EXTRATERRITORIALITY AND THE ELECTRIC GRID: NORTH DAKOTA V. HEYDINGER, A CASE STUDY FOR STATE ENERGY REGULATION

Tessa Gellerson*

Under the extraterritoriality doctrine, a branch of the dormant Commerce Clause, state statutes that regulate behavior wholly outside of the regulating state's borders will be invalidated. In today's interconnected world, this doctrine is outdated. Many desirable state statutes have out-of-state effects, and per se application of extraterritoriality threatens to invalidate these statutes despite their net benefits. This is particularly true as applied to the electric grid, which is interconnected by nature. This Note joins the chorus of scholars and judges who have argued that extraterritoriality is outmoded and should be folded into the Pike balancing test. Under this balancing framework, statutes' local benefits would be credited, but courts would remain free to strike down statutes that excessively burdened interstate commerce. This balancing framework is loyal to the Supreme Court's early articulations of the concerns animating the extraterritoriality doctrine and would allow a path forward for innovative state solutions to climate change.

Introduction			563
I.	Contextualizing The Extraterritoriality Doctrine		568
	А.		568
	В.	Extraterritoriality's Historical Development	569
		1. The Court Historically Evaluated Extraterritorial Effects	
		Under a Balancing Framework	570
		2. The Court's Most Forceful Articulations of Extraterritoriality	
		Are Limited to Price-Setting Statutes	573
		3. Possible Contemporary Limitations to Extraterritoriality	578
		4. Inconsistent Interpretation of Extraterritoriality in the	
		Lower Courts	580
	C.	Criticism of the Extraterritoriality Doctrine	581
II.	Heydinger and The Illogic Of Applying Extraterritoriality To State		
	Reg	gulation Of The Electric Grid	583
	А.	State Regulation of the Electric Grid Is Necessary, But	
		Complicated	584
	В.	Minnesota Enacted Innovative Climate Change Mitigation	
		Strategies	588
	C.	On Appeal to the Eighth Circuit, Judge Loken, Judge Murphy,	
		& Judge Colloton Each Wrote Separately, Invalidating	
		Minnesota's Act on Separate Grounds	590
	D.	Lessons Learned From Heydinger	593
Con		n	596

^{*} J.D. Candidate, Harvard Law School, Class of 2018. The author would like to thank Jim Tripp, Elizabeth Stein, and Michael Panfil of the Environmental Defense Fund for encouraging her initial research into *Heydinger*, Professor Richard Lazarus for his invaluable support and feedback, and the editorial staff of the *Harvard Environmental Law Review* for their help and advice. Any mistakes are the author's own.

Introduction

Emissions from the electricity sector account for 30% of current domestic greenhouse gas ("GHG") emissions in the United States.¹ Any comprehensive climate change mitigation strategy must include policies aimed at reducing these GHG emissions. But national legislation is unlikely for two reasons: one pragmatic and one technical. First, far from evincing the desire to pass national environmental regulation, the Trump Administration has worked swiftly to dismantle the Clean Power Plan and has not signaled any desire to replace it.² Second, authority to regulate the electric grid is bifurcated between the Federal Energy Regulatory Commission ("FERC") and the states. While FERC has authority to regulate wholesale electricity markets,³ states have authority over retail electricity markets, electricity generation, and new transmission line siting.⁴ And FERC may worry that tinkering with the existing electricity market—to incorporate the social cost of carbon into market prices for electricity generation, for example—strays beyond its statutory mandate.⁵

Alternatively, the Environmental Protection Agency ("EPA") could regulate GHG emissions under the Clean Air Act,⁶ but attempts to use the Clean Air Act to force generation shifting have faced political and legal challenges.⁷ States, therefore, are the actors best situated and most capable of crafting innovative and nimble environmental regulation in this arena. States are best positioned to evaluate the local environmental benefits and burdens imposed by different energy sources. And they can incentivize shifts to cleaner energy sources directly by regulating electricity generation and indirectly via line siting decisions.

- 1. Sources of Greenhouse Gas Emissions, EPA (Feb. 14, 2017), https://perma.cc/K8U3-CXUE.
- 2. See Coral Davenport, Trump to Undo Vehicle Rules That Curb Global Warming, N.Y. TIMES (Mar. 3, 2017), https://perma.cc/RH48-63LG.
- See 16 U.S.C. § 824 (2012); see also What FERC Does, FERC (May 24, 2014), https://perma.cc/8WQW-ZF2R.
- 4. See, e.g., Promoting Wholesale Competition Through Open Access Non-Discriminatory Transmission Services by Public Utilities; Recovery of Stranded Costs by Public Utilities and Transmitting Utilities, 75 FERC ¶ 61,080 at 433, n.543 (Apr. 24, 1996) [hereinafter Order No. 888]. There, FERC noted that "Congress left to the States authority to regulate generation and transmission siting." Id. at 433 n.543.
- 5. FERC has authority to set "just and reasonable" rates, see 16 U.S.C. § 824d (2012), but may be hesitant to choose favorites within the electricity generation market. While to some extent the concept of an "intrastate" retail market is a misnomer as electric grids are interconnected in most parts of the country and are often run by regional independent system operators ("ISOs") or regional transmission organizations ("RTOs"), states still retain authority over intrastate retail electricity sales. See What FERC Does, supra note 3.
- See Massachusetts v. EPA, 549 U.S. 497, 532 (2007); see also Am. Elec. Power Co. v. Connecticut, 564 U.S. 410, 424 (2011).
- 7. See Davenport, supra note 2; see also West Virginia v. EPA, 136 S. Ct. 1000 (2016).

Creative state efforts to reduce GHG emissions resulting from the electricity sector, however, have been stymied by a per se application of the dormant Commerce Clause's extraterritoriality doctrine. The doctrine holds that states cannot regulate interstate commerce that occurs wholly outside of their borders.⁸ But extraterritoriality's historical development and the Supreme Court's recent application of the doctrine counsel in favor of recasting extraterritoriality as part of the dormant Commerce Clause's *Pike v. Bruce Church*⁹ balancing framework.¹⁰ Placing extraterritoriality within a balancing framework would provide courts with more latitude to weigh local benefits against burdens imposed on interstate commerce, thereby avoiding excessive invalidation of needed state environmental regulation while maintaining sufficient safeguards against economic protectionism and balkanization.

Article I of the U.S. Constitution states, "Congress shall have the power ... [t]o regulate commerce with foreign nations, and among the several states, and with the Indian tribes." In order to avoid the paralytic effects of protectionist state regulations, which burdened the U.S. economy under the Articles of Confederation, courts read a negative implication into the Commerce Clause. This dormant Commerce Clause "prohibits state taxation or regulation that discriminates against or unduly burdens interstate commerce and thereby impedes free private trade in the national marketplace. States, however, "retain authority under their general police power to regulate matters of legitimate local concern, even though interstate commerce may be affected.

Unlike the concomitant commerce power whose scope has undulated, experiencing a surge in the wake of the New Deal, and a constriction post-*Lopez*¹⁵ and *Morrison*, ¹⁶ modern dormant Commerce Clause jurisprudence has continually branched outwards, shrinking the permissible sphere of state regulation. This mismatch between the regulatory arenas of Congress and the states raises the possibility of regulatory gaps, in which neither states nor the federal government are able to mitigate a public harm. This risk is particularly acute in an era of congressional intransigence.

^{8.} See Healy v. Beer Inst., 491 U.S. 324, 336 (1989).

^{9. 397} U.S. 137 (1970).

^{10.} See Healy, 491 U.S. at 337 n.13; Brown-Forman Distillers Corp. v. N.Y. State Liquor Auth., 476 U.S. 573, 579 (1986); Edgar v. MITE Corp., 457 U.S. 624, 640, 643–46 (1982); see also Pharm. Research & Mfrs. of Am. v. Walsh, 538 U.S. 644, 669 (2003) (referring to extraterritoriality not as a pervasive prong of the dormant Commerce Clause, but as the "rule that was applied in Baldwin and Healy" and thereby arguably cabining the doctrine to the price-setting context).

^{11.} U.S. CONST. art. I, § 8, cl. 3.

^{12.} See Gen. Motors Corp. v. Tracy, 519 U.S. 278, 287 (1997).

^{13.} Id. (citations omitted).

^{14.} Maine v. Taylor, 477 U.S. 131, 138 (1986).

^{15.} United States v. Lopez, 514 U.S. 549 (1995).

^{16.} United States v. Morrison, 529 U.S. 598 (2000).

The nature of commerce has also changed; historical distinctions between "local" and "national" commerce are anachronistic in an age where technology and increasingly interconnected markets allow for the ready flow of goods in interstate commerce. Commerce Clause jurisprudence must similarly evolve to "oversee[] [the] largely overlapping spheres of authority" that have resulted from this change in market structures. The But technology and markets change rapidly, at a pace that often cannot be matched by our legal system's common law tradition, which is marked by decisional minimalism and intermittent developments. This discrepancy has understandably bred confusion as courts struggle to graft existing case law onto novel and complex forms of commerce. The struggle to graft existing case law onto novel and complex forms of commerce.

Extraterritoriality, which calls for per se invalidation of state statutes that regulate behavior "wholly outside" of the regulating state, has been criticized as out of step with the principles underpinning the dormant Commerce Clause and ossified in an age of evolving commerce and shifting understandings of states' jurisdictions. Scholars have written extraterritoriality's obituary and extraterritoriality has been termed the "most dormant" clause of the dormant Commerce Clause. The contemporary per se extraterritoriality analysis sprung up from a handful of cases in the 1980s²² and has rarely been applied by the Supreme Court. Instead, the doctrine has developed in varying forms amongst the federal courts of appeals. S

To the extent that the Court's historical justifications for the per se extraterritoriality test—rigid territorialism and state autonomy—were ever convincing, they no longer are. In other areas of the law, such as personal jurisdiction, the judiciary has adopted a fluid conception of states' territories that reflects our increasingly interconnected world.²⁴ Extraterritoriality has not kept pace. Its

^{17.} Am. Beverage Ass'n v. Snyder, 735 F.3d 362, 378 (6th Cir. 2013) (Sutton, J., concurring).

^{18.} See Ari Lanin, Note, Who Controls the Internet? States' Rights and the Reawakening of the Dormant Commerce Clause, 73 S. CAL. L. REV. 1423, 1439–48 (2000).

See Brannon P. Denning, Extraterritoriality and the Dormant Commerce Clause: A Doctrinal Post-Mortem, 73 LA. L. REV. 979, 979-80 (2013); Jack L. Goldsmith & Alan O. Sykes, The Internet and the Dormant Commerce Clause, 110 YALE L.J. 785, 803-06 (2001); see also Energy & Env't Legal Inst. v. Epel, 793 F.3d 1169, 1172 (10th Cir. 2015), cert. denied, 136 S. Ct. 595 (2015).

^{20.} See Denning, supra note 19, at 979-80.

^{21.} Energy & Env't Legal Inst., 793 F.3d at 1172.

See Healy v. Beer Inst., 491 U.S. 324 (1989); Brown-Forman Distillers Corp. v. N.Y. State Liquor Auth., 476 U.S. 573 (1986); Edgar v. MITE Corp., 457 U.S. 624 (1982).

^{23.} See Chinatown Neighborhood Ass'n v. Harris, 794 F.3d 1136, 1146 (9th Cir. 2015). Compare Am. Beverage Ass'n v. Snyder, 735 F.3d 362, 377 (6th Cir. 2013) (Sutton, J., concurring) (applying extraterritoriality as a per se test) with Freedom Holdings, Inc. v. Spitzer, 357 F.3d 205, 216 n.11 (2d Cir. 2004) (citing Nat'l Elec. Mfrs. v. Sorrell, 272 F.3d 104, 109–10 (2d Cir. 2001)) (considering extraterritorial effects within the Pike balancing framework).

^{24.} See IMS Health, Inc. v. Mills, 616 F.3d 7, 29 n.29 (1st Cir. 2010), vacated on other grounds sub nom., IMS Health, Inc. v. Schneider, 564 U.S. 1051 (2011).

rigid application is out of sync with the principles animating the dormant Commerce Clause and threatens to invalidate state laws that promise net benefits notwithstanding some inevitable extraterritorial effects.

This is particularly true as applied to the environmental context, where rigid application of extraterritoriality threatens to stunt innovative state solutions to climate change. As Justice Brandeis famously wrote:

Denial of the right to experiment may be fraught with serious consequences to the Nation. It is one of the happy incidents of the federal system that a single courageous State may, if its citizens choose, serve as a laboratory; and try novel social and economic experiments without risk to the rest of the country.²⁵

North Dakota v. Heydinger,²⁶ a recent Eighth Circuit case, presents a case study of the complexity of applying extraterritoriality to the electric grid. The statute at issue in Heydinger is one example of a state, Minnesota, striving to craft creative solutions to decrease local GHG emissions from the electricity sector by encouraging a shift away from coal-generated electricity.²⁷ North Dakota challenged the statute as surreptitiously regulating wholly out-of-state behavior, arguing that, because electricity is untraceable, out-of-state energy producers would be forced to either comply with the terms of Minnesota's statute for all of their sales or unplug from the regional electric grid entirely.²⁸ While some of the extraterritorial effects discussed in Heydinger are inevitable, they do not trigger the concerns that the dormant Commerce Clause was designed to address, and should not result in per se invalidation of the statute.

This mismatch between the current nature of commerce and extraterritoriality, especially as applied to the electric grid, recalls the oft-repeated question: "Is it possible that the extraterritoriality doctrine, at least as a freestanding branch of the dormant Commerce Clause, is a relic of the old world with no useful role to play in the new?" The answer may very well be yes. Folding extraterritoriality into the *Pike v. Bruce Church* balancing framework will not address the concerns of Justices who criticize *Pike*'s "totality of the circumstances" approach. But this balancing framework is loyal to the principles un-

^{25.} New State Ice Co. v. Liebmann, 285 U.S. 262, 311 (1932) (Brandeis, J., dissenting).

^{26. 825} F.3d 912 (2016).

^{27.} MINN. STAT. § 216H.03, subdiv. 3 (2016).

^{28.} Heydinger, 825 F.3d at 916-17.

^{29.} Am. Beverage Ass'n v. Snyder, 735 F.3d 362, 378 (6th Cir. 2013) (Sutton, J., concurring).

^{30.} See Dep't of Revenue of Ky. v. Davis, 553 U.S. 328, 359–61 (2008) (Scalia, J., concurring in part); Camps Newfound/Owatonna, Inc. v. Town of Harrison, 520 U.S. 564, 619 (1997) (Thomas, J., dissenting) ("[Balancing] invites us, if not compels us, to function more as legislators than as judges."); Bendix Autolite Corp. v. Midwesco Enters., Inc., 486 U.S. 888, 897 (1988) (Scalia, J., concurring in judgment) (noting that under Pike, courts must ask "whether a particular line is longer than a particular rock is heavy").

dergirding the dormant Commerce Clause and will allow state statutes that are justified by legitimate local interests to survive judicial scrutiny, offering a way forward for innovative state solutions to climate change.

This Note proceeds in two parts. Part I outlines the Court's contemporary dormant Commerce Clause jurisprudence and delineates extraterritoriality's historical development, making the case that the Court historically considered extraterritorial effects within a balancing framework. Part I concludes by describing the criticism that extraterritoriality has faced from courts of appeals and academic commentators. Part II makes the case that extraterritoriality is inappropriate as applied to the electric grid because of the need for state regulation of GHG emissions and because of the Court's and Congress's express decisions to leave authority over retail electricity markets and new electricity generation and transmission line siting with the states. Part II advances the case for incorporating the extraterritoriality doctrine into the *Pike* balancing test by an in-depth look at the doctrine's implications in the Eighth Circuit case, *Heydinger*.

I. Contextualizing The Extraterritoriality Doctrine

This Part lays out the Supreme Court's current dormant Commerce Clause jurisprudence and details extraterritoriality's historical development. While wielding outsized power, extraterritoriality has rarely been applied by the Supreme Court, so the doctrine's full contours remain unclear. Historically, the Court analyzed the concerns animating extraterritoriality within a balancing framework. It only fully embraced the doctrine's current per se form in a string of three cases in the 1980s, and the Court's most recent application of the doctrine counsels in favor of reining in its application.³¹ Folding extraterritoriality within the Court's balancing framework may thus be most loyal to the doctrine's historical development and the Court's recent articulation of the doctrine. This recasting would also address the criticisms that extraterritoriality has faced: over-inclusivity, an unmooring from the dormant Commerce Clause's undergirding principles, and a growing misalignment with the Court's understanding of territoriality in the personal jurisdiction and choice-of-law contexts.

A. Contemporary Dormant Commerce Clause Doctrine

Contemporary dormant Commerce Clause jurisprudence has three branches. First, a statute that is discriminatory either on its face or in practice is subject to strict scrutiny.³² A discriminatory statute will likely be invalidated unless there are legitimate local interests at stake and there are no less discrimi-

^{31.} See discussion infra Parts I.A, I.B.

^{32.} See Hughes v. Oklahoma, 441 U.S. 322, 337 (1979).

natory means of accomplishing those interests.³³ Second, if the statute is not discriminatory, the court will apply the *Pike* balancing test.³⁴ Under this test, the statute "will be upheld unless the burden it imposes on [interstate] commerce is clearly excessive in relation to the . . . local benefits."³⁵ The burden on interstate commerce that "will be tolerated will of course depend on the nature of the local interest involved, and on whether it could be promoted as well with a lesser impact on interstate activities."³⁶ The *Pike* balancing framework thus provides significantly more leeway for courts to consider the local benefits of a statute that allegedly burdens interstate commerce.

The third branch of dormant Commerce Clause jurisprudence, extraterritoriality, remains clouded by uncertainty and varied application. Under this doctrine, statutes "that directly control[] commerce occurring wholly outside the boundaries of a State" violate the dormant Commerce Clause.³⁷ In determining whether a statute has extraterritorial effects, the Supreme Court takes a functional approach:

[The] critical inquiry is whether the practical effect of the regulation is to control conduct beyond the boundaries of the State. . . . [T]he practical effect of the statute must be evaluated not only by considering the consequences of the statute itself, but also by considering how the challenged statute may interact with the legitimate regulatory regimes of other States and what effect would arise if not one, but many or every, State adopted similar legislation.³⁸

The Supreme Court has thus expressed particular concern about overlapping or inconsistent regulations that threaten to impose burdensome regulations on industry.³⁹

B. Extraterritoriality's Historical Development

Extraterritoriality is treated as a separate prong of the dormant Commerce Clause, but the Court has rarely applied extraterritoriality, and has never fully articulated the contours of the doctrine. This has led to calls amongst scholars

^{33. &}quot;[W]hen discrimination against commerce . . . is demonstrated, the burden falls on the State to justify it both in terms of the local benefits flowing from the statute and the unavailability of nondiscriminatory alternatives adequate to preserve the local interests at stake." *Id.* (quoting Hunt v. Washington Apple Advert. Comm'n, 432 U.S. 333, 353 (1977)).

^{34.} Pike v. Bruce Church, Inc., 397 U.S. 137, 142 (1970).

^{35.} Id. at 142.

³⁶ I.I

Healy v. Beer Inst., 491 U.S. 324, 336 (1989); see also Edgar v. MITE Corp., 457 U.S. 624, 642–43 (1982).

^{38.} Healy, 491 U.S. at 336.

^{39.} See, e.g., Kassel v. Consol. Freightways Corp., 450 U.S. 662, 671 (1981).

to fold the doctrine into either the *Pike* balancing test or the *City of Philadelphia* v. New Jersey⁴⁰ discriminatory statute test.⁴¹ In the doctrine's nascent stages, the Court raised and analyzed the concerns underlying the extraterritoriality doctrine—territorialism and state sovereignty—within a general balancing framework.⁴² Reincorporating extraterritoriality within the *Pike* balancing test would thus remain loyal to the principles undergirding the doctrine's historical development. It would allow judges to strike down state statutes that are not justified by legitimate local concerns or that impose excessive burdens on interstate commerce, while allowing states to serve as breeding grounds for innovative environmental policies.

1. The Court Historically Evaluated Extraterritorial Effects Under a Balancing Framework

In *Baldwin v. Seelig*,⁴³ the Court analyzed whether the New York Milk Control Act violated the dormant Commerce Clause. The Court considered the Act's extraterritorial effects within a balancing framework. The Act established "minimum prices to be paid by dealers to producers" of milk, and prohibited the sale of milk produced within or imported into New York unless the price paid to milk producers, whether within or outside the state, was at or above the established statutory floor.⁴⁴ The Court explicitly condemned the extraterritorial reach of this statute: "New York has no power to project its legislation into Vermont by regulating the price to be paid in that state for milk acquired there."⁴⁵ Yet this did not end the Court's inquiry. Instead, the Court considered whether either "economic security" or public health justified the statute's burden on interstate commerce.⁴⁶ The Court rejected both of these arguments.

First, the Court rejected the argument that a price floor was necessary to protect the intra- and interstate supply of milk because milk producers might otherwise exit the market if their standard of living deteriorated.⁴⁷ The Court reasoned that accepting this rationale "would be to eat up the rule under the guise of an exception" because every protectionist statute could be justified on these grounds.⁴⁸ Further, the Court rejected the argument that a price floor

^{40. 437} U.S. 617 (1978).

See, e.g., Energy & Env't Legal Inst. v. Epel, 793 F.3d 1169, 1173 (10th Cir. 2015), cert. denied, 136 S. Ct. 595 (2015); Goldsmith & Sykes, supra note 19, at 806.

^{42.} See, e.g., Baldwin v. G.A.F. Seelig, 294 U.S. 511, 524 (1935).

^{43.} Id.

^{44.} Id. at 519.

^{45.} Id. at 521.

^{46.} Id. at 523-24.

^{47.} See id. at 523.

^{48.} Id.

was necessary to ensure that milk producers had the economic wherewithal to comply with sanitary guidelines, thereby protecting the public health.⁴⁹ The Court surmised that "[w]hatever relation there may be between earnings and sanitation is too remote and indirect to justify obstructions to the normal flow of commerce in its movement between states."⁵⁰ The Court thus clearly chastised the New York legislature's attempt to project its established price scale beyond the state's boundaries, but explicitly weighed the public health and economic benefits of the Act against the burden the Act imposed on interstate commerce.⁵¹

Ten years later, in *Southern Pacific Co. v. State of Arizona ex rel. Sullivan*,⁵² the Court again considered extraterritorial effects within a balancing framework. The Court analyzed whether the Arizona Train Limit Law, a state statute which set maximum train lengths for passenger and freight trains, violated the Commerce Clause by impermissibly burdening interstate commerce.⁵³ The Court emphasized that the Train Limit Law "materially impedes the movement of appellant's interstate trains through that state and interposes a substantial obstruction to the national policy proclaimed by Congress, to promote adequate, economical and efficient railway transport service."⁵⁴ The Train Limit Law would affect train operations outside of the state because "of the necessity of breaking up and reassembling long trains . . . before entering and after leaving the regulating state."⁵⁵

Yet, despite the extraterritorial effects of this state regulation, the court did not consider this a per se violation of the dormant Commerce Clause, but rather weighed the safety benefits of decreased train length against the burden imposed on interstate commerce:

The decisive question is whether in the circumstances the total effect of the law as a safety measure in reducing accidents and casualties is so slight or problematic as not to outweigh the national interest in keeping interstate commerce free from interferences which seriously impede it and subject it to local regulation which does not have a uniform effect on the interstate train journey which it interrupts.⁵⁶

^{49.} Id. at 523-24.

^{50.} Id. at 524.

^{51.} Id. at 524-25.

^{52. 325} U.S. 761 (1945).

^{53.} *Id.* at 763, 773–84.

^{54.} Id. at 773.

^{55.} Id. at 775.

^{56.} Id. at 775-76.

After carefully delineating the costs and benefits of the Train Limit Law, the Court concluded that "the state interest is outweighed" by the national interest in "an adequate, economical and efficient" railroad system.⁵⁷

Justice Black's dissent in *Southern Pacific Co.* further underscores that, historically, the Court shied away from treating extraterritorial effects and the resulting potential for conflicting and economically cumbersome regulations as triggering a per se violation of the dormant Commerce Clause.⁵⁸ The dissent noted that similar extraterritorial concerns were dismissed in *Atlantic Coast Line Railroad Co. v. Georgia*,⁵⁹ where Justice Hughes concluded that the remedy for conflicting state regulations that "inconvenience[] [interstate commerce]" was national regulation.⁶⁰ Justice Black's dissent highlighted the importance of judicial deference to popularly enacted state regulations, and implied that the proper strategy for coping with conflicting state regulations is national legislation rather than per se judicial invalidation.⁶¹ Implicitly, undue judicial invalidation of state regulations may also remove a necessary incentive for national regulation—inconsistent state laws—and leave pressing problems unsolved.

Most tellingly, the Supreme Court has categorized *Southern Pacific Co.* as falling within the *Pike* balancing approach. *Pike* cited to *Southern Pacific Co.* as an example of a "candid[]... balancing approach." Thus, the Court's jurisprudence demonstrates a clear concern over extraterritorial effects of states' regulations. However, the Court historically considered these impacts within a balancing framework, weighing local benefits against the burden imposed on interstate commerce.

^{57.} Id. at 783-84.

^{58.} See id. at 794 (Black, J., dissenting).

^{59. 234} U.S. 280, 291 (1914).

^{60.} Id. at 292.

^{61.} Justice Black noted "[t]he balancing . . . is not in my judgment a matter for judicial determination, but one which calls for legislative consideration. Representatives elected by the people to make their laws, rather than judges appointed to interpret those laws, can best determine the policies which govern the people." S. Pac. Co., 325 U.S. at 794 (Black, J., dissenting). Justice Douglas' dissent further underscored that "the legislation is entitled to a presumption of validity," id. at 796, and "courts should intervene only where the state legislation discriminated against interstate commerce or was out of harmony with laws which Congress had enacted," id. at 795.

^{62.} Pike v. Bruce Church, Inc., 397 U.S. 137, 142 (1970).

2. The Court's Most Forceful Articulations of Extraterritoriality Are Limited to Price-Setting Statutes

In the 1980s, extraterritoriality's "heyday," ⁶³ the Court decided three cases which form the crux of the modern doctrine: Edgar v. MITE Corp., ⁶⁴ Brown-Forman Distillers Corp. v. New York State Liquor Authority, ⁶⁵ and Healy v. Beer Institute. ⁶⁶

In *Edgar*, the Court held that the Illinois Business Take-Over Act⁶⁷ was invalid under the dormant Commerce Clause because the Act's extraterritorial effects outweighed its local benefits.⁶⁸ The Business Take-Over Act allowed the Secretary of State to oversee the "substantive fairness" of corporate buyouts within the state.⁶⁹ Justice White summarized the Act's invalidity as twofold: "First, it directly regulates and prevents, unless its terms are satisfied, interstate tender offers which in turn would generate interstate transactions. Second, the burden the Act imposes on interstate commerce is excessive in light of the local interests the Act purports to further."⁷⁰ But only the latter reasoning was joined by a majority of the Court.⁷¹

Writing only for a plurality, Justice White strayed beyond a balancing framework and articulated an early version of today's per se extraterritoriality test. He concluded that the Act had "sweeping extraterritorial effect" because it applied to corporations even if none of the corporation's shareholders resided in Illinois. Justice White concluded that extraterritorial regulation was impermissible regardless of "whether or not the commerce has effects within the State. Justice White asserted this proposition, which departed from the Court's previous balancing approach, without any citation to case law. In the next sentence, Justice White cited to Southern Pacific Co. v. Arizona as a case in which the Court invalidated a statute because the "practical effect of such regulation [was] to control [conduct] beyond the boundaries of the state. Tet, as previously discussed, the Court in Southern Pacific Co. did not consider extrater-

^{63.} Brannon P. Denning, Extraterritoriality and the Dormant Commerce Clause: A Doctrinal Post-Mortem, 73 LA. L. REV. 979, 979 (2013).

^{64. 457} U.S. 624 (1982).

^{65. 476} U.S. 573 (1986).

^{66. 491} U.S. 324 (1989).

^{67.} ILL. REV. STAT., ch. 121 1/2, §§ 137.51–137.70 (1979).

^{68.} Edgar, 457 U.S. at 645-46.

^{69.} Id. at 627.

^{70.} Id. at 640.

^{71.} Id. Justice White wrote for the Court with respect to Parts I, II, and V-B only.

^{72.} Id. at 641-42.

^{73.} Id. at 641.

^{74.} Id. at 642-43.

^{75.} *Id.* at 643 (second alteration in original) (quoting S. Pac. Co. v. Arizona, 325 U.S. 761, 775 (1945)).

ritorial effects as an automatic trigger of invalidity under the dormant Commerce Clause, but instead weighed this burden on interstate commerce against the asserted public safety benefits of the statute. If Justice White skirted over this aspect of the case. And it may have been this elastic interpretation of the Court's jurisprudence and the establishment of a per se extraterritoriality test for invalidity under the dormant Commerce Clause that cost Justice White the majority of the Court in this portion of the opinion.

The Justices' papers detail concern over Justice White's per se test. One of Justice Blackmun's clerks, for example, wrote a memo to Justice Blackmun which stated:

The Commerce Clause section of the opinion seems more troubling. First, it begins by holding that apparently *all* state takeover statutes are unconstitutional because of their extraterritorial effect. Thus, according to the opinion, even the state of incorporation could not regulate a corporation's takeover in a way that had extraterritorial effects. This ruling is fatal to effective state regulation of takeovers, because a state is practically powerless to control a takeover of a corporation if its statute cannot have extraterritorial effects. And traditionally, states of incorporation have regulated extraterritorially, as when a state of incorporation sets forth rules to govern proxies or mergers. . . .

[I]t would be preferable for you to limit your join to the preemption part of the opinion, parts III and IV (as well as the introductory section and the mootness section, parts I and II). . . .

The Commerce Clause part of the opinion, part V, is the most disturbing, because it in effect prevents states from passing effective state tender offer statutes—either because their extraterritorial effect is illegitimate (part V-A) or because their extraterritorial effect is not justified by the asserted local interests (part V-B). If you want to join some aspect of the Commerce Clause section, it would be preferable to join only the balancing part. ⁷⁸

Justice Blackmun marked a check by this portion of the memo, and he did not join part V. Similarly, Justice Powell limited his join to part V-B "because its

^{76.} See S. Pac. Co., 325 U.S. at 775-76.

^{77.} Interestingly, Justice White likens the extraterritoriality limit under the dormant Commerce Clause to "[t]he limits on the jurisdiction of state courts. In either case, 'any attempt directly to assert extraterritorial jurisdiction over persons or property would offend sister States and exceed the inherent limits of the State's power.'" Edgar v. MITE Corp., 457 U.S. 624, 643 (1982) (plurality opinion) (quoting Shaffer v. Heitner, 433 U.S. 186, 197 (1977)). Yet, the Court has backed away from strict territorialism in both the choice-of-law and personal-jurisdiction contexts. See IMS Health, Inc. v. Mills, 616 F.3d 7, 29 n.29 (1st Cir. 2010), vacated on other grounds sub nom., IMS Health, Inc. v. Schneider, 564 U.S. 1051 (2011).

^{78.} Memorandum from Frank S. Holleman III for Justice Henry Blackmun (June 7, 1982).

Commerce Clause reasoning leaves some room for state regulation of tender offers."⁷⁹ A per se extraterritoriality test therefore did not gain a majority of the court because it unnecessarily stymied state legislation that might be justified by net benefits notwithstanding some extraterritorial effects.

Justice White did, however, gain the majority of the Court in his analysis of the Act under the *Pike* balancing test. Justice White included the Act's "nationwide reach" in this balancing test,⁸⁰ an indication that the majority of the Court considered extraterritorial effects to be merely one factor to consider alongside states' interests in regulating corporations within their territories. Under this balancing framework, the Court concluded that the Act was invalid under the Commerce Clause because the Act "impose[d] a substantial burden on interstate commerce which outweigh[ed] its putative local benefits." Thus, while *Edgar* has often been cited as the birthplace of the Court's per se extraterritoriality test, the portions of Justice White's opinion that would support such a test were only written on behalf of a plurality of the Court. And, when writing for the Court, Justice White placed the Act's extraterritorial effects squarely within the *Pike* balancing test.

Nonetheless, the Brown-Forman Court embraced Justice White's Edgar plurality opinion, along with dicta from Seelig, to establish the contemporary per se extraterritoriality test. The Brown-Forman Court considered whether a provision of New York's Alcoholic Beverage Control Law ("ABC Law")82 violated the dormant Commerce Clause.83 The provision effectively tied together in-state and out-of-state liquor pricing regimes by mandating that liquor prices in New York could not exceed liquor prices in neighboring states.84 The Brown-Forman Court discussed its "two-tiered approach"85 to Commerce Clause analysis, and noted that state statutes that "directly regulate[]...interstate commerce" are "generally struck down . . . without further inquiry,"86 just like facially discriminatory statutes. The Court cited Edgar's plurality opinion for this proposition.87 The Court further reasoned that states "may not insist that producers or consumers in other States surrender whatever competitive advantages they may possess."88 The Court noted that "[f]orcing a merchant to seek regulatory approval in one State before undertaking a transaction in another" and "project[ing] its legislation into [other States]" both "directly regu-

^{79.} See Edgar, 457 U.S. at 646 (Powell, J., concurring).

^{80.} See id. at 643.

^{81.} Id. at 646.

^{82.} N.Y. ALCO. BEV. CONT. LAW § 100(1) (McKinney, 1970).

^{83.} Brown-Forman Distillers Corp. v. N.Y. State Liquor Auth., 476 U.S. 573, 575 (1986).

^{84.} Id.

^{85.} Id. at 578.

^{86.} Id. at 579.

^{87.} Id. (citing Edgar v. MITE Corp., 457 U.S. 624, 640-43 (1982) (plurality opinion)).

^{88.} Id. at 580.

lates interstate commerce" and violates *Seelig*. 89 *Brown-Forman* thus fully embraced the plurality in *Edgar* and dicta in *Seelig*, formally ushering in the contemporary extraterritoriality doctrine.

Yet, while most of *Brown-Forman*'s language indicated a virtually per se extraterritoriality test, the Court explicitly noted that the dividing line between this per se branch of the Commerce Clause and the *Pike* balancing test is thin:

[T]here is no clear line separating the category of state regulation that is virtually *per se* invalid under the Commerce Clause, and the category subject to the *Pike v. Bruce Church* balancing approach. In either situation the critical consideration is the overall effect of the statute on both local and interstate activity.⁹⁰

This hesitancy is understandable. The Court, in relying on dicta from *Seelig* and Justice White's plurality opinion in *Edgar*, recast both *Seelig* and *Edgar* as cases that create a per se extraterritoriality doctrine, even though the *Seelig* and *Edgar* Courts themselves arguably did not intend such a divergent reading. Interestingly, the Court also concluded that the ABC law, though focused on liquor sales in New York, had the "practical effect" of regulating liquor sales out of state. The Court cited *Southern Pacific Co.* for this proposition. But as previously discussed, the Court has explicitly stated that *Southern Pacific Co.* exemplified a balancing approach that today would fall under the *Pike* balancing framework. These hiccups in the doctrine have fueled continued confusion over extraterritoriality's full scope.

Creating further doctrinal confusion, Justice White joined Justice Stevens' dissent in *Brown-Forman*, casting doubt on even Justice White's belief in an across-the-board per se test for extraterritoriality. Justice Stevens' dissent in *Brown-Forman* noted that the ABC law was distinguishable from the law at issue in *Seelig* and therefore should not be struck down. 94 Justice Stevens reasoned that the law in *Seelig* raised milk prices in order to insulate New York producers from "out-of-state competition."95 Conversely, the ABC law was specifically "designed to keep the prices of liquor *down* in order to give New York consumers the benefit of out-of-state competition."96 Justice White joined Justice Stevens' dissent; he either must not have meant to prescribe a per se extraterritoriality test in *Edgar* or his opinion had changed by the time the Court heard *Brown-Forman* and he did not believe that extraterritorial effects of *any*

^{89.} Id. at 582-84.

^{90.} Id. at 579.

^{91.} Id. at 583.

^{92.} Id.

^{93.} See supra note 62 and accompanying text.

^{94.} Brown-Forman Distillers Corp., 476 U.S. at 590 (Stevens, J., dissenting).

^{95.} Id. at 590-91.

^{96.} Id. at 590 (emphasis added).

form should trigger invalidation of a statute. By the time of *Brown-Forman*, Justice White supported invalidating only statutes that fell within the realm of traditional economic protectionism by stripping out-of-state producers of their competitive advantage.

Healy v. Beer Institute provides the richest description of the Court's own understanding of its extraterritoriality cases. Healy involved a Connecticut statute which "t[ied] Connecticut beer prices to the prices charged in the border states."97 Healy framed extraterritorial analysis as an outgrowth of "the Constitution's special concern both with the maintenance of a national economic union unfettered by state-imposed limitations on interstate commerce and with the autonomy of the individual States within their respective spheres."98 The Healy Court went on to articulate three propositions that arose from prior extraterritoriality cases. First, state statutes may not be applied to commerce wholly outside of the state's borders, regardless of the commerce's intrastate effects.99 The Court qualified this dictate by noting, "a State may not adopt legislation that has the practical effect of establishing a scale of prices for use in other states."100 Second, extraterritorial regulation "exceeds the inherent limits of the enacting State's authority" and is therefore impermissible regardless of the legislature's intent.¹⁰¹ Third, whether a statute has extraterritorial effects will be determined by evaluating how the statute interacts with other states' regulatory regimes, with a particular concern for overlapping or inconsistent regulation. 102 Summarizing these principles, the Court explained:

[T]he Commerce Clause protects against inconsistent legislation arising from the projection of one state regulatory regime into the jurisdiction of another State. And, specifically, the Commerce Clause dictates that no State may force an out-of-state merchant to seek regulatory approval in one State before undertaking a transaction in another. 103

The *Healy* Court, however, tempered the reach of these propositions with a footnote that stated, "Our distillation of principles from prior cases involving extraterritoriality is meant as nothing more than a restatement of those specific concerns that have shaped this inquiry." 104 *Healy* further concluded that *Brown-Forman* stood for the proposition that the "critical consideration in determining whether the extraterritorial reach of a statute violates the Commerce Clause is

^{97.} Healy v. Beer Inst., 491 U.S. 324, 326 (1989).

^{98.} Id. at 335-36.

^{99.} Id. at 336.

^{100.} Id. (internal quotations omitted).

^{101.} Id.

^{102.} Id.

^{103.} Id. (internal citations and quotations omitted).

^{104.} Id. at 337 n.14.

the overall effect of the statute on both local and interstate commerce," a statement which cuts against per se invalidation of state statutes with extraterritorial effects without any consideration of the statute's related local effects. Thus, while *Healy* affirmed *Brown-Forman*'s articulation of a virtually per se test for extraterritoriality, the *Healy* Court was also careful to qualify its conclusions.

3. Possible Contemporary Limitations to Extraterritoriality

Although the Supreme Court has resolved various dormant Commerce Clause cases in recent years, 106 the Court's most recent foray into extraterritoriality weakened the doctrine by both rejecting its applicability to the case at hand and implicitly cabining extraterritoriality to the price-setting context. 107 In Pharmaceutical Research & Manufacturers of America v. Walsh, 108 the Court analyzed whether Maine's Act to Establish Fairer Pricing for Prescription Drugs 109 violated the dormant Commerce Clause. The Act directed the Commissioner of Human Services to negotiate rebates for uninsured Maine citizens who purchased a prescription at a Maine pharmacy. 110 Relying on Seelig, Edgar, Brown-Forman, and Healy, the lower court noted that the legislation had the practical effect of reducing the revenue that out-of-state drug manufacturers stand to gain from selling drugs to Maine. 111

The First Circuit, however, disagreed. The First Circuit noted that the Commissioner was required to use only "best efforts" to negotiate a "rebate amount equal to or greater than the rebate calculated under the Medicaid program."

The First Circuit reasoned that, unlike *Healy, Brown-Forman*, and *Seelig*, which concerned price-affirmation and price-control statutes:

the Maine Act does not regulate the price of any out-of-state transaction, either by its express terms or inevitable effect. Maine does not insist that manufacturers sell their drugs to a wholesaler for a certain

¹⁰⁵ Id

See, e.g., Dep't of Revenue of Ky. v. Davis, 553 U.S. 328 (2008); Am. Trucking Ass'ns, Inc. v. Mich. Pub. Serv. Comm'n, 545 U.S. 429 (2005); Granholm v. Heald, 544 U.S. 460 (2005).

^{107.} See IMS Health Inc. v. Mills, 616 F.3d 7, 29 n.27 (1st Cir. 2010) (noting that the Court rejected extraterritoriality's applicability in Pharm. Research & Mfrs. of Am. v. Walsh, 538 U.S. 644 (2003)), vacated on other grounds sub nom., IMS Health, Inc. v. Schneider, 564 U.S. 1051 (2011).

^{108. 538} U.S. 644 (2003).

^{109. § 2697(2), 2000} Me. Legis. Serv. 786 (S.P. 1026) (West) (to be codified at 22 M.R.S.A. § 2697(2)).

^{110.} Pharm. Research & Mfrs. of Am. v. Comm'r, Me. Dep't of Human Serv., Civil No. 00-157-B-H, 2000 U.S. Dist. LEXIS 17363, at *3 (D. Me. Oct. 26, 2000).

^{111.} Id. at *15.

^{112.} Pharm. Research & Mfrs. of Am. v. Concannon, 249 F.3d 66, 82 (1st Cir. 2001) (quoting Me. Rev. Stat. Ann. tit. 22, § 2681(4)(B) (2017)).

price. Similarly, Maine is not tying the price of its in-state products to out-of-state prices.¹¹³

The First Circuit therefore held that the Maine Act did not directly control out-of-state behavior, and thus did not amount to impermissible extraterritorial regulation under the dormant Commerce Clause.¹¹⁴

In affirming the First Circuit,¹¹⁵ the Supreme Court implicitly imposed a limiting principle on the extraterritoriality doctrine, circumscribing the doctrine to instances when a statute either "by its express terms or inevitable effect," and not merely *possible* effect, regulates extraterritorial behavior.¹¹⁶ This is a departure from the *Healy* Court's functionalist approach which asked courts to engage in an analysis of the "practical effects" of the statute in question in conjunction with other state regulations. The Supreme Court has long faced criticism that totality of the circumstances approaches invite undisciplined decision–making,¹¹⁷ and that the weighing of intrastate benefits against burdens imposed on interstate commerce is "ill suited to the judicial function" and an abrogation of Congress' power.¹¹⁸ *Pharmaceutical Research* may then be viewed as the Court working to remedy both the unprincipled and expansive nature of extraterritoriality analysis.

And, in its own analysis of the Maine Act's extraterritorial effects, the Supreme Court refrained from using the term "extraterritoriality" and instead used potentially cabining language, referring to this branch of dormant Commerce Clause jurisprudence as "[t]he rule that was applied in *Baldwin* and *Healy*." This has prompted speculation amongst lower courts over whether the Court intended to limit extraterritorial analysis solely to price-control statutes. Pharmaceutical Research's treatment of extraterritoriality thus counsels

^{113.} Id. at 81-82.

^{114.} Id. at 85.

^{115.} Pharm. Research & Mfrs. of Am. v. Walsh, 538 U.S. 644, 670 (2003).

^{116.} Id. at 669. This is the approach taken by the Seventh Circuit in Alliant Energy Corp. v. Bie, 336 F.3d 545 (7th Cir. 2003), noting that CTS Corp. v. Dynamics Corp., 481 U.S. 69, 81 (1987), disavowed the precedential value of the plurality opinion in Edgar. There, the Alliant Court stated, "[W]e are not bound by [Edgar's] reasoning," Alliant, 336 F.3d at 547 (quoting CTS, 481 U.S. at 81), and thus only "direct or facial regulation of wholly extraterritorial transactions is per se invalid." Id.

^{117.} See, e.g., Morrison v. Olson, 487 U.S. 654, 733-34 (1988) (Scalia, J., dissenting).

^{118.} See, e.g., Bendix Autolite Corp. v. Midwesco Enters., Inc., 486 U.S. 888, 897 (1988) (Scalia, J., concurring) (quoting CTS Corp., 481 U.S. at 95 (1987) (Scalia, J., concurring in part and concurring in judgment)); Dep't of Revenue of Ky. v. Davis, 553 U.S. 328, 359–61 (2008) (Scalia, J., concurring).

^{119.} Walsh, 538 U.S. at 669.

^{120.} See Chinatown Neighborhood Ass'n v. Harris, 794 F.3d 1136, 1146 (9th Cir. 2015) ("We have recognized the sui generis effect of interstate commerce of such price-control regimes and the correspondingly limited scope of these cases."); Energy & Env't Legal Inst. v. Epel, 793 F.3d 1169, 1175 (10th Cir. 2015) ("[I]f any state regulation that 'control[s]... conduct'

against sweeping or automatic invalidation of state regulations outside of the price-control context, especially when the statute's extraterritorial effects are open to question.

4. Inconsistent Interpretation of Extraterritoriality in the Lower Courts

Extraterritoriality is "unsettled and poorly understood,"121 leading to confusion among the lower courts. Several circuits have rejected the per se test for extraterritoriality, while other circuits adopt it in a rigid form. The First Circuit has refused to apply a per se extraterritoriality test: "[the extraterritoriality doctrine] clearly does not require per se invalidation of all extraterritorial applications contained within state statutes regulating commerce."122 The Second Circuit has at least once evaluated extraterritorial effects "as a form of 'disproportionate[] burden' on interstate commerce under the Pike balancing test."123 The Tenth Circuit has cabined the extraterritoriality doctrine to cases involving "(1) a price control or price affirmation regulation, (2) linking in-state prices to those charged elsewhere, with (3) the effect of raising costs for out-of-state consumers or rival businesses."124 The Eight Circuit has held that only statutes that "discriminat[e] against interstate commerce, or [evince] other form[s] of 'economic protectionism'" trigger a test of per se invalidity under the dormant Commerce Clause. 125 Conversely, the Sixth, Seventh, and Ninth Circuits apply a strict per se extraterritoriality test. 126 But the Ninth Circuit has explicitly con-

out of state is per se unconstitutional, wouldn't we have to strike down state health and safety regulations that require out-of-state manufacturers to alter their designs or labels? . . . [I]t seems to call on us not merely to respect the actual holdings of the most dormant authorities in all of dormant Commerce Clause jurisprudence but to revive and rebuild them on the basis of dicta into a weapon far more powerful than Pike or Philadelphia. That's an audacious invitation we think the Court unlikely to take up, especially given its remarks about the limits of Baldwin doctrine in Walsh."), cert. denied, 136 S. Ct. 595 (2015); Ass'n des Eleveurs de Canards et d'Oies du Quebec v. Harris, 729 F.3d 937, 951 (9th Cir. 2013) ("Healy and Baldwin are not applicable to a statute that does not dictate the price of a product and does not tie the price of its in-state products to out-of-state prices."); Freedom Holdings, Inc. v. Spitzer, 357 F.3d 205, 216 n.11 (2d Cir. 2004) (explaining that Nat'l Elec. Mfrs. Ass'n v. Sorrell, 272 F.3d 104, 109–110 (2001) analyzes extraterritorial effects "as a form of 'disproportionate[] burden' on interstate commerce under the Pike balancing test").

- 121. Goldsmith & Sykes, supra note 19, at 789.
- 122. IMS Health, Inc. v. Mills, 616 F.3d 7, 29 (1st Cir. 2010), vacated on other grounds sub nom., IMS Health, Inc. v. Schneider, 564 U.S. 1051 (2011).
- Freedom Holdings, Inc. v. Spitzer, 357 F.3d 205, 216 n.11 (2d Cir. 2004) (citing Nat'l Elec. Mfrs. Ass'n v. Sorrell, 272 F.3d 104, 109–110 (2001)).
- 124. Epel, 793 F.3d at 1173.
- 125. S. Union Co. v. Mo. Pub. Serv. Comm'n, 289 F.3d 503, 508 (8th Cir. 2002).
- 126. See Sam Francis Found. v. Christies, Inc., 784 F.3d 1320, 1324–25 (9th Cir. 2015); Am. Beverage Ass'n v. Snyder, 735 F.3d 362, 370 (6th Cir. 2013); Dean Foods Co. v. Brancel, 187 F.3d 609, 616 (7th Cir. 1999).

cluded that "*Healy* and *Baldwin* are not applicable to a statute that does not dictate the price of a product and does not tie the price of its in-state products to out-of-state prices."¹²⁷ Disparate application of the extraterritoriality doctrine among the lower courts may make it difficult for businesses that operate across state lines to ensure that they are not running afoul of the dormant Commerce Clause.

C. Criticism of the Extraterritoriality Doctrine

Extraterritoriality has invoked three common critiques: (1) if applied strictly, the extraterritoriality doctrine is problematically over-inclusive; (2) strict application of the extraterritoriality doctrine is out of sync with the anti-discrimination principles which animate the dormant Commerce Clause; and (3) the theoretical underpinnings of the doctrine, namely concerns over state sovereignty, are better expressed via other constitutional provisions.¹²⁸

Many statutes have extraterritorial effects and blanket invalidation of these statutes would run awry of contemporary understandings of not only commerce but state sovereignty. As Justice Scalia noted in his concurring opinion in *Healy*, "innumerable valid state laws" affect out-of-state behavior.¹²⁹ This criticism has been echoed by Judge Sutton, who gave the example of California's emission standards for cars sold within the state, a standard that:

undoubtedly has the 'practical' effect of impacting car companies located in any State with lower emissions standards Faced with this discrepancy in state emission standards, national car manufacturers have three choices: (1) produce California models and rest-of-country models, spreading the costs of maintaining two separate production and distribution networks across consumers nationwide; (2) sell only California-compliant cars and pass the higher costs of production on to consumers nationwide; or (3) stop selling cars in California entirely, shutting the State off from the stream of commerce and depriving consumers of the economies of scale generated by a national market. All three options practically impact businesses and commerce in other states. ¹³⁰

Then-Judge Gorsuch similarly commented, "if any state regulation that 'control[s]... conduct' out of state is per se unconstitutional, wouldn't we have to

^{127.} Ass'n des Eleveurs de Canards et d'Oies du Quebec v. Harris, 729 F.3d 937, 951 (9th Cir. 2013); see also Chinatown Neighborhood Ass'n v. Harris, 794 F.3d 1136, 1146 (9th Cir. 2015).

See, e.g., Healy v. Beer Inst., 491 U.S. 324, 345 (1989) (Scalia, J., concurring); Am. Beverage, 735 F.3d at 378–80.

^{129.} Healy, 491 U.S. at 345 (1989) (Scalia, J., concurring).

^{130.} Am. Beverage, 735 F.3d at 379 (6th Cir. 2013).

strike down state health and safety regulations that require out-of-state manufacturers to alter their designs or labels?"¹³¹ Rigid application of the extraterritoriality doctrine would jeopardize a range of state statutes, an outcome that would likely not be favored by either state legislators or courts and may engender backlash.

A rigid per se approach to extraterritoriality is also inconsistent with the theoretical underpinnings of the dormant Commerce Clause: prevention of economic balkanization and the undergirding constitutional principle "that the peoples of the several states must sink or swim together, and that in the long run prosperity and salvation are in union and not division." If read literally, dicta in *Healy*, *Edgar*, and *Brown-Forman* suggest that state statutes that are neither discriminatory nor overly burdensome to interstate commerce, but instead have extraterritorial effects that facilitate interstate commerce, must be struck down. Rigid per se invalidity is therefore not only over-inclusive, but may do violence to the principles animating the dormant Commerce Clause by stymieing regulations aimed at facilitating interstate commerce.

Further, a formalistic reading of the Court's extraterritoriality doctrine articulates a strict view of state sovereignty, a view that is out of step with current choice-of-law and personal jurisdiction jurisprudence. In the personal jurisdiction context, the Supreme Court's jurisprudence has shifted from the "rigid geographical rules" epitomized by *Pennoyer v. Neff*¹³⁴ to *International Shoe Co. v. Washington*'s "nexus-oriented approach." Contemporary personal jurisdiction doctrine recognizes that a state's authority may expand beyond its territory. But extraterritoriality has not kept pace; courts continue to invoke the doctrine's ossified understanding of states' territories to invalidate state statutes. And to the extent that watering down extraterritoriality raises concerns about violating state autonomy, Judge Sutton has noted that eliminating the extraterritoriality doctrine would do no violence to constitutional principles of territorialism as "[t]erritorial limits on lawmaking underlie, indeed animate many other

Energy & Env't Legal Inst. v. Epel, 793 F.3d 1169, 1175 (10th Cir. 2015), cert. denied, 136
 Ct. 595 (2015).

^{132.} Baldwin v. G.A.F. Seelig, Inc., 294 U.S. 511, 523 (1935).

^{133.} See Am. Beverage, 735 F.3d at 378 ("Even a hypothetical state law that facilitated interstate commerce—say, an Ohio law that gave tax credits to automobile companies that keep open the production lines of their factories in Michigan and elsewhere—would be invalid if it had extraterritorial 'practical effects.'").

^{134. 95} U.S. 714 (1877).

^{135. 326} U.S. 310 (1945).

^{136.} IMS Health, Inc. v. Mills, 616 F.3d 7, 30, n.29 (1st Cir. 2010), vacated on other grounds sub nom., IMS Health, Inc. v. Schneider, 564 U.S. 1051 (2011).

^{137.} Id.

constitutional imperatives" such as due process and the Full Faith and Credit Clause. 138

II. Heydinger and The Illogic Of Applying Extraterritoriality To State Regulation Of The Electric Grid

Electricity is a fundamental part of modern life. Yet the electric grid contributes significantly to GHG emissions in the United States. Regulation of these emissions, however, is complicated by bifurcation of authority over the electric grid and electricity's physical properties—which makes electricity untraceable across an interconnected, interstate grid, thereby potentially opening the door to extraterritoriality concerns. National regulation of these GHG emissions seems unlikely in the current political climate. And FERC's ability to regulate GHG emissions from the grid is limited by the FPA's bifurcation of authority over the wholesale and retail electric markets between FERC and the states, respectively. State regulation of the grid is thus not only necessary, but also favorable, as states are best positioned to evaluate the costs and benefits of using various energy sources.

But, this state regulation is stifled by an unnecessary and illogical application of extraterritoriality to the interconnected electric grid. ¹³⁹ Courts should be cognizant of these challenges and of the benefits of state regulation of the electric grid and should recast extraterritoriality as part of the *Pike* balancing test. This is not only loyal to the foundational principles of the dormant Commerce Clause, but also avoids absurd results as applied to the electric grid. This recasting provides a way forward for innovative state legislation while also granting courts sufficient leeway to strike down state legislation that is overly burdensome to interstate commerce.

^{138.} Am. Beverage Ass'n v. Snyder, 735 F.3d 362, 380 (6th Cir. 2013) ("A State must have at least some contact with a defendant to exercise personal jurisdiction, its courts may not impose punitive damages that are 'grossly excessive' to the State's interest in the conduct underlying a lawsuit, and it can criminalize only conduct that produces 'detrimental effects' within its borders. Even if Ohio, for instance, made it illegal for its citizens to gamble, the State could not prosecute Nevada casinos for letting Buckeyes play blackjack. The Full Faith and Credit Clause underscores a related geographical limitation on the States' police power. States must respect 'public acts which are within the legislative jurisdiction of the enacting State,' but they face no similar imperative for extraterritorial laws. The Extradition Clause likewise presupposes territorial lawmaking limits when it speaks of the 'State having Jurisdiction of the Crime,' and the Sixth Amendment requires that defendants receive a trial 'by an impartial jury of the State and district wherein the crime shall have been committed'. Indeed, one of the American colonists' indictments of King George III was that he 'combined with others to subject us to a Jurisdiction foreign to our Constitution, and unacknowledged by our Laws.'" (internal citations omitted)).

^{139.} See Daniel A. Farber, Climate Change, Federalism, and the Constitution, 50 ARIZ. L. REV. 879, 889 (2008) (arguing that in the environmental context, extraterritorial impacts should be considered as part of the *Pike* balancing test rather than as part of a per se rule).

A. State Regulation of the Electric Grid Is Necessary, But Complicated

Effectively addressing climate change will require innovative state policy solutions that reduce GHG emissions from the electricity sector. The electricity sector currently accounts for 30% of total domestic GHG emissions. Approximately 80% of these emissions result from coal-fired power plants alone. It is national legislation that aggressively tackles GHG emissions would be the optimal solution, affording uniformity and alleviating constitutional and pragmatic concerns about interstate conflicts and overlapping regulation. However, at the time of this writing, it seems likely that the Trump Administration will rescind the Clean Power Plan, and unlikely that Congress will work to replace it. And, even if the political will for federal legislation existed, any federal effort to curb GHG emissions from the electricity sector would be complicated by the historical division of authority over wholesale and retail electricity markets between FERC and the states, respectively.

Under the FPA, FERC has authority to regulate interstate wholesale sales of electricity, but states retain authority to regulate intrastate retail sales of electricity and siting of new transmissions lines. Any policy solution must navigate this sharp demarcation of authority, which confines state policies to the retail market and FERC policies to the wholesale market. Excessive application of extraterritoriality in this context threatens to create regulatory gaps where neither FERC nor the states can regulate, leaving room only for unlikely national regulation. FERC and various states have tested the boundaries of state and federal authority, but these boundaries are not always clear, and litigation has often ensued, likely chilling further innovative policy solutions. Several state-level policies illustrate this point: demand response, in-state generation incentives, renewable portfolio standards ("RPSs"), and regional transmission organizations ("RTOs").

Demand response programs are part of a wave of creative policy solutions that answered calls for increased electricity supply by refocusing on electricity demand. Wholesale electricity markets must instantaneously balance supply and demand because electricity cannot be easily stored. During peak hours—for example, the hottest months of the summer—demand surges and bids from costly generators must be accepted in order to meet demand. Unlike other

^{140.} Sources of Greenhouse Gas Emissions, EPA, https://perma.cc/A4R5-G4CU.

^{141.} See Coal, CTR. FOR CLIMATE AND ENERGY SOLS., https://perma.cc/ALA4-NAHB.

^{142.} See Davenport, supra note 2.

^{143. 16} U.S.C. § 824(a)-(w) (2012).

^{144.} See, e.g., William Boyd, Public Utility and the Low-Carbon Future, 61 UCLA L. Rev. 1614, 1633 (2014).

^{145.} See FERC v. Elec. Power Supply Ass'n, 136 S. Ct. 760, 768 (2016).

^{146.} See id. at 769.

markets, the electricity market "lacks [a] self-correcting mechanism." Retail rates are set in advance, after approval by state Public Utility Commissions, so retail consumers are "insulated" from spikes in prices during peak periods and do not adjust their behavior in light of surging costs. In demand response programs, market participants, or aggregators of demand, voluntarily agree to reduce their electricity demand during peak hours in exchange for compensation. These offers to decrease demand are bid into the wholesale market, allowing market operators to balance total demand and total supply at a lower price, without having to rely on generation bids from the costliest electricity producers that would otherwise be called upon to meet peak demand. This reduces prices, increases grid reliability, and staves off the need to construct additional infrastructure to generate and transport electricity to meet peak demand.

In FERC v. Electric Power Supply Association, ¹⁵¹ the Court upheld FERC's authority under the FPA to regulate demand response transactions in the wholesale market, rejecting claims that the demand response program infringed on state authority by interfering with retail market prices. ¹⁵² However, challengers argued that demand response interfered with retail prices by creating a novel opportunity cost to forgoing demand response payments: "economically-minded consumers now consider both the cost of making [an electricity purchase] and the cost of forgoing a possible demand response payment." ¹⁵³ The Court dismissed these arguments, holding that demand response "directly affect[s] wholesale rates" but does not regulate retail sales of electricity. ¹⁵⁴ While

^{147.} Id.

^{148.} See id. These peak prices are, however, folded into and spread across the standard prices consumers pay.

^{149.} See id. at 769-70.

^{150.} See id. at 770 (citing ISO/RTO COUNCIL, HARNESSING THE POWER OF DEMAND: HOW ISOS AND RTOS ARE INTEGRATING DEMAND RESPONSE INTO WHOLESALE ELECTRICITY MARKETS 40–43 (2007) (finding demand response program that reduced electricity usage by 3% during peak hours could lead to price declines of 6% to 12%)).

^{151. 136} S. Ct. 760.

^{152.} See id. at 775-76.

^{153.} Id. at 777.

^{154.} See id. at 777–80. Interestingly, the Court also expressed concern that a finding to the contrary would leave "vacuums of authority over the electricity markets" since neither FERC nor the states would be able to regulate wholesale demand response programs. Id. at 780. This would circumvent the underlying purpose of the FPA, which empowered the federal government to remedy the "Attleboro Gap," which arose after Pub. Utils. Comm'n of R.I. v. Attleboro Steam & Electric Co. held that states could not regulate interstate sales of electricity. 273 U.S. 83, 90 (1927). Without a regulator, wholesale demand response could not proceed and this would undermine the FPA's purposes of protecting consumers "against excessive prices and ensur[ing] effective transmission of electric power." Elec. Power Supply Ass'n, 136 S. Ct. at 781 (internal quotations omitted). The Court thus refused to "read the FPA, against its clear terms, to halt a practice that so evidently enables the Commission to fulfill its statutory

FERC's wholesale demand response program survived scrutiny, the dividing line between state and federal authority remains blurred by the inherently interconnected nature of the electric grid.

In Hughes v. Talen Energy Marketing, LLC,¹⁵⁵ the Court held that a Maryland program that incentivizes in-state electricity generation was preempted by the FPA because it interfered with the wholesale rate set by FERC.¹⁵⁶ Maryland sought to induce in-state energy generation by requiring entities that deliver electricity to retail customers to sign a twenty-year contract with a new instate generator.¹⁵⁷ The contract ensured that the new in-state generator received a set price so long as its bid cleared the wholesale market, regardless of the market's clearing price.¹⁵⁸ This price stability provided enough certainty for the in-state generator to enter the market. But the Court held that Maryland had impermissibly "disregard[ed] an interstate wholesale rate required by FERC."¹⁵⁹ Justice Ginsburg, however, was careful to circumscribe the Court's holding, noting that this finding does not "foreclose Maryland and other States from encouraging production of new or clean generation through measures untethered to a generator's wholesale market participation."¹⁶⁰

Over thirty states have also passed RPSs mandating that a set percentage of wholesale electricity derive from renewable sources. RPS structures vary and states are free to define what qualifies as renewable energy. States generally require utilities to demonstrate compliance by either generating or purchasing renewable energy credits ("RECs") that represent "the environmental attributes associated with the generation of one megawatt-hour of electricity." States have also attempted to ensure that the benefits from RPS programs accrue locally by either limiting REC eligibility to, or providing additional REC benefits from, renewable generation that occurs in-state or in-region. RPS programs that favor in-state generation may implicate dormant Commerce Clause concerns if they are discriminatory either facially or in practice. But RPS pro-

duties of holding down prices and enhancing reliability in the wholesale energy market." Id. at 782.

^{155. 136} S. Ct. 1288 (2016).

^{156.} Id. at 1297.

^{157.} Id. at 1294-95.

^{158.} Id. at 1295.

^{159.} Id. at 1299.

^{160.} Id. (internal quotations omitted).

^{161.} See William Griffin, Note, Renewable Portfolio Standards and the Dormant Commerce Clause: The Case for In-Region Location Requirements, 41 B.C. ENVIL. AFFAIRS L. Rev. 133, 136 (2014).

^{162.} Id. at 138.

^{163.} See id. at 140.

^{164.} *Id.* at 150–54; *see also* Ill. Commerce Comm'n v. FERC, 721 F.3d 764, 776 (7th Cir. 2013) ("Michigan cannot, without violating the commerce clause of Article I of the Constitution, discriminate against out-of-state renewable energy.").

grams that are not discriminatory have survived legal scrutiny. Against a backdrop of national gridlock, states continue to raise the requirements set by their RPSs. Hawaii, for example, is moving towards a 100% renewable energy requirement by 2045. As states stretch to not only fortify their RPS programs, but also to fill the federal regulatory void, more states may draft statutes like Minnesota's which raise dormant Commerce Clause concerns.

FERC has encouraged the creation of regional electric grids, which increase grid reliability by instantaneously balancing supply and demand. 167 But an uncompromising reading of the extraterritoriality doctrine as applied to the electric grid may leave insufficient room for states to regulate GHG emissions, perverting the expected benefits of interconnectivity. States have a legitimate interest in regulating local GHG emissions. But, to ensure net reductions in GHG emissions, states must address leakage, whereby electricity generators rejigger electricity contracts in order to superficially comply with a state's RPS without altering net GHG emissions. 168 Attempts to address leakage by regulating imported electricity may trigger extraterritoriality concerns because electricity cannot be traced across the grid. There is thus no way to guarantee that the energy that is ultimately imported complies with the importing state's regulations. According to strict interpreters of extraterritoriality, this presents a quandary. Out-of-state energy generators must either comply with another state's regulations for all of its exports—implicating state autonomy concerns or out-of-state generators must unplug from regional grids—sacrificing the economies of scale gained from regional consolidation of the grid.

This is a false dilemma, however. Regulators have already crafted an effective way of navigating these murky waters: RECs. RECs serve as proxies for renewable energy generation and can be presented to importing states as assurance that their regulations have been met, notwithstanding a fundamental in-

See Energy & Env't Legal Inst. v. Epel, 793 F.3d 1169, 1173–75 (10th Cir. 2015), cert. denied, 136 S. Ct. 595 (2015).

^{166.} Haw. Clean Energy Initiative, Transforming Power in Paradise: The Hawaii Clean Energy Initiative (2014), https://perma.cc/STP4-PKZX.

^{167.} See Order 888, supra note 4 (requiring public utilities to file a single open access tariff to combat intra-industry discrimination); Open Access Same-Time Information System (Formerly Real-Time Information Networks) and Standards of Conduct, 61 Fed. Reg. 21,737 (May 10, 1996) (codified at FERC STATS. & REGS. ¶ 31,035 (1996)) (requiring public utilities to file open access non-discriminatory transmission tariffs).

^{168.} California defines leakage as "a reduction in emissions of greenhouse gases within the state that is offset by an increase in emissions of greenhouse gases outside the state." Cal. Health & Safety Code § 38595(j) (West 2014). Resource shuffling is a form of leakage where entities re-arrange the designation of contracts so that contracts for lower-carbon intensive electricity are re-routed to the regulated market—thereby complying with emissions caps—without changing underlying behavior. See Cal. Code Regs. tit. 17, § 95802(a)(336) (2015); Erin Parlar et al., Colum. Law Sch. Ctr. for Climate Change Law, Legal Issues in Regulating Imports in State and Regional Cap and Trade Programs 15 (2012), https://perma.cc/K5M7-GTF7.

ability to ensure that the renewable energy represented by each REC reached the importing state. Similarly, as the internet developed into an important channel of interstate commerce, critics noted that *any* state regulation of the internet would implicate the dormant Commerce Clause's extraterritoriality doctrine. But technological developments allowed for geographic pinpointing of internet users, assuaging these concerns. Rather than feeding into similar outsized dormant Commerce Clause fears surrounding state legislation of the electric grid, courts should recognize the existing policy innovations which provide effective stand-ins for electricity tracing, thereby alleviating extraterritoriality concerns.

The bifurcation of authority between FERC and the states and the physical properties of electricity complicate regulation of GHG emissions resulting from electricity production. Against this backdrop, flexibility is particularly important. Furthermore, as Justice Brandeis reasoned, states serve as laboratories of innovation, providing testing grounds for novel policy solutions.¹⁷² A per se interpretation of the extraterritoriality doctrine threatens to stall this innovation and is particularly inappropriate as applied to the electric grid. Folding extraterritoriality into the *Pike* balancing test would preserve judicial review of state statutes that impermissibly burden interstate commerce while allowing for innovative policy measures that provide net economic and environmental benefits.

B. Minnesota Enacted Innovative Climate Change Mitigation Strategies

The Eighth Circuit's recent foray into extraterritoriality provides a telling case study for the difficulties of interpreting the electric grid's extraterritorial

^{169.} This Note does not argue that RECs will save RPS programs that favor in-state generation over out-of-state generation from legal scrutiny. But RECs do serve as a useful legal fiction: RECs provide regulating states with a means of ensuring their regulations have been met notwithstanding the untraceability of electrons. RECs also allow regulated parties to comply with a state's regulations without forcing illegitimate shifts in wholly out-of-state behavior. States may not be able to force out-of-state importers to obtain RECs for *all* of their electricity production, but states may require RECs solely for electricity imported into the regulating state. *See* Rocky Mountain Farmers Union v. Corey, 730 F.3d 1070, 1104 (9th Cir. 2013) ("States do not regulate transactions occurring wholly out of state when they impose reporting requirements that out-of-state producers must meet before making in-state sales." (citing Baldwin v. G.A.F. Seelig, Inc., 294 U.S. 511, 524 (1935))); *see also* North Dakota v. Heydinger, 825 F.3d 912, 925 (8th Cir. 2016) ("A state may subject out of state companies to its laws when they enter into commerce within the state without violating any extraterritoriality principle.") (Murphy, J., concurring in part and concurring in the judgment).

^{170.} See Goldsmith & Sykes, supra note 19, at 786–87 (citing Am. Libraries Ass'n v. Pataki, 969 F. Supp. 160 (S.D.N.Y. 1997); Spencer Kass, Regulation and the Internet, 26 S.U. L. Rev. 93, 105–08 (1998).

^{171.} Goldsmith & Sykes, supra note 19, at 811-12.

^{172.} New State Ice Co. v. Liebmann, 285 U.S. 262, 311 (1932) (Brandeis, J., dissenting).

effects. Minnesota took several steps in 2007 to reduce GHG emissions. First, Minnesota passed an RPS requiring that renewable resources supply 25% of utilities' retail electricity sales by 2025.¹⁷³ Second, the state passed the Next Generation Energy Act, which aimed to decrease GHG emissions to 15% below the 2005 level by 2015, at least 30% below the 2005 level by 2025, and at least 80% below the 2005 level by 2050.¹⁷⁴ In support of this goal, the Act targeted GHG emissions from in-state electricity consumption in what amounted to a moratorium on new coal generation.¹⁷⁵ The statute mandated that:

[N]o person shall:

- (1) construct within the state a new large energy facility that would contribute to statewide power sector carbon dioxide emissions;
- (2) import or commit to import from outside the state power from a new large energy facility that would contribute to statewide power sector carbon dioxide emissions; or
- (3) enter into a new long-term power purchase agreement that would increase statewide power sector carbon dioxide emissions. For purposes of this section, a long-term power purchase agreement means an agreement to purchase 50 megawatts of capacity or more for a term exceeding five years.¹⁷⁶

The statute defined "statewide power sector carbon dioxide emissions" as "the total annual emissions of carbon dioxide from the generation of electricity within the state and *all emissions of carbon dioxide from the generation of electricity imported from outside the state and consumed in Minnesota.*"¹⁷⁷ This definition avoids leakage by ensuring that covered entities do not avoid the regulation by importing electricity from out of state, thereby shifting carbon emissions to the exporting state rather than leading to a net emissions reduction. Minnesota also crafted a definition of "large energy facility" that effectively limited the statute's application to coal plants. ¹⁷⁹

^{173.} Minn. Stat. § 216B.1691 (2010).

^{174.} Id. § 216H.02 (2010).

^{175.} Id. § 216H.03 (2016).

^{176.} Id.

^{177.} Id. (emphasis added).

^{178.} See PARLAR ET AL., supra note 168, at 15.

^{179. &}quot;Large energy facility" excludes sources that:

⁽¹⁾ uses natural gas as a primary fuel, (2) is a cogeneration facility or combined heat and power facility located in the electric service area of a public utility . . . or is designed to provide peaking, intermediate, emergency backup, or contingency services, (3) uses a simple cycle or combined cycle turbine technology, and (4) is capable of achieving full load operations within 45 minutes of start-up for a simple cycle

Taken together, the effect of this statute was to ban new coal generation in Minnesota's electricity market. North Dakota, Minnesota's neighbor and a large coal producer, 180 was understandably concerned that this would adversely affect the market for its coal and brought suit against the Minnesota Public Utilities Commission and Minnesota Department of Commerce. 181 North Dakota argued that Minnesota's statute violated the dormant Commerce Clause by regulating beyond its borders. 182 Minnesota countered that the statute could be read narrowly to avoid such an interpretation. 183

This suit, and the splintered opinion that resulted, brings the debate surrounding extraterritoriality analysis into sharp focus. The trial court refused to adopt a narrow interpretation of Minnesota's statute that would have avoided dormant Commerce Clause implications by cabining the statute's reach to only "persons" located in Minnesota and only agreements to import power, exempting the short-term, retail electricity market. 184 The trial court then held that extraterritoriality applied outside of the price-control context, 185 and the statute at hand violated extraterritoriality because of the "boundary-less nature of the electricity grid." Since electricity is untraceable, North Dakota energy producers would be unable to ensure that the energy they export, even for consumption by entities outside of Minnesota, would not enter Minnesota. These out-of-state producers would therefore be forced to either comply with Minnesota's statute for all of their exports or effectively unplug from the regional electric grid. 188

C. On Appeal to the Eighth Circuit, Judge Loken, Judge Murphy, & Judge Colloton Each Wrote Separately, Invalidating Minnesota's Act on Separate Grounds

In *North Dakota v. Heydinger*, ¹⁸⁹ Judges Loken, ¹⁹⁰ Murphy, and Colloton each concluded the statute was unconstitutional, but wrote three separate opin-

facility, or is capable of achieving minimum load operations within 185 minutes of start-up for a combined cycle facility.

MINN. STAT. ANN. § 216H.03 (2016).

- 180. See U.S. Energy Info. Admin., U.S. Dep't of Energy, Annual Coal Report 2015, at 22 tbl.14 (2016), https://perma.cc/EP85-V82Y.
- 181. North Dakota v. Heydinger, 15 F. Supp. 3d 891 (D. Minn. 2014).
- 182. Id. at 910.
- 183. Id. at 908.
- 184. Id. at 909-10.
- 185. Id. at 911.
- 186. Id. at 917-18.
- 187. Id. at 918.
- 188. See id.
- 189. North Dakota v. Heydinger, 825 F.3d 912 (8th Cir. 2016).

ions invalidating the statute on three separate grounds: the dormant Commerce Clause, FPA preemption, and Clean Air Act preemption.

Judge Loken concluded that sections (2) and (3) of Minnesota's statute violated the dormant Commerce Clause. Judge Loken adopted an expansive reading of the extraterritoriality doctrine. He reasoned that a categorical approach which cabined extraterritoriality analysis to the price-control context "would be contrary to well-established Supreme Court jurisprudence" as both the Supreme Court in *Edgar* and various circuit courts, including the Eighth Circuit, have applied the extraterritoriality doctrine outside of the price-control context.¹⁹¹ Judge Loken refused to construe Minnesota's statute narrowly to apply only to "persons" located or operating within Minnesota or to exclude short-term transactions on the Midcontinent Independent System Operator ("MISO")—plausible statutory constructions that would have avoided the thorny dormant Commerce Clause question.¹⁹² Determining that the statute's language was unambiguous, Judge Loken refused to apply the presumption against extraterritoriality.¹⁹³

Judge Loken further noted:

[W]hen a non-Minnesota generating utility injects electricity into the MISO grid to meet its commitments to *non*-Minnesota customers, it cannot ensure that those electrons will not flow into and be consumed in Minnesota. Likewise, non-Minnesota utilities that enter into power purchase agreements to serve *non*-Minnesota members cannot guarantee that the electricity eventually bid into the MISO markets pursuant to those agreements will not be imported into and consumed in Minnesota.¹⁹⁴

This means that it will be impossible to ensure that out-of-state electricity that does not comply with Minnesota's statute does not unwittingly travel to Minnesota entities unless out-of-state energy producers disconnect from the regional electric grid. ¹⁹⁵ Judge Loken likened the electric grid to the internet, where people posting to an out-of-state website cannot ensure that in-state users will not gain access to the website's content. ¹⁹⁶ Out-of-state electricity

^{190.} Notably, Judge Loken clerked for Justice White. See Biography: The Honorable James B. Loken, 17 Wm. MITCHELL L. REV. 695, 695 (1991).

^{191.} Heydinger, 825 F.3d at 919-20.

^{192.} See id. at 920–21. Judge Loken argued that the statute's import prohibition "prohibits entering into a new long-term power purchase agreement that would increase emissions from an out-of-state generating facility, whether presently existing or not. These broad prohibitions plainly encompass non-Minnesota entities and transactions." Id. at 921 (internal quotations omitted).

^{193.} See id. at 921.

^{194.} Id. at 921 (emphasis in original).

^{195.} Id. at 921.

^{196.} Id. (citing Am. Booksellers Found. v. Dean, 342 F.3d 96, 103 (2d Cir. 2003)).

producers are thus forced to modify their behavior either by unplugging from the MISO grid or complying with Minnesota's statute for all of their exports, which violates *Brown-Forman*'s command that "'[f]orcing a merchant to seek regulatory approval in one State before undertaking a transaction in another directly regulates interstate commerce.'"¹⁹⁷

Judge Loken expressed further concern about the potential for overlapping, inconsistent state regulations: "the challenged statute will impose that policy on neighboring States by preventing MISO members from adding capacity from prohibited sources anywhere in the grid, absent Minnesota regulatory approval or the dismantling of the federally encouraged and approved MISO transmission system."¹⁹⁸

Judge Murphy disagreed, concluding that regulations will be held invalid under the dormant Commerce Clause if "the practical effect of the regulation is to control conduct beyond the boundaries of the state."199 But, Judge Murphy concluded that Judge Loken's holding relies on a misconception of the electric grid. Judge Murphy concluded that electrons do not "behave like drops of water flowing through a pipe [r]ather, the electrons oscillate in place, and it is the electric energy which is transmitted through the propagation of an electromagnetic wave."200 Courts assume legislatures do not intend absurd consequences, and the canon of constitutional avoidance counsels in favor of avoiding thorny constitutional issues.²⁰¹ Yet, under Judge Loken's interpretation, the statute would be impossible to enforce. Judge Murphy therefore noted Minnesota legislators likely intended the statute to apply solely to bilateral contracts between out-of-state energy generators and Minnesota utilities.²⁰² Under this interpretation, the statute does not regulate behavior wholly outside the state, and thus survives dormant Commerce Clause scrutiny. Judge Murphy, however, noted that the FPA grants FERC exclusive jurisdiction over interstate transmission of electricity²⁰³ and the wholesale energy market.²⁰⁴ As the Minnesota statute has the practical effect of regulating imports into the wholesale market, it is therefore preempted by the FPA.²⁰⁵

^{197.} *Id.* at 921 (quoting Brown-Forman Distillers Corp. v. N.Y. State Liquor Auth., 476 U.S. 573, 582 (1986)).

^{198.} Id. at 922.

^{199.} Id. at 923 (quoting Healy v. Beer Inst., 491 U.S. 324, 337 (1989)).

^{200.} Id. at 924.

^{201.} See generally John F. Manning, The Absurdity Doctrine, 116 HARV. L. REV. 2387, 2390 (2003) ("[S]tandard interpretive doctrine (perhaps tautologically) defines an absurd result as an outcome so contrary to perceived social values that Congress could not have intended it." (internal quotations omitted)); Ashwander v. Tenn. Valley Auth., 297 U.S. 288, 346–48 (1936) (Brandeis, J., concurring).

^{202.} Heydinger, 825 F.3d at 925 (2016) (Murphy, J., concurring).

^{203.} Id. at 926.

^{204.} Id. (citing FERC v. Elec. Power Supply Ass'n, 136 S. Ct. 760, 767-68 (2016)).

^{205.} Id. at 927.

Judge Colloton similarly concluded the Minnesota statute was preempted by the FPA.²⁰⁶ However, Judge Colloton also concluded that the statute's offset provision—allowing generators that would otherwise violate section 3 to offset emissions in another facility, or to purchase carbon dioxide allowances—was preempted by the Clean Air Act.²⁰⁷ Judge Colloton noted that the Clean Air Act establishes an intricate program of cooperative federalism, and "[a]llowing a number of different states to have independent and plenary regulatory authority over a single discharge would lead to chaotic confrontation between sovereign states."

Heydinger's splintered decision, and Judge Loken's decision in particular, demonstrate the complexity and continued confusion surrounding the application of a rigid per se extraterritoriality test to the electricity grid, which is interconnected by design. Judge Loken's expansive extraterritoriality analysis is at odds with at least the Ninth²⁰⁹ and Tenth²¹⁰ Circuits' doctrine, which have limited extraterritoriality to the price control context. Heydinger thus illustrates the continued confusion over extraterritoriality's scope. It also demonstrates the real danger of grafting a per se extraterritorial test onto the electric grid and thereby creating a regulatory gap where neither Congress, nor FERC, nor states either can or are likely to regulate.

D. Lessons Learned from Heydinger

Folding extraterritoriality into the *Pike* balancing test would be more faithful to the Court's most recent and limiting articulations of the doctrine, and may allow for a needed avenue for energy and climate policy. *American Libraries*, which Judge Loken relied on in analogizing the electric grid to the internet, has faced criticism from academic commentators.²¹¹ Technology has tamed the

^{206.} Id. at 928.

^{207.} Id.

^{208.} Id.

^{209.} See Chinatown Neighborhood Ass'n v. Harris, 794 F.3d 1136, 1146 (9th Cir. 2015) ("We have recognized the sui generis effect on interstate commerce of such price-control regimes and the correspondingly limited scope of [Healy and Baldwin]"); Ass'n des Eleveurs de Canards et d'Oies du Quebec v. Harris, 729 F.3d 937, 951 (9th Cir. 2013) (holding Healy and Baldwin inapplicable outside of the price control context). But see Sam Francis Foundation v. Christies, Inc., 784 F.3d 1320, 1324 (2015) (distinguishing Harris, 729 F.3d at 951).

^{210.} The Tenth Circuit evaluated a Colorado statute that required Colorado electricity generators to ensure that 20% of their electricity derives from renewable sources under the *Pike* balancing test, noting that "non-price standards for products sold in-state . . . may be amenable to scrutiny under the generally applicable *Pike* balancing test, or scrutinized for traces of discrimination under *Philadelphia*, but the Court has never suggested they trigger near-automatic condemnation under *Baldwin*." Energy & Env't Legal Inst. v. Epel, 793 F.3d 1169, 1173 (10th Cir. 2015), *cert. denied*, 136 S. Ct. 595 (2015).

^{211.} See, e.g., Goldsmith & Sykes, supra note 19, at 786-87.

seemingly boundary-less nature of the internet, allowing for geographic pinpointing of online content users, thereby voiding some of the dormant Commerce Clause concerns that initially clouded states' internet regulations.²¹² Professors Goldsmith and Sykes also note that across-the-board invalidation of state internet regulation may lead to suboptimal outcomes as "out-of-state costs of state regulation of cross-border externalities are commonplace and often desirable from the efficiency perspective that informs the meaning and scope of the dormant Commerce Clause."²¹³ The same may be said for excessive invalidation of state regulations aimed at reducing GHG emissions from electricity generation. These regulations promise net benefits, notwithstanding some inevitable extraterritorial effects. Folding the Court's extraterritoriality analysis into the *Pike* balancing test may therefore improve outcomes by allowing regulations that yield net benefits to survive judicial scrutiny.

State-level energy regulation faces some of the same line-drawing issues that were implicated by early state-level internet regulation. As Judge Murphy argued, individual electrons are untraceable as they oscillate in place, and energy is transmitted via an electromagnetic wave.²¹⁴ But this need not automatically trigger extraterritoriality concerns for several reasons. First, Minnesota's statute can be envisioned as a novel RPS, in which 100% of the state's retail energy consumption comes from non-coal sources. Such a recasting would place Minnesota alongside Hawaii, which has imposed a 100% RPS quota.²¹⁵ Hawaii's electric grid is unconnected from the continental United States, 216 so Hawaii's RPS program has not raised dormant Commerce Clause concerns. But the arbitrary fortune of geography should not mean that isolated states like Hawaii, Alaska, and Texas, which all have independent electric grids, can craft novel solutions to climate change that would be invalidated if passed by states that are connected to regional ISOs. Such inconsistency among states would be capricious and unnecessarily forestall the development of innovative strategies for reducing GHG emissions.

If Judge Loken's train of logic were to gain traction, it would also establish perverse incentives to isolate state electric grids, forfeiting the economies of scale gained by establishing regional grids. FERC has encouraged utilities to participate in Regional Independent System Operators ("ISOs") and RTOs such as the MISO at issue in *Heydinger*.²¹⁷ The Supreme Court also recently endorsed RTOs' "efficient allocat[ion of] the supply and demand for electric

^{212.} Id. at 809-12.

^{213.} Id. at 827.

^{214.} North Dakota v. Heydinger, 825 F.3d 912, 924 (8th Cir. 2016).

^{215.} See HAW. CLEAN ENERGY INITIATIVE, supra note 166.

^{216.} U.S. Energy Info. Admin., Hawaii State Energy Profile (2016), https://perma.cc/6NE2-8EMK.

^{217.} Id. at 914.

power."²¹⁸ Practically speaking, regional ISOs and RTOs are unlikely to disappear in the near future, and disincentivizing their use runs counter to Supreme Court jurisprudence and risks destabilizing the electric grid.²¹⁹

Moreover, Goldsmith's and Sykes's thesis—that technological advances tamed the illimitable nature of the internet, thereby alleviating dormant Commerce Clause concerns—can be applied with equal force to the electric grid. Over half the states have crafted RPS programs to reduce GHG emissions. ²²⁰ States recognize that electricity is untraceable and have therefore developed REC programs that allow utilities to demonstrate compliance with RPS requirements by either generating or purchasing sufficient REC credits to comply with RPS criteria. ²²¹ These RECs are proxies for electricity and cannot ensure that the renewable energy associated with each REC travels to a specific state. Instead, RECs, like technological developments that allowed for geographic pinpointing of internet users, are a market innovation that provide mechanisms for "locating" electricity within the electric grid and crafting progressive environmental policies without triggering dormant Commerce Clause concerns.

And, courts have sufficient leeway under the *Pike* balancing test to address any outstanding dormant Commerce Clause concerns. Under this balancing framework, courts balance the burden a statute imposes on interstate commerce against its purported local benefits. Statutes that excessively burdened interstate commerce will not survive this scrutiny. In the case of *Heydinger*, this would mean balancing market pressures on out-of-state energy generators to shift their production to renewable resources against the local environmental and public health benefits accrued by reducing GHG emissions. Under this framework, it is likely that the statute in *Heydinger* would survive scrutiny.

Once recast as an RPS, the statute looks more like Colorado's RPS upheld by *Epel*. Use of RECs could allow out-of-state electricity generators who elected to do business with Minnesota utilities to comply with the statute's mandates without forcing them to alter their behavior in transactions that occurred wholly outside of Minnesota. States have historically retained authority to regulate market transactions conducted by out-of-state entities that choose to do business in the state.²²² Moreover, this statute does not trigger the protectionist or economically discriminatory concerns that historically animated the dormant Commerce Clause.²²³ To the contrary, rather than vitiating the com-

^{218.} Id. at 915 (citing FERC v. Elec. Power Supply Ass'n, 136 S. Ct. 760, 768 (2016)).

^{219.} Exemplifying the current trend, California considered purchasing PacifiCorps' assets to establish a regional west coast ISO. See Lynn Doan, Buffett's PacifiCorp Studies Joining California Power System, BLOOMBERG (Apr. 14, 2015), https://perma.cc/7BVC-XZB2.

^{220.} See Griffin, supra note 161, at 136.

^{221.} See Renewable Energy Certificates (RECs), EPA, https://perma.cc/TK8R-6PRE.

^{222.} See Rocky Mountain Farmers Union v. Corey, 730 F.3d 1070, 1104 (9th Cir. 2013); see also Baldwin v. G.A.F. Seelig, Inc., 294 U.S. 511, 524 (1935).

^{223.} See supra text accompanying notes 56-60.

petitive advantage of out-of-state electricity generators, the statute will likely raise electricity prices in Minnesota.²²⁴ And should Congress disagree, they may step in at any time to enact legislation that expressly preempts state laws that regulate the electric grid or burden the national economy.

Conclusion

Extraterritoriality should be folded into the *Pike* balancing test. The doctrine's current per se test is over-inclusive and risks stymieing much needed innovative state statutes. Rigid application of the doctrine is particularly inappropriate as applied to the electric grid, which has been expressly left to the states' purview, and is inherently interconnected. Evaluating the concerns animating the extraterritoriality doctrine—state autonomy and economic balkanization—under a balancing framework will allow for adequate judicial scrutiny of state statutes that impermissibly burden interstate commerce while maintaining an avenue for the promulgation of state statutes that offer net environmental benefits.

^{224.} Cf. Energy and Env't Legal Inst. v. Epel, 793 F.3d 1169, 1174 (10th Cir. 2015) ("[I]f anything, Colorado's mandate seems most obviously calculated to raise prices for in-state consumers."), cert. denied, 136 S. Ct. 595 (2015).