COMMENT

CLIMATE STUMBLING BLOCKS: ZOMBIE ENERGY LAWS, STATES, AND THE PATH TO PARIS

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With the dawn of the Joseph Biden Administration, there is renewed optimism that the United States will take steps to fulfill its responsibilities under the Paris Agreement and curb greenhouse gas (GHG) emissions. Electrification is a big step on this path, and the nation needs a cleaner, more resilient grid to support this reduced emissions future.

But as University of Chicago Law Prof. Joshua C. Macey details in his article, Zombie Energy Laws, efforts to support mass electrification and decarbonization face a major stumbling block: zombies. In particular, zombie energy laws—“statutes, regulations, and judicial precedents that continue to apply after their underlying economic and legal bases dissipate”—undermine incorporation of more clean energy resources into the electricity grid and harm consumers in the process.

Here, we highlight the progress states have made and are poised to continue making in reducing GHG emissions from the power sector. We then discuss two of the zombie energy laws identified in Macey’s article and identify other proposed fixes. Last, we explore two additional zombie laws that may impede clean energy progress.

I. The Power Sector and States: Progress, Commitment, and Opportunity

Over the last nearly 30 years, states have played a large role in helping the country reduce power-sector GHG emissions by 4.1% by leading the shift to cleaner sources of generation. Beginning in the 1990s, a majority of states adopted renewable performance standards (RPS) that require an identified percentage of electricity sales come from renewable sources. Forty-five percent of renewable energy growth in the United States since 2000 can be attributed to state RPSs.

Fifteen states have now adopted 100% zero carbon or carbon-neutral electricity targets. As of 2019, the states in the U.S. Climate Alliance with RPSs and other climate programs were projected to reduce their GHG emissions by 20 to 27% from the 2005 emissions level by 2025, in line with the Paris Agreement’s GHG emissions reduction targets. But as Macey points out, threats to competition and entrenched preferences for incumbent fossil fuel

Authors’ Note: This Comment does not necessarily reflect the views of NYU School of Law.

3. See FERC, FERC Announces Technical Conference to Discuss Electrification and the Grid of the Future (Mar. 2, 2021), https://ferc.gov/news-events/news/ferc-announces-technical-conference-discuss-electrification-and-grid-future (announcing proceeding to discuss "the shift from non-electric to electric sources of energy at the point of final consumption (e.g., to fuel vehicles, heat and cool homes and businesses, and provide process heat at industrial facilities)").
6. Id. at 1077.
generators—in the form of zombie energy laws—threaten this progress.

II. Undead or Just Sleeping?

Macey highlights three “zombie” laws or areas of law that are impeding clean energy competition and progress. These zombies are remnants of an electricity regulatory system that in some ways no longer resembles the modern system, and they now haunt, rather than serve, consumers and the public interest. Two of these zombie energy laws are particularly tied in to the role of states: (A) rate regulation; and (B) certificates of public convenience and necessity.

A. Rate Regulation

As Macey describes, energy companies have been treated as natural monopolies. Rate regulation—the first zombie law he discusses12—was put in place to protect consumers and mitigate potential harms and abuses. State utility commissions are responsible for retail rates, and the Federal Energy Regulatory Commission (FERC) is responsible for rates for interstate sales at wholesale.

State utility commissions have a variety of ways to oversee the utilities they regulate. A utility will seek to recover its costs plus a reasonable rate of return. Of course, however, the devil is in the details of exactly what costs should be passed on to ratepayers, and what kind of return is reasonable.13

Under the Federal Power Act, FERC evaluates rates to ensure they are just and reasonable and not unduly discriminatory.14 Rates were traditionally set based on a utility’s cost of providing service. Now, FERC will grant a utility market-based rate authority if that company can demonstrate it lacks or has adequately mitigated market power in the relevant area.15

FERC also regulates interstate transmission. In a series of orders, FERC implemented open access requirements, requiring transmission-owning utilities to provide transmission service on their systems on a nondiscriminatory basis.16 Also, FERC has encouraged the formation of regional transmission operators and independent system operators (RTOs/ISOs), independent grid operators that administer wholesale power markets and plan and run the transmission system. These actions by FERC, along with a push to separate generation and transmission, have moved toward a more competitive power system.

However, the market is far from perfect. For example, Macey discusses uneconomic self-scheduling, a practice by which the owners of coal-fired generation will submit a below-cost bid into the wholesale power market to ensure that the coal plants are selected to run.17 This may be required from an engineering standpoint—a coal-fired generator cannot start up quickly—but it can also occur when the plant owner knows it will recover its costs from captive retail ratepayers and is therefore indifferent to the market price.

One solution Macey offers is for FERC to prohibit generators that benefit from retail rate regulation from participating in wholesale markets.18 The reality is, though, that there are large parts of the country where traditional rate regulation remains standard, including in RTOs/ISOs where this kind of uncompetitive behavior is likely occurring—the Midcontinent Independent System Operator (MISO) and the Southwest Power Pool (SPP).19 Disallowing the participation of these generators does not seem realistic. These uneconomic coal plants are the scariest zombies, not necessarily rate regulation.

State utility regulation can be awakened to curb these anticompetitive practices that hinder clean energy progress.20 State utility commissions have numerous tools available to them to reevaluate how they oversee and regulate utility ratemaking.21 There is a lot of work to be done at the state regulatory and legislative level.

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12. Macey, supra note 5, at 1108-09.
13. Id. at 1124.
15. To the extent that state commissions try to implement protectionist, discriminatory rates, the filed rate doctrine provides an avenue for challenge.
17. FERC, supra note 5, at 1108.
18. Macey, supra note 5, at 1108.
We are also generally wary of FERC banning swaths of generators from participating in wholesale markets based on state activity. We have seen in recent years that this is a slippery slope for FERC, as it has categorized state clean energy programs and mandates as market distortions. FERC has engaged in mental gymnastics to create an offer floor to prevent these resources from lowering prices in wholesale capacity markets.23 But by promoting renewable energy, state programs are taking the external costs of fossil fuel emissions into account and penalizing those resources frustrates state goals and raises costs for consumers.24 We are reluctant to embrace an approach that encourages FERC to do more picking and choosing amongst generators and state policy goals.

That is not to say FERC does not have a role to play here. Wholesale market operators and their market monitors can provide information to support state investigations, as well as examine market design issues that will affect coal unit bidding.25 FERC recently announced a series of market design technical conferences that may be good forums to have these conversations and consider needed reforms.26

B. Certificates of Public Convenience and Necessity

Macey’s next zombie is certificates of public convenience and necessity rules for building infrastructure—specifically, the doctrine that may impede the transmission buildout that is necessary to support increased clean energy deployment and electrification.27 While interstate sales of transmission capacity are subject to FERC jurisdiction, the siting of the lines requires the approval of each state where the project will be constructed, typically in the form of a certificate of public convenience and necessity.

These projects often face opposition from landowners, as well as local governments. And because the project developer must usually seek approvals from multiple states, developers handle applications, appeals, and opposition on multiple fronts.28 The lines have the potential to deliver cheaper, cleaner power while reducing transmission congestion (leading to lower costs generally).29 These projects also provide local tax revenue and jobs.30

Project developers may be able to mitigate risk of delay or denial by using existing rights-of-way and by appealing to the public interest.31 But some aspects of state law can still be effective obstructions. As Macey points out, there are legal remnants that protect incumbent utilities, such as a requirement that the developer be a “public utility” under state law, that can strike at project viability.32 In these cases, the state regulators may believe the projects are beneficial and in the public interest, but are bound by state law to deny them.33

Clearly, change is needed, and there are steps that can be pursued within current federal legislative authority.34 However, we hesitate to go as far as agreeing with Macey that “[r]egulators should not be in the business of second-guessing energy developers’ expectations about the profitability of a business venture.”35 The downside of employing an approach that relies solely on a developer’s analysis can be seen in what FERC has done in the context of natural gas pipelines.36 FERC’s review of natural gas pipelines—a process that is still subject to certain state environmental review but is largely consolidated before FERC, unlike transmission siting—unfortunately does not employ a robust needs analysis, allowing need to be demonstrated by a contract to purchase the gas with an affiliate of the developer.37 FERC approves the vast majority of these projects, locking in a dependence on natural gas. This is a threat to the deployment of clean energy resources and progress toward state GHG emissions reduction goals.

28. Macey, supra note 5, at 1085.
29. Id. at 1085 n.28.
30. Id. at 1085.
Market forces may be particularly ill-equipped to produce the transmission grid needed to promote decarbonization and electrification. Markets do not appropriately value clean power, and thus may not send the right signals. There are some additional places for advocacy in the meantime. For example, the efficiency of the existing transmission grid can be enhanced.\textsuperscript{39} FERC, RTOs/ISOs, and stakeholders can work to improve the interregional planning process. And incumbents that may not be planning and building (and charging ratepayers) for the right types of transmission projects can be subject to more scrutiny.\textsuperscript{40}

\section*{III. More Zombie Energy Laws}

In addition to those listed by Macey, other zombie energy laws imperil the clean energy transition and the United States’ attempts to hit the Paris Agreement climate goals. Two such other zombies are: (A) laws that promote the development and use of natural gas infrastructure; and (B) a statutory provision that blocks the building of electric vehicle charging stations on federally funded highways.

\subsection*{A. Natural Gas Infrastructure Laws}

The conflict between new clean energy commitments and zombie energy laws is particularly fraught in the context of laws that promote the use of natural gas to heat residential buildings.\textsuperscript{41} Many states that have committed to reduce GHG emissions still have on their books laws that subsidize or require the use of natural gas, which is a source of the short-lived, super pollutant GHG methane, to heat buildings.\textsuperscript{42}

For example, the GHG emissions reduction target of 85\% below 1990 emission levels by 2050\textsuperscript{43} included in New York’s Climate Leadership and Community Protection Act (CLCPA), adopted in 2019, indicates a “limited role, if any,” for natural gas in New York’s 2050 energy system.\textsuperscript{44} But the preexisting Section 30 of the New York Public Service Law (NYPSL) states that providing natural gas to residential customers is in the public interest, restricting residential customers to fuels—including natural gas—they have used in the past and incumbent utilities that have provided that fuel.\textsuperscript{45} With natural gas consumption by current residential customers representing more than one-half of New York’s 2050 carbon budget, Section 30 of the NYPSL may undermine the state’s ability to meet the CLCPA’s goals.\textsuperscript{46} Section 30 of the NYPSL is a zombie energy law that has outlived its original purpose. As states seek to achieve their climate goals, they will have to identify and address these lurking zombies that are a threat to their climate ambitions.\textsuperscript{47}

\subsection*{B. Ban on Economic Activities at Highway Rest Stops}

At the beginning of America’s highway building boom in the middle of the 20th century, local businesses near highway rest stops succeeded in securing a ban on almost all economic activity at highway rest stops as a way of protecting them from new competition.\textsuperscript{48} Specifically, agreements between the U.S. Department of Transportation (DOT) and state DOTs to construct highway projects are required to contain a clause that prohibits states from permitting “automotive service stations or other commercial establishments for serving motor vehicle users to be constructed or located on the rights-of-way of the interstate system.”\textsuperscript{49}

The prohibition on service stations and other commercial establishments at rest stops on the federal highway system is a threat to the development of an electric vehicle charging network needed to electrify and clean the transportation sector,\textsuperscript{50} the largest sectoral source of GHG emissions.\textsuperscript{51} Dependable location of electric vehicle charging stations at highway rest stops would ameliorate consumers’ range concerns, one of the bigger impediments to greater electric vehicle use and market penetration.\textsuperscript{52} But the ban on economic activity at rest stops complicates the buildout of an electric vehicle charging network because it encompasses commercially available charging stations for electric vehicles.\textsuperscript{53}

\begin{thebibliography}{10}


\bibitem{44} Gundlach & Stein, supra note 42, at 224.

\bibitem{45} Id.

\bibitem{46} Id. at 225-26.


\bibitem{48} David Ferris, EV Chargers at Rest Stops! Not in Fast, Say the Feds, E&E News (Nov. 27, 2019), https://www.eenews.net/stories/1061656653.

\bibitem{49} 23 U.S.C. §1116.

\bibitem{50} Of course, cleaning the transportation sector through electrification depends upon cleaning the underlying electricity system itself. David Roberts, The Key to Tackling Climate Change: Electrify Everything, Vox (Oct. 27, 2017, 8:48 AM), https://www.vox.com/2016/9/19/12938086/ electrify-everything.

\bibitem{51} Sources of Greenhouse Gas Emissions, supra note 7, at “Transportation” tab.


\bibitem{53} Id.

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The ban on economic activity at federal rest stops is a zombie (energy) law. The good news is that the ban might be on the chopping block as the U.S. Congress and the Biden Administration consider how to build and maintain a 21st-century electricity grid and highway system. Last year, the U.S. House of Representatives Democratic surface transportation reauthorization legislation included a provision that would allow for the building of electric vehicle charging stations at federal highway rest stops. This type of provision will likely be included in similar legislation that is proposed in Congress this year as part of President Biden’s climate and infrastructure plan.54

IV. Conclusion

Advocates, regulators, and policymakers must grapple with the laws that Macey discusses and others to determine if (and if so, how) they continue to be applicable to the modern electricity sector, as well as how they may hurt or hinder decarbonization and electrification. Clean energy is competitive. States continue to lead the push for strong clean energy standards and energy innovation. The protectionist remnants of our power system need to be examined and reformed to ensure that we can move forward with a cleaner, more resilient grid.

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