEAPON (2018) (urging that the voting power of pension funds be used to advance a pro-labor agenda).

^{119.} See Compare Wealth Components across Groups, FED. RESERVE (last accessed Mar. 14, 2023), https://www.federalreserve.gov/releases/z1/dataviz/dfa/compare/chart/ [https://perma.cc/4G43-NALW] (showing that corporate equities are overwhelmingly held by the wealthiest 10% of households) [https://perma.cc/K4NJ-ZCXL]; cf. LISTOKIN, supra note 113 at 179 (arguing that utility customers generally have less capacity to spend than utility shareholders).

^{120.} See Brett Israel, Coal Plants Smother Communities of Color, Scientific American (Nov. 16, 2012), https://www.scientificamerican.com/article/coal-plants-smother-communities-of-color/ [https://perma.cc/NVS9-GM73]; Power Plants and Neighboring Communities, Enviro. Protection Agency (last accessed Jan. 6, 2023), https://www.epa.gov/airmarkets/power-plants-and-neighboring-communities [https://perma.cc/ZY8E-DBP3].

As a broader slice of the population, ratepayers also experience impacts on equity more acutely than shareholders. ¹²¹ There may be some indirect impacts that ratepayers are less attuned to—for example, a dramatic increase in generation and corresponding decrease in prices might encourage a range of other businesses to enter the jurisdiction and scale up production. But ratepayers are likely to experience some of those impacts as well, as more business in the state would translate into more jobs and a bigger tax base.

But although ratepayers are the residual claimants of public utility companies, the mechanisms of corporate governance currently reinforce shareholder control. As discussed below, reforming public utilities to focus them on ratepayer interests may help address misconduct within the industry.

III. Proposed Reforms

Assuming regulators lack the inclination or ability to restructure energy and other public utility industries, they should work to make sure that utilities are subject to a corporate law that reflects their unique pattern of incentives.

This Part proposes three sets of reforms intended to correct public utilities' incentives so that they are run with ratepayer interests in mind. Part III.A focuses on changes to the mechanisms of corporate governance, particularly voting and fiduciary duties. Part III.B describes changes that would subject shareholder activism to increased scrutiny. Part III.C sets out reforms such as unbundling and increased stress testing that would support an overall realignment. In presenting these proposals, we do not purport to derive the optimal solution to every policy design question. Instead, we attempt to identify options available to policymakers, along with relevant considerations and experiences. We recognize, moreover, that our proposed reforms are not a panacea, and that many of the mechanisms of disciplining managers are only available in competitive markets. The unavoidable tradeoffs that are apparent in these individual solutions thus also highlight the need for strict regulatory oversight of public utilities.

A. Governance Reforms

Since ratepayers are residual claimants of utilities—they experience the marginal benefits and costs of utility decisions and thus have the appropriate incentives to make investment decisions—the corporate governance of public utilities should arguably be modified to focus on their interests instead of the interests of shareholders. ¹²² This can be done by (1) making the board of directors

^{121.} *Cf.* Lenore Palladino, *The Contribution of Shareholder Primacy to the Racial Wealth Gap*, REV. BLACK POL. ECON. (May. 2, 2022) (observing that shareholders are disproportionately wealthy and white, and suggesting that shareholder primacy systematically advances their interests to the exclusion of others).

^{122.} In offering these proposals, we presume the existence of a corporate board operating at a level that aligns with a relevant set of ratepayers. The corporate board of a holding company with subsidiaries serving Pennsylvania and New Jersey would not be an ideal site for representing either

electorally accountable to ratepayers instead of shareholders and (2) reforming fiduciary duties so that directors are not responsible to shareholders alone.

1. Representation and Voting

Typically, shareholders elect the boards of American public companies. ¹²³ This gives directors an incentive to serve shareholders' interests, since dissatisfied shareholders can vote them out of office. Altering this norm to allow ratepayer representation on the board would help ensure that corporate decisions advance ratepayers' interests.

(a) First, policymakers must decide how much representation ratepayers should receive vis-à-vis shareholders. The options range from allowing ratepayers to elect the entire board and excluding shareholders entirely, to giving ratepayers a single representative on the board. A middle course might be to give ratepayers equal representation on the board, with some mechanism to break ties. Each mechanism has benefits and drawbacks.

At one extreme, the entire board might be made up of ratepayer representatives. In effect, public utilities would become government entities, and shareholders would be the equivalent of unsecured creditors without governance rights. This is not as radical a concept as it might seem: it is at best unclear why private for-profit businesses would be better at fulfilling the role of public utilities. 124

That said, excluding shareholders from the board would create other issues. Shareholders would effectively be treated as unsecured junior creditors without governance rights. They would have some right to demand a financial return on their investment, but be last in line to recover if the company faced financial distress. They would also lack power to protect their investment by getting involved in governance or demanding that decisions be made to advance their

Pennsylvania ratepayers or New Jersey ratepayers. Instead, there should be an empowered board at each affiliate: Pennsylvania ratepayers should be represented at the Pennsylvania affiliate, and New Jersey ratepayers should be represented at the New Jersey affiliate. See infra Part III.C.1. This might also suggest that the reforms should implemented through state statutes, with each relevant state adopting its own governance regime. We view this as broadly salutary. Corporate law currently benefits from experimentation by different states. See, e.g., ROBERTA ROMANO, THE GENIUS OF AMERICAN CORPORATE LAW 1 (1993) ("The genius of American corporate law is in its federalist orientation."). Admittedly, the size of these benefits is disputed, and some of the advantageous mechanisms would be absent here—the Pennsylvania affiliate would be required to charter in Pennsylvania and to follow Pennsylvania's rules, eliminating the competition for charters and the generally enabling (as opposed to mandatory) character of corporate law. However, variation and experimentation across the several states would help reformers work through issues and converge on a set of best practices.

^{123.} See, e.g. Del. Code Ann. tit. 8, § 141 (2020).

^{124.} *Cf.* Klass et al., *supra* note 15, at 1005 ("Attempts to force institutions such as NERC and RTOs to be wholly public would face major political hurdles and might eliminate some of the nimbleness that often accompanies privatized, less bureaucratic forms of decisionmaking."). It is possible to imagine hybrid models. For example, the government could own physical generation or transmission facilities, and private companies could bid for the right to operate them for some specific term. The bidding process could diminish the harms of monopoly. But it could be difficult for public authorities to play their necessary role in such a system.

financial interests. Such an arrangement might cause them to demand higher rates of return, increasing the company's cost of capital.

Excluding shareholders from the board would also complicate the market for corporate control, because potential acquirers with new (and potentially superior) business ideas would be unable to buy a position in the company that would allow them to effect changes. This problem might be solved with hybrid structures, such as a supervisory board representing only ratepayers and a management board in which shareholders have some say. ¹²⁵ But such hybrid structures would entail giving shareholders some mechanism for asserting control, defeating the point of the exclusion, and might diminish the distinctive advantages that corporate governance has over external regulation. ¹²⁶

At another extreme, ratepayers might be given a single representative on the board. Although shareholders' representatives will outvote them in any dispute, the representation would not be a meaningless gesture. Groups as diverse as unions¹²⁷ and shareholder activists¹²⁸ have sought and obtained toehold representation on corporate boards. Even a single representative could serve as a whistleblower, alerting regulators or the public to problems. ¹²⁹ A single ratepayer representative also may not be powerless on the board even if the other board members can outvote them. If the representative speaks for an important constituency and is backed by a vigorous regulator with formal authority, wise shareholder representatives will take the ratepayer representative's positions seriously. ¹³⁰

Another alternative is to strike a middle course between the extremes of total ratepayer representation and toehold representation. At large German firms practicing codetermination, shareholders elect half the supervisory board while

^{125.} This would not be an unprecedented innovation. Large German firms have a two-tiered board structure. Workers and shareholders enjoy representation rights on the higher supervisory board (*Aufsichtsrat*), while the company's top officers sit on the lower management board (*Vorstand*). See Leo E. Strine, Jr., Aneil Kovvali & Oluwatomi Williams, Lifting Labor's Voice: A Principled Path Toward Greater Worker Voice and Power Within American Corporate Governance, 106 MINN. L. REV. 1325, 1353-54 (2022)

^{126.} If ratepayers are only represented on a supervisory board while shareholders enjoy representation on a management board, the ratepayers' body would be operating at a remove from the site where corporate decisions are made and corporate information is shared. It is not clear that this would be an improvement on the present system, in which ratepayers are represented by an external regulator and shareholders are represented on a corporate board.

^{127.} A high-profile early example was the election of United Auto Workers President Douglas A. Fraser to the board of Chrysler Corp. in 1980 as part of a deal that included substantial union concessions to the company. See James L. Rowe, Chrysler Elects Douglas Fraser Board Member, WASH. POST (May 14, 1980), https://www.washingtonpost.com/archive/business/1980/05/14/chrysler-elects-douglas-fraser-board-member/3dbebebc-2662-4577-8039-ccfc7b1054a4/ [https://perma.cc/UW2P-MNNF].

^{128.} For an example in the energy space, see FirstEnergy, FirstEnergy Announces Agreement with Icahn Capital, FIRSTENERGY (Mar. 16, 2021), https://firstenergycorp.com/newsroom/news_articles/firstenergy-announces-agreement-with-icahn-capital.html [https://perma.cc/JRP6-2FJW] (describing an agreement allowing shareholder activist Icahn Capital to appoint 2 of 14 members to FirstEnergy's board of directors).

^{129.} But see infra note 141 and accompanying text (discussing the duty of confidentiality).

^{130.} *Cf.* Strine, Kovvali & Williams, *supra* note 125, at 1343 (worker representatives on the board of directors are important because of the other rights given to workers within the organization).

workers elect the other half.¹³¹ Ties are broken by the chair of the board, who represents shareholders.¹³² This structure gives workers a meaningful voice on the board, without compromising the essentially for-profit nature of the enterprise.

(b) Second, policymakers must determine how ratepayers' representatives would be appointed. Again, a range of approaches is possible. The most natural routes would be a direct election by ratepayers and appointment by existing public officials.

Ratepayers might elect their own representatives directly. ¹³³ Ratepayers' representatives might also be appointed by government officials. For example, members of the Electric Reliability Council of Texas's board are appointed by a board selection committee, which in turn is appointed by high officials in the state executive and legislature. ¹³⁴ The two basic approaches have familiar problems. Both processes may be subject to industry capture: voters may be uninformed or uninterested, ¹³⁵ and government officials may view the roles as sinecures ripe for patronage appointments. A related set of questions concerns the term of the appointments. While a relatively short term might enhance the board members' accountability, it would be appropriate to allow ratepayers' representatives to hold their office for several years to ensure that they can build up expertise, hold managers accountable for failures to meet commitments, and monitor energy projects that can easily take years to go from conception to completion. ¹³⁶

While it is possible to implement this proposal in a variety of ways, it seems that ratepayer representatives should be appointed by a different process than the process used to appoint members of regulatory agencies. Varying the mechanism (direct elections versus appointment by public officials), the geographic scope of

^{131.} Id. at 1343 & nn. 69-70.

^{132.} *Id*.

^{133.} Within this possibility, there are a variety of design choices. Representatives might represent geographic districts. It might also be sensible to have particular representatives for particular groups: among other things, retail and industrial customers are likely to have different needs, incentives, capacity to opt-out, and capacity to hedge or insure against disruptions.

Policymakers might also consider giving different ratepayers a different number of votes, based on their total energy consumption; this would be comparable to the fact that shareholders generally cast votes in proportion to their economic stake in a firm. See EASTERBROOK & FISCHEL, supra note 6 at 73 (suggesting that "each element of the residual interest" ought to carry "an equal voting right"); Benrard Black & Reinier Kraakman, A Self-Enforcing Model of Corporate Law, 109 HARV. L. REV. 1911, 1945-46 (1996) (arguing that "one share, one vote" systems "match economic incentives with voting power"). While worth considering, this type of weighting might bias results to favor lower prices to the exclusion of all other values.

^{134.} See Public Utility Commission of Texas, Selection Committee Names Two New ERCOT Board Members (Dec. 1, 2021), https://www.puc.texas.gov/agency/resources/pubs/news/2021/PUCTX-REL-ERCOT_Board_Members.pdf [https://perma.cc/KT3Y-ZT3T]. ("The ERCOT Board Selection Committee members... were respectively appointed by the Governor, Lieutenant Governor, and Speaker").

^{135.} Voting mechanisms can also be subject to manipulation through gerrymandering or opaque procedures. *See* Taft, *supra* note 94.

^{136.} *Cf.* Strine, Kovvali & Williams, *supra* note 125, at 1383 (proposing that worker representatives in a codetermination system should have "terms of no less than three years").

districts, or the timing of the appointments might make it more difficult to fully capture both the external regulator and the internal ratepayer representatives. This should make it more likely that public-regarding results are obtained, and that someone in authority is positioned to alert the public of any wrongdoing.

(c) Third, policymakers should consider the role of ratepayers' representatives on the board. If they are not in the majority, rules should protect their ability to be involved on critical issues and to collect and share the information necessary to protect ratepayer interests.

If ratepayers are allowed to elect representatives, those representatives should have to be involved critical issues, such as executive compensation and major projects. Without the capacity to be involved—or at least informed and consulted—on important decisions, they will be unable to play a productive role. As discussed below, public utilities should not be permitted to use corporate funds for campaign financing or lobbying. However, in the absence of such a prohibition, ratepayers' representatives should oversee the company's political and lobbying spending. These activities—which are ultimately funded with money collected from ratepayers—can have a profound effect on the willingness and capacity of external regulators to hold public utilities in check. 137

Policymakers should also give careful thought to the ratepayers' representatives' authority to access and share information. Normally, board members have real rights to demand information from management. Perhaps similar rights should be accorded to ratepayers' representatives to ensure that they have the ability to monitor the company's performance, opportunities, and risks. Indeed, it may be sensible to expand these rights to ensure that ratepayer representatives are not dependent on management for access to high quality information and analysis. How board members normally operate under a duty of confidentiality and confidentiality policies that may be inappropriate for the

^{137.} See Mario Alejandro Ariza, Miranda Green & Annie Martin, Leaked: US Power Companies Secretly Spending Millions to Protect Profits and Fight Clean Energy, GUARDIAN (July 27, 2022, 7:00 EDT), https://www.theguardian.com/environment/2022/jul/27/leaked-us-leaked-power-companies-spending-profits-stop-clean-energy [https://perma.cc/K47J-J43Y] (describing lobbying and political activities that would be difficult to detect from outside the company).

^{138.} See Del. Code Ann. tit. 8, § 220(d) (2020).

^{139.} Current regulations do not seem to provide an adequate flow of information. For example, Washington utility company PacifiCorp has successfully fought off attempts to force it to disclose the costs it incurs by operating a fleet of coal plants, shielding it from pressure to transition to cheaper and cleaner options. See Robert Walton, Washington Judge Allows PacifiCorp to Keep Coal Study Under Wraps, UTILITYDIVE (Sept. 12, 2018), https://www.utilitydive.com/news/washington-judge-allows-pacificorp-to-keep-coal-study-under-wraps/532084/ [https://perma.cc/VWV4-VJDK].

^{140.} While this observation would have particular force in the context of ratepayer representatives essentially elected by the public, it also has some application in the context of ordinary shareholder representatives. See Kobi Kastiel & Yaron Nili, "Captured Boards": The Rise of "Super Directors" and the Case for a Board Suite, 2017 WIS. L. REV. 19, 52 (suggesting that there should be an "office of the board" to "serve as information facilitators: requesting information and collecting outside sources, receiving the information requested, editing it and providing it in a simple, clear, and efficient way to the board with a critical eye on the board's responsibilities").

ratepayers' representatives.¹⁴¹ Ratepayers' representatives need the power to share information with ratepayers, both to demonstrate that they are effectively serving ratepayers' interests and to mobilize outside forces when needed.¹⁴² One approach might be to grant them some measure of authority over the company's public disclosures, thereby allowing ratepayer representatives to bargain for any information they deem appropriate.

- (d) Fourth, the ratepayers' representatives should receive compensation and be subject to conflict-of-interest restrictions. Without meaningful compensation, the representatives are unlikely to be able to devote the time needed to develop expertise or engage in oversight. And without restrictions intended to preserve independence, the representatives will be vulnerable to capture. ¹⁴³
- (e) Finally, policymakers should consider mechanisms for ratepayers to have direct involvement in corporate governance matters. 144 Corporate law normally entrusts management of the firm to the board of directors and prevents shareholders from dictating various decisions, 145 but shareholders have the right to vote on fundamental transactions. 146 Perhaps ratepayers should have the same rights in fundamentally important decisions, such as a transformative investment. 147

We recognize, moreover, that ratepayer representatives raise significant principal-agent problems. It is not clear that ratepayers would effectively monitor their board representatives or closely scrutinize their behavior. The efficacy of

^{141.} See David A. Katz & Laura A. McIntosh, Boardroom Confidentiality Under Focus, HARV. L. SCH. F. ON CORP. GOVERNANCE (Jan. 23, 2014), https://corpgov.law.harvard.edu/2014/01/23/boardroom-confidentiality-under-focus/ [https://perma.cc/Z46U-RNNL].

^{142.} *Cf.* Strine et al. *supra* note 125, at 1379 (suggesting that in a codetermination scheme, workers' representatives on the board must be able to share some information with workers); Katz & McIntosh, *supra* note 141 (stating that a board member selected to represent a particular shareholder is generally permitted to share information with that shareholder, provided that the information does not damage the company and is not used to usurp a corporate opportunity).

^{143.} *Cf.* Matthew D. Cain, Jill E. Fisch, Sean J. Griffith & Steven Davidoff Solomon, *How Corporate Governance Is Made: The Case of the Golden Leash*, 164 U. PA. L. REV. 649, 670 (2016) (describing concern that "golden leash" compensation agreements between directors and specific shareholders may create "an incentive for the director to favor the interests of the shareholder that is paying him or her rather than the interests of all shareholders").

^{144.} While the discussion in the text focuses on voting, policymakers should consider whether ratepayers should be entitled to corporate books and records in the same way that shareholders are. *See* DEL. CODE ANN. tit. 8, § 220. Such access to information may help hold public utilities accountable, but could also entail substantial compliance costs.

^{145.} See Aronson v. Lewis, 473 A.2d 805, 811 (Del. 1985) ("A cardinal precept of the General Corporation Law of the State of Delaware is that directors, rather than shareholders, manage the business and affairs of the corporation."). Various accounts of corporate law have emphasized and sought to justify this principle. See Stephen Bainbridge, Director Primacy: The Means and Ends of Corporate Governance, 97 Nw. U. L. Rev. 547 (2003); Blair & Stout, supra note 20.

^{146.} See Del. Code Ann. tit. 8, § 251(c) (2020) (mandating shareholder votes on mergers); Del. Code Ann. tit. 8, § 271 (2020) (mandating shareholder votes on the sale of substantially all assets).

^{147.} Shareholders are also often able to submit and vote on resolutions that are taken seriously by the board. See 17 C.F.R. § 240.14a-8 (2022). Federal law also provides for shareholders to have a "say on pay," by requiring regular advisory votes on executive compensation. 17 C.F.R. § 240.14a-21 (2017); Dodd-Frank Wall Street Reform and Consumer Protection Act, Pub. L. No. 111-203,§ 951, 124 Stat. 1899 (2010) (codified as amended at 15 U.S.C. § 78n-1). Perhaps ratepayers should also be entitled to weigh in on such matters.

ratepayer monitoring is further limited by the fact that, unlike shareholders, ratepayers cannot sell stock if they disagree with board decisions. Their only recourse is the ballot box. Ratepayers thus lack some of the tools that shareholders have to supervise their representatives. That does not, however, mean that ratepayers are not residual claimants who should have governance rights. It instead implies that implementing governance reforms is more difficult in the utility context than it is in competitive markets.

2. Fiduciary Duties

In addition to voting rights, American corporate law provides shareholders further protections: managers and directors have a fiduciary duty to advance shareholder interests. ¹⁴⁸ Here, too, the logic of American corporate law suggests that the managers and directors should owe fiduciary duties to ratepayers.

A wide range of reasonable design choices are available to policymakers setting up a regime for fiduciary litigation. But one plausible approach would (a) allow ratepayers and shareholders to specify and ratify a tailored definition of corporate purpose and duties; (b) refuse to extend business judgment protection to directors' decisions; (c) impose specific *Caremark*-style duties to monitor and manage risks; (d) impose a specific obligation to prevent the siphoning of economic value away from rate-regulated utilities, whether through self-dealing or transfers to unregulated affiliates; and (e) extend deference to director decisions to use defensive tactics where they reasonably detect a threat to ratepayers' interests.

(a) First, the content of fiduciary duties must be consistent with the structure of the board. Most obviously, ratepayers' representatives should be entitled to consider ratepayer interests. If they were obligated to advance only shareholder interests, ratepayer representation would be pointless. A ratepayer-only board, in which only ratepayers are represented and shareholders are excluded, should imply a duty to advance only ratepayer interests. We discuss how such a duty would be operationalized in practice below and in the next subsection. Here, we note that as a conceptual matter, a ratepayer board would imply that efforts to advance other interests, such as by lobbying to increase rates solely to improve shareholder returns, would be actionable. By contrast, a mixed board, in which ratepayers and shareholders are represented, should imply mixed duties, under which directors are permitted to balance ratepayer and shareholder interests.

In addition to this basic requirement, a new corporate law of public utilities could permit directors to consider ratepayer interests (and shareholder interests in the case of a mixed board) when making decisions. This would allow directors to work out questions of purpose and objectives, but it likely would not be

^{148.} See, e.g. Revlon, Inc. v. MacAndrews & Forbes Holdings, Inc., 506 A.2d 173, 182 (Del. 1986); eBay Domestic Holdings, Inc. v. Newmark, 16 A.3d 1, 33 (Del. Ch. 2010) ("Promoting, protecting, or pursuing nonstockholder considerations must lead at some point to value for stockholders."). These cases are Delaware case law, not federal law, but Delaware provides the dominant approach in American corporate law.

enough to force directors and officers to advance ratepayers' interests. Several states have adopted "constituency statutes" allowing directors and officers at ordinary for-profit firms to engage in similar balancing of stakeholder interests, and it is at best unclear whether those statutes have led to improved outcomes for stakeholders other than shareholders. ¹⁴⁹ Such statutes may also exacerbate the principal-agent problem and facilitate managerial self-dealing.

Another approach would be to impose specific mandates on directors. For example, directors and officers might be instructed to minimize the present value of rates subject to environmental and reliability constraints. While potentially effective, it is not clear that this approach has real advantages over straightforward ex ante regulation that simply instructs utilities on specific steps to be taken.

A better approach might draw inspiration from the public benefit corporation. Public benefit corporations are not required by statute to advance a specific objective. Instead, public benefit corporations can include a bespoke definition of their public purpose in their charter. This approach allows for deliberation and private ordering in specifying goals, while providing a standard that directors can be held to through litigation. Similarly, the directors of a public utility might be required to announce a purpose, perhaps subject to a process of public participation, comment, comment, and ratification by ratepayers. A stronger version of this would be for PUCs to determine the utility's purpose and delineate the scope of managerial duties.

(b) Second, policymakers should consider how much deference directors and officers ought to receive when their decisions are reviewed. In principle, corporate directors and officers can be sued for breaches of their fiduciary duty. But outside of specific contexts, courts normally apply the "business judgment rule" and refuse to second-guess informed decisions by corporate directors and officers. 152

The business judgment rule has benefits as well as drawbacks. On the positive side, the rule prevents judges from micromanaging firms. ¹⁵³ It also assures directors and officers that they can make risky bets without fear that they will be sued if the bets do not pay off. ¹⁵⁴ These features create value for shareholders by encouraging their representatives to take value-creating but risky measures. On the negative side, the rule weakens the judicial mechanism for

^{149.} See Lucian A. Bebchuk & Roberto Tallarita, *The Illusory Promise of Stakeholder Governance*, 106 CORNELL L. REV. 91, 156-57 (2020) (arguing that the constituency statutes have had little impact).

^{150.} DEL. CODE ANN. tit. 8, § 362(a) (2020).

^{151.} *Id.* § 367. It is not clear that public benefit corporations have fully realized the potential of this approach. Many statements of public objectives are too vague and aspirational to be actionable. *See* Jill E. Fisch & Steven Davidoff Solomon, *The "Value" of a Public Benefit Corporation, in RESEARCH HANDBOOK ON CORPORATE PURPOSE AND PERSONHOOD 68, 82 (Elizabeth Pollman & Robert B. Thompson, eds., 2022).*

^{152.} See supra note 38 and accompanying text.

^{153.} Id.

^{154.} *Id*.

holding directors and officers accountable. As a matter of practice, if not design, the business judgment rule permits directors and officers to advance interests other than shareholder interests.¹⁵⁵ A well-counseled director or officer who makes an ordinary business decision that advances worker or environmental interests at the expense of shareholder value is likely safe from liability.¹⁵⁶ This suggests that the business judgment rule will only create value for shareholders if other mechanisms—such as electoral accountability and the market for corporate control—are in place and functioning effectively.

The business judgment rule interacts with procedural requirements. Fiduciary duties are generally owed *to the corporation* as opposed to its shareholders. As a result, shareholders often cannot sue managers or directors directly for breaches of fiduciary duty; the right to sue belongs to the corporation. Ordinarily, a corporation's managers and directors decide whether a corporation will bring a lawsuit—for example, whether to sue an important supplier or customer is a business decision that managers and directors are expected to make. Courts do recognize that the situation is different when the decision concerns suing the managers and directors themselves. But a shareholder who wants to bring a suit in the name of the corporation must still overcome high procedural hurdles before they can override the board's judgment and bring a claim. 158

These issues have direct application to public utilities. It plainly would not be helpful to tie down every decision in years-long litigation. Legal regimes that arm individuals with such rights can increase costs and delay necessary investments. Subjecting public utilities decisions to constant judicial second-guessing at the behest of any ratepayer who feels aggrieved would also make directors more risk averse. As discussed above, one problem with the current governance model at public utilities is that it encourages risk aversion and discourages investment and innovation; 160 at a minimum, the litigation regime should not make matters worse. Directors and officers should also be given space to manage potentially conflicting interests amongst ratepayers: it would be

^{155.} Elhauge, supra note 39, at 33; STOUT, supra note 20.

^{156.} See, e.g., M. Todd Henderson, Everything Old Is New Again: Lessons from Dodge v. Ford Motor Company, in CORPORATE LAW STORIES (J. Mark Ramseyer, ed., 2007) (arguing that Ford could have defended worker and customer friendly policies in shareholder value maximization terms if he had wanted to do so).

^{157.} See United Food & Commercial Workers v. Zuckerberg, 250 A.3d 862, 875 (Del. 2020) ("When a corporation suffers harm, the board of directors is the institutional actor legally empowered under Delaware law to determine what, if any, remedial action the corporation should take, including pursuing litigation against the individuals involved.").

^{158.} See, e.g., id. at 876-77; FED. R. CIV. P. 23.1(b)(3) (setting out pleading requirement in federal court).

^{159.} This problem is increasingly appreciated in the urban planning context. *See* Annie Lowrey, *NIMBYism Reaches Its Apotheosis*, ATLANTIC (Feb. 26, 2022), https://www.theatlantic.com/ideas/archive/2022/02/uc-berkeley-university-enrollment-nimby/622927/ [https://perma.cc/6YVU-ZBZB].

^{160.} See supra Part II.B.2 & II.B.3.

tremendously inefficient to litigate an issue to verdict every time that the board sides with one group of ratepayers over another. ¹⁶¹

There are a number of potential resolutions to utilities' uneasy fit in the broader corporate law framework. One approach would be to recalibrate the substance of fiduciary duties to emphasize process. Directors might be granted business judgment protection if they took adequate steps to inform themselves about potential risks¹⁶² or undertook a process to solicit ratepayer input and approval.¹⁶³ Alternatively, business judgment deference might be relaxed only with respect to certain kinds of failures, such as a failure to manage catastrophic risk or ensure reliability.¹⁶⁴

Our preferred approach would be to weaken the business judgment rule in the public utility context, but to reinforce procedural hurdles to litigation to ensure that it cannot be pursued by idiosyncratic or captured individuals. One potential hurdle could require that derivative litigation be authorized by a vote of a majority or supermajority of ratepayers. The goal of this structure would be to ensure that litigation is used to reinforce democratic deliberation and accountability. Instead of entrusting the enforcement process to public officials who may be subject to capture, or to private individuals and plaintiffs' lawyers who may seek to advance parochial instead of public goals, the approach would channel litigation to stakeholders.

The failure of the current business judgment rule to adequately protect ratepayers highlights the need for robust regulatory oversight of utility industries. While we believe that managers of public utilities should have less unilateral discretion over corporate decisions, the reality is that it will be difficult to establish a clear standard for a breach of fiduciary duty claim. And, while tweaking fiduciary duties may improve managerial performance at the margins, it could just as easily have negative consequences. If it is easier to sue boards and managers for breaching their fiduciary duties, it may become more difficult

^{161.} *Cf.* HANSMANN, *supra* note 7, at 175 (suggesting that conflicts amongst different classes of ratepayers may be extensive and interfere with effective governance).

^{162.} *Cf.* Smith v. Van Gorkom, 488 A.2d 858, 881 (Del. 1985) (faulting directors for inadequate care in analyzing takeover bid).

^{163.} *Cf.* Corwin v. KKR Financial Holdings LLC, 125 A.3d 304, 312-14 (Del. 2015) (explaining that adequate procedural steps can insulate a transaction from searching judicial review in the absence of a controlling shareholder); Kahn v. M & F Worldwide Corp., 88 A.3d 635, 644-45 (Del. 2014) (explaining that adequate procedural steps can insulate a transaction from searching judicial review in the presence of a controller).

^{164.} A robust cause of action against directors for reliability failures could help solve other problems in energy markets. It is difficult to create external market mechanisms that provide an adequate incentive to invest in reliability. Markets are incomplete and inefficient, so a shareholder will not immediately internalize the full economic value of an investment in reliability. Regulations also interfere—regulators will not tolerate companies raising rates dramatically in the aftermath of a disaster, reducing the ex ante incentive to ensure that generation and transmission capacity will continue to operate after a disaster. See Macey, supra note 83, at 15 & n.54; see also infra note 210 and accompanying text. By giving directors a personal incentive to ensure reliability, the cause of action would help reduce the impact of these problems. Admittedly, this may encourage directors to be risk averse and to overinvest in reliability. But we believe that the risk would be manageable. Ratepayer representatives would be answerable electorally to the public, and would have to explain to their constituents why an investment was worth the rate increases required to finance it.

to attract talented executives. Perhaps the most straightforward take-away is therefore that regulators should reduce managerial discretion directly by closely supervising corporate behavior and exercising strict control over utility investment decisions.

- (c) Third, corporate officers and directors should have a responsibility to set up systems that monitor for key operational risks, and to react when those systems reveal red flags. *Caremark* imposes general duties on corporate directors and officers to monitor compliance with important regulations, thus recruiting the mechanisms of corporate governance to advance social interests. ¹⁶⁵ Although *Caremark* claims had historically been difficult to bring, recent cases allowing suits to proceed suggest that the doctrine might have more teeth. ¹⁶⁶ Given the fundamental importance of public utilities, it would be worthwhile to hold directors and officers to a heightened standard in this regard. ¹⁶⁷
- (d) Fourth, directors and officers should have an obligation to prevent the siphoning of economic value from rate-regulated utilities to unregulated utilities. Ordinary corporate law seeks to control self-dealing and the tunneling of corporate assets and opportunities. These concerns again may have important implications for the utilities space. Even if holding companies are permitted to own several businesses, 169 it would be important to limit opportunities to move economic value from a regulated utility to another company. Appropriate fiduciary duties might help serve as a backstop for appropriate regulation.
- (e) Fifth, policymakers should consider how fiduciary duties interact with shareholder activism and acquisitions. Corporate law is normally somewhat skeptical of efforts by managers and directors to limit shareholder activism or acquisitions, because such efforts weaken the mechanisms that keep managers accountable to shareholders. ¹⁷⁰ But as the analysis above shows, the managers of public utilities should be less accountable to shareholders and more accountable to ratepayers. Fiduciary duties surrounding activism and acquisitions should reflect that orientation.

As explained below, shareholder activism and mergers should be viewed with suspicion in the public utilities space given the potential for harm to ratepayers. As a result, we believe that directors and officers should have broad

^{165.} See Elizabeth Pollman, Corporate Oversight and Disobedience, 72 VAND. L. REV. 2013, 2030 (2014) (arguing that Caremark duties serve a legitimating function for corporate law, ensuring that corporations do not engage in socially destructive behavior).

^{166.} See supra note 40 (discussing Caremark claims).

^{167.} At a minimum, directors and officers should supervise a system of rigorous stress testing and scenario analysis that would surface the type of problems that *Caremark* is intended to address. *See infra* Part III.C.2.

^{168.} See Zohar Goshen, The Efficiency of Controlling Corporate Self-Dealing: Theory Meets Reality, 91 CALIF. L. REV. 393, 427 (2003) (analyzing various corporate law regimes for preventing oppression of minority shareholders, including Delaware's "entire fairness" test); Ronald J. Gilson & Jeffrey N. Gordon, Controlling Controlling Shareholders, 152 U. PA. L. REV. 785 (2003) (discussing the means by which controlling shareholders can siphon off value from corporate enterprise, and doctrinal tools for dealing with them).

^{169.} See infra Part III.C.2.

^{170.} See infra notes 177 to 180 and accompanying text.

discretion to use defensive tactics like poison pills to flummox activism or acquisitions when the directors reasonably perceive a threat to ratepayers' interests.¹⁷¹ A court reviewing defensive tactics in the context of fiduciary duty litigation should be deferential and should give appropriate weight to the literature identifying dangers to ratepayers from this type of activity.

(f) Finally, the interaction between fiduciary duties and corporate lobbying should be reconsidered in the context of public utilities. Corporate law currently does relatively little to tamp down on efforts to shape political or regulatory outcomes, even where those efforts have plausibly contributed to disastrous outcomes for shareholders. For example, in *City of Birmingham Retirement and Relief System v. Good*,¹⁷² a majority of the Delaware Supreme Court rejected a shareholder suit against directors of Duke Energy alleging that the directors had breached their fiduciary duties when they allowed Duke to flout regulations by lobbying public officials, with the ultimate consequence that the company faced massive fines after a disaster that would have been prevented through compliance.

Such outcomes are questionable even within the dominant shareholder primacy paradigm. The Duke Energy leadership plainly did not serve shareholders well when they removed regulatory guardrails that would have prevented a costly disaster. ¹⁷³ More broadly, political lobbying and rent seeking are questionable business models that may distract from genuinely value-creating activities, ¹⁷⁴ and may serve as vehicles for diverting shareholder resources to cater to the whims of corporate leaders. ¹⁷⁵ As a result, the normal corporate law defense for this spending—that it is a reasonable strategy for transferring wealth from ratepayers to shareholders—has limited persuasiveness today. But it would plainly be indefensible in the context of a ratepayer primacy regime like the one that we urge here. Politicians and regulators are supposed to work for the ratepaying public, and a company oriented toward ratepayers should not use ratepayer funds to distort politicians' and regulators' decisions.

^{171.} Special deference may not be called for when directors and officers purport to be using defensive tactics to advance shareholders' interests.

^{172. 177} A.3d 47, 64 (Del. 2017).

^{173.} Then-Chief Justice Leo E. Strine filed a dissent noting that the company had faced "predictable... financial and reputational consequences" as a result of its decision to use "a strategy of political influence-seeking and cajolement to reduce the risk that the company would be called to fair account" for "flouting important laws." *Id.* at 68, 69.

^{174.} See Dorothy S. Lund & Leo E. Strine, Jr., Corporate Political Spending Is Bad Business, HARV. BUS. REV. (Jan. 2022), https://hbr.org/2022/01/corporate-political-spending-is-bad-business [https://perma.cc/H72L-XKLC] ("[T]he classic justification that corporate [political] donations maximize shareholder wealth is on shaky ground: Emerging evidence suggests that they can destroy value by suppressing innovation and distracting managers from more-pressing tasks.").

^{175.} *Id.* (arguing that "political donations are controlled by managers," and "cannot reflect the diverse preferences and views" of shareholders or other stakeholders); Lucian A. Bebchuk & Robert J. Jackson, Jr., *Corporate Political Speech: Who Decides?*, 124 HARV. L. REV. 83, 84 (2010) (noting that "the interests of directors and executives with respect to political speech decisions may diverge from those of shareholders" in non-trivial ways).

B. Reducing Shareholder Influence

Policymakers should also consider additional interventions that would further weaken the influence of certain shareholders. This is a difficult issue. On the one hand, as we explain below, there is reason to be skeptical of activist investors, since rate regulation limits the value activist shareholders can obtain by firing the board. On the other hand, utility executives and board members already have insufficient incentives to act diligently and pursue socially valuable investments, and limiting activism would further entrench the power of incumbent managers and board members. Thus, any proposed reforms likely have trade-offs, and it may be necessary to increase regulatory involvement in merger review.

Shareholder activism entails purchasing a stake in a company and advocating for changes, generally without acquiring the whole company outright. By forcing managers to attend more closely to shareholder interests despite the fact that *ratepayers* are the true residual claimants, activism could cause a reduction in investment and innovation at public utility companies and could disrupt industry structure in unhelpful ways. As a result, reforms that push back on shareholder activism could be beneficial.

There is an active debate on the value of shareholder activism at ordinary companies. Shareholder activism has been criticized as encouraging managers to unduly prioritize short term returns over long term investment, to squeeze workers and other constituencies, and to boost share prices at the expense of resilience and long-term viability.¹⁷⁷ Defenders of activism suggest that it improves efficiency and improves incentives for managers to advance shareholder interests.¹⁷⁸ This is an active debate on which a range of views are credible and reasonable.¹⁷⁹

Regardless of whether activism is a helpful force at ordinary companies, the public utilities space is different. In the public utilities space, the potential harms appear to be greater and the benefits more attenuated. While "investment-limiting interventions" by activists may play a useful role in weeding out

^{176.} See Goshen & Steel, *supra* note 34 at 416 (describing how activists seek "to push their reforms through via the proxy-voting process" after buying a "relatively small block of shares" compared to acquirers).

^{177.} See, e.g. DesJardine & Durand, supra note 35; John C. Coffee, Jr. & Darius Palia, The Wolf at the Door: The Impact of Hedge Fund Activism on Corporate Governance, 41 J. CORP. L. 545, 549 (2016) (expressing concern "that hedge fund activism is associated with a pattern involving three key changes at the target firm: (1) increased leverage, (2) increased shareholder payout (through either dividends or stock buybacks), and (3) reduced long-term investment in research and development (R&D)").

^{178.} See, e.g. Lucian A. Bebchuk, Alon Brav & Wei Jiang, The Long-Term Effects of Hedge Fund Activism, 115 COLUM. L. REV. 1085, 1089 (2015) ("We find that the empirical evidence does not support the predictions and assertions of supporters of the myopic-activists claim.").

^{179.} *Cf.* Strine,, *supra* note 26, at 1909 (suggesting "a caution flag" for "both zealots for and against hedge fund activism"); Coffee & Palia, *supra* note 177, at 549 (rejecting "either polar characterization" of activism).

wasteful projects at ordinary firms, ¹⁸⁰ a reduction in investment by public utilities can carry far more dangerous consequences, many of which will not be felt by shareholders, and many of which will not be felt within a timeframe that is likely to be priced in by securities markets. As a result, activism might generate substantial returns for those who pursue the strategy even though it causes enormous harms.

More importantly, though, public utilities' monopoly status can also change the consequences of activism. In an ordinary market, a number of firms can pursue any given project. If shareholder activism dissuades one firm from pursuing a profitable project, other firms that are more insulated from shareholder pressure should arise and pursue it.¹⁸¹ But in the public utilities space, there are no other firms. If activism dissuades the relevant utility from pursuing a project, the project simply will not be pursued. Importantly, the mere *threat* of activism can cause this harm, as managers preemptively cut investment to avoid attracting activist attention.

An activist could also coordinate positions and pricing across the public utility companies in its portfolio. ¹⁸² In principle, this type of coordination should be checked by the presence of regulators who set rates. But the regulators may rely on the conduct of other similarly-situated utilities when setting rates. If the utilities all take coordinated positions, regulators will lose the benefit of information required to set rates effectively. ¹⁸³

Admittedly, activism is unlikely to directly cause some of the distinctive harms that can come from mergers in the public utility space: for example, a merger between a rate-regulated company and an unregulated company can result in value transfers from the former to the latter, but activism at both companies is unlikely to have that effect. ¹⁸⁴ But activism can make mergers more

^{180.} Bebchuk et al., *supra* note 178, at 1138 ("There is no good theoretical basis... for presuming that activist-initiated reductions in investments are value reducing in the long term. Both financial economists and corporate-law scholars have long recognized management's tendency to avoid distributing excess cash or assets to shareholders.").

^{181.} See Zohar Goshen & Doron Levit, Irrelevance of Governance Structure, Colum. L. & Econ. Working Paper No. 603, Eur. Corp. Governance Inst., Finance Working Paper No. 606/2019 (May 13, 2020), https://papers.ssrn.com/sol3/abstract=3340912 [https://perma.cc/W6DA-HV52].

^{182.} There is a large and controversial literature examining whether common owners have this effect in other industries. *See, e.g.* Einer Elhauge, *The Causal Mechanisms of Horizontal Shareholding*, 82 OHIO ST. L.J. 1, 2 (2021) ("With common ownership, single-firm profit-maximization is compromised by the fact that the corporation is, to some extent, influenced by common shareholders who are also interested in the profits of other corporations."); Jose Azar, Martin C. Schmalz & Isabel Tecu, *Anticompetitive Effects of Common Ownership*, 73 J. FIN. 1513 (2018).

^{183.} Cf. Joshua C. Macey, Utility Mergers and the Modern (and Future) Power Grid, 42 ENERGY L.J. 237, 246 (2021) (reviewing SCOTT HEMPLING, REGULATING MERGERS AND ACQUISITIONS OF U.S. ELECTRIC UTILITIES (2020)) ("An electricity sector with many different utilities provides substantial data to regulators who want to compare utilities to each other."); SCOTT HEMPLING, REGULATING MERGERS AND ACQUISITIONS OF U.S. ELECTRIC UTILITIES 193 (2020).

^{184.} See infra Part III.C.1 (describing the harms from holding companies and proposing unbundling). Theoretically, an activist with stakes in a rate-regulated utility and a non-rate-regulated utility could push for dividends and the former while injecting capital into the latter. But because a typical activist would only own a minority stake in each, the maneuver would entail substantial leakage to other investors and public payments that regulators could readily police.

likely; activists often demand that managers explore strategic alternatives like a sale. This could be a benefit at ordinary companies. The market for corporate control is a useful mechanism for ensuring that managers advance shareholder interests, and for replacing ineffective managers at ailing targets with better managers at successful acquirers. But in the public utility space, shareholders are not the residual claimants; it is not obviously beneficial to align managers with their interests.

We should add, though, that limiting shareholder activism also has downsides. As we discussed above, utility executives are shielded from many of the tools that ordinarily check executive misconduct, and there is little evidence that public utility managers will meaningfully improve investment, innovation, or efficiency if they are left to their own devices. Reducing accountability to shareholders in isolation would thus be a suboptimal reform. Governance reforms that reduce accountability to shareholders should be combined with governance reforms that enhance accountability to ratepayers and other stakeholders, and with vigorous regulation that limits the scope of managerial discretion. And, in order to allow activists to check board misconduct, it is perhaps worth permitting activists to seek governance reforms but require regulatory approval before enacting any reforms proposed by activists. Assuming regulators have sufficient capacity and expertise and that they are not captured (these assumptions are not obviously true), they could seek to distinguish between value-enhancing activists and value-destroying activists.

Once again, public utilities' governance challenges highlight the need for strong regulatory involvement. Activism is itself problematic, since there is reason to doubt that activist investors that get involved in utilities have the correct incentives. But it seems just as problematic to further increase the job security of utility boards and management. This suggests a prosaic (and likely second-best) solution: Regulators should carefully review proposed transactions.

In the energy sector, regulators already have authority to address the potential problems created by shareholder activism. Section 203 of the Federal Power Act gives the Federal Energy Regulatory Commission authority to review transactions that effect a change in control at regulated utilities. FERC defines control functionally, acknowledging that a minority stake could be sufficient to direct management at a company. Historically, FERC has been highly

^{185.} See Audra Cohen & Tia Barancik, Shareholder Activism in the Regulated Utility Sector, HARV. L. SCH. F. ON CORP. GOVERNANCE (Apr. 2, 2022), https://corpgov.law.harvard.edu/2022/04/02/shareholder-activism-in-the-regulated-utility-sector/ [https://perma.cc/LJJ9-GA4U].

^{186.} See 16 U.S.C. § 824b (2018). State public utilities commissions also have the authority to review change of control transactions within their jurisdictions. Cohen & Barancik, *supra* note 185. For a broader theoretical view of the line between state and federal jurisdiction in the energy space, see Matthew R. Christiansen & Joshua C. Macey, *Long Live the Federal Power Act's Bright Line*, 134 HARV. L. REV. 1360 (2021).

^{187.} Enova Corp., 79 Fed. Energy Reg. Comm'n \P 61,107, at 61,142 (1997).

deferential in reviewing proposed mergers, which has led to consolidation, ¹⁸⁸ though recent FERC decisions offer some ground for optimism. ¹⁸⁹

C. Additional Reforms

A number of regulatory reforms would strengthen the corporate governance changes that we propose. While the principal function of the proposals is to make the corporate governance changes more effective, several would be worthwhile as independent reforms.

1. Unbundling

In order for ratepayer representation on a corporate board to be effective, the boundaries of the corporation would need to correspond to the relevant set of ratepayers. If a holding company serves customers across multiple jurisdictions, at a minimum the regime would have to require the existence of a subsidiary for each jurisdiction. Each subsidiary would then be required to have its own board, and to deal at arms-length with other subsidiaries and the holding company.

This reform would have value even apart from facilitating ratepayer representation. There are dangers to allowing one company to own both a regulated utility with monopoly power over a set of ratepayers and less-regulated companies that operate in competitive markets: the less-regulated companies can gain competitive advantages by pushing costs onto the captive ratepayers or siphoning value from the regulated utility. Shareholders of the holding company would have a strong incentive to undertake this maneuver. The shareholders of the holding company are the residual claimants of subsidiaries operating in competitive markets, but not of the rate-regulated subsidiaries. As a result, they will benefit from the increased investments and profits at the competitive subsidiaries, and are insulated from the pain at the rate-regulated subsidiaries.

In principle, FERC already scrutinizes financial transactions to ensure that utility companies deal with their non-utility affiliates on competitive terms. ¹⁹¹ But FERC review appears to be highly deferential. ¹⁹² A separate corporate board with a fiduciary duty to defend the interests of its particular subsidiary would

^{188.} See HEMPLING, supra note 183, at 8.

^{189.} See Evergy Kans. Central, Inc., 181 FERC ¶ 61,044, ¶¶ 44-45 (2022) (holding that an investor became an affiliate of a public utility when it appointed one of its own directors to the board of the utility, even though it and another activist together held less than 6% of the utility's shares); TransAlta Energy Mktg. (U.S.), Inc., 181 FERC ¶ 61,055, ¶ 33 (2022) (holding that investor should have sought prior approval for a change of control before purchasing shares that took its stake to 10.1% of a regulated utility, even though investor was subject to a standstill agreement).

^{190.} See Macey, supra note 183, at 246.

^{191.} See id. at 244 (citing 18 C.F.R. § 34.2(a) (2022)).

^{192.} *Id.* (citing Jones Day, *Federal Energy Regulatory Commission Regulation of Securities* (Nov. 2009), https://www.jonesday.com/en/insights/2009/11/federal-energy-regulatory-commission-regulation-of-securities [https://perma.cc/X6ZP-KZM5]).

both facilitate ratepayer representation and police the separation between affiliates.

A more complete solution would be to break up the holding companies. During the Great Depression, the federal government did exactly that. Responding to the collapse of several holding companies owning utilities, Congress enacted the Public Utilities Holding Company Act (PUHCA). 193 Under PUHCA, holding companies could only own geographically integrated utilities. Owning utility companies in neighboring geographic areas could generate genuine scale benefits without seriously compromising the ability of regulators to supervise the enterprise. By contrast, owning a collection of geographically dispersed companies subject to disparate regulatory regimes is simply a recipe for financial complexity, regulatory gamesmanship, and the concentration of unaccountable economic power. 194 PUHCA empowered the SEC to break up holding companies that did not comply with the mandate, and the SEC wielded that power to restructure the utilities industry.

Like its famous cousin, the Glass-Steagall Act, PUHCA thus reflected the New Deal regulatory strategy of breaking down the concentration of economic power and simplifying corporations with the goal of making them more manageable and easier to regulate. ¹⁹⁵ It met a similar fate, repealed shortly after Glass-Steagall as part of a wave of deregulation. ¹⁹⁶ In principle, FERC retains the ability to review mergers and acquisitions involving regulated utilities to ensure that they are in the public interest. But it has adopted a cramped and incomplete understanding of the public interest in this context. ¹⁹⁷

Reinstating PUHCA's structural mandates would enhance the ability of ratepayer-oriented boards to supervise utility companies. And requiring divestitures would not necessarily be destructive: corporate governance theory and practice has long been attentive to the benefits of simplified and focused corporate structures, and companies regularly engage in voluntary divestitures as part of their efforts to generate value. 198 Indeed, companies as diverse as General

^{193.} Ch. 687, 49 Stat. 803 (1935) (codified as amended at 15 U.S.C. §§ 79-79(z)-6), repealed by Energy Policy Act of 2005, 42 U.S.C. §§ 16451-63 (2005).

^{194.} As President Franklin Roosevelt put it, "Except where it is absolutely necessary to the continued functioning of a geographically integrated operating utility system, the utility holding company with its present powers must go... It is a corporate invention which can give a few corporate insiders unwarranted and intolerable powers over other people's money. In its destruction of local control and its substitution of absentee management, it has built up the public-utility field into what has justly been called a system of private socialism which is inimical to the welfare of a free people." Nidhi Thakar, Note, *The Urge to Merge: A Look at the Repeal of the Public Utility Holding Company Act of 1935*, 12 LEWIS & CLARK L. REV. 903, 910-11 (2008) (quoting Markian M.W. Melnyk & William S. Lamb, *PUHCA's Gone: What is Next for Holding Companies*?, 27 ENERGY L.J. 1, 5-6 (2006)).

^{195.} See Roberta S. Karmel, Is the Public Utility Holding Company Act a Model for Breaking Up the Banks That Are Too-Big-To-Fail?, 62 HASTINGS L. J. 821, 856-62 (2011) (drawing an analogy between PUHCA and efforts to regulate the structure of the financial industry).

^{196.} Id. at 857.

^{197.} See Macey, supra note 183; HEMPLING, supra note 183.

^{198.} See Rory Van Loo, In Defense of Breakups: Administering a "Radical" Remedy, 105 CORNELL L. REV. 1955 (2020).

Electric, ¹⁹⁹ Johnson & Johnson, ²⁰⁰ and Kellogg²⁰¹ have recently announced plans to break themselves up. PUHCA itself may have had a positive impact on the operations of public utilities holding companies. ²⁰² By distinguishing between geographically-integrated utilities where there are plausible scale benefits that could justify holding the company together, and other holding companies that lack such an operational justification, a PUHCA-style mandate would be consistent with sound corporate governance principles.

While break-ups would help support the project of aligning public utilities' decisions with ratepayers' interests, support could run in the opposite direction as well. There is a growing literature on common ownership urging that formally separating companies would have relatively little value if shareholders can own them all and successfully push a unified agenda at them all.²⁰³

2. Stress Tests

Regulators should also work to study and prepare for crises. Ramping up stress testing—imagining a broad range of potential disasters, simulating the

^{199.} Thomas Gryta, *General Electric to Split Into Three Public Companies*, WALL ST. J. (Nov. 9, 2021, 5:17 PM ET), https://www.wsj.com/articles/general-electric-to-split-into-three-public-companies-11636459790?mod=article_inline [https://perma.cc/2CYH-ZZSL] ("This is the best way to fully realize the potential of these businesses," [GE CEO] Culp said in an interview. The splits will bring more focus to the individual operations with separate boards having industry-specific expertise, benefitting customers and broadening the investor base.").

^{200.} Jonathan D. Rockoff, Johnson & Johnson to Split Consumer From Pharmaceutical, Medical-Device Businesses, Creating Two Companies, WALL ST. J. (Nov. 12, 2021, 11:20 AM ET), https://www.wsj.com/articles/johnson-johnson-plans-to-split-into-two-public-companies-11636715700 [https://perma.cc/4929-9BN4] ("J&J decided to make the change," Chief Executive Alex Gorsky said, "because the businesses, their customers and markets have diverged so much in recent years, including during the pandemic.").

^{201.} Annie Gasparro, *Kellogg Splitting Into Three Companies as It Shifts Focus to Global Snacks*, WALL St. J. (June 21, 2022, 6:21 PM ET), https://www.wsj.com/articles/kellogg-to-separate-into-three-businesses-11655810600 [https://perma.cc/7XMX-76V9] ("Bigness for bigness sake doesn't make a lot of strategic sense,' said Kellogg's Chief Executive Steve Cahillane.").

^{202.} See Thakar, supra note 194, at 915-16 ("Standard & Poor's and Fitch, two major credit rating agencies, both blamed the downward trend of utility ratings for merchant generators and power marketers on the partial repeal of PUHCA. In a study conducted in 2004, Standard & Poor's concluded that PUHCA may have provided some level of credit protection for bondholders by restricting investment in utilities by risky or low-rated non-utility entities that could lower a utility's credit rating. Consumer advocate group Public Citizen also notes that there were numerous bankruptices of PUHCA-exempt utilities, such as EWGs, and non-utility businesses after partial PUHCA repeal." (internal citations omitted)); Karmel, supra note 195, at 855 ("In addition to reducing the concentration of economic power in the utilities industry, the PUHCA had several beneficial effects upon investors, consumers, and utility companies. Operating companies became financially stronger and more responsive. Investors began to buy securities in public utility companies. These investments were more accurately valued. Investors began receiving previously unseen dividends and other cash payments."). But see Paul G. Mahoney, The Public Utility Pyramids, 41 J. LEGAL STUD. 37, 39 (2017) (finding that "both parents and subsidiaries reacted negatively (positively) to events favorable (unfavorable) to the abolition of holding companies," and suggesting that evasion of rate regulations was not a complete explanation).

^{203.} There is a large and controversial literature on the potentially pernicious effects of common ownership. The core concern is that the common owner will cause nominally distinct companies to behave as if they are part of a single company or cartel, thus suppressing supply and investment. See, e.g., Einer Elhauge, Horizontal Shareholding, 129 HARV. L. REV. 1267 (2016); Jose Azar, Martin C. Schmalz & Isabel Tecu, Anti-Competitive Effects of Common Ownership, 73 J. OF FIN. 1513 (2018); Zohar Goshen & Doron Levit, Common Ownership and the Decline of the American Worker, 72 DUKE L. J. 1 (2021).

utility's performance in the scenario, studying results, and making changes in response—should play an important role. Improving the design, transparency, and oversight of these exercises is important if they are to reach their full potential.²⁰⁴

Regulators should consider implementing stress tests regardless of whether our proposed corporate governance reforms are enacted. Shareholders do not internalize the full impact of crises or a lack of preparedness, and regulators lack good tools for forcing internalization. Massive penalties *ex post* would damage ratepayers in the long run, and shareholders are unlikely to respond adequately to the potential for liability.²⁰⁵ If shareholders retain unchallenged control over public utilities, policymakers must find some way to ensure that the companies take adequate steps to prepare.

But governance reforms that give ratepayers more of a say would not eliminate the need for improved stress testing. Stress tests would reinforce the governance reforms in two ways. First, the stress tests would generate important information for the board to use in discharging their risk management responsibilities. ²⁰⁶ If a stress test revealed that the utility was vulnerable to a disaster, the board could insist upon appropriate preparations—or be held liable for breach of fiduciary duty if the disaster materialized and the company was unprepared.

Second, stress tests could help sharpen relevant tradeoffs. In a well-managed system, there will be a tradeoff between improvements in cost and improvements in reliability.²⁰⁷ Building redundant facilities and hardening infrastructure costs money, and a utility will inevitably recover the cost of such investments in reliability by increasing prices.

A ratepayer-oriented board would be well-equipped to serve as a site for discussing and resolving such tradeoffs. Shareholders that simply respond to market signals will not internalize the full consequences of the decision. Their capacity to diversify away risks will also cause them to adopt a risk-neutral stance, making an investment in reliability if and only if the expected value of the benefits exceeds the expected value of the cost. That criterion may not be the right one for individual ratepayers who internalize a broader range of consequences, who are unable to diversify away risk, and who may be risk-averse and thus willing to pay for a higher level of precaution. ²⁰⁸

A ratepayer-oriented corporate board would be a useful way to identify and meet the appropriate level of precautions. From an economic perspective, the

^{204.} See, e.g. Rory Van Loo, Stress Testing Governance, 75 VAND. L. REV. 553 (2022).

^{205.} See supra notes 83 to 85 and accompanying text.

^{206.} See supra notes 165 to 167 and accompanying text.

^{207.} In a poorly designed system, there may be changes that could lower cost without damaging reliability or improve reliability without increasing costs. In a well-managed system, any such opportunities will have already been taken.

^{208.} *Cf.* Kovvali, *supra* note 18, at 205-07 & n.55.

threat of civil liability²⁰⁹ or tailored market mechanisms²¹⁰ are imperfect substitutes for internal reforms that improve the criteria that corporations use to make decisions: even if regulators saddle a company with ruinous liability after a disaster, it will not fully register with a diversified shareholder protected by limited liability.²¹¹ Shareholders considering investment decisions ex ante are unlikely to be moved by such a threat. From the perspective of democratic theory, such consequential decisions should be made by a body representing the affected public.²¹²

Stress tests would be an important mechanism for realizing these benefits because they would force and focus a conversation about reliability and the investments required to achieve it.

Conclusion

Public utilities, like ordinary firms, are run for the benefit of shareholders. As a result, shareholders of public utilities are entitled to the special rights that protect shareholders of ordinary firms. They vote to elect the board of directors, and those directors have fiduciary responsibilities to advance shareholders' interests. Corporate governance law affords shareholders these protections because, as residual claimants, shareholders are generally thought to be in the optimal position to make welfare-enhancing decisions.

But that logic does not apply to rate-regulated utilities. These firms differ from non-utility firms in two key respects: they have a legal right to a monopoly and their rates are set by regulators. As a consequence of this regulatory treatment, shareholders do not internalize the full impact of corporate decisions. Under current law, public utility companies therefore make decisions with the goal of benefitting their shareholders, but it is *ratepayers* who bear the costs and benefits of those decisions. Recognizing that ratepayers are the residual claimants in public utility industries suggests that the corporate law of public utilities should be reformed to protect the interests of ratepayers rather than shareholders. Such reforms have the potential to improve utility decisions and drive improvements in resilience and carbon emissions.

^{209.} Examples of this approach include PG&E, which has faced civil and criminal liability for its contribution to wildfires in California.

^{210.} Allowing uncapped prices during a heavy load period would encourage investments in capacity. But it can have unfortunate effects during periods of disruption. See Robert Bryce, Texas Ratepayers Are Being Saddled With Nearly \$38 Billion In Excess Energy Costs From Winter Storm Uri, Forbes (June 11, 2021, 10:54 AM EDT), https://www.forbes.com/sites/robertbryce/2021/06/11/texas-ratepayers-are-being-saddled-with-nearly-38-billion-in-excess-energy-costs-from-winter-storm-uri/?sh=1d391d486785. [https://perma.cc/6B6H-WXUK]. It may also be insufficient to ensure adequate investment if shareholders are risk-averse and risk-trading is incomplete. See Jacob Mays, Michael T. Craig, Lynne Kiesling, Joshua C. Macey, Blake Shaffer & Han Shu, Private Risk and Social Resilience in Liberalized Electricity Markets. 6 JOULE 369 (2022).

^{211.} Diversified investors are indifferent to idiosyncratic risk at particular companies, and will only support an investment if it has a positive expected value.

^{212.} Cf. HAYDEN & BODIE, supra note 7.