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## Zombie Energy Laws

Joshua C. Macey

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# Zombie Energy Laws

Joshua C. Macey\*

*This Article traces the development of three legal rules—cost recovery for vertically integrated utilities, the requirement that regulators assess the financial viability of energy projects before issuing a certificate of public convenience and necessity, and the filed rate doctrine—that emerged out of the view that electric power companies should be shielded from market forces. It argues that important elements of these legal rules have become “zombie energy laws.” Zombie energy laws are statutes, regulations, and judicial precedents that continue to apply after their underlying economic and legal bases dissipate. Zombie energy laws were originally designed to protect consumers by, among other things, preventing utilities from exploiting their market power. Today, however, they protect incumbent fossil fuel generators and have provided the legal basis for invalidating billions of dollars of wind and solar projects. Thus, energy laws that emerged to mitigate market power abuses under the old system of utility rate regulation now entrench incumbent market power and are impeding the transition to a cleaner energy system. In this way, zombie energy laws are protecting incumbent energy companies from traditional tort, contract, and antitrust laws that prevent firms operating in ordinary industries from acting anticompetitively.*

*This Article concludes by arguing that the Federal Power Act, which instructs the Federal Energy Regulatory Commission to maintain “just and reasonable” wholesale rates, can plausibly be read to mitigate—and, in some cases, eliminate—the market distortions caused by zombie energy laws. The Act’s meaning should be construed to fit the market structure to which it is being applied.*

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## INTRODUCTION

In much of the country, solar and wind generators could provide electricity more cost effectively than fossil fuel generators,<sup>1</sup> yet solar

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1. See Eric Gimon et al., *The Coal Cost Crossover: Economic Viability of Existing Coal Compared to Wind and Solar Resources*, ENERGY INNOVATION: POL’Y & TECH. LLC 2 (Mar. 2019), [https://energyinnovation.org/wp-content/uploads/2019/03/Coal-Cost-Crossover\\_Energy-Innovation\\_VCE\\_FINAL.pdf](https://energyinnovation.org/wp-content/uploads/2019/03/Coal-Cost-Crossover_Energy-Innovation_VCE_FINAL.pdf) [<https://perma.cc/2WNR-YEWZ>]:

Our research finds that in 2018, 211 gigawatts (GW) of existing (end of 2017) U.S. coal capacity, or 74 percent of the national fleet, was at risk from local wind or solar that could provide the same amount of electricity more cheaply. By 2025, at-risk coal increases to 246 GW – nearly the entire U.S. fleet;

*Levelized Cost of Electricity in the United States*, U. TEX. AUSTIN: ENERGY INST., [http://calculators.energy.utexas.edu/lcoe\\_map/#/county/tech](http://calculators.energy.utexas.edu/lcoe_map/#/county/tech) (last visited May 7, 2020)

and wind developments are routinely abandoned because they do not receive a “certificate of public convenience and necessity” to build transmission lines that would allow them to send power to the grid.<sup>2</sup> Energy markets are vulnerable to market power abuses,<sup>3</sup> yet the judicially created “filed rate doctrine” largely preempts judicial enforcement of state and federal antitrust laws.<sup>4</sup> Congress has repeatedly taken steps to encourage generators to participate in competitive markets,<sup>5</sup> yet many utilities that own both transmission and generation assets have managed to circumvent competitive markets for generations. By selling electricity at a loss and recovering these losses in state rate recovery proceedings, vertically integrated

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[<https://perma.cc/UGM8-GTPQ>] (demonstrating the relative cost effectiveness of renewable energy sources compared to fossil fuels).

2. The Application of Plains and Eastern Clean Line LLC for a Certificate of Public Convenience and Necessity to Construct, Own and Operate as an Electric Transmission Public Utility in the State of Arkansas, No. 10-041-U, at 1 (Ark. Pub. Serv. Comm’n, Jan. 11, 2011), [http://www.apscservices.info/pdf/10/10-041-u\\_41\\_1.pdf](http://www.apscservices.info/pdf/10/10-041-u_41_1.pdf) [<https://perma.cc/6JYA-QRLL>]; see Robert Walton, *Delaware Legislation Aims to Give Leverage over Controversial Artificial Island Project*, UTILITY DIVE (Jan. 24, 2018), <https://www.utilitydive.com/news/delaware-legislation-aims-to-give-leverage-over-controversial-artificial-is/515483/> [<https://perma.cc/3QCK-GUNF>] (discussing state-level plans for clean energy that have received pushback from lawmakers over cost concerns).

3. See Severin Borenstein et al., *Measuring Market Inefficiencies in California’s Restructured Wholesale Electricity Market*, 92 AM. ECON. REV. 1376, 1398 (2002) (estimating that market power abuses in California transferred approximately \$4 billion from consumers to generators in 2000); Letter from AARP to Donna N. Kooperstein, Chief, Transp., Energy, and Agric. Section, Antitrust Div., U.S. Dep’t of Justice 3 (May 14, 2010), <http://www.justice.gov/atr/cases/f259700/259704-1.pdf> [<https://perma.cc/W9NS-GRV3>] (estimating that anticompetitive behavior transferred over \$100 million from consumers to generators in New York in 2006); see also Steven L. Puller, *Pricing and Firm Conduct in California’s Deregulated Electricity Market*, 89 REV. ECON. & STAT. 75, 85 (2007) (confirming “earlier work that market power is a concern” when “designing deregulated electricity markets”); cf. Frank A. Wolak, *Measuring Unilateral Market Power in Wholesale Electricity Markets: The California Market, 1998–2000*, 93 AM. ECON. REV. 425, 430 (2003) (noting that “collusive behavior” among California energy generators “is unnecessary to explain the enormous increase in market power exercised starting in June 2000”).

4. The filed rate doctrine is a common law rule that was extended to utility companies in *Keogh v. Chicago & Northwestern Railway Co.*, 260 U.S. 156, 163 (1922) and prohibits entities that are required to file rates and services (also known as “tariffs”) with a regulator from charging rates deviating from the terms they filed with regulators. Today, energy companies invoke the filed rate doctrine to avoid judicial enforcement of antitrust and bankruptcy regulations. See, e.g., *Tex. Commercial Energy v. TXU Energy, Inc.*, 413 F.3d 503, 508–09 (5th Cir. 2005) (“Since *Keogh*, courts have consistently applied the filed rate doctrine in a number of energy cases to preclude lawsuits against companies based on rates that were filed with a government agency.” (citation omitted)); *Wegoland Ltd. v. NYNEX Corp.*, 27 F.3d 17, 18 (2d Cir. 1994) (“[T]he doctrine holds that any ‘filed rate’—that is, one approved by the governing regulatory agency—is per se reasonable and unassailable in judicial proceedings brought by ratepayers.”).

5. See, e.g., 16 U.S.C. § 824a-3(a)–(b) (2012) (requiring load-serving entities (“LSEs”) to purchase electricity from cogeneration facilities when the facilities can provide electricity cost-competitively with LSEs).

utilities have managed to continue operating coal generators even when those generators are uncompetitive.<sup>6</sup>

These rules are all vestigial remnants of the public utility era.<sup>7</sup> They originated when most Americans purchased electricity from rate-regulated, vertically integrated utilities.<sup>8</sup> In exchange for exclusive franchises, utilities agreed to provide nondiscriminatory electricity at regulated rates.<sup>9</sup> The filed rate doctrine, the certificate of public convenience and necessity, and rate regulation were all intended to protect consumers against market power abuses.<sup>10</sup> Courts developed the filed rate doctrine, for example, to prevent utilities from discriminating against certain customers by deviating from the rates

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6. See Catherine Morehouse, *Inefficient Coal Plant Scheduling Cost Ratepayers \$3.5B from 2015 to 2017, Report Says*, UTILITY DIVE (Oct. 23, 2019), <https://www.utilitydive.com/news/inefficient-coal-plant-scheduling-cost-ratepayers-35b-from-2015-to-2017/565648/> [https://perma.cc/QXF8-QC7F] (discussing how “[v]ertically-integrated utilities [have] consistently operated coal units based on their own scheduling rather than relying on market signals to determine when running that plant would be most economic”); *infra* Section IV.A.

7. This Article is far from the first to observe that statutes can become obsolete. John Hart Ely, Guido Calabresi, and others have theorized extensively about the challenges that arise when statutes persist beyond their useful life. See, e.g., GUIDO CALABRESI, *A COMMON LAW FOR THE AGE OF STATUTES* 8–11 (1982) (discussing “judicial frustration with laws that do not fit the current legal landscape and which the courts believe could not be currently enacted”); JOHN HART ELY, *DEMOCRACY AND DISTRUST: A THEORY OF JUDICIAL REVIEW* 11 (1980) (noting Noah Webster’s observation that “the very attempt to make a perpetual constitution, is the assumption of a right to control the opinions of future generations; and to legislate for those over whom we have as little authority as we have over a nation in Asia”). The description of zombie energy laws is a doctrinal contribution that builds on that theoretical literature by identifying the original justification for energy laws that are now operating at cross-purposes with environmental goals. More recently, Douglas Baird, Anna Gelpern, and Mitu Gulati have explored a related phenomenon in contracts. See Douglas G. Baird, *Pari Passu Clauses and the Skeuomorph Problem in Contract Law*, 67 DUKE L.J. ONLINE 84, 86 (2017) (using the word “skeuomorph” to describe contractual terms that remain in contracts after losing their original justification); Stephen J. Choi, Mitu Gulati & Robert E. Scott, *The Black Hole Problem in Commercial Boilerplate*, 67 DUKE L.J. 1, 3 (2017) (discussing how boilerplate terms in contract language create “blackholes” over time as they lose meaning but remain binding on parties); Anna Gelpern & Mitu Gulati, *CDS Zombies*, 13 EUR. BUS. ORG. L. REV. 347, 349 (2012) (examining “the role of trade groups in drafting and adjudicating standardised contracts” for clues about “how trade group and industry objectives – as distinct from those of the parties – might affect contract interpretation”).

8. See Jeffrey D. Watkiss & Douglas W. Smith, *The Energy Policy Act of 1992—A Watershed for Competition in the Wholesale Power Market*, 10 YALE J. ON REG. 447, 451 (1993) (“During this period, most significant electric utilities were vertically integrated—they generated power, transmitted power within their service territory, and distributed power to their retail customers.”); *infra* Part III.

9. See *New York v. Fed. Energy Regulatory Comm’n*, 535 U.S. 1, 5–7 (2002); *Jersey Cent. Power & Light Co. v. Fed. Energy Regulatory Comm’n*, 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 (coupled with state-conferred rights of eminent domain or condemnation) is granted to the utility in exchange for a regime of intensive regulation, including price regulation.”); SIDNEY A. SHAPIRO & JOSEPH P. TOMAIN, *REGULATORY LAW AND POLICY: CASES AND MATERIALS* 109 (3d ed. 2003).

10. See *infra* Part III.

they had “filed” with state and federal regulators.<sup>11</sup> The original purpose of the certificate of public convenience and necessity was to protect the dominant market position of firms who enjoyed a legal right to a monopoly.<sup>12</sup> Rate regulation kept these monopolists from abusing their market power.<sup>13</sup>

Beginning in the 1970s, the electricity industry began to shift away from cost-of-service regulation as Congress and energy regulators broke down barriers to entry.<sup>14</sup> But while much of the country has embraced competition in energy markets, courts and regulators have not abandoned many of the legal rules that emerged to protect consumers in the era of utility rate regulation. And they have not done so even though the original justification for these rules—that they mitigated market power abuses of companies that enjoyed a legal right to a monopoly franchise—ceased to exist once regulators decided that generation should be subject to market forces.

Today, these “zombie energy laws” entrench incumbent market power and prevent the deployment of renewables.<sup>15</sup> The filed rate

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11. See Jim Rossi, *Lowering the Filed Tariff Shield: Judicial Enforcement for a Deregulatory Era*, 56 VAND. L. REV. 1591, 1598–1605 (2003) (“In original design, the [filed rate] doctrine was intended to serve as a sword to protect consumers from monopolistic price discrimination . . . without justifications based on the cost of providing service to the customer.”).

12. See William K. Jones, *Origins of the Certificate of Public Convenience and Necessity: Developments in the States, 1870-1920*, 79 COLUM. L. REV. 426, 427 (1979) (“[T]he essence of the certificate of public convenience and necessity is the exclusion of otherwise qualified applicants from a market because, in the judgment of the regulatory commission, the addition of new or expanded services would have no beneficial consequences or . . . [would] have harmful consequences.”).

13. See 1 A.J. GUSTIN PRIEST, PRINCIPLES OF PUBLIC UTILITY REGULATION: THEORY AND APPLICATION 4 (1969) (“This system [of public utility regulation] is designed to protect consumers against exploitation where competition is inherently unavailable or inadequate . . .” (quoting Joseph C. Swidler, Comm’r of the Fed. Power Comm’n, Address before the Chicago Law Club (Feb. 4, 1965))); Darryl Tietjen, *An Overview of Rate Regulation in Texas*, PUB. UTIL. COMMISSION TEX. 4, <https://pubs.naruc.org/pub.cfm?id=5385E393-2354-D714-5163-60ED2382CB9A> [<https://perma.cc/5EME-DBV5>] (identifying the objective of utility ratemaking as, “[o]n behalf of the public, attempt[ing] to replicate the results that would be achieved by competition within the context of a monopolistic company operating in a regulated industry”).

14. See David B. Spence, *Can Law Manage Competitive Electricity Markets?*, 93 CORNELL L. REV. 765, 770 (2008):

The impulse to restructure the electric and gas industries had both an economic and a political basis. Its economic rationale was part of a sea change in economic thinking in the 1970s and 1980s, which saw increased faith in the ability of markets to achieve efficient outcomes through competition and reduced faith in the ability of governments to achieve efficient outcomes through regulation or production of service.

15. Elizabeth Sepper uses a similar phrase to describe organizations that enjoy constitutional protections because of a prior religious affiliation that has since faded away. See Elizabeth Sepper, *Zombie Religious Institutions*, 112 NW. U. L. REV. 929, 930–31 (2018) (describing a phenomenon where, as a result of ownership changes between secular and religious institutions, a hospital remains religious in “zombie form—lacking a live connection to religion but contractually committed to religious identity”).

doctrine, for example, continues to shield energy companies from civil antitrust suits even though most energy companies no longer formally file rates with regulators.<sup>16</sup> The requirement that regulators assess the financial viability of transmission projects before issuing a certificate of public convenience and necessity to site new transmission lines is a vestigial remnant of a rule that was once needed to prevent new entry into a utility's exclusive service territory.<sup>17</sup> In these ways, courts and regulators have clung to many of the rules that were created to protect customers in the public utility era but have since outlived their useful purpose.<sup>18</sup>

These zombie energy laws are now seriously degrading energy markets. They allow incumbents to raise prices and, worse, prevent clean energy companies from competing with incumbent fossil fuel generators. For example, Arkansas regulators recently blocked a multibillion dollar transmission line that would have enabled more than \$7 billion of investment in renewable energy facilities after finding that only incumbent utilities are eligible to receive a certificate of public convenience and necessity in the state of Arkansas.<sup>19</sup> Although the

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16. See Rossi, *supra* note 11, at 1646 (noting how courts have “allow[ed] the filed tariff doctrine to become an independent, firm-specific antitrust defense”). In twin cases decided in 1956, the Supreme Court instructed the Federal Power Commission (the regulatory predecessor to the Federal Energy Regulatory Commission (“FERC”)) to presume that any freely negotiated wholesale transaction was “just and reasonable” for purposes of the Federal Power Act and the Natural Gas Act. See *Fed. Power Comm’n v. Sierra Pac. Power Co.*, 350 U.S. 348, 372 (1956) (holding that contract rates freely negotiated between sophisticated parties meet the just-and-reasonable standard required by the Federal Power Act, even if they are unprofitable to the public utility); *United Gas Pipe Line Co. v. Mobile Gas Serv. Corp.*, 350 U.S. 332, 344–45, 347 (1956) (same, but for the purposes of the Natural Gas Act). The presumption that freely negotiated energy contracts are “just and reasonable” applies even if FERC did not have an initial opportunity to review the contract. See *NRG Power Mktg., LLC v. Me. Pub. Utils. Comm’n*, 558 U.S. 165, 167 (2010) (“Under this Court’s *Mobile–Sierra* doctrine, FERC must presume that a rate set by ‘a freely negotiated wholesale-energy contract’ meets the statutory ‘just and reasonable’ requirement.”); *Morgan Stanley Capital Grp. Inc. v. Pub. Util. Dist. No. 1*, 554 U.S. 527, 530 (2008) (“The presumption may be overcome only if FERC concludes that the contract seriously harms the public interest.”).

17. This is not always the case. For federal gas pipeline citing, the government is less protective of incumbents. See *infra* Section IV.B.

18. As explained in Part IV, much of the country abandoned principles of public utility regulation when they “restructured” their energy markets. Restructured electricity markets, also known as deregulated electricity markets, refer to parts of the country in which vertically integrated utilities no longer own and operate all electricity. Restructured markets permit competitors, which are generally known as merchant generators, to enter and exit the market and buy and sell electricity. See *Regulated vs. Deregulated Energy Markets*, ENERGYWATCH, <https://energywatch-inc.com/regulated-vs-deregulated-electricity-markets/> (last visited May 7, 2020) [<https://perma.cc/M77L-NSGP>].

19. Estimated costs for Clean Line’s project ranged between approximately \$2 and \$4 billion. See *The Application of Plains and Eastern Clean Line LLC for a Certificate of Public Convenience and Necessity to Construct, Own and Operate as an Electric Transmission Public Utility in the State of Arkansas*, No. 10-041-U, at 11–12 (Ark. Pub. Serv. Comm’n, Jan. 11, 2011), [http://www.apscservices.info/pdf/10/10-041-u\\_41\\_1.pdf](http://www.apscservices.info/pdf/10/10-041-u_41_1.pdf) [<https://perma.cc/A839-29CL>] (denying

project would have reduced electricity prices in the southeast and provided enough clean energy to power over a million homes a year, it has been repeatedly delayed in part because state energy regulators have determined that only incumbent utilities were legally authorized to construct new transmission lines.<sup>20</sup> The certificate of public convenience and necessity was originally designed to ensure that rate regulated utilities were able to honor their service obligations. Today, the requirement that regulators assess market demand before granting a certificate of public convenience and necessity entrenches incumbent market power and impedes the development of renewable suppliers.

Numerous scholars and policymakers have questioned the usefulness of these doctrines.<sup>21</sup> This Article's contribution is therefore not to provide a novel critique of these zombie energy laws. It is instead to point out that many of the seemingly diffuse problems that pervade modern electric power markets can be attributed to the historical origins of electricity regulation. All of these laws emerged to mitigate market power abuses under a regulatory system that has largely been abandoned. Their continued application is now facilitating market power abuses and blocking the development of cleaner and cheaper energy sources.

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Clean Line's application to be treated as a public utility); RUSSELL GOLD, *SUPERPOWER: ONE MAN'S QUEST TO TRANSFORM AMERICAN ENERGY* 161–63 (2019) (discussing Clean Line's struggle to obtain a certificate of public convenience and necessity in Arkansas); Robert Walton, *DOE Terminates Partnership with Clean Line Energy Partners*, UTILITY DIVE (Mar. 26, 2018), <https://www.utilitydive.com/news/doe-terminates-partnership-with-clean-line-energy-partners/519995/> [<https://perma.cc/TP4U-ZTS7>] (noting that Clean Line's project, despite construction cost estimates of \$2.2 billion, had the potential to “enable over \$7 billion of investment in new renewable energy facilities in the Oklahoma Panhandle region”); *infra* Section IV.B.

20. See generally GOLD, *supra* note 19 (tracing the challenges Clean Line Energy faced in its attempt to build a power line from Oklahoma to Tennessee that would have spanned seven hundred miles); Max Brantley, *Arkansas Business: Clean Line Wind Power Project Across Arkansas Appears Dead*, ARK. TIMES (Jan. 23, 2018), <https://arktimes.com/arkansas-blog/2018/01/23/arkansas-business-clean-line-wind-power-project-across-arkansas-appears-dead> [<https://perma.cc/BF3L-K7Q4>] (“Arkansans in Congress want the Energy Department to terminate the project. It entered the process when the Clean Line effort couldn't get state PSC approval.”).

21. See, e.g., Alexandra B. Klass & Jim Rossi, *Reconstituting the Federalism Battle in Energy Transportation*, 41 HARV. ENVTL. L. REV. 423, 464–67 (2017) (explaining how transmission line siting laws make it difficult for renewable projects to connect to the power grid); Rossi, *supra* note 11, at 1597 (“The [filed rate] doctrine also creates perverse incentives for private firms to forum shop by strategically over disclosing information to regulators, thus thwarting the ability of both regulators and courts to monitor and deter violations of market norms and ultimately causing considerable harm to consumers.”); Jeremy Fisher et al., *Playing with Other People's Money: How Non-Economic Coal Operations Distort Energy Markets*, SIERRA CLUB 4 (Oct. 2019), <https://www.sierraclub.org/sites/www.sierraclub.org/files/Other%20Peoples%20Money%20Non-Economic%20Dispatch%20Paper%20Oct%202019.pdf> [<https://perma.cc/JJR6-XQNJ>] (estimating that coal generators that participate in competitive markets have used rate regulation to foist \$3.5 billion in unnecessary costs onto captive customers).



Moreover, this Article argues that the Federal Power Act (“FPA”) can plausibly be interpreted to make it illegal for regulators to apply some zombie energy laws in competitive markets when those laws serve no useful purpose and allow incumbents to abuse their market power. The FPA instructs the Federal Energy Regulatory Commission (“FERC”) to make sure that wholesale electricity rates are “just and reasonable” and not “unduly discriminatory.”<sup>22</sup> Rate regulation of vertically integrated utilities, the certificate of public convenience and necessity, and the filed rate doctrine may have once protected consumers and mitigated market power abuses. Insofar as these zombie energy laws have the opposite effect today, they are incompatible with FERC’s statutory obligation to maintain “just and reasonable” wholesale rates.<sup>23</sup> This Article thus argues that the transition to competitive power markets renders “unjust and unreasonable” many of the very laws and regulations that had supported “just and reasonable” wholesale rates when energy markets were rate regulated.<sup>24</sup>

I should note at the outset that this Article does not claim that rate regulation and the certificate of public convenience and necessity should be abandoned altogether.<sup>25</sup> Though scholars have defended both of those views,<sup>26</sup> this Article makes the more modest claim that the application of these doctrines in regions that have restructured energy markets should evolve to reflect the needs of competitive markets. The certificate of public convenience and necessity was originally designed to protect incumbents from competition. To the extent that certificate of public convenience and necessity laws continue to do so today, they contravene the core principles of electricity restructuring. Regulators

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22. 16 U.S.C. § 824e(a) (2012).

23. As discussed in Part IV, some form of rate regulation may remain necessary to fund transmission projects. While that claim is contested, it is beyond the scope of this paper. Instead, this Article critiques the ability of generation facilities that are owned by utilities and that operate in restructured states to use transmission ratemaking proceedings to avoid having to actually compete with merchant generators.

24. As discussed in Part V, some zombie energy laws require an administrative or congressional response.

25. The filed rate doctrine, by contrast, is indefensible and should be jettisoned altogether.

26. See, e.g., Harvey Averch & Leland L. Johnson, *Behavior of the Firm Under Regulatory Constraint*, 52 AM. ECON. REV. 1052, 1068 (1962) (“[A] misallocation of economic resources may result from the use by regulatory agencies of the rate-of-return constraint for price control.”); Ashley C. Brown & Jim Rossi, *Siting Transmission Lines in a Changed Milieu: Evolving Notions of the “Public Interest” in Balancing State and Regional Considerations*, 81 U. COLO. L. REV. 705, 731 (2010) (arguing that state siting laws that focus on in-state benefits are “increasingly obsolete”). For important economic work building on their theory, see William J. Baumol & Alvin K. Klevorick, *Input Choices and Rate-of-Return Regulation: An Overview of the Discussion*, 1 BELL J. ECON. & MGMT. SCI. 162 (1970); Alvin K. Klevorick, *The Behavior of a Firm Subject to Stochastic Regulatory Review*, 4 BELL J. ECON. & MGMT. SCI. 57 (1973); Robin A. Prager, *Firm Behavior in Franchise Monopoly Markets*, 21 RAND J. ECON. 211 (1990).

should stop assessing whether there is market demand for an energy project before authorizing the project.<sup>27</sup>

That does not mean, however, that there should be no permitting regime for energy infrastructure. There are compelling reasons for regulators to review transmission and pipeline projects to make sure that they comply with environmental laws, state and federal land use laws, and other regulatory programs. But once regulators embrace competitive markets, there is no reason for them to continue to assess the financial viability of a project before issuing a certificate of public convenience or to stipulate that only incumbents can build new energy infrastructure.<sup>28</sup> Regulators should not be in the business of second-guessing energy developers' expectations about the profitability of a business venture.

Similarly, it is possible that regulators should continue to rate regulate transmission projects. Transmission lines possess economies of scale that suggest that there are plausible, though not incontrovertible, reasons to allow transmission line owners to make infrastructure investments and remain confident that they will recover their costs.<sup>29</sup> But that does not mean that transmission line owners should be allowed to use *transmission* ratemaking proceedings to recover losses incurred by *generation* assets that are supposed to operate in competitive markets.<sup>30</sup> Nor does it mean that transmission developers should be barred from competing with incumbents to build new transmission lines in a region.<sup>31</sup>

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27. See Request for Proposals for New or Upgraded Transmission Line Projects Under Section 1222 of the Energy Policy Act of 2005, 75 Fed. Reg. 32,940, 32,941 (June 10, 2010) (requiring proposed projects to either be "(A) Located in a national interest electric transmission corridor designated" and "reduce congestion of electric transmission in interstate commerce; or (B) Necessary to accommodate an actual or projected increase in demand for electric transmission capacity").

28. FERC has arguably done just that for natural gas pipelines by taking considerable steps to ease permitting and deferring to the developer's views about the financial viability of a project. See 18 C.F.R. § 157.5–157.8 (2019).

29. That is not to say that there should be no competitive solicitation of transmission lines. Once a developer has been designated as responsible for constructing a needed transmission line, however, it makes sense to allow the transmission line owner to recover its investment. See, e.g., ISO NEW ENGLAND, SECTION II: ISO NEW ENGLAND OPENACCESS TRANSMISSION TARIFF II.2 (Jan. 22, 2020), [https://iso-ne.com/static-assets/documents/regulatory/tariff/sect\\_2/oatt/sect\\_ii.pdf](https://iso-ne.com/static-assets/documents/regulatory/tariff/sect_2/oatt/sect_ii.pdf) [<https://perma.cc/C4ZK-CNNP>] (providing that the "ISO pays to or charges its Market Participants or Customers (as applicable) the amounts produced by the pertinent market clearing process or through the other pricing mechanisms described in the Tariff").

30. See Fisher et al., *supra* note 21, at 20 (noting that "[w]hile merchant [generators] must recover all of their costs through energy and capacity markets," regulated generators can recover costs through "fuel adjustment proceedings" where "utilities report the incurred cost of fuel, and request adjustments to rates").

31. I should also note that zombie energy laws are not the exclusive, or even the predominant, reason that energy markets continue to favor incumbents and remain vulnerable to market power

This Article proceeds in five parts. Part I explains why the electricity industry was excepted from market forces. It summarizes the conventional view that regulators gave utilities exclusive franchises because they believed that utilities were natural monopolies. In addition, it explains that utility regulation may have also been the result of regulatory capture and attempts to circumvent the *Lochner* era's substantive due process jurisprudence. Part II describes how competition was introduced into electricity markets beginning in the 1970s. Part III identifies the theoretical rationales of the filed rate doctrine, the certificate of public convenience and necessity, and rate regulation. These laws were originally designed to protect consumers from market power abuses by companies that enjoyed a legal right to a monopoly. Part IV shows how these zombie energy laws now protect incumbents and impose barriers to entry for clean energy companies. They do so, moreover, despite the fact that regulators have abandoned the economic and legal justifications that originally motivated these doctrines. Part V concludes by offering suggestions about how to most efficiently transition away from these zombie energy laws and argues that many of the most objectionable zombie energy laws may violate the FPA.

## I. UTILITY REGULATION

The conventional view is that regulators exempted a significant percentage of the American economy from market pressures between

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abuses. There are many reasons why restructured power markets are not fully competitive. These challenges have been documented extensively. See Alexandra B. Klass & Elizabeth J. Wilson, *Interstate Transmission Challenges for Renewable Energy: A Federalism Mismatch*, 65 VAND. L. REV. 1801, 1827, 1829–30 (2012) (critiquing state-centered electric transmission line siting regimes as being ill-equipped to accommodate the regional and national scope of the electric grid); Alexandra B. Klass, *The Electric Grid at a Crossroads: A Regional Approach to Siting Transmission Lines*, 48 U.C. DAVIS L. REV. 1895, 1898–1901 (2015) [hereinafter Klass, *The Electric Grid at a Crossroads*] (“[A] regional approach rather than a purely federal approach is a better match for the physical and market characteristics of the grid as well as modern policy preferences regarding future electricity resources.”); Alexandra B. Klass, *Takings and Transmission*, 91 N.C. L. REV. 1079, 1152–54 (2013) [hereinafter Klass, *Takings and Transmission*] (critiquing state eminent domain laws for failing to consider renewable policy goals); Joshua C. Macey & Jackson Salovaara, *Bankruptcy as Bailout: Coal Company Insolvency and the Erosion of Federal Law*, 71 STAN. L. REV. 879, 906–42 (2019) (describing how coal companies have reorganized in a manner that has allowed them to avoid internalizing many regulatory costs); Jim Rossi, *The Trojan Horse of Electric Power Transmission Line Siting Authority*, 39 ENVTL. L. 1015, 1018–19 (2009) (contending that the problem of cost allocation in transmission line expansion is a bigger problem than restrictive state siting laws); Shelley Welton, *Rethinking Grid Governance for the Climate Change Era*, CALIF. L. REV. (forthcoming 2021), [https://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=3564682&dgcid=ejournal\\_html\\_email\\_energy:law:policy:ejournal\\_abstractlink](https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3564682&dgcid=ejournal_html_email_energy:law:policy:ejournal_abstractlink) [https://perma.cc/DQK8-LAE6] (arguing that regional transmission organization (“RTO”) governance procedures are protecting incumbent fossil fuel generators). Eliminating energy laws that have outlived their useful purpose would eliminate only some of these constraints.

1880 and 1920 because they believed that these industries were natural monopolies.<sup>32</sup> Alternative explanations are that the utility industries managed to capture their regulators and convince them to accept a regulatory apparatus that was highly favorable to incumbent power providers, and that public utility regulation reflected a strategic decision by state legislatures to circumvent restrictions the *Lochner* Court imposed on regulations that interfered with private property. This Part summarizes these views and presents evidence that the rise in public utility regulation was likely due to a combination of all three.

### A. Utilities as Natural Monopolies

A natural monopoly exists when it is efficient for a single firm to control an entire market.<sup>33</sup> The term natural monopoly does not refer to the number of companies that happen to operate at a given moment in time, but to a market in which “the entire demand . . . can be satisfied at lowest cost by one firm rather than by two or more.”<sup>34</sup>

Natural monopolies are characterized by declining average costs and often describe industries with high fixed costs. If a single set of railroad tracks is capable of transporting everyone who wants to travel from Boston to New York by rail, then it imposes needless costs to build a second set of railroad tracks. A company that decides to do so is making unnecessary capital investments. A single set of tracks could meet all of the demand for rail service between Boston and New York.

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32. Herbert Hovenkamp, *Technology, Politics, and Regulated Monopoly: An American Historical Perspective*, 62 TEX. L. REV. 1263, 1268 (1984) (“The proliferation of such monopolies was justified at that time by the precapitalist economic view that in certain markets with high start-up costs no private entrepreneur would invest his money unless he was guaranteed freedom from competitive entry.”). Justice Story seemingly embraced this position in his dissenting opinion in *Charles River Bridge v. Warren Bridge*, 36 U.S. 420, 608 (1837). Story claimed that failure to provide monopoly protection in high-investment industries would “arrest all public improvements.” *Charles River Bridge*, 36 U.S. at 606. A related view held that this approach facilitated capital formation. MORTON J. HORWITZ, *THE TRANSFORMATION OF AMERICAN LAW: 1780-1860*, at 109–39 (1977) (“In an under developed society, with little available private capital, a policy of encouraging development required that the legal system provide legal arrangements that guaranteed private investors certainty and predictability of economic consequences. Perhaps the most important of these guarantees was protection against freedom from competitive injury.”).

33. See Richard A. Posner, *Natural Monopoly and Its Regulation*, 21 STAN. L. REV. 548, 548 (1969) (“If the entire demand within a relevant market can be satisfied at lowest cost by one firm rather than by two or more, the market is a natural monopoly . . .”). It is worth noting that the market need not be nationwide. If there are locational barriers that prevent companies located far apart from competing with each other, it is possible to have multiple natural monopolies and to give exclusive franchises to distinct regions. People who want to travel by rail from Boston to Washington, D.C. do not compete with people who want to travel from Los Angeles to San Francisco. See *id.* at 574 (“Generally it is the regional or local market that can accommodate only a single firm.”).

34. *Id.*

Historically, many segments of the energy industry possessed significant economies of scale. Although it was costly to build the transmission lines that transport electricity, once a company built a transmission line, it was often able to provide electricity to an entire community.<sup>35</sup> An incumbent that had already built a transmission line was thus in a position to offer less expensive electricity to new users than its competitors.<sup>36</sup> While a new entrant would have to invest in a transmission system before providing electricity to a new community, the incumbent would have to pay only for the additional electricity because it had already built the infrastructure necessary to transport electricity from power generators to new homes. The same economies of scale apply to gas pipelines. Moreover, at its inception, the electric power generation industry also possessed economies of scale because larger generators produced electricity more efficiently than smaller ones. Many policymakers therefore felt that electricity in a region could be provided and transported most efficiently by a single firm. As a result, they viewed the industry as a natural monopoly.<sup>37</sup>

The decision to protect utilities from market forces was in large part based on this view that energy companies were natural monopolies. It is a view often associated with Samuel Insull, who wrote in 1898 that electric power companies would provide more efficient service if “exclusive control of a given territory [were] placed in the hands of one undertaking.”<sup>38</sup> According to Insull, it was cost effective for a single firm to dominate its market.<sup>39</sup> Insull therefore urged state legislatures to give electric power companies exclusive franchises. Recognizing that monopolists can exploit their market power, however, Insull proposed that “exclusive franchises . . . be coupled with the conditions of public control, requiring all charges for services fixed by

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35. See PAUL L. JOSKOW & RICHARD SCHMALENSEE, *MARKETS FOR POWER: AN ANALYSIS OF ELECTRIC UTILITY DEREGULATION* 59 (1983):

[A]s the number of customers on the network or the total power demand on the network increases, given a particular geographic area served by the distribution system, unit distribution costs can be expected to decline. These apparently pervasive economies of density imply that it would be inefficient to serve the same geographic area with more than one distribution system.

36. See *id.*

37. Technological advances increased the efficiency of small gas wellheads and electricity generators and, in doing so, eroded the economic justification for natural monopoly regulation. See Richard J. Pierce, *Reconsidering the Roles of Regulation and Competition in the Natural Gas Industry*, 97 HARV. L. REV. 345, 357–63 (1983).

38. SAMUEL INSULL, *CENTRAL-STATION ELECTRIC SERVICE* 45 (William E. Keily ed., 1915).

39. *Id.* A natural monopoly refers to an industry in which a single firm can produce a good or service more cost effectively than it would if it faced competition. Natural monopolies are generally characterized by declining average costs. WILLIAM W. SHARKEY, *THE THEORY OF NATURAL MONOPOLY* 4 (1982).

public bodies to be based on cost plus a reasonable profit.”<sup>40</sup> To prevent market power abuses, utilities would be required to serve all customers on a nondiscriminatory basis and at regulated rates.<sup>41</sup>

Insull’s argument about optimal electricity regulation was quickly adopted by Progressive Era policymakers. Twenty years after Insull’s speech, a majority of states regulated the electric power industry according to natural monopoly principles.<sup>42</sup> In exchange for the exclusive right to serve a geographic area, electricity companies submitted to pervasive regulatory oversight.<sup>43</sup> State public service commissions prescribed maximum rates and required companies to provide nondiscriminatory access to electricity.

And the natural monopoly story does seem to have influenced policymakers that regulated public utilities. In 1908, for example, the Massachusetts Railroad Commission explained that the state’s electricity “statutes are founded on the assumption that, to have two or more competing companies running lines of gas pipe and conduits for electric wires through the same street would often greatly increase the necessary cost of furnishing light.”<sup>44</sup> Other public utility commissioners regularly echoed this concern,<sup>45</sup> and their views found support in academic arguments.<sup>46</sup> Thus, one of the reasons policymakers subjected electric power companies to rate regulation and gave them exclusive franchises was because they believed that the industry was a natural monopoly and that it was therefore economically efficient to do so.

### *B. Regulatory Capture*

Legal and economic historians have not, however, unanimously endorsed the view that cost-of-service regulation followed from the theory that the utility industries were natural monopolies. Scholars have also suggested that public utility regulation reflected regulators’

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40. INSULL, *supra* note 38, at 45.

41. *Id.* Discriminatory service refers to pricing policies that treated certain customers more favorably than others. Regulators prohibited discriminatory service to prevent utilities from giving favorable terms to certain customers and to prohibit them from refusing to serve others.

42. *See* Jones, *supra* note 12, at 447–50 (tabulating the origins of state public service commissions).

43. *See* Spence, *supra* note 14, at 767–68 (“[G]overnments licensed private firms as monopoly suppliers, closely regulating their rates and conditions of service.”).

44. *Weld v. Gas & Elec. Light Comm’rs*, 84 N.E. 101, 101–02 (Mass. 1908); *see also* CHARLES F. PHILLIPS, JR., *THE REGULATION OF PUBLIC UTILITIES* 4 (1993) (“Public utilities . . . seem to operate more efficiently as monopolies.”).

45. *See infra* Sections III.A, III.B.

46. *See* YOUNG B. SMITH, NOEL T. DOWLING & ROBERT L. HALE, *CASES ON THE LAW OF PUBLIC UTILITIES* 1–6 (Warren A. Seavey ed., 2d ed. 1936) (summarizing the history and theory behind public utilities and their regulation).

attempts to support the industries that had managed to curry favor with energy regulators.<sup>47</sup>

There is evidence that the capture theory accounts for at least part of the sudden rise of utility rate regulation. Utility regulation was immensely profitable for the energy companies that managed to use it to shield themselves from competition, and prominent public service commissioners worked for the industries they regulated before and after becoming commissioners.<sup>48</sup> Insull himself stood to benefit if regulators accepted his economic argument because doing so would have the convenient effect of shielding his electricity franchises from competition.

It is perhaps unsurprising, therefore, that energy companies such as those operated by Insull would lobby for public utility regulation. When a regulator or legislature designated a business a public utility, the business would generally be shielded from competition and enjoy a protected stream of revenue. From the perspective of utilities, it was clearly preferable to have a captive customer base than to be forced to compete with other railroad and energy companies.

The capture theory is not inconsistent with the natural monopoly theory. Even if one believes that regulatory capture accounts entirely for the sudden rise in utility regulation, policymakers nonetheless justified utility rate regulation on the theory that public utilities were natural monopolies—even if that justification was entirely pretextual.<sup>49</sup> In fact, prominent adherents to the capture theory have recognized that regulators relied on the natural monopoly theory to defend their decisions to give railroad, electricity, gas, and telecommunications companies exclusive franchises.<sup>50</sup>

### C. *Lochner Evasion*

There is also evidence that utility rate regulation offered a way for regulators to impose substantive regulations that otherwise would

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47. See George L. Priest, *The Origins of Public Utility Regulation and the "Theories of Regulation" Debate*, 36 J.L. & ECON. 289, 291–94 (1993) (describing critiques of utility regulation advanced in the second half of the twentieth century).

48. See *id.* at 299–305 (“[F]indings that profits were higher under regulation suggested that regulatory commissions were created as a result of industry demand rather than to pursue the public interest.”).

49. See *id.* (“Demsetz intimated that the natural monopoly defense for regulation may well be a pretext disguising a regulatory regime that benefited and, therefore, might be demanded by the regulated monopolists themselves.”).

50. See 1 ALFRED E. KAHN, *THE ECONOMICS OF REGULATION: PRINCIPLES AND INSTITUTIONS* 15–39 (1970) (summarizing scholarly views).

have run afoul of the *Lochner* Court's protection of corporate property rights. Public utilities were given exclusive franchises just as the Supreme Court embraced a strong view of private property in what is now known as the *Lochner* era.

The *Lochner* era is remembered today for the Supreme Court's willingness to strike down regulations that interfered with private contract.<sup>51</sup> While scholars disagree about the *Lochner* Court's motivations—some view *Lochner* and its progeny as constitutionalizing laissez-faire market principles,<sup>52</sup> others view them as associating early twentieth-century American capitalism with natural rights, and others view them as rejecting “class” legislation by preventing legislatures from passing laws that allowed certain groups “to gain unfair or unnatural advantages over their market adversaries”<sup>53</sup>—all of these theories accept that the *Lochner* Court was willing to invoke liberty of contract to strike down economic regulations. The legal environment in which utility law developed was thus one in which it was difficult for legislatures to regulate rates and services. And when energy regulators wanted to control utilities' rates and services, they often encountered judicial skepticism.<sup>54</sup>

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51. See Cass R. Sunstein, *Lochner's Legacy*, 87 COLUM. L. REV. 873, 874 (1987) (“The received wisdom is that *Lochner* was wrong because it involved ‘judicial activism’: an illegitimate intrusion by the courts into a realm properly reserved to the political branches of government.”); see also *Lochner v. New York*, 198 U.S. 45, 53 (1905) (striking down a ten-hour workday limit as “interfer[ing] with the right of contract between the employer and employees”).

52. See, e.g., *Coll. Sav. Bank v. Fla. Prepaid Postsecondary Educ. Expense Bd.*, 527 U.S. 666, 691 (1999) (Scalia, J.) (“We had always thought that the *distinctive* feature of *Lochner*, nicely captured in Justice Holmes's dissenting remark about ‘Mr. Herbert Spencer's Social Statics,’ was that it sought to impose a particular economic philosophy upon the Constitution.” (citation omitted)).

53. HOWARD GILLMAN, *THE CONSTITUTION BESIEGED: THE RISE AND DEMISE OF LOCHNER ERA POLICE POWERS JURISPRUDENCE* 11, 61 (1993).

54. See *Klatt v. R.R. Comm'n*, 221 P. 926, 931 (Cal. 1923) (annulling the order of the Railroad Commission finding a public utility because “the record is destitute of any evidence which even tends to show an unequivocal intention or conduct . . . from which a dedication of the water to a public use can be inferred”); *Richardson v. R.R. Comm'n*, 218 P. 418, 420–21 (Cal. 1923) (annulling the Railroad Commission's decision and order declaring the petitioner a public utility, explaining that “we utterly fail to find any substantial evidence that this petitioner” should be considered “a public utility subject to regulation as to its service and rates by the Railroad Commission”); *Stratton v. R.R. Comm'n*, 198 P. 1051, 1053–54 (Cal. 1921) (prohibiting rate regulation of a water company that was not dedicated to a “public use”); *Allen v. R.R. Comm'n*, 175 P. 466, 467–68 (Cal. 1918) (stating that “[t]o hold that property has been dedicated to a public use is ‘not a trivial thing,’ and such dedication is never presumed ‘without evidence of unequivocal intention’” (quoting *San Francisco v. Grote*, 52 P. 127, 128 (Cal. 1898))); *Pac. Tel. & Tel. Co. v. Eshleman*, 137 P. 1119, 1127–28 (Cal. 1913) (explaining the three circumstances in which public utility commissions have legal authority to regulate utility rates and services); *Thayer v. Cal. Dev. Co.*, 128 P. 21, 24 (Cal. 1912) (“[T]he water right which a person gains by diversion from a stream for a beneficial use is a private right—a right subject to ownership and disposition by him, as in the case of other private property.”); *Hildreth v. Montecito Creek Water Co.*, 72 P. 395, 396, 398 (Cal. 1903) (finding that, because a water company was not dedicated to a public use, it could not be compelled to provide



The particular regulatory structure that came to dominate the energy industry in the early twentieth century, in which energy companies with exclusive franchises agreed to cap rates and provide nondiscriminatory service to all customers in their service areas, allowed state legislatures to regulate energy contracts without falling afoul of the Supreme Court's substantive due process jurisprudence. That is because while the Supreme Court was skeptical of legislative interventions that interfered with *private* property, the Court was more accommodating of regulations that interfered with *utilities'* property. In *Munn v. Illinois*, a decision that predated *Lochner*, the Supreme Court held that the legislature could cap rates and regulate services of companies in certain circumstances.<sup>55</sup> Specifically, *Munn* held that property ceased to be "purely and exclusively private"<sup>56</sup> when it was "affected with a public interest."<sup>57</sup> A company became "clothed with a public interest" and therefore subject to regulatory control when it enjoyed a legal right to a monopoly or was a "common carrier."<sup>58</sup>

The *Lochner* Court did not reject *Munn's* holding that states could regulate firms that were "affected with a public interest."<sup>59</sup> Some states seem to have viewed utility rate regulation as allowing them to

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continued service to a customer); *Niles v. City of Los Angeles*, 58 P. 190, 192 (Cal. 1899) (stating that a company will not be regarded as a public utility "without evidence of unequivocal intention"). State utility regulators also routinely considered the legal and economic consequences of decisions to authorize market entry when adjudicating disputes involving utility companies. *See* *Coast Cty. Gas & Elec. Co. v. Sierra & S.F. Power Co.*, P.U.R. 1917C. 709 (Cal. R.R. Comm'n 1917) (permitting an electric company to serve a large customer on the ground that doing so would not lead to duplicative transmission lines); *Great W. Power Co.*, 8 Cal. R.R. Comm'n 426 (1915) (expressing concern that market entry would expose incumbent utilities to losses by removing large segments of their business); *Great W. Power Co.*, P.U.R. 1915E 843 (Cal. R.R. Comm'n 1915) (same); *Oro Elec. Corp.*, 2 Cal. R.R. Comm'n 748 (1913) (stating that the Commission would assess the financial viability of potential market participants in order to ensure that utilities would be able to honor their service obligations), *aff'd*, 147 P. 118, (1915); *Pac. Gas & Elec. Co. v. Great W. Power Co.*, 1 Cal. R.R. Comm'n 203 (1912) (stating that the law is designed to protect a utility where that utility "has pioneered in the field, and is rendering efficient and cheap service and is fulfilling adequately the duty which, as a public utility, it owes to the public, and the territory is so generally served that it may be said to have reached the point of saturation").

55. *Munn v. Illinois*, 94 U.S. 113 (1876).

56. *Id.* at 125.

57. *Id.* at 126.

58. *Id.* at 130–33, 151–52. A common carrier is a company that is "bound" to "serve all persons to the capacity of his facilities, without discrimination, and for reasonable pay." *Mich. Pub. Util. Comm'n v. Duke*, 266 U.S. 570, 577 (1925); *see also* *Sanger v. Lukens*, 24 F.2d 226, 228 (D. Idaho 1927) (defining a common carrier as one who "holds himself out to the public and transports upon the highways for compensation all property for any one").

59. *See, e.g.*, *New State Ice Co. v. Liebmann*, 285 U.S. 262, 304 (1932):

To grant any monopoly to any person as a favor is forbidden even if terminable. But where, as here, there is reasonable ground for the legislative conclusion that in order to secure a necessary service at reasonable rates, it may be necessary to curtail the right to enter the calling, it is, in my opinion, consistent with the due process clause to do so . . . .

regulate rates and services in a manner that would pass the Supreme Court's strong conception of property rights. The California Supreme Court, for example, said that the state's "primary purpose" in enacting public utility regulations was to "give into the power of the Commission for regulation and control in the interest of the public the operation of auto stages for transportation."<sup>60</sup> By granting public utilities legally protected monopoly franchises and conditioning their right to operate in a given market on companies' willingness to hold themselves out to the public, state regulators managed to ensure that public utilities were "clothed with the public interest" and therefore subject to regulatory control.

Public utilities thus enjoyed extremely favorable market conditions. They enjoyed a legal right to operate free from competition. In exchange, they agreed to cap rates and provide nondiscriminatory service to everyone in their service territories. This regulatory structure seems to have had at least three causes. First, policymakers believed that utilities were natural monopolies and therefore that it was economically desirable for a single firm to control an entire market. Second, industry succeeded in capturing its regulators. Third, state legislatures recognized that utility regulation offered a way for them to regulate corporate property despite *Lochner*-era restrictions.

## II. RESTRUCTURING

In most of the country today,<sup>61</sup> electric power generators no longer enjoy exclusive franchises.<sup>62</sup> In the 1970s, policymakers abandoned the economic theory that utilities needed to be protected from competition and began a lengthy process of restructuring the airline, energy, and telecommunications businesses to introduce competitive pressures into those industries.<sup>63</sup> Restructuring the electric

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60. *Motor Transit Co. v. R.R. Comm'n*, 209 P. 586, 591 (Cal. 1922); *see also* *Palermo Land & Water Co. v. Cal. R.R. Comm'n*, 160 P. 228, 230 (Cal. 1916) (explaining that the state's "grant of a water right" constituted "a burden or servitude upon the water system of the grantor").

61. About one-third of the country continues to receive power from vertically integrated utilities that are subject to rate regulation. Moreover, while two-thirds of the country has introduced competition into electric power markets, there are significant differences among restructured states, and some retain many of the hallmarks of the public utility model. *See Map of Deregulated Energy States and Markets*, ELECTRIC CHOICE, <https://www.electricchoice.com/map-deregulated-energy-markets/> (last updated 2018) [<https://perma.cc/LVE9-U8QF>].

62. *See* Jim Rossi, *The Electric Deregulation Fiasco: Looking to Regulatory Federalism to Promote a Balance Between Markets and the Provision of Public Goods*, 100 MICH. L. REV. 1768, 1772–78 (2002) (summarizing the deregulatory movement and explaining how that movement supported policy choices that led to restructuring).

63. *See generally* Joseph D. Kearney & Thomas W. Merrill, *The Great Transformation of Regulated Industries Law*, 98 COLUM. L. REV. 1323 (1998) (describing the legal, academic, and technical causes of deregulation across a number of different utility industries).

power industry began with the Public Utility Regulatory Policies Act (“PURPA”)<sup>64</sup> and has continued ever since.<sup>65</sup>

A core insight that led to deregulation of the sale of electric power was that power generation—the process of producing and selling electricity—could be unbundled from the transmission services that deliver electricity to end users. As a result of technological developments in the middle of the twentieth century, smaller gas-fired power plants became cost competitive with the generation facilities that had provided electricity to the United States during the first half of the century.<sup>66</sup>

Legal reform followed. Congress passed PURPA in 1978.<sup>67</sup> PURPA required vertically integrated utilities to purchase power from merchant power plants, known as qualifying facilities, and allow those facilities to connect to the grid.<sup>68</sup> Utilities were required to purchase power from qualifying utilities at the utilities’ avoided cost, which referred to the amount it would have cost the utility to generate an equivalent amount of power itself.<sup>69</sup>

PURPA demonstrated that it was possible for utilities to purchase power from independent generators and thus that power generation could be exposed to competitive forces. Legal reforms in the 1990s built on that realization. First, the Energy Policy Act of 1992 increased the number of merchant generation facilities that were permitted to generate electric power and sell that power to distribution facilities.<sup>70</sup> It also gave FERC authority to require that utilities provide

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64. Public Utility Regulatory Policies Act of 1978, 16 U.S.C. § 2601 (2012).

65. A number of factors led American regulators to embrace markets in electric power. These included an academic embrace of market forces, a recognition that power generation could be unbundled from transmission, a concern about the incentive that regulated utilities had to keep their costs high in order to maximize the rate base from which regulators calculated costs, and a concern that regulated utilities had more information about their costs and operations than did regulators. See Spence, *supra* note 14, at 770–72 (“To its critics, a system with high transaction costs, information asymmetries, and perverse incentives will yield unnecessarily high electric rates in both wholesale and retail markets.”).

66. See Severin Borenstein & James Bushnell, *The U.S. Electricity Industry After 20 Years of Restructuring*, 7 ANN. REV. ECON. 437, 439, 441–43 (2015) (describing how the development of small generators challenged the theory that generation was a natural monopoly).

67. Public Utility Regulatory Policies Act of 1978, Pub. L. No. 95-617, 92 Stat. 3117 (1978) (codified as amended in scattered sections of 15, 16, 42, and 43 U.S.C.).

68. 16 U.S.C. § 824a-3 (2012).

69. *Id.*

70. See Energy Policy Act of 1992, Pub. L. No. 102-486, § 722, 106 Stat. 2776, 2916 (codified at 16 U.S.C. § 824k (2012)) (amending section 212 of the Federal Power Act):

An order under section 211 shall require the transmitting utility subject to the order to provide wholesale transmission services at rates, charges, terms, and conditions which permit the recovery by such utility of all the costs incurred in connection with the transmission services and necessary associated services, including, but not limited to, an appropriate share, if any, of legitimate, verifiable and economic costs, including

open and nondiscriminatory access to transmission services.<sup>71</sup> The independent power producers (“IPPs”) that entered electricity markets were not rate regulated.

FERC then issued three orders: Order 888, Order 889, and Order 1000, to further encourage competition in electric power markets. Utilities were ordered to “functionally unbundle” generation from transmission,<sup>72</sup> to provide independent power producers with real-time pricing information,<sup>73</sup> and to encourage the formation of independent system operators (“ISOs”) to manage day-to-day grid operations.<sup>74</sup> Today, ISOs operate electric power markets across much of the grid.<sup>75</sup>

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taking into account any benefits to the transmission system of providing the transmission service, and the costs of any enlargement of transmission facilities. Such rates, charges, terms, and conditions shall promote the economically efficient transmission and generation of electricity and shall be just and reasonable, and not unduly discriminatory or preferential. Rates, charges, terms, and conditions for transmission services provided pursuant to an order under section 211 shall ensure that, to the extent practicable, costs incurred in providing the wholesale transmission services, and properly allocable to the provision of such services, are recovered from the applicant for such order and not from a transmitting utility’s existing wholesale, retail, and transmission customers;

see also § 711, 106 Stat. at 2905–10 (repealed 2005) (amending section 32 of the Public Utility Holding Company Act of 1935 to expand the category of firms that could sell electricity at wholesale).

71. See § 721, 106 Stat. at 2915–16 (codified at 16 U.S.C. § 824j (2012)), which amended section 211 of the FPA such that:

Any electric utility, Federal power marketing agency, or any other person generating electric energy for sale for resale, may apply to the Commission for an order under this subsection requiring a transmitting utility to provide transmission services (including any enlargement of transmission capacity necessary to provide such services) to the applicant.

72. See Promoting Wholesale Competition Through Open Access Non-Discriminatory Transmission Services by Public Utilities, Order No. 888, 61 Fed. Reg. 21,540, 21,577 (May 10, 1996) (“Our approach to assuring such open access . . . [requires] [f]unctional unbundling of transmission and generation (which includes separately stated rates for generation, transmission, and ancillary services, and a requirement that a transmission provider take service under its own tariff), except for bundled retail service . . .”). As discussed in Part IV, FERC allowed “functional” separation of transmission and generation and did not require utilities to divest or spin off their transmission assets. See *id.* at 21,552 (“In the absence of evidence that functional unbundling will not work, we are not prepared to adopt a more intrusive and potentially more costly mechanism—corporate unbundling—at this time.”).

73. See Open Access Same-Time Information System (Formerly Real-Time Information Networks) and Standards of Conduct, Order No. 889, 61 Fed. Reg. 21,737, 21,740 (May 10, 1996) (“This final rule contains three basic provisions that, taken together, will ensure that transmission customers have access to transmission information enabling them to obtain open access transmission service on a non-discriminatory basis.”).

74. See Promoting Wholesale Competition Through Open Access Non-Discriminatory Transmission Services by Public Utilities, Order No. 888, 61 Fed. Reg. 21,540, 21,552 (May 10, 1996) (“[W]e see many benefits in ISOs, and encourage utilities to consider ISOs as a tool to meet the demands of the competitive marketplace.”).

75. See *Regional Transmission Operators (RTO)/Independent System Operators (ISO)*, FED. ENERGY REG. COMMISSION, <https://www.ferc.gov/industries/electric/indus-act/rto.asp> (last updated Dec. 20, 2019) [<https://perma.cc/FY7B-T74Q>].

They manage a bidding process that selects the least expensive generators that are available to provide the electricity the grid needs at a given moment.<sup>76</sup> They also oversee grid planning.<sup>77</sup> In these markets, load-serving entities (“LSEs”), which distribute electricity to end users, are required to purchase electricity in auctions overseen by grid operators.<sup>78</sup> Energy market auctions are supposed to ensure that market forces replace competition as the mechanism for determining which generators operate in a given moment. But as Part IV shows, zombie energy laws are undermining this goal.

### III. LAWS FOR RATE-REGULATED UTILITIES

Although the electric power industry has evolved and much of the country no longer shields power generators from competition, many of the legal rules that originated in the public utility era persist despite the fact that those rules were designed to mitigate the particular challenges posed by cost-of-service regulation. Regulators developed a number of doctrines to preserve utilities’ exclusive franchises and ensure that they were able to honor their service obligations. This Part traces the origins of these laws and describes the original justifications for three such doctrines—rate regulation for vertically integrated utilities, the certificate of public convenience and necessity, and the filed rate doctrine. Part IV argues that these three legal rules have become zombie energy laws: they have outlived their useful purpose, are seriously distorting electricity markets in areas of the country that

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76. For a description of this bidding process, see *infra* Section IV.A.

77. See RALPH LUCIANI & MAGGIE SHOBER, NAT’L ASS’N REG. UTIL. COMMISSIONERS, TRANSMISSION PLANNING WHITE PAPER 9 (Jan. 2014), <https://pubs.naruc.org/pub.cfm?id=53A151F2-2354-D714-519F-53E0785A966A> [<https://perma.cc/62WW-ZPHA>] (“RTOs do not own transmission facilities. They operate the transmission system in accordance with NERC and regional reliability criteria on behalf of their member transmission owners, administer the regional OATT, ensure nondiscriminatory access to the transmission system, and manage and plan for the reliability of the transmission system.”); Jay Caspary, *Electric Transmission 101: Markets, ISOs/RTOs and Grid Planning/Operations*, ENVTL. & ENERGY STUDY INST. 10 ([https://www.eesi.org/files/070913\\_Jay\\_Caspary.pdf](https://www.eesi.org/files/070913_Jay_Caspary.pdf) (last visited May 7, 2020) [<https://perma.cc/GY66-N5VC>] (explaining that ISOs “[p]erform planning and operations of the grid to ensure reliability”); *Regional Transmission Operators (RTO)/Independent System Operators (ISO)*, *supra* note 75.

78. See *Reliability Assurance Agreement Among Load Serving Entities in the PJM Region*, PJM INTERCONNECTION 41 (Sept. 17, 2010) <https://www.pjm.com/directory/merged-tariffs/raa.pdf> [<https://perma.cc/PPU6-E5D8>] (“Except to the extent its capacity obligations are satisfied through the FRR Alternative, each Party shall pay, as to the loads it serves in each Zone during a Delivery Year, a Locational Reliability Charge for each such Zone during such Delivery Year.”); *Understanding the Differences Between PJM’s Markets*, PJM INTERCONNECTION 1 (Mar. 6, 2019) <https://learn.pjm.com/-/media/about-pjm/newsroom/fact-sheets/understanding-the-difference-between-pjms-markets-fact-sheet.ashx?> [<https://perma.cc/2HNC-PDMS>] (“Each year, PJM holds a competitive auction to obtain these future power supplies at the lowest reasonable price.”).

have abandoned the public utility model for generations, and are impeding the transition to a cleaner energy sector.

### *A. Origins of Rate Regulation*

Price regulation was the bedrock principle of public utility regulation and seems to have been relatively uncontroversial in the late nineteenth and early twentieth centuries. By 1932, three companies—the Electric Bond and Share Company, J.P. Morgan’s United Company, and the Insull Group—controlled nearly half of the investor-owned utilities that operated in the United States.<sup>79</sup>

Large utility companies took advantage of their dominant market position in a number of ways.<sup>80</sup> In response to what President Roosevelt described as the “none too benevolent private paternalism” and “tyrannical power and exclusive opportunity” of these utilities, the federal government implemented a number of reforms designed to mitigate market power abuses.<sup>81</sup>

Whether because policymakers believed that it was economically optimal for utilities to enjoy monopoly control over the markets in which they operated or because they regarded it as a more practical response to the legal and political realities of the 1920s and 1930s, the energy regulators decided to regulate—not break up—energy utilities.<sup>82</sup>

Once policymakers decided to treat energy companies as public utilities and grant them exclusive franchises, they had to figure out how to mitigate market power abuses of the utility companies that enjoyed a legal right to a monopoly. Absent regulatory interference, a monopolist will produce lower quality goods at a higher price than it would in competitive markets.<sup>83</sup> The monopolist will in this way capture surplus that would otherwise go to consumers.<sup>84</sup>

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79. See Douglas W. Hawes & William S. Lamb, *Restructuring Under PUHCA: Can the ‘35 Act Envelope Be Stretched?*, 3 ELECTRICITY J. 16, 18 (1990) (“By 1932, approximately 49% of the [investor-owned utilities] were controlled by three holding companies.”).

80. See FED. TRADE COMM’N, UTILITY CORPORATIONS, S. DOC. NO. 70-92, Pt. 73-A (1st Sess. 1935) (summary report on the holding and operating companies of electric and gas utilities).

81. FRANKLIN D. ROOSEVELT, PRESIDENT OF THE U.S., REPORT OF THE NATIONAL POWER POLICY COMMITTEE WITH RESPECT TO THE TREATMENT OF HOLDING COMPANIES, H.R. DOC. NO. 74-137, at 2–3, 8 (1st Sess. 1935).

82. See Watkiss & Smith, *supra* note 8, at 451 (“The structural requirements of PUHCA and the jurisdictional provisions of the FPA remained essentially unchanged from 1935 to 1978. During this period, most significant electric utilities were vertically integrated—they generated power, transmitted power within their service territory, and distributed power to their retail customers.”).

83. See HAL R. VARIAN, INTERMEDIATE MICROECONOMICS: A MODERN APPROACH 11–17 (7th ed. 2006) (explaining monopolies and discussing pareto efficiency).

84. See *id.* (“What about the ordinary monopolist who is constrained to charge one price? It turns out that this situation is not Pareto efficient.”).

Rate regulation emerged as the solution to this problem. According to Alfred Kahn, a leading economist who studied the regulation of public utilities, “[t]he essence of regulation is the explicit replacement of competition with governmental orders as the principal institutional device for assuring good performance.”<sup>85</sup> In an industry that was subject to rate regulation, the government—rather than market forces—became responsible for disciplining corporate behavior. Utility regulators permitted private firms to act as monopoly suppliers and closely regulated their rates and services.<sup>86</sup> The utilities that were entitled to operate in a given market were required to charge rates that were established by an administrator during a ratemaking proceeding. To do this, a regulator would calculate a utility’s reasonably incurred costs and allow it to recover those costs plus a “reasonable” rate of return.<sup>87</sup> State regulators, known as public utility commissions (“PUCs”) or public service corporations (“PSCs”), regulated retail rates, which are the rates consumers pay to the utility that transports electricity for use.<sup>88</sup> After Congress passed the FPA in 1935, federal regulators oversaw wholesale rates, which are the rates transmission companies pay for electricity when they purchase it from generators.<sup>89</sup>

In short, rate regulation was supported by an economic theory that viewed energy companies as natural monopolies. That economic theory led many policymakers to think that optimal electric service would be provided only if companies enjoyed a legal right to a monopoly. Once companies enjoyed a legal right to monopoly control in their service territories, markets became vulnerable to market power abuses. Controlling utility rates and services in ratemaking proceedings allowed regulators to mitigate market power abuses.

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85. 1 KAHN, *supra* note 50, at 20.

86. See JOSKOW & SCHMALENSEE, *supra* note 35, at 13 (describing the process of franchising utilities).

87. See *Fed. Power Comm’n v. Hope Nat. Gas Co.*, 320 U.S. 591, 621 (1944) (Reed, J., dissenting) (“The rates fixed would produce an annual return and that annual return was to be compared with a theoretical just and reasonable return, all risks considered, on the fair value of the property used and useful in the public service at the time of the determination.”).

88. See 16 U.S.C. § 824(b) (2012); *Fed. Energy Regulatory Comm’n v. Elec. Power Supply Ass’n*, 136 S. Ct. 760, 766 (2016) (“[T]he law places beyond FERC’s power, and leaves to the States alone, the regulation of ‘any other sale’—most notably, any retail sale—of electricity.” (citing 16 U.S.C. § 824(b))).

89. See 16 U.S.C. § 824(b)–(e) (applying federal regulation “to the transmission of electric energy in interstate commerce and to the sale of electric energy at wholesale in interstate commerce”). When the federal government first began regulating energy markets, an agency called the Federal Power Commission (“FPC”) was responsible for regulating wholesale electricity rates and the transmission of electric energy in interstate commerce. FERC was not created until 1977, when the Department of Energy Organization Act, 42 U.S.C. §§ 7134, 7171 (2012), dissolved the FPC and gave FERC most of the responsibilities that had formerly belonged to the FPC.

*B. Origins of the Certificate of Public Convenience and Necessity*

Today, companies that would like to build energy infrastructure—especially transmission lines that transport electricity and pipelines that transport oil and gas—must first receive a certificate of public convenience and necessity before beginning to construct the infrastructure. A certificate of public convenience and necessity is a license issued by a regulatory body that allows the holder of the permit to operate in a particular area.<sup>90</sup> For example, to receive regulatory approval to build a new transmission line, a company often must establish that the line is “in the public interest” and demonstrate the line’s “financial viability.”<sup>91</sup> In markets with requirements such as these, regulatory approval—in addition to the views of the developer that would like to build the transmission line—establishes whether there is actual demand for a new transmission line and determines when firms are able to enter a market.<sup>92</sup>

Regulators have offered at least five related justifications for laws requiring certificates of public convenience and necessity in the energy industry: (1) avoiding “wasteful duplication” of physical facilities, (2) preventing “ruinous” or “destructive” competition between energy providers,<sup>93</sup> (3) cross-subsidizing customers who otherwise

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90. See, e.g., 49 U.S.C. § 10901(c) (2012) (“The Board shall issue a certificate authorizing activities for which such authority is requested in an application filed under subsection (b) unless the Board finds that such activities are inconsistent with the public convenience and necessity.”).

91. Request for Proposals for New or Upgraded Transmission Line Projects Under Section 1222 of the Energy Policy Act of 2005, 75 Fed. Reg. 32,940, 32,941 (June 10, 2010).

92. This is not universally true. Though historically certificates of public convenience and necessity involved an assessment of the financial viability of the proposed project, in recent years some regulators have relaxed that requirement when licensing new energy projects. For example, FERC’s assessment of the financial viability of natural gas pipelines has become very deferential. See Order Clarifying Statement of Policy, Certification of New Interstate Natural Gas Pipeline Facilities, 90 FERC ¶ 61,128, at 3 (2000), <https://www.ferc.gov/legal/maj-ord-reg/PL99-3-001.pdf> [<https://perma.cc/82MZ-3JHT>] (stating that “[t]he Commission . . . changed its policy regarding the pricing of construction projects so that market decisions by pipelines and shippers, as opposed to regulatory tests, would better reveal whether there is sufficient support for the project and whether the project is financially viable.”). In the context of transmission line siting, however, many states continue to consider whether the developer can “demonstrate the need for the proposed facilities and that their construction will not result in the wasteful duplication of facilities.” Application of Big Rivers Electric Corporation for a Certificate of Public Convenience and Necessity to Construct a 161 KV Transmission Line in Ohio County, Kentucky, No. 2007-00177, at 10 (Oct. 30, 2007), [https://psc.ky.gov/order\\_vault/Orders\\_2007/200700177\\_10302007.pdf](https://psc.ky.gov/order_vault/Orders_2007/200700177_10302007.pdf) [<https://perma.cc/Y2AY-73Q6>]. For a description of the historical factors that caused natural gas and electric power transmission siting regimes to diverge, see Klass, *The Electric Grid at a Crossroads*, *supra* note 31, at 1903–21. For a history and overview of gas and oil transportation laws, see Alexandra B. Klass & Danielle Meinhardt, *Transporting Oil & Gas: U.S. Infrastructure Challenges*, 100 IOWA L. REV. 947 (2015).

93. See *Northampton Elec. Lighting Co., Petitioner*, 7 ANNUAL REPORT OF THE BOARD OF GAS AND ELECTRIC COMMISSIONERS OF THE COMMONWEALTH OF MASSACHUSETTS 14, 21 (Jan.



would not receive service or who would otherwise have had to pay higher prices for service (also known as “cream skimming”), (4) protecting investments in assets that have large upfront capital costs, and (5) protecting the community against externalities such as environmental harms and eminent domain.

Once regulators decided to grant a company an exclusive franchise, they had to ensure that the company retained its market dominance.<sup>94</sup> Regulators were concerned that competition would lead to “wasteful duplication” of the physical facilities needed to generate and transport gas and electric power.<sup>95</sup> Regulators worried that without exclusive franchises, multiple companies would build gas pipelines even when a single pipeline was capable of meeting all of a region’s demand for gas.<sup>96</sup> Competition was thought to be problematic because it encouraged companies to make excessive infrastructure investments.

In addition to concern about wasteful duplication of energy infrastructure, concern about destructive competition preoccupied energy regulators in the industry’s early years. Specifically, policymakers worried that competitors would reduce rates to unprofitable levels to drive their competitors out of business.<sup>97</sup> Once a company drove competitors out of business, it would often raise prices and engage in discriminatory service.<sup>98</sup> The Massachusetts Railroad Commission, for example, explained in a 1908 decision that the state’s utility “statutes are founded on the assumption that, to have two or more competing companies running lines of gas pipe and conduits for electric wires through the same street would often greatly increase the necessary cost of furnishing light.”<sup>99</sup> When New York passed its own utility law, it did not simply aim to prevent monopoly abuses, but also named “destructive competition” as one of the evils utility regulation was designed to prevent.<sup>100</sup> Other states made similar appeals to concerns about destructive or ruinous competition, and twentieth

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1892) (“[C]apital wisely expended for the purpose of supplying public needs is entitled to be protected against destructive competition . . .”).

94. See PHILLIPS, *supra* note 44, at 4 (“[I]f economic power is not to be controlled by the market, it must be controlled by public authority, since a firm’s contribution to the general welfare, rather than being the result of voluntary choice, must be compelled.”).

95. See *id.* at 54 (“Competition [between public utilities] is self-destructive and results in a waste of scarce resources.”).

96. See *id.* (noting that multiple firms could agree to share the market).

97. See *id.* at 53–54 (“Competition may exist for a time, but only until bankruptcy or merger leaves the field to one firm.”).

98. See *id.* at 54 (“[A] monopolist might absorb not only the benefits resulting from the lower cost, but also might raise prices.”).

99. *Weld v. Gas & Elec. Light Comm’rs*, 84 N.E. 101, 102 (Mass. 1908).

100. See 1 *BD. OF R.R. COMM’RS OF N.Y., THIRD ANNUAL REPORT* viii, xxix–xxx (Albany, Weed, Parsons & Co. 1885).

century academics also seem to have accepted that competition was problematic in utility industries because it caused multiple firms to make infrastructure investments that would turn out to be redundant.<sup>101</sup> Public utility commissioners regularly echoed this concern.<sup>102</sup>

Concern about destructive competition was closely related to attempts to use public utility regulation to require utility industries to provide nondiscriminatory service. If regulators had not restricted market entry, competitors would have been able to offer reduced rates to the customers that they could serve at the lowest cost and refuse to serve other, less financially lucrative customers. The reason that competition posed an existential threat to the model of rate-regulated public utilities was that it was less expensive for utilities to provide service to some customers than to others. For example, utilities often operate at a loss when they serve rural customers but make significant profits when they serve customers who live in densely populated urban areas. That is because the infrastructure that transports electricity to urban customers allows the utility to expand its customer base to include all of those customers. The transmission lines that serve rural areas will cost the same to build but will open up a much smaller market.

Under rate regulation, the utility was required to provide nondiscriminatory rates and services to all customers. If an unregulated competitor had been allowed to offer the profitable customers reduced rates or superior services, they would be able to steal those customers from the regulated utility. That would leave the incumbent utility with a legal mandate to serve unprofitable customers despite the fact that competitors had convinced profitable customers to defect. In other words, the regulated utility would have been left with a statutory obligation to provide electricity service at regulated rates to customers that no one else was willing to serve. The Idaho Public Utility Commission captured this concern in a 1918 order. The Commission stated that the “whole theory of regulated monopoly . . . would be

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101. See, e.g., Aditya Bamzai, *The Wasteful Duplication Thesis in Natural Monopoly Regulation*, 71 U. CHI. L. REV. 1525, 1525 (2004) (discussing “the view that a grant of monopoly rights prior to excessive competition could preempt the ‘wasteful duplication’ of valuable resources by giving one party the exclusive right—and incentive—to invest”); see also SMITH, DOWLING & HALE, *supra* note 46, at 1–6; Horace M. Gray, *The Passing of the Public Utility Concept*, 16 J. LAND & PUB. UTIL. ECON. 8, 11 (1940) (“Certainly many of the proponents of public utility regulation intended it to protect consumers against excessive charges and discriminations; all the early state laws bear witness to this intent.”). Justice Breyer even used the phrase “wasteful duplication” in two opinions authored in the late 1990s and early 2000s. See *Verizon Commc’ns, Inc. v FCC*, 535 U.S. 467, 539 (2002) (Breyer, J., concurring in part and dissenting in part); *AT&T Corp. v Iowa Utils. Bd.*, 525 U.S. 366, 416 (1999) (Breyer, J., concurring in part and dissenting in part).

102. See *supra* notes 93–96 and accompanying text.

broken down if . . . a rival might invade a field occupied by a public utility . . . and take from it one [or] more of its best patrons.”<sup>103</sup>

The certificate of public convenience and necessity emerged largely as the solution to these perceived problems. According to the California Supreme Court, “[t]he certificate of public convenience and necessity is the means whereby protection is given to the utility rendering adequate service at a reasonable rate against ruinous competition.”<sup>104</sup> Regulated utilities were required to provide nondiscriminatory rates and services in their service areas. In exchange, they were protected from competition so that they could honor their service obligations.

The certificate of public convenience and necessity can be understood as a mechanism to ensure that rate-regulated utilities were able to use the profits from some customers to cross-subsidize customers that they were legally required to serve but who might not yield a profit for the utility. By preventing competitors from stealing utilities’ most lucrative customers, certificates allowed utilities to use the profits generated from profitable customers to sell electricity at below-cost rates to less financially remunerative electricity consumers. In that way, the certificate of public convenience and necessity ensured that utilities were in a financial position to provide nondiscriminatory rates and services to all of their customers.

### *C. Origins of the Filed Rate Doctrine*

As discussed, the certificate of public convenience and necessity ensured that market forces did not undermine cost-of-service regulation. The filed rate doctrine promoted a related goal, which was to prevent judicial enforcement of state and federal laws from forcing rate-regulated utilities to modify rates that they had already filed with

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103. *Sandpoint Water & Light Co. v. Humbird Lumber Co.*, P.U.R. 1918B 535, 547 (Idaho Pub. Util. Comm’n 1918).

104. *Motor Transit Co. v. R.R. Comm’n*, 209 P. 586, 589 (Cal. 1922). As discussed in Section I.C, it is also possible that the certificate of public convenience and necessity allowed state legislatures to give themselves legal authority to impose regulations that otherwise might not have survived judicial scrutiny. *See id.* at 591:

The primary purpose of the legislature in enacting this statute was not to confer a franchise upon the operating companies but to give into the power of the commission for regulation and control in the interest of the public the operation of auto stages for transportation. It did this by requiring every auto transportation company to secure from the commission a certificate of public convenience and necessity;

*Ex parte Russell*, 126 P. 875, 876 (Cal. 1912), *rev’d sub nom. Russell v. Sebastian*, 233 U.S. 195 (1914) (“[The] provision expressly limits the pre-existing powers and rights available to private corporations and natural persons. They are permitted to engage in such enterprises within the city only ‘upon such conditions and under such regulations as the municipality may prescribe.’”).

state and federal regulators. Judicial enforcement that altered rates could, among other things, thwart the nondiscrimination mandate built into ratemaking proceedings. Thus, like rate regulation and the certificate of public convenience and necessity, the filed rate doctrine was originally designed to protect consumer interests in the era of rate-regulated utilities. Specifically, it prevented utilities' customers and regulators from invoking legal rules to force utilities to deviate from the rates they filed with regulators.<sup>105</sup>

In ratemaking proceedings, regulators are supposed to carefully scrutinize utility rates to make sure that rates are just and reasonable.<sup>106</sup> The filed rate doctrine often forecloses judicial review of a wide swath of legal rules, including state and federal antitrust, tort, and contract law.<sup>107</sup> In this way, the filed rate doctrine prevents utilities from being forced to deviate from the rates that they filed with regulators absent the approval of the energy regulator charged with supervising the utility's rates and services.

The Supreme Court formally established the filed rate doctrine in *Keogh v. Chicago & Northwestern Railway Co.*, after a group of merchants sued railroads for colluding to establish rates.<sup>108</sup> The Interstate Commerce Act ("ICA") prohibited rate discrimination.<sup>109</sup> To ensure that utilities did not favor certain customers, the Interstate Commerce Commission ("ICC") ordered utilities and public service commissions to publish filed tariffs and prohibited railroads from secretly departing from those tariffs.<sup>110</sup>

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105. Rossi, *supra* note 11, at 1602 ("The filed tariff doctrine was originally intended to protect consumers . . .").

106. See Thomas W. Merrill & Henry E. Smith, *The Property/Contract Interface*, 101 COLUM. L. REV. 773, 808 n.112 (2001):

Under this [filed rate] doctrine, utilities and common carriers must establish their rates and services in standard form contracts called tariffs, which must be made available on equal and nondiscriminatory terms to all customers. Deviations from the filed tariff are not permitted, but the relevant regulatory agency is authorized to review and adjust the terms to ensure that they are "just and reasonable" to affected customers.

107. See *Square D Co. v. Niagara Frontier Tariff Bureau, Inc.*, 476 U.S. 409, 424 (1986) (affirming dismissal under *Keogh* of case to recover treble damages for alleged antitrust violation); *Keogh v. Chi. & Nw. Ry. Co.*, 260 U.S. 156, 162 (1922) (establishing the filed rate doctrine and dismissing Plaintiff's antitrust claim against railroad companies); *California ex rel. Lockyer v. Dynegy, Inc.*, 375 F.3d 831, 853 (9th Cir. 2004) (dismissing tort actions due to their preemption under the filed rate doctrine); *Cty. of Stanislaus v. Pac. Gas & Elec. Co.*, 114 F.3d 858, 863 (9th Cir. 1997) (holding that the filed rate doctrine bars all three of Plaintiff's asserted antitrust claims); *Sun City Taxpayers' Ass'n v. Citizens Utils. Co.*, 45 F.3d 58, 61–62 (2d Cir. 1995) (holding that the filed rate doctrine precludes a racketeering action).

108. 260 U.S. at 163.

109. *Id.* at 164.

110. See *id.* at 163 ("The legal rights of shipper as against carrier in respect to a rate are measured by the published tariff. Unless and until suspended or set aside, this rate is made, for all purposes, the legal rate, as between carrier and shipper."); Adam Candeub, *The Common*

The Plaintiff in *Keogh* was a manufacturer who used Defendants' railroads to ship goods he manufactured.<sup>111</sup> The Plaintiff claimed that the Defendant railroad companies violated section 7 of the Sherman Antitrust Act.<sup>112</sup> The ICC and the railroads argued that regulators—not courts—were responsible for determining the validity of rates and that, once they did so, railroads were shielded from judicial enforcement of private antitrust suits.<sup>113</sup> The Supreme Court agreed, claiming that private enforcement of antitrust law was at odds with the ICA's goal of preventing rate discrimination.<sup>114</sup> According to the Court,

[t]his stringent rule prevails, because otherwise the paramount purpose of Congress—prevention of unjust discrimination—might be defeated. If a shipper could recover under section 7 of the Anti-Trust Act for damages resulting from the exaction of a rate higher than that which would otherwise have prevailed, the amount recovered might, like a rebate, operate to give him a preference over his trade competitors.<sup>115</sup>

The Supreme Court was especially concerned that judicial enforcement of antitrust laws could prevent the ICC from effectively controlling utility rates and services. The Court speculated that “it is possible that no lower rate . . . could have been legally maintained without reconstituting the whole rate structure for many articles moving in an important section of the country.”<sup>116</sup> The Supreme Court thus recognized that antitrust actions that resulted in lower rates in one area might disrupt a region's entire rate framework by making it difficult for utilities to provide adequate and profitable service across their entire service areas.

Other early Supreme Court cases reflected a similar concern with making sure that judicial decisions did not undermine the rates energy companies filed with public utility commissions. The Court often emphasized, for example, that the filed rate doctrine protected utilities' nondiscrimination mandates. This concern is evident in filed rate cases that preceded *Keogh*. Though *Keogh* is generally considered the seminal filed rate case, the doctrine can be traced back to at least 1906, when the Supreme Court held that congressional legislation prohibiting discriminatory rates and services required that utilities be exempt from

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*Carrier Privacy Model*, 51 U.C. DAVIS L. REV. 805, 821 (2018) (noting the placement of interstate communications under the supervision of the ICC and the requirement that telegraph companies file tariffs with the ICC); Kearney & Merrill, *supra* note 63, at 1331–32 (“[T]he carrier's tariffs, which were filed with the Interstate Commerce Commission (ICC) and made available for public inspection both there and elsewhere, defined all aspects of the carrier-customer relationship.”).

111. 260 U.S. at 159–62.

112. *Id.* at 159.

113. *Id.* at 160.

114. *Id.* at 163.

115. *Id.* at 163.

116. *Id.* at 164.

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judicial enforcement of state antitrust laws.<sup>117</sup> In one case, the Supreme Court found that judicial enforcement of antitrust laws were preempted once a rate had been filed with a utility regulator because preemption was necessary “to secure equality of rates as to all, and to destroy favoritism.”<sup>118</sup> In another, decided in 1915, the Court reiterated that the doctrine “embodies the policy which ha[d] been adopted by Congress in the regulation of interstate commerce in order to prevent unjust discrimination.”<sup>119</sup> If the judiciary required utilities to provide differential rates and services by enforcing antitrust and tort, it would have forced utilities to deviate from the rates approved by public utility commissions.

Thus, the filed rate doctrine, like rate regulation and the certificate of public convenience and necessity, was designed to protect consumers from the particular regulatory challenges generated by cost-of-service regulation. Rate-regulated utilities were excepted from competitive markets. To protect consumers from monopolistic pricing, regulators controlled the rates and services that utilities charged. To ensure that new entrants did not undermine utilities’ exclusive franchises, regulators limited entry by requiring energy companies to receive a certificate of public convenience and necessity before entering a market. And the Supreme Court created the filed rate doctrine to prevent ordinary tort and antitrust suits from forcing utilities to provide discriminatory rates and services that deviated from those filed with energy regulators.<sup>120</sup>

#### IV. ZOMBIE ENERGY LAWS

While the three doctrines described in the previous Part were all originally intended to protect consumers by preserving the delicate regulatory balance required to respect cost-of-service regulation, today

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117. *See* N.Y., *New Haven & Hartford R.R. Co. v. Interstate Commerce Comm’n*, 200 U.S. 361, 391 (1906) (“That a carrier engaged in interstate commerce becomes subject as to such commerce to the commands of the statute, and may not set its provisions at naught whatever otherwise may be its power when carrying on commerce not interstate in character, cannot in reason be denied.”).

118. *Id.*; *see also* *Dayton Coal & Iron Co. v. Cincinnati, New Orleans & Tex. Pac. Ry. Co.*, 239 U.S. 446, 451 (1915) (“That it is essential to the maintenance of uniform rates and the avoidance of rebates and preferential treatment that the tariff rates filed with the Commission according to the Interstate Commerce Act . . . shall be the only rates which the carrier may lawfully receive . . .”).

119. *Louisville & Nashville R.R. Co. v. Maxwell*, 237 U.S. 94, 97 (1915).

120. Interestingly, the legal basis for many early filed rate cases was that the rates utilities filed with public utility commissions were a form of federal legislation. *See* *Tex. & Pac. Ry. Co. v. Mugg*, 202 U.S. 242, 245 (1906) (“[W]hatever may be the rate agreed upon, the carrier’s lien on the goods is, by force of the act of Congress, for the amount fixed by the published schedule of rates and charges . . .”).

those doctrines distort electric power markets and impede the development of renewable energy sources. This Part explains how the legal rules that were designed to mitigate the market power abuses of utilities subject to cost-of-service regulation have the opposite effect in restructured markets.

### A. *Zombie Rate Regulation*

Although FERC attempted to unbundle generation from transmission, the Commission ultimately did not force utilities to fully divest themselves of their generation assets. Instead being required to sell or spin off their generation assets, utilities that owned transmission lines remained able to own and operate generation facilities as well so long as they provided independent power producers with nondiscriminatory access to their transmission lines.<sup>121</sup> FERC's efforts to force utilities to unbundle transmission and generation was intended to make generators compete on an equal playing field. In practice, however, FERC's failure to require utilities to fully divest themselves of their generation assets has allowed utilities to manipulate generation bids in a manner that ensures that generators owned by vertically integrated utilities continue to operate despite being unable to compete with alternative electricity providers.

In restructured markets, grid operators oversee a bidding process that determines which generators will provide electricity to meet demand in a given period of time.<sup>122</sup> The utilities responsible for distributing electricity to end users—known as load-serving entities—purchase electricity from a centralized market.<sup>123</sup> Load-serving entities tell the grid operators their demand requirement, and the generators that compete to serve the market submit bids in which they offer a price at which they are willing to provide an amount of power (in megawatt-

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121. See Promoting Wholesale Competition Through Open Access Non-Discriminatory Transmission Services by Public Utilities, Order No. 888, 61 Fed. Reg. 21,540, 21,552 (May 10, 1996) (“We conclude that functional unbundling of wholesale services is necessary to implement non-discriminatory open access transmission and that corporate unbundling should not now be required.”).

122. For an overview of this process, see Joshua Macey & Jackson Salovaara, *Rate Regulation Redux*, 168 U. PA. L. REV. (forthcoming 2020) (manuscript at 16–19), [https://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=3362920](https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3362920) [<https://perma.cc/B38Q-58C5>].

123. See FRANCISCO FLORES-ESPINO ET AL., NAT'L RENEWABLE ENERGY LAB., COMPETITIVE ELECTRICITY MARKET REGULATION IN THE UNITED STATES: A PRIMER 12–13 (2016), <https://www.nrel.gov/docs/fy17osti/67106.pdf> [<https://perma.cc/B78F-7NH8>] (“A transparent wholesale spot market coordinated by an independent entity forms the foundation of competitive electricity markets in the United States.” (footnote omitted)).

hours, or “MWh”).<sup>124</sup> The grid operator then determines how much electricity is needed to meet all demand for electricity and identifies which generators are able to provide power to the region at the lowest cost.<sup>125</sup> Generators that submit successful bids are said to “clear” the market.<sup>126</sup> The least expensive resources clear the market first, followed by the next cheapest options, until the grid operator is able to provide enough electricity to match the region’s demand for electricity.<sup>127</sup> Every supplier is paid the price offered by the last generator to clear.<sup>128</sup>

In theory, generators that participate in a competitive market will generally bid the marginal costs, which are the costs they incur in providing an additional unit of electricity in a given moment.<sup>129</sup> If the generator submitted a bid below its marginal costs, it would risk being dispatched when the costs of producing electricity are greater than the revenues the generator would receive by selling electricity into the wholesale market. If a generator submits a bid above its variable costs, it risks not being dispatched when it would be profitable to operate. Because all dispatched generators are paid the price offered by the last resource to clear, a generator that clears the market will make the same amount of money regardless of its bid. That is because a market that clears at \$40 per MWh will pay all generators \$40 per MWh. Thus, a generator that can operate at \$10 per MWh will be paid \$40 per MWh regardless of whether the generator bids \$20 or \$10 per MWh. But if the generator bids at \$20 per MWh, it will risk not being dispatched if the market clears at \$15 per MWh despite the fact that the generator would have made money if it had sold electric power for \$15 per MWh.

In theory, merit order dispatch is supposed to ensure that consumers receive electricity at the lowest cost.<sup>130</sup> In practice, however,

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124. *See id.* (“In competitive markets, generators submit offers to the system operator based on the incremental cost to produce energy and the amount of power they want to sell.”).

125. *Id.*

126. *See id.* (“In real-time markets, the volume of energy traded is the difference between energy commitments cleared in day-ahead markets and the energy actually needed in the system to meet demand.”).

127. *Id.*

128. *Id.*

129. *See* MICHAEL MILLIGAN ET AL., NAT’L RENEWABLE ENERGY LAB., MARGINAL COST PRICING IN A WORLD WITHOUT PERFECT COMPETITION: IMPLICATIONS FOR ELECTRICITY MARKETS WITH HIGH SHARES OF LOW MARGINAL COST RESOURCES 4–5 (2017), <https://www.nrel.gov/docs/fy18osti/69076.pdf> [<https://perma.cc/UD6R-5CRJ>] (“Perfectly competitive markets can be shown to achieve short-run equilibrium at the point at which price equals marginal cost.”).

130. *See How Resources Are Selected and Prices Are Set in the Wholesale Energy Markets*, ISO NEW ENGLAND, <https://www.iso-ne.com/about/what-we-do/in-depth/how-resources-are-selected-and-prices-are-set> (last visited May 7, 2020) [<https://perma.cc/T9CG-AH9J>] (“Every five minutes of every day, ISO New England chooses resources to produce just the right amount of electricity to meet the region’s demand, but we also choose the least expensive resources available to meet that demand.”).



there are a few ways for generators to operate “out of merit” and send electricity to the grid even when market conditions render it uneconomic for them to do so. Specifically, generators can self-schedule or submit bids that are below their costs of production. When a generator self-schedules (also known as self-committing), it identifies the hours in which it operates and commits to providing a certain amount of electricity during those times regardless of the market clearing price.<sup>131</sup> Like all generators that clear, it receives the market clearing price.<sup>132</sup>

There are justifiable reasons for generators to self-schedule. For example, generators that incur high costs when they turn on or off may prefer to operate at a loss some of the time to ensure that they do not incur startup costs when wholesale prices rise.<sup>133</sup> It is expensive to turn nuclear and coal-fired power plants on and off.<sup>134</sup> Nuclear and coal generators may therefore be willing to send electricity into the grid even when they lose money doing so because they would like to avoid startup and shutdown costs. By self-scheduling, they know that they will be able to ramp up production when prices increase without having to incur these start-up costs. Grid operators count generators that self-schedule in the merit order as zero-cost bids.<sup>135</sup>

Alternatively, generators may simply submit a bid that is below their cost of production. If the bid is low enough, this will ensure that the generator clears the market. It is not clear why a generator would submit bids below their production costs absent some other source of revenue.<sup>136</sup>

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131. Grid operators count self-scheduled bids as zero-cost bids in the supply curve. *See, e.g., Authorization to Self-Schedule Capacity*, PJM, <https://www.pjm.com/~media/etools/erpm/20070302-rpm-authorization-self-sched.ashx> (last visited May 7, 2020) [<https://perma.cc/T3QH-2DFT>] (“Because PJM will self-schedule the Unit, Owner recognizes that the Unit’s offer will always clear an auction . . .”).

132. *See id.* (“[The] Owner must accept the applicable clearing price.”).

133. *See* N.Y. Indep. Sys. Operator, Inc., 167 F.E.R.C. ¶ 61,057, at P 22 (2019).

134. *See* HERMINÉ NALBANDIAN-SUGDEN, IEA CLEAN COAL CTR., OPERATING RATIO AND COST OF COAL POWER GENERATION 41 (Dec. 2016), <https://www.usea.org/sites/default/files/Operating%20ratio%20and%20cost%20of%20coal%20power%20generation%20-%20ccc272-1.pdf> [<https://perma.cc/ZC64-FCJD>] (“[O]ne full start-up may require additional fuel use with costs in the order of €30,000 (hot) and €100,000 (cold) for coal-fired power plants of 1000 MW capacity. The cost for starting a nuclear power plant is higher at €200,000 per start.”).

135. *See* SOUTHWEST POWER POOL, MKT. MONITORING UNIT, SELF-COMMITTING IN SPP MARKETS: OVERVIEW, IMPACTS, AND RECOMMENDATIONS 6 (Dec. 2019), <https://assets.documentcloud.org/documents/6573451/Spp-Mmu-Self-Commitment-Whitepaper.pdf> [<https://perma.cc/5NZA-BSJ2>] (“When participants self-commit resources, the commitment algorithm does not make the decision to commit those units based on their cost. Participants make their own commitment decisions without regard to the optimization of total costs. Said another way, these resources effectively move themselves to the bottom of the cost curve.”).

136. Generators that receive subsidies such as tax credits for operating may submit bids that are technically below their production costs. For example, wind receives a tax credit worth \$23 per

While generators may occasionally have legitimate reasons to operate even when it is unprofitable for them to do so, coal-fired power plants owned by vertically integrated utilities seem to be recouping losses they incur in energy markets from their captive ratepayers. Many state regulators continue to allow vertically integrated utilities to recover their costs even when those utilities participate in restructured markets.<sup>137</sup> This practice allows generation facilities owned by vertically integrated utilities to manipulate competitive energy markets, which seriously distorts energy market prices and reduces revenues enjoyed by generators that could offer electricity more competitively, including solar and wind generators. Imagine if a coal-fired power plant needs \$100 million a year to operate in a market. A generator that submits an uneconomic, \$0 bid into energy markets reduces the revenues received by every other generator that participates in wholesale energy auctions. If the coal-fired power plant had not bid \$0, another facility would have cleared the energy auction. That is because when an uneconomic generator is dispatched because it submits an anticompetitive bid, it replaces a unit that would have been dispatched had the coal-fired generator not submitted a bid below its marginal costs of production. Without the coal-fired generator's bid, a different generator that had submitted a higher bid would have been dispatched and would have set the energy market clearing price. That, in turn, would have raised the price paid to all generators in the market.

The coal generator does not mind the suppressive effect of its low bid because it recovers its energy market losses from its ratepayers. In fact, insofar as it owns the transmission assets that are required to purchase electricity from energy markets, it might stand to benefit from suppressed energy market prices.<sup>138</sup> But the generators whose

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MWh. Herman K. Trabish, *Prognosis Negative: How California Is Dealing with Below-Zero Power Market Prices*, UTILITY DIVE (May 11, 2017), <https://www.utilitydive.com/news/prognosis-negative-how-california-is-dealing-with-below-zero-power-market/442130/> [https://perma.cc/Z7JH-3FD3]. Wind generators may therefore be willing to submit negative bids—they are willing to pay the grid operator to produce electricity. The production tax credit allows clean generation facilities to submit lower-cost bids than they otherwise would and thereby ensures that they clear more frequently. *See id.* (noting that the tax credit and California's renewable energy mandates allow solar and wind energy sources “to be dispatched first in the generation stack, giving them greater influence over power prices”). Note that unlike the strategies vertically integrated utilities have adopted, the production tax credit rewards generators that provide clean energy and operates inside of energy markets. The tactics described in the rest of this Section do not operate inside of energy markets and do not provide revenue for anything of value.

137. *See Calpine Corp. v. PJM Interconnection, L.L.C.*, 163 F.E.R.C. ¶ 61,236, at 8 (Glick, C., dissenting) (2018) (“Roughly 20 percent of the installed capacity within PJM is owned by vertically integrated utilities. Those utilities are guaranteed to recover the cost [of] their resources, irrespective of the price they receive in PJM's capacity market.”).

138. A vertically integrated utility that operates in a restructured market and that owns transmission and generation assets is generally required to purchase electricity from wholesale

profitability is based on wholesale energy market auctions are harmed because they now receive lower rates. Thus, by using cost-of-service regulation to prolong the life of uneconomic coal generators, utilities not only increase electricity costs for consumers, but also decrease compensation for energy sources—including renewables—whose revenues are derived from energy market prices. Because grid operators count self-scheduled generators in the merit order and count them as bidding zero, coal-fired power plants displace generators that would clear energy auctions if the auctions were actually being run competitively.

Many long-term renewable energy projects are financed by power purchase agreements (“PPAs”) that are based off of estimated future market prices,<sup>139</sup> and PURPA’s avoided cost calculation is often based on projections about future energy market prices. Thus, strategic bidding by vertically integrated utilities harms more than just the utility customers that pay more for electricity and the generators that already participate in competitive energy markets and rely on wholesale market revenues to fund their continued operations. It also reduces the incentives for new merchant generators to enter the market and in this way deters the construction of new generation facilities even if new facilities could provide electricity at a lower cost than incumbents.

An analysis conducted by Synapse and the Sierra Club estimated that uneconomic dispatch of coal-fired generators owned by vertically integrated utilities has cost ratepayers \$3.5 billion between 2015 and 2017.<sup>140</sup> Duke Energy is seeking cost recovery for three coal-fired power plants that would allow it to receive close to \$1 billion from ratepayers.<sup>141</sup> It therefore seems that vertically integrated utilities are sometimes willing to accept a loss in energy markets because they can recover costs from captive ratepayers. This practice ensures that uneconomic generators continue to operate and reduces revenues

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energy auctions. Since low bids submitted by the utility’s generation assets reduce the clearing price, the utility reduces its costs by driving wholesale prices down.

139. See *Physical Power Purchase Agreements*, U.S. ENVTL. PROTECTION AGENCY, <https://www.epa.gov/greenpower/financial-power-purchase-agreements> (last visited May 7, 2020) [<https://perma.cc/A57V-8Z4U>] (“A financial PPA (Financial PPA) is a financial arrangement between a renewable electricity generator (the seller) and a customer, that enables both parties to hedge against electricity market price volatility.”).

140. Fisher et al., *supra* note 21, at 4.

141. See Testimony of Tyler Comings at 28, Petition of Duke Energy Indiana, LLC, No. 45253 (Ind. Util. Regulatory Comm’n Oct. 30, 2019), [https://iurc.portal.in.gov/\\_entity/sharepointdocumentlocation/0173ef4f-5b48-ea11-a999-001dd8009f4b/bb9c6bba-fd52-45ad-8e64-a444aef13c39?file=45253%20PUBLIC%20Tyler%20Comings%20Direct%20Testimony%20Revise%20d.pdf](https://iurc.portal.in.gov/_entity/sharepointdocumentlocation/0173ef4f-5b48-ea11-a999-001dd8009f4b/bb9c6bba-fd52-45ad-8e64-a444aef13c39?file=45253%20PUBLIC%20Tyler%20Comings%20Direct%20Testimony%20Revise%20d.pdf) [<https://perma.cc/ZM7Q-KU7R>] (“Duke is seeking cost recovery in this docket for all of its generation units.”).

enjoyed by generators that could offer electricity more competitively, including solar and wind generators.

Nor is cost recovery in a ratemaking proceeding the only way that cost-of-service regulation allows vertically integrated utilities to insulate themselves from the price signals sent by competitive energy markets. Arcane aspects of cost-of-service regulation known as price “trackers” and “fuel adjustment clauses” allow generators owned by vertically integrated utilities to pass along fuel costs to their captive customers.<sup>142</sup> Many power plants owned by vertically integrated utilities enter take-or-pay contracts that obligate them to pay for fuel even if they do not run.<sup>143</sup> Coal-fired power plants owned by rate-regulated utilities thus pay for—and pass on to consumers—the costs of fuel regardless of whether they actually operate. In this way, fuel adjustment clauses authorize vertically integrated utilities to recover fuel costs from their captive ratepayers.<sup>144</sup> Utilities need not receive formal authorization from a public service commission in a ratemaking proceeding to use these clauses. When this rate adjustment occurs automatically, utilities have little incentive to internalize fuel costs in energy bids because they can pass those costs on to their customers and need not worry that a public utility commission will prevent them from recovering those costs. This creates an additional revenue source for vertically integrated utilities outside of the energy markets overseen by grid operators.

A central premise of restructured energy markets is that less expensive generators should be dispatched before more expensive

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142. See *Fuel Adjustment Clauses & Other Cost Trackers*, ELECTRICITY CONSUMERS RESOURCE COUNCIL, <https://elcon.org/fuel-adjustment-clauses-cost-trackers/> (last visited May 7, 2020) [<https://perma.cc/REC3-49AZ>] (“A fuel adjustment clause (FAC) is a tariff provision which permits a change in rates to occur as a result of a change in the cost of fuel or a portion of purchased power expenses. These changes occur without the utility filing a formal rate case.”); Travis Kavulla, *Reviewed Work: “The Billion-Dollar Coal Bailout Nobody Is Talking About: Self-Committing in Power Markets,”* R STREET (June 12, 2019), <https://www.rstreet.org/2019/06/12/reviewed-work-the-billion-dollar-coal-bailout-nobody-is-talking-about-self-committing-in-power-markets/> [<https://perma.cc/6X9H-2EGT>] (“Today, without exception, each state with regulated generation has a tracker for fuel costs. However, these mechanisms have one huge problem: By eliminating a utility’s opportunity to earn additional profit (or incur a loss) on fuel, the utility is deprived of a financial incentive to improve their fuel-contracting behavior.”).

143. See Daniel R. Rogers & Merrick White, *Key Considerations in Energy Take-or-Pay Contracts*, KING & SPALDING (Apr. 1, 2013), <https://www.kslaw.com/blog-posts/key-considerations-energy-take-pay-contracts> [<https://perma.cc/8WUZ-W7J9>] (“While take-or-pay is not the only way to manage delivery obligations in long-term commodity sales agreements, it remains the most common form.”).

144. See, e.g., *The Fuel Adjustment Clause: Frequently Asked Questions*, PUB. SERV. COMMISSION OF KY. 1, <https://psc.ky.gov/agencies/psc/consumer/FAC%20QandA.pdf> (last visited May 7, 2020) [<https://perma.cc/K5G9-JAF9>] (“The [fuel adjustment clause] allows utilities to reflect those fluctuations [in fuel prices] in their electric rates without having to request changes in their base rates.”).

generators.<sup>145</sup> Merit order dispatch is supposed to ensure that consumers receive electricity as inexpensively as possible. But that assumption does not seem to apply to many coal-fired power plants owned by vertically integrated utilities. By using ratemaking proceedings to allow the uneconomic dispatch of coal-fired generators that lose money in wholesale energy markets, vertically integrated utilities have found a way to ensure that the generators they own can operate despite the fact that it costs more for them to do so. As discussed in Section III.A, utility rate regulation was originally intended to prevent utilities from charging monopolistic prices. Now that FERC relies on market forces to procure electricity at the lowest cost, however, the ability of vertically integrated energy utilities to use ratemaking proceedings to recover the losses they incur in wholesale markets is undermining the Commission's goals, which "are to promote competition and help American consumers gain access to reliable and affordable energy."<sup>146</sup>

### *B. Zombie Certificate of Public Convenience and Necessity Rules*

Beginning in the 1930s, when the Supreme Court repudiated its substantive due process cases, public service commissioners no longer had to protect companies from competition in order to impose substantive regulations.<sup>147</sup> The intellectual scaffolding that undergirded utility rate regulation took a bit longer to crumble than did the legal doctrines that originally justified certificates of public convenience and necessity. Once regulators embraced competitive energy markets in the 1970s, however, there were no longer economic reasons for regulators to assess the demand for a product before authorizing a company to enter a market.

Despite attempts to encourage competition in electric power markets, states have not eliminated laws requiring companies to receive a certificate of public convenience and necessity in order to build

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145. In Order 888, FERC explained that it relies on market processes "to bring more efficient, lower cost power to the Nation's electricity consumers." Promoting Wholesale Competition Through Open Access Non-Discriminatory Transmission Services by Public Utilities, Order No. 888, 61 Fed. Reg. 21,540, 21,541 (May 10, 1996).

146. *Apache Corp. v. FERC*, 627 F.3d 1220, 1221 (D.C. Cir. 2010).

147. See *Nebbia v. New York*, 291 U.S. 502, 538 (1937) ("[A]ppropriate statutes passed in an honest effort to correct the threatened consequences may not be set aside because the regulation adopted fixes prices reasonably deemed by the Legislature to be fair to those engaged in the industry and to the consuming public."); *West Coast Hotel Co. v. Parrish*, 300 U.S. 379, 399-400 (1937) ("The community may direct its law-making power to correct the abuse which springs from their selfish disregard of the public interest.").

new energy infrastructure.<sup>148</sup> These requirements protect incumbents, raise electricity prices, and obstruct green energy projects. Consider the case of Clean Line Energy, which tried to build a \$3.5 billion wind development project but abandoned it after failing to receive a certificate of public convenience and necessity from the Arkansas Public Service Commission.<sup>149</sup> The project would have connected a large wind development in Oklahoma to cities on the east coast.<sup>150</sup> It also would have lowered electricity prices by millions of dollars and generated thousands of jobs.<sup>151</sup>

The Arkansas Public Service Commission (“PSC”) blocked the project after Entergy, an Arkansas utility, filed an objection in which it argued that Clean Line Energy was not legally authorized to build transmission lines in Arkansas. Entergy pointed out that only public utilities can build transmission lines in Arkansas, and that Arkansas law defines “public utility” as a company that “own[s] or operat[es] in [Arkansas] equipment or facilities for . . . transmitting . . . power to or for the public for compensation.”<sup>152</sup> The Arkansas law creates a catch-22. Because Clean Line did not own or operate any transmission lines in Arkansas, it was not a public utility. And because it was not a public utility, it was not authorized to build transmission lines.

Entergy is one of only four investor-owned utilities operating in the state.<sup>153</sup> In denying Clean Line’s petition for a certificate of public convenience and necessity, the Arkansas PSC emphasized that it “strongly supports the improvement of the transmission system in this state as a means to lower energy costs for Arkansas ratepayers.”<sup>154</sup> The PSC also commended Clean Line for proposing a project that would “stimulate economic development, promote wider choice and

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148. See NAT’L ASS’N OF REGULATORY UTIL. COMM’RS, 1975 ANNUAL REPORT ON UTILITY AND CARRIER REGULATION 507–20, 560–65, 575–78, 601–04 (1976) (providing a taxonomy of state public utility laws).

149. Order, The Application of Plains and Eastern Clean Line LLC for a Certificate of Public Convenience and Necessity to Construct, Own, and Operate as an Electric Transmission Public Utility in the State of Arkansas, No. 10-041-U, at 11 (Ark. Pub. Serv. Comm’n, Jan. 11, 2011), [http://www.apscservices.info/pdf/10/10-041-u\\_41\\_1.pdf](http://www.apscservices.info/pdf/10/10-041-u_41_1.pdf) [<https://perma.cc/A839-29CL>].

150. *Id.* at 3.

151. See *id.*; Benjamin Peters, *PSC Reluctantly Denies Clean Line’s Application for a Third Time*, MO. TIMES (Aug. 16, 2017), <https://themissouritimes.com/psc-reluctantly-denies-clean-lines-application-third-time/> [<https://perma.cc/HSV4-UX7B>] (explaining that some estimated that Clean Line’s project would have created “1,500 jobs in the state” and “save[d] ratepayers millions in energy savings” by providing clean, low-cost energy).

152. ARK. CODE ANN. § 23-1-101(9)(A)(i) (2020).

153. See *Electric Section*, ARK. PUB. SERV. COMMISSION, <http://www.apscservices.info/electric.asp> (last visited May 7, 2020) [<https://perma.cc/M4RK-LQGH>]. The state also has a few small municipal utilities. See *id.*

154. Order, *supra* note 149, at 11.

competition in wholesale generation, and reduce pollution.”<sup>155</sup> The Arkansas PSC even recognized

that the law governing public utilities was not drafted to comprehend changes in the utility industry such as this one—where a non-utility, private enterprise endeavors to fill a void in the transmission of renewable power that is much needed but for which the Commission is unable to afford any regulatory oversight.<sup>156</sup>

Still, despite recognizing that “there is some circularity” in the Arkansas public utility statute, the Commission felt that its hands were tied and denied Clean Line’s request for a certificate of public convenience and necessity.<sup>157</sup>

Clean Line has also struggled to obtain a certificate of public convenience and necessity outside of Arkansas. For example, the Missouri PSC refused to approve Clean Line’s request for a certificate, which was necessary for the company to build merchant transmission lines.<sup>158</sup> The Missouri PSC observed that the project would not support the reliable provision of electricity in the state and that it was not in the public interest because the harm that it would cause to landowners outweighed any in-state benefits the project would provide.<sup>159</sup> Similarly, the Illinois Supreme Court echoed the Arkansas PSC and overturned an Illinois PSC decision to grant Clean Line a certificate of public convenience and necessity on the ground that Clean Line did not already own transmission infrastructure and thus did not qualify as a utility under state law.<sup>160</sup>

Clean Line’s wind project is far from the only clean energy development that has struggled with outdated public convenience and necessity laws. The American Electric Power Company gave up on a proposed \$4.5 billion wind project after regulators in Oklahoma

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155. *Id.* at 3 (citations omitted).

156. *Id.* at 10.

157. *See id.* at 11.

158. The Application of Grain Belt Express Clean Line LLC for a Certificate of Convenience and Necessity Authorizing It to Construct, Own, Operate, Control, Manage, and Maintain a High Voltage, Direct Current Transmission Line and an Associated Converter Station Providing an Interconnection on the Maywood–Montgomery 345 kV Transmission Line, No. EA-2014-0207, at 22, 25–26 (Mo. Pub. Serv. Comm’n July 1, 2015), [https://www.efis.psc.mo.gov/mpsc/CommonComponents/view\\_itemno\\_details.asp?caseno=EA-2014-020701&attach\\_id=2016000069](https://www.efis.psc.mo.gov/mpsc/CommonComponents/view_itemno_details.asp?caseno=EA-2014-020701&attach_id=2016000069) [<https://perma.cc/FD2Y-QSEF>].

159. *Id.*

160. Ill. Landowners All., *NFP v. Ill. Commerce Comm’n*, 90 N.E.3d 448, 462 (Ill. 2017):

Because only public utilities are eligible to receive certificates of public convenience and necessity under section 8-406 of the Public Utilities Act and because Rock Island [Clean Line] cannot meet the ownership test necessary to qualify as a public utility, the Commission’s order granting Rock Island a certificate of public convenience and necessity fails as a matter of law and cannot be sustained.

(citation omitted).

determined that the state did not need additional electricity.<sup>161</sup> The project would have saved Texas customers \$4 billion in electricity fees over its twenty-five year life.<sup>162</sup> Regulators in Illinois,<sup>163</sup> Iowa,<sup>164</sup> Kentucky,<sup>165</sup> and Missouri<sup>166</sup> have reached similar decisions, in each case denying a certificate to clean energy developments either because the developer did not qualify as a utility or because the state did not find that there was demand for the project.

Numerous academics have shown that protective transmission line siting laws benefit incumbents, raise electricity prices, and reduce competition.<sup>167</sup> One reason restrictive transmission siting laws pose

161. See Edward Klump, *Texas Rejection Dims Outlook for AEP's Wind Outlook Plan*, GOVERNORS' WIND & SOLAR ENERGY COMMISSION (July 30, 2018), <https://governorswindenergycoalition.org/texas-rejection-dims-outlook-for-aeps-wind-catcher-plan/> [<https://perma.cc/Z6TH-X28R>].

162. See Sonal Patel, *AEP's \$4.5B Wind Catcher Project Gets Louisiana's Approval*, POWERMAG (June 21, 2018), <https://www.powermag.com/aeps-4-5b-wind-catcher-project-gets-louisianas-approval/> [<https://perma.cc/UW94-RRPE>] (noting AEP's claim that the project, which required approval from Texas regulators, would "save customers more than \$4 billion over its 25-year life").

163. See Becky Yerak, *Battle Over \$600M Wind Power Superhighway Heads to Illinois Supreme Court*, CHI. TRIB. (Dec. 1, 2016), <https://www.chicagotribune.com/business/ct-grundy-county-transmission-1201-biz-20161130-story.html> [<https://perma.cc/Z95A-5YVB>] (reporting on rejection of project that would have powered 1.4 million homes).

164. See James Lynch, *GOP Lawmakers Propose Limits on Eminent Domain, Rock Island Clean Line*, COURIER (Jan. 11, 2014), <http://thegazette.com/2014/01/10/iowa-gop-lawmakers-propose-limits-on-eminant-domain-rock-island-cleanline> [<https://perma.cc/7DBT-XA3>].

165. See Application of AEP Kentucky Transmission Company, Inc. for a Certificate of Public Convenience and Necessity Pursuant to KRS 278.020 to Provide Wholesale Transmission Service in the Commonwealth, No. 2011-00042, at 7–8 (Ky. Pub. Serv. Comm'n June 10, 2013), [https://psc.ky.gov/PSCSCF/2011%20Cases/2011-00042/20130610\\_PSC\\_ORDER.pdf](https://psc.ky.gov/PSCSCF/2011%20Cases/2011-00042/20130610_PSC_ORDER.pdf) [<https://perma.cc/QBB6-W6TU>].

166. See Andra B. Stefanoni, *Panel's Silence Indicates Approval of Arkansas Power Line*, JOPLIN GLOBE (Feb. 19, 2014), <http://www.joplinglobe.com/topstories/x129173414/Panel-s-silence-indicates-approval-of-Arkansas-power-line> [<https://perma.cc/S8LS-64JM>].

167. See, e.g., BIPARTISAN POLICY CTR., CAPITALIZING ON THE EVOLVING POWER SECTOR: POLICIES FOR A MODERN AND RELIABLE U.S. ELECTRIC GRID 28–33 (2013) (critiquing the regulatory regime governing siting of interstate electric transmission lines); MASS. INST. OF TECH., THE FUTURE OF THE ELECTRIC GRID: AN INTERDISCIPLINARY MIT STUDY 77 (2011) (arguing that transmission line siting laws are a "significant hurdle" to necessary transmission system expansion); James W. Coleman, *Pipelines & Power-Lines: Building the Energy Transport Future*, 80 OHIO ST. L.J. 263, 266–67 (2019) (critiquing pipeline siting procedures and proposing improvements); Klass & Wilson, *supra* note 31, at 1803 (critiquing the ineffective nature of traditional electric transmission line siting laws); Klass, *The Electric Grid at a Crossroads*, *supra* note 31, at 1901 (arguing that "it no longer makes sense for states to be wholly responsible for reviewing and approving long-distance, interstate transmission lines" and proposing "a regional approach for siting interstate electric transmission lines"); Klass, *Takings and Transmission*, *supra* note 31, at 1154 (arguing that state eminent domain laws governing electric transmission lines reflect their policy goals for expansion of renewable energy use); Joel F. Zipp, *Amending the Federal Power Act: A Key Step Toward an "Energy Security and Supply Act of 2009" for the New Administration*, 21 ELECTRICITY J. 6, 6–7 (2008) (proposing federal legislation that would transfer siting and eminent domain authority over interstate electric transmission lines from the states to the Federal Energy Regulatory Commission); cf. Rossi, *supra* note 31, at 1018:



such significant impediments to renewable developments is that renewable-rich regions tend to be located outside of cities. But wind and solar developments need to be able to build transmission lines in order to transport electricity from wind- and solar-rich regions to population-dense areas that will consume the electricity they produce.<sup>168</sup>

The permitting requirements for these certificates are problematic for two reasons. The first is that regulators—not price signals—determine when it is “appropriate and necessary” to construct new transmission lines. This means that in some markets, a solar development that has secured long-term contracts to fund its operations and provide low-cost electricity to a region can be prohibited from entering the market if regulators disagree with the developer’s assessment of future demand or determine that the state has no need for these assets. The second problem with many certificate of public convenience and necessity laws is that they stifle competition by explicitly protecting incumbent transmission line owners. Clean Line Energy, for example, could not connect to the grid because Arkansas’s transmission siting laws stipulate that only incumbent utilities can build new transmission lines.

Note that this Section does not argue that regulators should play no role in siting—and even encouraging—new transmission projects. Often, new transmission lines are built because a regulator or grid operator determines that there is a need for new transmission capacity and solicits proposals to do so. This Section simply argues that these requests for proposals should not be limited to incumbents, and that a merchant power producer that is willing to pay to construct transmission lines that will connect its generation facilities to the grid should be able to do so regardless of whether a regulatory body agrees with the developer’s financial assessment of a region’s future demand for electricity.

As discussed in Section III.B, the siting laws that obstruct clean energy developments were generally drafted at the height of the era

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[B]ecause existing state laws ignore the more difficult issues of how the costs and benefits of transmission are balanced in the interstate market, and how new transmission will be paid for, siting jurisdiction alone will not remove barriers to transmission infrastructure and may present some hidden problems of its own.

168. See GRETCHEN BAKKE, *THE GRID: THE FRAYING WIRES BETWEEN AMERICANS AND OUR ENERGY FUTURE* xvii (2016):

Wind farms go up where it is windy. And places like Wyoming or Iowa or West Texas have a lot of strong wind on constant offer. What they don’t have are many people to use this power or very good long-distance power lines to carry it to more promising markets. The grid was never built to be robust in the midst of wastelands. But these empty, often uninhabitable places tend to be where wind and solar power are most effectively produced.

when regulators had economic and legal reasons to protect incumbent utilities from competition.<sup>169</sup> While regulators have abandoned the economic and legal theories that supported laws mandating that the energy companies receive certificates of public convenience and necessity before entering a new market, the continued requirement for these certificates creates Kafkaesque bureaucratic imbroglios that prevent companies—especially clean energy companies—from competing with incumbent utilities.

### C. The Zombie Filed Rate Doctrine

The filed rate doctrine is another example of a zombie energy law. The filed rate doctrine is a judicially created exception to a variety of state laws that attaches when plaintiffs challenge the validity of rates or terms that have been approved by a federal regulatory body.<sup>170</sup> Courts have described utility tariffs as firm-specific regulations that lock in place utility rates and services.<sup>171</sup> As discussed in Section III.C, once a utility files a tariff, it cannot change the terms and services it offers to its customers without receiving approval from its public service commission.<sup>172</sup>

The filed rate doctrine might have been a sensible rule when generators were regulated as public utilities. It is difficult to imagine how a plaintiff could have brought an antitrust case in court when utilities had a legal right to a monopoly and when regulators determined what prices were reasonable. The problem with the filed rate doctrine today is that many generators no longer actually file rates with public service commissioners.<sup>173</sup>

Energy markets look radically different than they did a century ago. Much of the country's generation is now compensated through

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169. See Jones, *supra* note 12, at 444–59.

170. See Keogh v. Chi. & Nw. Ry. Co., 260 U.S. 156, 162 (1922) (“A rate is not necessarily illegal because it is the result of a conspiracy in restraint of trade in violation of the Anti-Trust Act.”).

171. See Square D Co. v. Niagara Frontier Tariff Bureau, Inc., 476 U.S. 409, 415–17 (1986).

172. See *id.* at 413–14 (“[T]he ICC requires motor carriers to file tariffs containing all their rates, to make the tariffs available for public inspection, and to give advance notice of any changes in the filed rates.”).

173. See Fed. Energy Regulatory Comm’n v. Elec. Power Supply Ass’n, 136 S. Ct. 760, 768 (2016):

Decades ago, state or local utilities controlled their own power plants, transmission lines, and delivery systems, operating as vertically integrated monopolies in confined geographic areas. That is no longer so. Independent power plants now abound, and almost all electricity flows not through “the local power networks of the past,” but instead through an interconnected “grid” of near-nationwide scope.

(quoting New York v. Fed. Energy Regulatory Comm’n, 535 U.S. 1, 7 (2002)).

competitive procurements, and, as of 2018, thirty-six percent of all generation is produced by independent power producers that are unaffiliated with investor-owned utilities.<sup>174</sup> In the mid-1950s, the Supreme Court announced that it would assume that rates that had been negotiated at arm's length were just and reasonable.<sup>175</sup> Thus, in most of the country, private ordering—not formal ratemaking proceedings—now determines the profits generators make when they sell electricity.<sup>176</sup>

There is therefore no need for regulators to worry that antitrust suits will prevent the public service commissions from realizing their mandate to prevent discriminatory rates, because regulators in these parts of the country no longer rely on ratemaking proceedings to ensure that rates are just and reasonable. In fact, FERC now presumes that freely negotiated contracts are just and reasonable.<sup>177</sup> When FERC and state energy regulators presume, without reviewing contracts in a ratemaking proceeding, that all freely negotiated contracts are just and reasonable, they do not have an opportunity to assess whether a contract has anticompetitive effects.

Yet the application of the filed rate doctrine to competitive energy markets means that market participants are largely shielded from the laws that mitigate anticompetitive behavior in ordinary markets. In 1986, the Supreme Court affirmed the filed rate doctrine on *stare decisis* grounds, and it did so despite recognizing that the doctrine no longer served its original purpose.<sup>178</sup> Without authority to enforce antitrust laws, consumers have to trust that regulators will prevent collusive behavior and monopolistic pricing.

And regulators have failed to prevent market power abuses in electricity markets. Consider the 2000–2001 California energy crisis. At the turn of the twenty-first century, large generators began to strategically refuse to sell electricity until prices rose to astronomical levels.<sup>179</sup> Companies such as Enron would purposefully export electricity that was needed in the state to neighboring states such as

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174. See Table 3.1A, *Net Generation by Electricity Energy Source (All Sectors), 2008–2018*, ENERGY INFO. ADMIN., [https://www.eia.gov/electricity/annual/html/epa\\_03\\_01\\_a.html](https://www.eia.gov/electricity/annual/html/epa_03_01_a.html) (last visited May 7, 2020) [<https://perma.cc/YC66-4LU9>] (demonstrating the quantity of various energy sources generated between 2008 and 2018 by sector).

175. See *United Gas Pipe Line Co. v. Mobile Gas Serv. Corp.*, 350 U.S. 332, 381 (1956); *Fed. Power Comm'n v. Sierra Pac. Power Co.*, 350 U.S. 348, 355 (1956).

176. See Macey & Salovaara, *supra* note 122 (manuscript at 18).

177. See *United Gas Pipe Line Co.*, 350 U.S. at 381; *Sierra Pac. Power Co.*, 350 U.S. at 355.

178. See *Square D Co. v. Niagara Frontier Tariff Bureau, Inc.*, 476 U.S. 409, 423–24 (1986); see also *McCray v. Fid. Nat'l Title Ins. Co.*, 682 F.3d 229, 238 (3d Cir. 2012).

179. See Puller, *supra* note 3, at 75; Wolak, *supra* note 3, at 430.

Nevada in order to drive up California electricity prices.<sup>180</sup> Pacific Gas and Electric (“PG&E”), one of the two California companies that purchased electricity from generators to sell to consumers, was forced into bankruptcy when it found itself unable to afford electricity it was required to supply to Californians.<sup>181</sup> This type of behavior contributed to market inefficiencies worth an estimated \$12 billion.<sup>182</sup> Suppliers’ anticompetitive behavior was one of the reasons wholesale prices increased so dramatically and was thus one of the reasons California had to implement rolling blackouts.<sup>183</sup>

Other states have experienced similar abuses. Texas found itself in the same position in 2005, when market manipulation cost Texans more than \$70 million.<sup>184</sup> In the summer of 2006, New York market manipulation cost New Yorkers approximately \$150 million.<sup>185</sup> Studies of energy prices have demonstrated that market manipulation is an ongoing problem and that the tools FERC uses to deter manipulation are ill-equipped to prevent the types of abuses that pervade energy markets.<sup>186</sup>

It arguably made sense to funnel antitrust suits against regulated monopolies through the federal regulator charged with overseeing those monopolies. That is because judicial enforcement may undermine a market’s entire rate structure and lead to discriminatory rates. On top of that, a company that enjoys a legal right to a monopoly is by definition permitted to engage in some conduct that would

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180. See CAISO, ANALYSIS OF TRADING AND SCHEDULING STRATEGIES DESCRIBED IN ENRON MEMOS 5 (2002), [http://www.caiso.com/Documents/Analysis-TradingandSchedulingStrategiesDescribedinEnronMemosDMA10\\_402\\_.pdf](http://www.caiso.com/Documents/Analysis-TradingandSchedulingStrategiesDescribedinEnronMemosDMA10_402_.pdf) [<https://perma.cc/XJ6J-UU9H>].

181. Cf. PAUL W. MACAVOY, THE UNSUSTAINABLE COSTS OF PARTIAL DEREGULATION 70 (2007), (“[E]scalating prices in wholesale markets could not be passed on to its customers because the statute had required that retail prices be frozen during transition.”). Market manipulation was only one reason California energy prices increased in this period. See *id.* at 69–93.

182. James L. Sweeney, *California Electricity Restructuring, The Crisis, and Its Aftermath*, in ELECTRICITY MARKET REFORM: AN INTERNATIONAL PERSPECTIVE 319, 371 (Fereidoon P. Sioshansi & Wolfgang Pfaffenberger eds., 2006).

183. See *id.* at 353.

184. See POTOMAC ECONOMICS, LTD., INVESTIGATION OF THE WHOLESALE MARKET ACTIVITIES OF TXU FROM JUNE 1 TO SEPTEMBER 30, 2005, at 53 (2007); Associated Press, *State Monitor Finds TXU Abused Texas Power Market*, N.Y. TIMES (Mar. 13, 2007), <https://www.nytimes.com/2007/03/13/business/13TXU.html> [<https://perma.cc/HK9M-FSEJ>].

185. See *Did Electricity Market Manipulation Cost New York Consumers \$157 Million in the Summer of 2006?*, N.Y.’S UTIL. PROJECT (Mar. 22, 2007), <http://utilityproject.org/2007/03/22/did-electricity-market-manipulation-cost-new-york-consumers-157-million-in-the-summer-of-2006/> [<https://perma.cc/PK9Z-GGUZ>].

186. See David B. Spence & Robert Prentice, *The Transformation of Energy Markets and the Problem of Market Power*, 53 B.C. L. REV. 131, 132 (2012) (“As energy markets have grown increasingly complex and competitive, these traditional approaches have been supplemented and partly supplanted by a new approach—one that uses a model of regulation borrowed from securities law.”).

otherwise constitute an antitrust violation. In such cases, it arguably made sense to have the regulator responsible for ensuring that a company charge just and reasonable rates also make sure that the company is complying with service obligations imposed by state tort, contract, and antitrust laws.

Yet courts continue to apply the filed rate doctrine in restructured energy markets. The U.S. Court of Appeals for the First Circuit, for example, has held that “utility filings with the regulatory agency prevail over . . . other claims seeking different rates or terms than those reflected in the filings with the agency.”<sup>187</sup> According to the Ninth Circuit, the doctrine is “a form of deference and preemption, which precludes interference with the rate setting authority of an administrative agency, like FERC.”<sup>188</sup>

As explained in Section III.C, the filed rate doctrine was a judicially created doctrine intended to make sure that the judiciary did not undermine rates filed in cost-of-service ratemaking proceedings. Today, however, FERC has replaced monopoly cost-of-service ratemaking with a market-based approach to setting wholesale rates in most of the country. The Commission now seeks to ensure “just and reasonable” rates “by enhancing competition” among multiple wholesale providers of electricity.<sup>189</sup> FERC has done so because it has concluded that competition is the most effective way “to bring more efficient, lower cost power to the Nation’s electricity consumers.”<sup>190</sup> To achieve that purpose, FERC has endeavored “to break down regulatory and economic barriers that hinder a free market in wholesale electricity”<sup>191</sup> and it has chosen to rely on market forces in competitive auctions to fulfill its statutory charge of ensuring “just and reasonable” wholesale rates.<sup>192</sup> Courts thus seem to reflexively apply the filed rate doctrine in restructured markets without recognizing that the doctrine has become obsolete in markets where energy regulators do not review every energy contract before determining that the contract is just and reasonable.<sup>193</sup>

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187. *Town of Norwood v. Fed. Energy Regulatory Comm’n*, 217 F.3d 24, 28 (1st Cir. 2000).

188. *Wah Chang v. Duke Energy Trading & Mktg., LLC*, 507 F.3d 1222, 1225 (9th Cir. 2007).

189. *Fed. Energy Regulatory Comm’n v. Elec. Power Supply Ass’n.*, 136 S. Ct. 760, 768 (2016) (quoting *Morgan Stanley Capital Grp. Inc. v. Pub. Util. Dist. No. 1*, 554 U.S. 527, 536 (2008)).

190. *See Promoting Wholesale Competition Through Open Access Non-Discriminatory Transmission Services by Public Utilities*, Order No. 888, 61 Fed. Reg. 21,540, 21,541 (May 10, 1996).

191. *Morgan Stanley Capital*, 554 U.S. at 536.

192. *Elec. Power Supply Ass’n.*, 136 S. Ct. at 768 (quoting *Morgan Stanley Capital*, 554 U.S. at 536).

193. *See Breiding v. Eversource Energy*, 939 F.3d 47, 52 (1st Cir. 2019) (“Importantly, the doctrine prohibits antitrust challenges to agency-approved tariffs even in energy markets in which

Restructured energy markets are intended to create the same incentives as ordinary markets. To that end, exempting energy companies from judicial enforcement of ordinary tort, contract, and antitrust claims gives energy companies an exceptional privilege. In the cases described in this Section, the filed rate doctrine prevented civil plaintiffs from enforcing antitrust laws.<sup>194</sup> In this way, a doctrine that was originally meant to protect consumers by ensuring utilities treat all customers fairly has become a weapon that generators yield to exploit their market power.

Antitrust laws are supposed to protect competitive markets by preventing monopolists from restricting supply, raising prices, and redistributing surplus from consumers to suppliers.<sup>195</sup> As this Section has shown, energy markets clearly remain vulnerable to market power abuses. While it may have made sense to shield companies from antitrust suits when firms were shielded from competitive markets, there is no reason to continue to do so once regulators embrace market principles. In such circumstances, the laws meant to deter anticompetitive behavior should apply.

#### V. “JUST AND REASONABLE” RATES IN COMPETITIVE ENERGY MARKETS

The previous Part explained how three energy laws that emerged to protect consumers in the era of rate-regulated public utilities are now distorting energy markets and blocking renewable developments. This Part argues that these laws no longer make sense and should be abandoned. Overturning the filed rate doctrine should be a straightforward affair. Courts created the doctrine, and it is in their power to destroy it now that it is being applied to markets that bear no resemblance to the regulatory apparatus it was designed for.

Preventing vertically integrated utilities from using ratemaking proceedings to recoup the losses their generation assets incur in energy markets should also be fairly uncontroversial. FERC has a statutory mandate to ensure that wholesale rates are “just and reasonable” and not “unduly discriminatory.”<sup>196</sup> Vertically integrated utilities are

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FERC has eschewed traditional ratemaking.”); Pub. Util. Dist. No. 1 v. Dynege Power Mktg., Inc., 384 F.3d 756, 761 (9th Cir. 2004) (extending the filed rate doctrine to allegedly anticompetitive behavior committed in a restructured energy market).

194. See *Breiding*, 939 F.3d at 52; *Pub. Util. Dist. No. 1*, 384 F.3d at 761; Rossi, *supra* note 11, at 1591–93.

195. See Louis Kaplow, *On the Relevance of Market Power*, 130 HARV. L. REV. 1303, 1308 (2017).

196. 16 U.S.C. § 824d(a) (2012):

contravening this mandate to the extent that they take advantage of state ratemaking proceedings to ensure that their generation facilities continue to be dispatched and remain profitable even though the facilities would not be profitable if their revenues were derived entirely from the competitive wholesale markets. While FERC cannot prohibit state public utility commissions from allowing generators to recover generation costs in state ratemaking proceedings, it could bar such generators from participating in wholesale auctions. That would create a strong incentive for states to limit rate recovery to transmission assets.

The illegality of restrictive certificates of public convenience and necessity is more speculative. While FERC has authority over wholesale energy rates, states generally have authority over transmission line siting.<sup>197</sup> FERC cannot prevent states from pursuing valid policies through transmission siting laws, but the practices may be preempted by the FPA to the extent that they interfere with the Commission's exclusive jurisdiction over the "transmission of electric energy in interstate commerce" and over "all facilities for such transmission or sale of electric energy."<sup>198</sup> The bar for conflict preemption in the FPA is very high, but generators that find themselves completely barred from wholesale markets might have a plausible preemption claim if they can show that a state is using its siting

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All rates and charges made, demanded, or received by any public utility for or in connection with the transmission or sale of electric energy subject to the jurisdiction of the Commission, and all rules and regulations affecting or pertaining to such rates or charges shall be just and reasonable, and any such rate or charge that is not just and reasonable is hereby declared to be unlawful;

16 U.S.C. § 824e(a) (2012):

Whenever the Commission, after a hearing held upon its own motion or upon complaint, shall find that any rate, charge, or classification, demanded, observed, charged, or collected by any public utility for any transmission or sale subject to the jurisdiction of the Commission, or that any rule, regulation, practice, or contract affecting such rate, charge, or classification is unjust, unreasonable, unduly discriminatory or preferential, the Commission shall determine the just and reasonable rate, charge, classification, rule, regulation, practice, or contract to be thereafter observed and in force, and shall fix the same by order.

197. See 16 U.S.C. § 824(a)–(b) (2012); ADAM VAUGHN, CONG. RESEARCH SERV., R40657, THE FEDERAL GOVERNMENT'S ROLE IN ELECTRIC TRANSMISSION FACILITY SITING 2 (2010):

The Federal Power Act (FPA), first enacted in 1920 as the Federal Water Power Act and amended to include interstate electricity transmission in 1935, granted the Federal Power Commission jurisdiction over wholesale electric power transactions and the interstate transmission of electric power. The states, for the most part, retained jurisdiction over the siting of generation and transmission facilities as well as the pricing of most retail electric power transactions.

198. 16 U.S.C. § 824(b)(1).

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authority to target wholesale auctions.<sup>199</sup> In any event, Congress should amend the FPA to give FERC authority to site transmission facilities.

Thus, while all three of the zombie energy laws described in the previous Part should be abandoned, the abandonment would have to take different forms. The judiciary could likely end the filed rate doctrine. FERC could disincentivize the practice of using state ratemaking proceedings to circumvent competitive wholesale markets; though if FERC fails to act, Congress, state legislatures, and state public service commissions should also step in to eliminate this practice. And while courts may be able to ameliorate some of the problems associated with certificates of public convenience and necessity, legislative solutions are likely necessary to facilitate transmission line siting. Nonetheless, the FPA should render, or at least raise questions about, the legality of zombie energy laws in restructured energy markets.

*A. Ratemaking Should Not Circumvent  
Competitive Wholesale Markets*

FERC and the courts have construed the FPA's mandate that FERC maintain "just and reasonable" rates to mean that the Commission should make sure that Americans receive low cost and reliable electricity.

The FPA gives FERC authority to regulate "the sale of electric energy at wholesale in interstate commerce."<sup>200</sup> The FPA further mandates that FERC "shall" preempt "any rule, regulation, practice, or contract affecting" a rate within the Commission's jurisdiction that "is unjust, unreasonable, unduly discriminatory or preferential."<sup>201</sup> State programs are preempted when they have the effect of "adjusting an interstate wholesale rate."<sup>202</sup> Thus, while states retain authority to regulate generation facilities and retail electric rates, they cannot alter or "set" wholesale rates.<sup>203</sup>

Yet that is precisely what seems to be happening in state ratemaking proceedings that allow generators to operate when it would be uneconomic for them to do so if their revenues derived entirely from wholesale energy markets. When ratemaking proceedings and fuel

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199. See Matthew R. Christiansen & Joshua C. Macey, *Long Live the Federal Power Act's Bright Line*, 134 HARV. L. REV. (forthcoming) (manuscript at 35–41) (on file with author).

200. 16 U.S.C. § 824(b)(1).

201. 16 U.S.C. § 824e(a).

202. *Hughes v. Talen Energy Mktg., LLC*, 136 S. Ct. 1288, 1297 (2016).

203. See *id.* at 1293. For a more detailed analysis of FPA preemption, see Christiansen & Macey, *supra* note 199, at 35–41.



adjustment clauses increase generation revenues without furthering a legitimate state interest, they may guarantee an income to generation facilities that are owned by vertically integrated utilities. Those generators are thus protected from energy market prices because they can recover costs elsewhere. Such practices are arguably preempted when they “aim at” or functionally “set” FERC-jurisdictional rates.

That is not to say that states cannot subsidize generation facilities or provide additional revenue in ratemaking proceedings. States simply have to identify a valid regulatory objective that is subject to their jurisdiction.<sup>204</sup> If they cannot do so, then the effect of cost recovery for generation facilities could be to revise wholesale rates whose jurisdiction does not belong to state PSCs. Still, many preemption claims would fail since states retain authority to subsidize generation facilities so long as the subsidies do not aim at or set wholesale rates.

But while the judiciary may not be able to fix the market distortions that arise whenever a rate regulated utility uses ratemaking proceedings to subsidize inefficient generation assets, FERC does have authority to intervene to protect wholesale markets. While the Commission cannot prevent states from subsidizing preferred resources, it might be able to prohibit generators that benefit from rate regulation from participating in wholesale auctions. These subsidies raise electricity prices and do not seem to benefit consumers in any way. Because FERC has authority over wholesale auctions, it can protect those auctions from practices that distort wholesale market prices. In doing so, it would force states to bear the full costs of their decisions to retain inefficient generation assets.

*B. Certificates of Public Convenience and Necessity Should Not Undermine Competitive Wholesale Markets*

Unlike the strategies that vertically integrated utilities have developed to use rate regulation to circumvent competitive wholesale markets, the challenges created by certificates of public convenience and necessity seem to require a legislative fix. That is because while FERC enjoys authority over wholesale energy rates and the transmission of electricity in interstate commerce, states retain jurisdiction over transmission line siting. An existing, and extensive, literature advocates for more federal involvement in transmission line siting, and those suggestions would certainly help FERC continue to open energy markets to competitive forces.

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204. See *Allco Fin. Ltd. v. Klee*, 805 F.3d 89, 92 (2d Cir. 2015).

In the absence of congressional action, however, FERC may be able to reduce some of the barriers to entry created by restrictive transmission siting laws by invoking its existing authority. Congress has instructed the Commission to preempt “any rule, regulation, practice, or contract affecting” a rate within the Commission’s jurisdiction that “is unjust, unreasonable, unduly discriminatory or preferential.”<sup>205</sup> Moreover, FERC has exclusive jurisdiction over the “transmission of electric energy in interstate commerce,” over the “sale of electric energy at wholesale in interstate commerce,” and over “all facilities for such transmission or sale of electric energy.”<sup>206</sup> To the extent that excessively restrictive state transmission siting laws undermine these objectives, it would seem that FERC has authority to issue regulations that create an incentive for states to adopt more permissive laws and regulations to govern transmission line siting. The Commission might, for example, support compensation schemes that give more favorable treatment to states that have taken steps to facilitate the development of merchant transmission lines. In that way, the Commission would put pressure on states to reform their siting laws.

### *C. The Filed Rate Doctrine Has Outlived Its Purpose*

Stare decisis provides the only justification for the filed rate doctrine in restructured energy markets. In fact, when the Supreme Court revisited the filed rate doctrine in 1986, it acknowledged that the doctrine’s justifications are less compelling in regions that have abandoned cost-of-service regulation for electricity sales and essentially affirmed the doctrine on stare decisis grounds.<sup>207</sup>

Though judges and academics often claim that stare decisis creates a strong presumption against overturning past judicial decisions,<sup>208</sup> not even the strongest proponents of stare decisis would

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205. 16 U.S.C. § 824e(a).

206. 16 U.S.C. § 824(b) (2012).

207. See *Square D Co. v. Niagara Frontier Tariff Bureau, Inc.*, 476 U.S. 409, 423–24 (1986).

208. For academics who have embraced a strong view of stare decisis, see Charles Fried, *Constitutional Doctrine*, 107 HARV. L. REV. 1140, 1142–43 (1994); Deborah Hellman, *The Importance of Appearing Principled*, 37 ARIZ. L. REV. 1107, 1120 n.75 (1995) (“To permit overruling where the overruling court finds only that the prior court’s decision is wrong is to accord the prior decision only persuasive force . . . without according it any weight as precedent.”); and Henry Paul Monaghan, *Stare Decisis and Constitutional Adjudication*, 88 COLUM. L. REV. 723, 756–63 (1988). The Supreme Court has also embraced a strong view of stare decisis. See *Planned Parenthood v. Casey*, 505 U.S. 833, 854 (1992) (associating stare decisis with “the very concept of the rule of law underlying our . . . Constitution”); cf. Caleb Nelson, *Stare Decisis and Demonstrably Erroneous Precedents*, 87 VA. L. REV. 1, 3 (2006) (arguing that it is possible to “develop a coherent doctrine of

save the filed rate doctrine. Even the most militant adherents of *stare decisis* agree that courts should overturn past judicial decisions that have proven to be “unworkable.”<sup>209</sup> The Supreme Court has said, for example, that courts should not affirm prior judicial decisions that have been left behind by “the growth of judicial doctrine or further action taken by Congress” or that create “a direct obstacle to the realization of important objectives embodied in other laws.”<sup>210</sup>

The filed rate doctrine passes this high threshold for overturning judicial precedents. As discussed in Section IV.C, it creates a “direct obstacle to the realization” of FERC’s objective to encourage competitive energy markets, and Congressional action that indicates a clear intent to further break down barriers to competition in energy markets such as the Energy Policy Act qualify as “further actions” that render the doctrine obsolete.

### CONCLUSION

The energy sector in restructured markets looks very different than the electric power industry that emerged in the late nineteenth and early twentieth centuries. In the early twentieth century, most energy was provided by vertically integrated monopolies that enjoyed exclusive franchises and protection from competition. Their revenues came from ratemaking proceedings that guaranteed recovery for costs that regulators deemed reasonable. That regulatory design led to a number of energy doctrines that courts and policymakers felt were necessary to protect the public utility model.

Today, these doctrines do not seem to serve any socially useful purpose. Instead, zombie energy laws provide a financial windfall for incumbent fossil fuel generators and often create significant barriers to entry for competitive renewable projects. The process of restructuring energy markets should go beyond market processes that procure the cheapest energy in a given moment. Fully restructured markets would also eliminate vestigial energy laws that protect incumbent fossil fuel generators from being subject to laws and regulations that would ensure markets remain competitive.

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*stare decisis*” that does not include a presumption against overruling “demonstrably erroneous precedent”).

209. *See* *Patterson v. McLean Credit Union*, 491 U.S. 164, 173–74 (1989).

210. *Id.* at 173.