ENVIRONMENTAL JUSTICE OR ELECTRICAL WARFARE: MINNESOTA'S ZERO CARBON LAW, ITS CONSTITUTIONALITY, AND ITS IMPACT ON NORTH DAKOTA*

ABSTRACT

Minnesota passed House File 7 in early 2023, requiring all electricity supplied in Minnesota be generated by renewable resources by 2040. Potentially, this could have a significant impact on North Dakota as the vast majority of its electricity is generated using fossil fuels. North Dakota may file a lawsuit against Minnesota given the negative financial consequences of being unable to sell electricity generated by fossil fuels to Minnesota wholesalers under this law. If a lawsuit were filed, North Dakota would likely pursue constitutional claims under the dormant commerce clause and the Supremacy Clause. Under the dormant commerce clause, North Dakota could also use the extraterritorial doctrine to show that the Minnesota statute has an impermissible effect on interstate commerce. Additionally, using the *Pike* test, North Dakota may argue the local benefits to Minnesota from the clean energy mandate do not outweigh the burden to interstate commerce. Lastly, North Dakota could also argue that the Federal Power Act preempts House File 7 under the Supremacy Clause.

^{*} This article is meant to be an unbiased analysis of Minnesota's new law, House File 7. It does not reflect the views of the authors or the NORTH DAKOTA LAW REVIEW.

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I. INTRODUCTION

On February 7, 2023, Minnesota Governor Tim Walz signed into law House File 7 ("HF 7") that established a carbon-free electricity standard and created incentives for certain generating facilities, prioritizing local employment. The purpose of HF 7 is to "lower greenhouse gas emissions, combat the climate crisis, and create new clean energy jobs" while

1. Governor Walz Signs Bill Moving Minnesota to 100 Percent Clean Energy by 2040, MINN. DEP'T OF COM. (Feb. 7, 2023) (http://mn.gov/commerce/news/index.jsp?id=17-563384); see also 2023 MINN. SESS. LAW SERV. ch. 7 (West) (The Minnesota legislature called these amendments HF 7.).

simultaneously "ensur[ing] [that] Minnesotans will continue to have reliable, affordable, and safe energy resources."2

Despite the State's goals of ensuring that its residents have reliable, affordable, and safe energy resources, the means by which Minnesota seeks to achieve these goals have raised constitutional questions. Specifically, there are questions regarding the validity of this zero carbon requirement in the larger context of the dormant commerce clause and the Supremacy Clause.³ This could be a significant issue because if the zero carbon mandate violates either the dormant commerce clause or the Supremacy Clause, then the mandate would be unenforceable. Minnesota will, of course, argue that it is merely regulating matters within the boundaries of its own jurisdiction and that it is not conflicting with federal law by pursuing its carbon-free mandate. North Dakota, meanwhile, will likely argue Minnesota is regulating matters that exceed its borders, and the Supremacy Clause preempts the regulation.

II. RENEWABLE PORTFOLIO STANDARDS AND RENEWABLE ENERGY CREDITS

Minnesota's pledge to go zero carbon by 2040 adds Minnesota to the growing list of states seeking to reach a one-hundred percent carbon-free electric grid.⁴ Collectively, these states are compressing the amount of time by which they must meet their zero carbon goals under their renewable portfolio standards ("RPSs").⁵

RPSs, also known as "renewable target[s]" or "quota obligation[s]," are statutes that require electric utilities to "source a certain share of the electricity they sell to end-users from renewable sources of energy." Iowa

^{2.} MINN. DEP'T OF COM., supra note 1.

^{3.} See generally Nathan E. Endrud, Note, State Renewable Portfolio Standards: Their Continued Validity and Relevance in Light of the Dormant Commerce Clause, the Supremacy Clause, and Possible Federal Legislation, 45 HARV. J. ON LEGIS. 259 (2008).

^{4.} See, e.g., CAL. PUB. UTIL. CODE § 454.53 (West 2023); COLO. REV. STAT. ANN. § 40-2-124 (West 2021); D.C. CODE ANN. § 34-1432 (West 2023); HAW. REV. STAT. ANN. § 269-92 (West 2022); ME. REV. STAT. ANN. tit. 35-A, § 3210(1-A) (2021); NEV. REV. STAT. ANN. § 704.7820(2) (West 2019); N.M. STAT. ANN. §§ 62-15-34(A)(3), 62-16-4(A) (West 2019); N.Y. ENV'T CONSERV. LAW §§ 75-0101 to -0119 (McKinney 2020); OR. REV. STAT. ANN. §§ 469A.050-.070 (West 2007); VA. CODE ANN. § 56-585.5 (West 2023); WASH. REV. CODE ANN. §§ 19.405.010, .050 (West 2019); State Renewable Portfolio Standards and Goals, NAT'L CONF. OF ST. LEGIS. (Aug. 13, 2021), https://www.ncsl.org/energy/state-renewable-portfolio-standards-and-goals [https://perma.cc/2QAA-N8RR].

^{5.} See NAT'L CONF. OF ST. LEGIS., supra note 4.

^{6.} Felix Mormann, Constitutional Challenges and Regulatory Opportunities for State Climate Policy Innovation, 41 HARV. ENV'T L. REV. 189, 198 (2017).

enacted the first RPS back in 1983,7 nearly twenty years before other states.8

Generally, the RPS "set[s] a minimum requirement for the share of electricity supply that comes from designated renewable energy resources by a certain date or year." Renewable sources that usually qualify for the RPS are "wind, solar, geothermal, biomass, and some types of hydroelectric," among others. Increased renewable energy generation is a consistent goal in each state's RPS policy; however, no two state programs are identical. Thirty-six states, along with the District of Columbia, have "established an RPS or a renewable energy goal." Thirteen states (and the District of Columbia) require "100% clean energy by 2050 or earlier." Is

Minnesota is one of those thirteen states, and its RPS particularly stands out as one of the most ambitious. When the state's original RPS was introduced in 2007, several observers remarked that it was "the 'most aggressive' renewable portfolio standard in the nation." Sixteen years later, Minnesota has reclaimed this label. The state's new plan is to transition its electric grid to one hundred percent renewable energy by 2040, putting it on track to be one of the first states to fully reach zero carbon. That is no small feat, given that most other participating states are not set to reach their zero carbon goals until 2045 or 2050 at the earliest.

To put this goal into perspective, some attention should be paid to Minnesota's current energy consumption. In 2021,¹⁷ Minnesota consumed 445.3 trillion British thermal units ("Btu") from renewable sources, including nuclear energy.¹⁸ That same year, Minnesota consumed 1,270.1

^{7.} See Act of June 6, 1983, ch. 182, §§ 2-6, 1983 Iowa Acts 389-91 (codified as amended at IOWA CODE ANN. §§ 476.41-.45).

^{8.} Endrud, *supra* note 3 at 262 n.21 (explaining that seven states enacted RPSs before 2002, whereas only one state enacted an RPS before 1997).

^{9.} Renewable Energy Explained: Portfolio Standards, U.S. ENERGY INFO. ADMIN. (Nov. 30, 2022), https://www.eia.gov/energyexplained/renewable-sources/portfolio-standards.php [https://perma.cc/LA9U-9W6C].

^{10.} Id.

^{11.} Id.

^{12.} Id.

^{13.} *Id.* Minnesota's new law passed in February 2023 and was not included in this list, which was last updated on Nov. 30, 2022. *See id.*

^{14.} Endrud, *supra* note 3, at 262-63 (quoting Brian Bakst, *Pawlenty Signs Renewable Energy Law*, MINNESOTA STAR TRIBUNE, Feb. 22, 2007).

^{15.} See NAT'L CONF. OF ST. LEGIS., supra note 4. Washington, D.C. plans to go to zero carbon by 2032, while Minnesota's goal date of 2040 is also shared by Oregon. Id.

^{16.} Id.

^{17. 2021} is the most recent year for which energy consumption figures are available from the U.S. Energy Information Administration.

^{18.} See Energy Consumption Overview: Estimates by Energy Source and End-Use Sector, 2021, U.S. ENERGY INFO. ADMIN., https://www.eia.gov/state/seds/sep_sum/html/pdf/sum_btu_1.pdf [https://perma.cc/74W3-4H84]

trillion Btu from fossil fuels such as coal, natural gas, and petroleum.¹⁹ In total, Minnesota consumed 1,820.5 trillion Btu in 2021.²⁰ Therefore, of all the energy consumed in the state for 2021, approximately 24.5 percent came from renewable sources,²¹ while approximately 69.8 percent came from fossil fuels.²² Assuming these figures have remained relatively constant over the past two years, Minnesota will have to substantially alter its portfolio over the next seventeen years if the state wants to increase its consumption of renewables to 100 percent.

One of the measures that Minnesota is taking to reach its zero carbon 2040 goal is implementing renewable energy credits ("RECs").²³ RECs quantify a specific amount of electricity generated from a renewable energy source, which utilities then use to prove compliance with the RPS requirements.²⁴ Power plant operators usually earn one REC for each megawatt-hour ("MWh") of electricity originating from a renewable source.²⁵ Independent power producers, and non-utility power generators, can then sell these RECs to electric utilities.²⁶ Electric utilities purchase these RECs to offset each MWh of electricity supplied from non-renewable sources,²⁷ or they can choose to invest in their own renewable power sources to earn RECs for the electricity they produce from renewable sources.²⁸ RECs serve an important purpose for electric utilities lacking access to renewable sources by allowing utilities to continue supplying electricity from non-renewable sources while also obligating those same utilities to purchase these credits to offset the amount of carbon they produce, ensuring the state meets its renewable energy quota under the **RPS**.29

(last visited July 19, 2023) (The calculation to reach this number is 147.5 trillion Btu in nuclear electric power and 297.8 trillion Btu in renewable energy, equaling a total of 445.3 trillion Btu.).

20. *Id.* (This figure includes 445.3 trillion Btu in renewable energy, 1,270.1 trillion Btu in fossil fuels, 97.7 trillion Btu in energy acquired through the net-interstate flow of electricity, and 7.4 trillion Btu in energy acquired from Canada and Mexico.).

^{19.} Id.

^{21.} See id. (The calculation to reach this number is 445.3 trillion Btu in renewable energy divided by 1,820.5 trillion Btu consumed, rounded, which equals 0.245 or 24.5 percent.).

^{22.} See id. (The calculation to reach this number is 1,270.1 trillion Btu in fossil fuels divided by 1,820.5 trillion Btu consumed, rounded, which equals 0.698 or 69.8 percent.).

^{23.} See Minn. Stat. § 216B.1691 (2022).

^{24.} Mormann, *supra* note 6, at 198; Lincoln L. Davies, *Power Forward: The Argument for a National RPS*, 42 CONN. L. REV. 1339, 1359 (2010) (describing RECs as "credit mechanism[s] for 'rights' to renewable power production").

^{25.} Mormann, supra note 6, at 198.

^{26.} Id.

^{27.} Davies, supra note 24, at 1359-60.

^{28.} Mormann, supra note 6, at 198.

^{29.} *Id.*; Davies, *supra* note 24, at 1359-60 ("[R]ather than actually requiring renewable energy production from each utility, RPSs use RECs as a proxy for their production requirement.

For a textbook example of a REC program, one needs to look no further than Minnesota.³⁰ Under the Minnesota program, utilities are allowed to purchase RECs from energy produced by an "eligible energy technology,"³¹ which is energy "generate[d] electricity from . . . (1) solar; (2) wind; (3) hydroelectric . . . ; (4) hydrogen . . . ; or (5) biomass."³² Much like a standard REC, one renewable energy credit represents a "kilowatthour of eligible energy technology generated or procured by an electric utility if it is produced by an eligible energy technology."³³ An electric utility can use a renewable energy credit "in lieu of generating or procuring energy directly to satisfy" the renewable energy standard, solar energy standard, or carbon-free energy standard.³⁴ In other words, an electric utility can purchase a renewable energy credit to offset the carbon it produces from each one kilowatt-hour of energy generated by a carbon-producing source in order for the electric utility to meet the Minnesota carbon-free standard.³⁵

The lead sponsor, House Majority Leader Jamie Long (DFL-Minneapolis), introduced HF 7 on January 4, 2023, and the bill was referred to the House Committee on Climate and Energy Finance and Policy.³⁶ During the January 18 hearing, testimony was mostly favorable, "although some representatives of small cooperative utilities said that meeting its mandates would be challenging."³⁷ Representative Long argued the legislation would be beneficial to the state's economy.³⁸

"Minnesota doesn't have any fossil fuels," Long said. "So we send \$13 billion out of state each year to buy energy. That's 4% of our state GDP that could create jobs right here in Minnesota. We should spend that here to create wind and solar instead, and make the 140 tons of steel in each wind turbine with Minnesota taconite." 39

The idea is much like environmental law's pollution trading schemes. Parties can use credits to more efficiently comply with the RPS.") (internal citations and footnotes omitted).

^{30.} See 2023 MINN. SESS. LAW SERV. ch. 7, sec. 12 (West).

^{31.} Id.

^{32.} Id. sec. 3.

^{33.} MINN. STAT. ANN. § 216B.1691, subdiv. 4(a) (West 2022).

^{34.} *Id.* at subdiv. 4(b).

^{35.} See id.

^{36.} Minn. H.J., 93d Leg., Reg. Sess. 29-30 (2023).

^{37.} Rob Hubbard, Energy Panel Approves Faster Path Toward Carbon-Free Utilities, MINN. H. REPS. SESS. DAILY (Jan. 18, 2023, 7:05 PM), https://www.house.mn.gov/SessionDaily/Story/17533 [https://perma.cc/ZT6L-QBSA].

^{38.} See id.

^{39.} Id.

Other supporters claimed HF 7 would provide substantial public health benefits,⁴⁰ "mitigate climate impacts that harm local communities and their residents,"⁴¹ and safeguard outdoor recreational opportunities.⁴² Opponents of the bill argued that it would "cause immediate and future cost and reliability concerns" by "put[ing] Minnesota on a premature timeline,"⁴³ and "puts ratepayers at the mercy of two entities that are outside the reach of voters: electric utility shareholders and MPUC commissioners."⁴⁴

HF 7 was quite divisive within the Minnesota legislature itself. The bill passed through the House committee on "a 10-6 party-line vote."⁴⁵ When HF 7 was brought to the House floor on January 26, 2023, representatives debated over its merits for over seven hours.⁴⁶ House Democrats argued that HF 7 "was necessary to slow climate change."⁴⁷ Representative Patty Acomb (DFL-Minnetonka), for instance, argued that the bill was needed to protect certain species from possible extinction.⁴⁸

"When we hear scientists say what will happen if we don't pass policies like this, and if we don't cut our carbon emissions, our state bird, the loon, will not be able to survive in Minnesota.... Our state tree, the red pine, won't grow in Minnesota. Our treasured fish, the walleye, won't be able to live in the lakes. Minnesota will become Kansas, which is a fine, wonderful place. But it's not Minnesota."⁴⁹

^{40.} Hearing on H. File 7 Before the H. Comm. on Climate and Energy Fin. & Pol'y, 93d Leg., Reg. Sess. (Minn. 2023) (statement of Kathryn Iverson, Advisor, Health Pros. for a Healthy Climate) ("Moving to carbon free energy could save Minnesota more than \$1.2 billion in avoided health costs between 2023 and 2040 by reducing pollution from power plants."), https://www.house.mn.gov/comm/docs/219FK04nRUG_RLte0KzpJg.pdf [https://perma.cc/F4LZ-PEXD].

^{41.} *Id.* (statement of Nels Paulsen, Pol'y Dir., Conservation Minn.), https://www.house.mn.gov/comm/docs/zeuNl7U05keyLuym47YdUg.pdf [https://perma.cc/XH6L-HAWB].

^{42.} *Id.* (statement of Tee McKlendy, Exec. Dir., MN350 Action), https://www.house.mn.gov/comm/docs/w57s-yOvh0_0WWKWPVJGPg.pdf [https://perma.cc/P2XA-PRWZ].

^{43.} *Id.* (statement of David Larson, Gov't Affs. Dir., Coop. Network), https://www.house.mn.gov/comm/docs/cqvShIo73EuBxDJ5kfVaUg.pdf [https://perma.cc/7Q6R-6AW8].

^{44.} *Id.* (statement of John L. Reynolds, Minn. State Dir., Nat'l Fed'n of Indep. Bus.), https://www.house.mn.gov/comm/docs/OK3sxzE7rkWA3OJgy_2xdw.pdf [https://perma.cc/EKC8-Y56F].

^{45.} Hubbard, supra note 37.

^{46.} Rob Hubbard, *House Passes Carbon-Free Energy Requirement After Bill Generates Lively Debate*, MINN. H. REPS. SESS. DAILY (Jan. 26, 2023, 11:13 PM), https://www.house.mn.gov/SessionDaily/Story/17575 [https://perma.cc/PKF2-T7L4].

^{47.} Id.

^{48.} Id.

^{49.} Id.

House Republicans, on the other hand, took issue with HF 7's impact on the electric grid.⁵⁰ Many Republicans in the chamber characterized HF 7 as a "blackout bill" due to concerns regarding the reliability of renewable sources.⁵¹ House Republicans also proposed amendments that would have either lifted the state's moratorium on new nuclear power plants or "allow[ed] the boards of electric cooperatives to modify the bill's directives or [made] their participation optional."⁵² However, none of these amendments passed.⁵³ In the end, the bill passed the House on a 70-60 party-line vote.⁵⁴

The Minnesota Senate received HF 7 from the House on January 30, 2023.⁵⁵ Senate Democrats strongly supported the bill, arguing that Minnesota needed to pass the bill to address climate change.⁵⁶ Senate Republicans, however, lamented that HF 7 would lead to higher energy prices and threaten the reliability of the electric grid.⁵⁷ Senate Republicans also proposed over thirty amendments, some of which would have "allow[ed] new nuclear plant construction; permit[ted] energy companies to use more coal and natural gas; and categorize[d] hydroelectric energy as a renewable source, like wind and solar."⁵⁸ None of these amendments passed.⁵⁹ The bill ultimately passed the Senate on February 2, 2023, on a 34-33 party-line vote.⁶⁰ Five days later, on February 7, 2023, Governor Tim Walz signed HF 7 into law.⁶¹

III. MINNESOTA LAW AT ISSUE

HF 7 sets ambitious energy and climate-related goals.⁶² At issue with North Dakota is Minnesota's statewide carbon-free electricity standard.⁶³

^{50.} See id.

^{51.} *Id*.

^{52.} Id.

^{53.} *Id*.

^{54.} Id.

^{55.} Minn. S.J., 93d Leg., Reg. Sess. 519-20 (2023).

^{56.} Michelle Griffith, Minnesota Senate Passes Bill Mandating Carbon-Free Energy by 2020; Bill Heads to Walz's Desk, MINN. REFORMER (Feb. 2, 2023, 9:36 PM) (statement of Sen. Nick Frentz) ("Carbon emissions are the number one threat to the health of our planet. This bill demonstrates that Minnesota takes climate change seriously, and that we must act now to create an energy production system that is reliable, affordable, and responsible."), https://minnesotareformer.com/briefs/minnesota-senate-on-the-cusp-of-passing-bill-mandating-carbon-free-energy-by-2040/ [https://perma.cc/GV3P-4JYK].

^{57.} *Id.* ("Sen. Jim Abeler, R-Anoka, said he spoke to his local utility, Anoka Municipal Utility, and the company said it would need to raise electricity rates by 50% if the bill were to pass").

^{58.} Id.

^{59.} Id.

^{60.} Id.

^{61.} Id.

^{62. 2023} MINN. SESS. LAW SERV. ch. 7 (West).

The standard requires electric utilities "to supply Minnesota customers with electricity generated or procured from carbon-free resources," starting at eighty percent of retail sales in 2030, increasing by increments of ten percent every five years until Minnesota reaches 100 percent of retail sales in 2040.64

IV. CONSTITUTIONAL CHALLENGES

North Dakota will likely argue that the Minnesota statute violates the dormant commerce clause because the statute either has an impermissible extraterritorial effect or the regulation places an impermissible burden on interstate commerce. North Dakota may also argue that federal law preempts any state regulation regarding zero carbon electricity that Minnesota enacts.

A. DORMANT COMMERCE CLAUSE

The Commerce Clause of the U.S. Constitution allows Congress "[t]o regulate Commerce . . . among the several States." The Framers of the Constitution intended to prevent the states from self-isolation and becoming uncooperative with one another. Allowing Congress to regulate the flow of commerce prevents states from protecting in-state businesses by restricting state legislation that impedes out-of-state commerce. The U.S. Supreme Court has interpreted the Commerce Clause to give Congress broad powers in regulating interstate commerce to allow for a straightforward interchange of goods and services between the states.

^{63.} Id. sec. 10.

^{64.} MINN. DEP'T OF COM., supra note 1.

^{65.} U.S. CONST. art. I, § 8, cl. 3.

^{66.} See Hughes v. Oklahoma, 441 U.S. 322, 325 (1979) (finding that it was the intent of the Framers to prevent "economic Balkanization"); see also Baldwin v. G.A.F. Seelig, Inc., 294 U.S. 511, 523 (1936) ("[The Constitution] was framed upon the theory 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.").

^{67.} See C & A Carbone, Inc. v. Town of Clarkstown, 511 U.S. 383, 390 (1994).

^{68.} See Gibbons v. Ogden, 22 U.S. 1, 189-90 (1824) ("Commerce, undoubtedly, is traffic, but it is something more: it is intercourse. It describes the commercial intercourse between nations, and parts of nations, in all its branches, and is regulated by prescribing rules for carrying on that intercourse."); see also United States v. Darby, 312 U.S. 100, 118 (1941) ("The power of Congress over interstate commerce is not confined to the regulation of commerce among the states. It extends to those activities intrastate which so affect interstate commerce or the exercise of the power of Congress over it as to make regulation of them appropriate means to the attainment of a legitimate end, the exercise of the granted power of Congress to regulate interstate commerce."); United States v. Wrightwood Dairy Co., 315 U.S. 110, 119 (1942) (The Commerce Clause "extends to those intrastate activities which in a substantial way interfere with or obstruct the exercise of the granted power."); Wickard v. Filburn, 317 U.S. 111, 125 (1941) ("[E]ven if appellee's activity be local and though it may not be regarded as commerce, it may still, whatever its nature, be reached by Congress if it exerts a substantial economic effect on interstate commerce and this irrespective of whether such effect is what might at some earlier time have been defined

However, the Constitution does not expressly divest the states the power to regulate interstate commerce.⁶⁹ This silent power of the states is known as the dormant commerce clause.⁷⁰

When determining if a state statute violates the dormant commerce clause, the Supreme Court has adopted three examination criteria. First, under the extraterritorial doctrine, statutes have a "specific impermissible" effect when the statute intentionally "prevent[ed out-of-state firms] from undertaking competitive pricing' or 'deprive[d] businesses and consumers in other states of whatever competitive advantages they may possess."71 Second, a state statute must pass strict scrutiny if it is discriminatory on its face, in practical effect, or purpose.72 Lastly, even if a state statute is not discriminatory but incidentally restrains interstate commerce, it must be evaluated for constitutionality using the *Pike* balancing test.73 Under the *Pike* test: "[w]here the statute regulates even-handedly to effectuate a legitimate local public interest, and its effects on interstate commerce are only incidental, it will be upheld unless the burden imposed on such commerce is clearly excessive in relation to the putative local benefits."74

as 'direct' or 'indirect.'"); United States v. Lopez, 514 U.S. 549, 558-59 (1995) ("First, Congress may regulate the use of the channels of interstate commerce. Second, Congress is empowered to regulate and protect the instrumentalities of interstate commerce, or persons or things in interstate commerce, even though the threat may come only from intrastate activities. Finally, Congress' commerce authority includes the power to regulate those activities having a substantial relation to interstate commerce, i.e., those activities that substantially affect interstate commerce.") (citations omitted).

^{69.} Gibbons, 22 U.S. at 60-61, 63 ("That is a concurrent power, according to all the principles before laid down. It was fully possessed by the States, after the declaration of independence, and constantly exercised. It is one of the attributes of sovereignty, specially designated in that instrument, 'to establish commerce.' It is not granted, in exclusive terms, to Congress. It is not prohibited, generally, to the States. . . . It is a clear principle of interpretation, that where a general power is given, but not in exclusive terms, and the States are restrained, in express terms, from exercising that power in particular cases, that in all other cases, the power remains in the States as a concurrent power. . . . The practice of the States shows that the power has always been considered as concurrent.").

^{70.} *Id.* at 189 (The dormant commerce clause was derived from dicta in Chief Justice Marshall's opinion in *Gibbons*: "The grant does not convey power which might be beneficial to the grantor, if retained by himself, or which can enure solely to the benefit of the grantee; but is an investment of power for the general advantage, in the hands of agents selected for that purpose; which power can never be exercised by the people themselves, but must be placed in the hands of agents, or lie *dormant*.") (emphasis added).

^{71.} Nat'l Pork Producers Council v. Ross, 143 S. Ct. 1142, 1155 (U.S. 2023) (quoting Healy v. Beer Inst., 491 U.S. 324, 338-39 (1989)) (internal quotations omitted).

^{72.} Id.

^{73.} North Dakota v. Heydinger, 15 F. Supp. 3d 891, 910 (D. Minn. 2014), *aff'd*, 825 F.3d 912 (8th Cir. 2016).

^{74.} Pike v. Bruce Church, Inc., 397 U.S. 137, 142 (1970).

1. Under the extraterritorial doctrine, North Dakota must show the Minnesota statute has a specific impermissible extraterritorial effect.

The Supreme Court has applied the extraterritorial doctrine to invalidate price affirmation and price fixing statutes that purposefully discriminate against out-of-state businesses as per se invalid.75 However, some lower courts have applied the extraterritorial doctrine broadly to invalidate state statutes as per se invalid if the statute directly restricts interstate commerce with its sweeping extraterritorial effects.⁷⁶ The doctrine has also been applied to "preclude[] application of a state statute to commerce that [took] place wholly outside of the State's borders."77 The Eighth Circuit found that if the "statute requires people or businesses to conduct their out-of-state commerce in a certain way," the statute is invalid.⁷⁸ Whether or not the state legislature purposefully enacted the statute to control out-of-state commerce is not consequential.⁷⁹ The most important question is "whether the practical effect of the regulation is to control conduct beyond the boundaries of the State."80 Additionally, the statute's practical effect must have been evaluated by "considering how the challenged statute may interact with the legitimate regulatory regimes of

^{75.} See Baldwin v. G.A.F. Seelig, Inc., 294 U.S. 511, 528 (1935) (holding that mandating the price for which milk could be purchased from out-of-state producers is a direct burden on interstate commerce); Brown-Forman Distillers Corp. v. N.Y. State Liquor Auth., 476 U.S. 573, 578 (1986) (holding a liquor affirmation statute that prevented a distiller from lowering prices in another state once the prices for that month were reported in New York, without seeking the approval of New York first, impermissibly regulated out-of-state commerce); *Healy*, 491 U.S. at 337 (holding a price affirmation statute requiring out-of-state beer dealers to post beer prices and confirm the prices were not higher than beer prices in neighboring states had the "undeniable effect of controlling" commerce that happened entirely outside of Connecticut).

^{76.} Healy, 491 U.S. at 336; see Nat'l Solid Wastes Mgmt. Ass'n v. Meyer, 63 F.3d 652, 653-54 (7th Cir. 1995) ("Wisconsin's solid waste legislation conditions the use of Wisconsin landfills by non-Wisconsin waste generators on their home communities' adoption and enforcement of Wisconsin recycling standards; all persons in that non-Wisconsin community must adhere to the Wisconsin standards whether or not they dump their waste in Wisconsin. . . . The practical impact of the Wisconsin statute on economic activity completely outside the State reveals its basic infirmity: It essentially controls the conduct of those engaged in commerce occurring wholly outside the State of Wisconsin and therefore directly regulates interstate commerce."); Am. Beverage Ass'n v. Snyder, 735 F.3d 362, 376 (6th Cir. 2013) ("Michigan's unique-mark requirement not only requires beverage companies to package a product unique to Michigan but also allows Michigan to dictate where the product can be sold. . . . Plaintiff must comply with the statute now or face criminal sanctions. In addition, other states must react today to Michigan's unique-mark requirement or also face legal consequences. Thus, Michigan is forcing states to comply with its legislation in order to conduct business within its state, which creates an impermissible extraterritorial effect.).

^{77.} Healy, 491 U.S. at 336.

^{78.} Cotto Waxo Co. v. Williams, 46 F.3d 790, 793 (8th Cir. 1995).

^{79.} Healy, 491 U.S. at 336.

^{80.} Id. (emphasis added) (citing Brown-Forman Distillers Corp., 476 U.S. at 579).

other States and what effect would arise if not one, but many or every, State adopted similar legislation."81

Applying the extraterritorial doctrine to non-price control statutes that restrain interstate commerce is what led the Eighth Circuit to use the doctrine to invalidate part of Minnesota's Next Generation Energy Act ("NGEA").82 Minnesota passed NGEA in 2007 to limit carbon dioxide emissions within the state's power sector.83 The statute's energy and environmental standards also applied to electricity generated outside of Minnesota that was imported and consumed in Minnesota.84 In 2014, North Dakota filed a lawsuit alleging the statute violated the dormant commerce clause because the statute sought to restrain commerce outside of Minnesota.85

Energy in the region, which includes Minnesota and other states, is controlled and coordinated by a regional transmission center called the Midwest Independent System Operator ("MISO").86 MISO is responsible for controlling wholesale electricity supply and demand into the electric grid.87 Once electricity purchased from producers enters the grid, it "immediately becomes a part of a vast pool of energy that is constantly moving in interstate commerce,"88 such that there is virtually no way to determine what source was used to generate the electricity.89 When electricity that violates the NGEA carbon dioxide emission standards enters the grid, it becomes a portion of electricity within the grid so it cannot be separated and prevented from entering Minnesota.90 North Dakota argued that the statute improperly sought to control and regulate energy facilities outside Minnesota.91 As a consequence of placing restrictions on coalgenerated electricity, "less coal will be mined in North Dakota to the

^{81.} Healy, 491 U.S. at 336.

^{82.} North Dakota v. Heydinger, 825 F.3d 912, 922 (8th Cir. 2016).

^{83.} North Dakota v. Heydinger, 15 F. Supp. 3d 891, 897 (D. Minn. 2014), $\mathit{aff'd}$, 825 F.3d 912 (8th Cir. 2016).

^{84.} Id. at 898.

^{85.} Id. at 895-96.

^{86.} Id. at 896-97.

^{87.} Id. at 896.

^{88.} North Dakota v. Heydinger, 825 F.3d 912, 915 (8th Cir. 2016) (quoting New York v. FERC, 535 U.S. 1, 7 (2002)).

^{89.} *Heydinger*, 15 F.Supp.3d at 897 (Once electricity is generated and injected into the power grid, there are no qualitative differences based on generation source, so the buyer is unaware of the type of resource that generated the electricity it receives.).

^{90.} Tessa Gellerson, Extraterritoriality and the Electric Grid: North Dakota v. Heydinger, A Case Study for State Energy Regulation, 41 HARV. ENV'T L. REV. 563, 591 (2017) ("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.").

^{91.} Plaintiffs' Memorandum of Law in Opposition to Defendants' Motion for Partial Judgment on the Pleading, *Heydinger*, 15 F. Supp. 3d 891 (No. 11-CV-3232 (SRN/SER)).

detriment of North Dakota and its citizens, and North Dakota will collect less in revenues from its coal severance tax and coal conversion tax than it would otherwise collect."92

Judge Loken, writing for a fractured court, determined that because of how the electric grid functions, an out-of-state producer cannot ensure that electricity that violates NGEA does not enter Minnesota.⁹³ As such, North Dakota would either need to comply with NGEA to continue supplying electricity to MISO or stop supplying electricity to MISO.⁹⁴ Additionally, at the time of the lawsuit, other states contributing electricity to the grid through MISO had not yet implemented regulations that promoted energy generated by renewable sources.⁹⁵ Considering the "legitimate regulatory regimes of other States,"⁹⁶ allowing Minnesota to impose the regulation onto interstate commerce originating "wholly outside of Minnesota" violated the extraterritorial doctrine and was unconstitutional.⁹⁷

However, in 2015, the Energy and Environment Legal Institute ("EELI") was unsuccessful in arguing that a Colorado statute, similar to Minnesota's NGEA, violated the extraterritorial doctrine. The statute mandated that twenty percent of electricity sold in Colorado must come from renewable sources. The grid providing electricity in Colorado is similar to the grid provided in Minnesota by MISO. To Since electricity's origin is anonymous once it enters the grid, electricity producers who violate this statute essentially cannot sell electricity to purchasers in any state that send the electricity onto the grid.

Judge Gorsuch, of the Tenth Circuit at the time, concluded that the statute withstands the extraterritorial doctrine challenge. 102 Judge Gorsuch explained the law did not fix the price of electricity in Colorado, it did not tie the price of electricity in Colorado to out-of-state prices, and EELI failed to show the court how it discriminated against out-of-state purchasers or consumers. 103 Therefore the law was not *per se* invalid under the extraterritorial doctrine. 104 In fact, Judge Gorsuch stated that it may benefit

^{92.} Id.

^{93.} Heydinger, 825 F.3d at 921.

^{94.} Id.

^{95.} Id. at 922.

^{96.} Id. (quoting Healy v. Beer Inst., Inc., 491 U.S. 324, 336 (1989).

^{97.} Id. at 921.

^{98.} Energy & Env't Legal Inst. v. Epel, 793 F.3d 1169, 1176 (10th Cir. 2015).

^{99.} Id. at 1170.

^{100.} See id. at 1171 ("Colorado consumers receive their electricity from an interconnected grid serving eleven states and portions of Canada and Mexico.").

^{101.} Id.

^{102.} Id. at 1173.

^{103.} Id.

^{104.} Id.

out-of-state producers and consumers.¹⁰⁵ He reasoned that when the demand for electricity generated by fossil fuels goes down, the price for consumers also goes down.¹⁰⁶ Therefore, if the Colorado law caused prices associated with fossil fuel-generated electricity to drop, other out-of-state electric users to may find it more economical to shift their demand to cheaper fossil fuels, which would benefit electricity producers.¹⁰⁷ Additionally, Judge Gorsuch reasoned that all in-state and out-of-state non-renewable energy producers would likely be impaired equally, similarly, all renewable electric producers would be benefitted equally.¹⁰⁸

In National Pork Producers Council v. Ross, Justice Gorsuch, now writing for the U.S. Supreme Court, affirmed his opinion in Epel and interpreted the extraterritorial doctrine narrowly to include only per se violations linked to price fixing statutes, price affirmation statutes, or statutes that unmistakably discriminate against out-of-state companies in favor of in-state companies. 109 The California statute at issue in Ross prohibited the sale of pork meat within the state if the meat came from an "animal [or its immediate offspring] confined in a cruel manner." 110 The California statute defined "confining in a cruel manner" as "[c]onfining a covered animal in a manner that prevents the animal from lying down, standing up, fully extending the animal's limbs, or turning around freely . . . [or] confining a breeding pig with less than 24 square feet of usable floorspace per pig."111 National Pork Producers Council ("NPPC") argued that because most of California's pork is imported from other states, the statute had the "practical effect of controlling commerce outside the State."112 Out-of-state producers would need to update animal facilities to accommodate California's requirements, increasing their expenses. Justice Gorsuch disavowed this interpretation, stating, "Petitioners' 'almost per se' rule against laws that have the 'practical affect' of 'controlling' extraterritorial commerce would cast a shadow over laws long understood to represent valid exercises of the States' constitutionally reserved

^{105.} Id. at 1174.

^{106.} Id.

^{107.} Id.

^{108.} Id.

^{109. 143} S. Ct. 1142, 1155-57 (2023).

^{110.} CAL. HEALTH & SAFETY CODE § 25990(b)(2) (West 2018).

^{111.} Id. § 25991(e).

^{112.} Nat'l Pork Producers Council v. Ross, 143 S. Ct. 1142, 1154 (U.S. 2023).

powers."113 Accepting this argument "would invite endless litigation and inconsistent results."114

Based on the narrow interpretation of the extraterritorial doctrine the Supreme Court has newly handed down in *Ross*, North Dakota would need to show that the challenged statute has a specific impermissible extraterritorial effect. Instead of demonstrating the statute controlled interstate commerce wholly outside of Minnesota, North Dakota would need to prove an impermissible effect—e.g., the statute fixes electricity prices, affirms electricity prices, or discriminates against out-of-state electricity producers in favor of in-state electricity producers—taking away any competitive advantages that North Dakota possessed.¹¹⁵

2. Under the Pike test, North Dakota would need to show the Minnesota statute has a substantial burden on interstate commerce that is clearly excessive in relation to local benefits.

North Dakota could also allege that the Minnesota statute violated the dormant commerce clause using the *Pike* balancing test. Under the *Pike* test, a statute may incidentally restrain interstate commerce as long as the statute governs a legitimate local public interest.¹¹⁶ A party can successfully challenge the statute if they can show that the burden imposed on commerce is clearly excessive to the legitimate local public interest.¹¹⁷

First, one must allege an impermissible burden on interstate commerce. The Supreme Court has found that the absence of uniform laws between the states is an impermissible burden on interstate commerce. Uniform Currently thirty states, two territories, and Washington, D.C. have RPSs or clean energy laws on the books. Of those, ten, plus D.C. and the U.S. territories, have a 100 percent zero carbon goal.

^{113.} Id. at 1156.

^{114.} *Id.* (Justice Gorsuch points to the vast amount of state laws that include inspection, quarantine, and health laws of every description that have an appreciable effect on commerce entirely outside of the state's borders.).

^{115.} See id. at 1154.

^{116.} Pike v. Bruce Church, Inc., 397 U.S. 137, 142 (1970).

^{117.} *Id*.

^{118.} Exxon Corp. v. Governor of Maryland, 473 U.S. 117, 127 (1978).

^{119.} North Dakota v. Heydinger, 14 F. Supp. 3d 891, 911 (D. Minn. 2014), aff'd, 825 F.3d 912 (8th Cir. 2016) ("[G]enerally speaking, the Commerce Clause protects against inconsistent legislation arising from the projection of one state regulatory regime into the jurisdiction of another State.") (quoting Brown-Forman Distillers Corp. v. N.Y. State Liquor Auth., 476 U.S. 575, 336-37 (1986)).

^{120.} NAT'L CONF. OF ST. LEGIS., supra note 4.

^{121.} Id.

among those with a 100 percent goal, when these states are projected to hit that goal varies between 2030 and 2050.122

Since electricity is transmitted through the grid via powerlines, which often run across multiple states, the electric grid would qualify as an instrumentality of interstate commerce. 123 Therefore, any burden imposed on the electric grid by one state will directly affect the electric grids of other states. North Dakota will likely argue that the Minnesota statute imposes a burden on the electric grid by requiring all electricity served to its customers be derived from renewable sources. This is a burden because then North Dakota, and any other state selling electricity generated from non-renewable resources, will have to devise new ways to transmit power generated from fossil fuels so that it does not get distributed to Minnesota in the electric grid. The court likely will find that this is a substantial burden because the electric grid would need to be redesigned to serve Minnesota's needs, imposing financial costs on other states.

North Dakota could also argue that the lack of uniformity between states burdens interstate commerce.¹²⁴ Minnesota is attempting to reach zero carbon by 2040, making it one of the first states to do so.¹²⁵ Other states, such as California and New Mexico, will not arrive at zero carbon until 2045 at the very earliest.¹²⁶ Still others, such as Colorado, will not arrive there until 2050.¹²⁷ The vastly different timeframes for these state goals may create significant issues for their neighbors, many of whom are not seeking to go to 100 percent renewable sources so soon. The Commerce Clause was devised to provide some consistency and uniformity in the interstate market, and the state regulation of electricity through varying RPSs will inescapably create an issue for maintaining a uniform and free-flowing interstate energy market.¹²⁸

Another impermissible burden on interstate commerce occurs when a state law benefits in-state producers at the expense of out-of-state producers.¹²⁹ North Dakota could argue the Minnesota law will cause Minnesota renewable energy generators to gain a larger market share at the expense of North Dakota energy generators. In 2021, Minnesota generated

^{122.} Id.

^{123.} See generally 29 CFR § 776.29; see also supra notes 86-97 and accompanying text.

^{124.} See Exxon Corp. v. Governor of Maryland, 473 U.S. 117, 128 (1978) ("[T]he Commerce Clause itself pre-empts an entire field from state regulation, and then only when a lack of national uniformity would impede the flow of interstate goods.").

^{125.} NAT'L CONF. OF ST. LEGIS., supra note 4.

^{126.} Id.

^{127.} Id.

^{128.} See Exxon, 473 U.S. at 127-28.

^{129.} Minnesota v. Clover Leaf Creamery Co., 449 U.S. 456, 473 (1981).

twenty-nine percent of its energy from renewable sources, ¹³⁰ whereas North Dakota has six percent renewable sources. ¹³¹ This law will effectively allow Minnesota producers to gain more market share in the renewable sector, while ninety-four percent of North Dakota's existing market share in Minnesota will be forbidden. On the other hand, if Minnesota continues to import its energy from other states, then it could be argued that by transitioning to 100 percent renewable energy sources, Minnesota is just switching from out-of-state fossil fuel producers to out-of-state renewable sources. ¹³² Since the Court has previously held that switching business models is constitutional under the Commerce Clause, Minnesota would not be prohibited from switching to renewable sources. ¹³³

Even if a court determines the statute has a substantial burden on interstate commerce, to be unconstitutional under *Pike* the burden on interstate commerce must outweigh the benefit to the putative local interests. The local interests in Minnesota's case are simple: clean air, less pollution, and a healthier environment. A court will likely find that these are legitimate, if not important, local interests for Minnesota. North Dakota would have to prove that the substantial burden of restructuring its electric grid and power supply or unplugging from the grid outweighs the local interests.

B. FEDERAL PREEMPTION

The Minnesota statute is unlikely to be struck down because of federal preemption. Neither conflict preemption nor the Federal Power Act are implicated under this law.

^{130.} Minnesota State Profile and Energy Estimates: Profile Overview, U.S. ENERGY INFO. ADMIN., https://www.eia.gov/state/?sid=MN#tabs-4 [https://perma.cc/ZWQ8-H8ES] (last updated July 21, 2022).

^{131.} U.S. ENERGY INFO. ADMIN., STATE ENERGY PRODUCTION ESTIMATES: 1960-2021, at 4 (2021), https://www.eia.gov/state/seds/sep_prod/SEDS_Production_Report.pdf [https://perma.cc/SY9U-G2VB]; see infra notes 210-15 and accompanying text.

^{132.} See Exxon, 437 U.S. at 127 ("The source of the consumers' supply may switch from company-operated stations to independent dealers, but interstate commerce is not subjected to an impermissible burden simply because an otherwise valid regulation causes some business to shift from one interstate supplier to another.").

^{133.} See id.

^{134.} Pike v. Bruce Church, Inc., 397 U.S. 137, 142 (1970).

^{135.} Minnesota v. Clover Leaf Creamery Co., 449 U.S. 456, 471 (1981) (Areas of legitimate local concern include "environmental protection and resource conservation.").

1. Constitutional Origin

Federal preemption is rooted in Article VI, Clause 2 of the U.S. Constitution, also known as the Supremacy Clause. 136 The Supremacy Clause provides:

This Constitution, and the Laws of the United States which shall be made in Pursuance thereof; and all Treaties made, or which shall be made, under the Authority of the United States, shall be the supreme Law of the Land; and the Judges in every State shall be bound thereby, any Thing in the Constitution or Laws of any State to the Contrary notwithstanding.¹³⁷

As the Clause indicates, the Constitution and the laws of the federal government are "supreme Laws" and the "Judges in every State" are bound to give effect to these "supreme" federal laws, regardless of state laws to the contrary. 138 Justice Ginsburg summed up the Supremacy Clause best: "Put simply, federal law preempts contrary state law." 139

Federal law can preempt state law in three scenarios. First, "[f]ield preemption occurs when federal law occupies a 'field' of regulation 'so comprehensively that it has left no room for supplementary state legislation," 140 or when a law "touch[es] a field in which the federal interest is so dominant that the federal system will be assumed to preclude enforcement of state laws on the same subject." Second, "conflict preemption" occurs when "compliance with both state and federal law is impossible, or where the state law stands as an obstacle to the accomplishment and execution of the full purposes and objectives of Congress." Third, express preemption occurs when Congress invalidates a state law through express language in a federal statute.

^{136.} See, e.g., Fid. Fed. Sav. & Loan Ass'n v. de la Cuesta, 458 U.S. 141, 152 (1982) ("The pre-emption doctrine . . . has its roots in the Supremacy Clause.").

^{137.} U.S. CONST. art. VI, cl. 2.

^{138.} See S. Candice Hoke, Transcending Conventional Supremacy: A Reconstruction of the Supremacy Clause, 24 CONN. L. REV. 829, 845 (1992) ("By its terms, the only government that has the opportunity to convert its legal norms into 'supreme Laws' is the national government, and the Clause mandates that the judges 'in every State' are bound by this national law.") (footnote omitted) (quoting U.S. CONST. art. VI, cl. 2).

^{139.} Hughes v. Talen Energy Mktg., LLC, 578 U.S. 150, 162 (2016).

^{140.} Murphy v. Nat'l Collegiate Athletic Ass'n, 138 S. Ct. 1461, 1480 (2018) (quoting R.J. Reynolds Tobacco Co. v. Durham Cnty., 479 U.S. 130, 140 (1986)).

^{141.} Pac. Gas & Elec. Co. v. State Energy Res. Conservation & Dev. Comm'n, 461 U.S. 190, 204 (1983).

^{142.} Oneok, Inc., v. Learjet, Inc., 575 U.S. 373, 377 (2016) (quoting California v. ARC Am. Corp., 490 U.S. 93, 100-01 (1989)) (internal quotation marks omitted); *see also* Fla. Lime & Avocado Growers, Inc. v. Paul, 373 U.S. 132, 142-43 (1963); Hines v. Davidowitz, 312 U.S. 52, 67 (1941).

^{143.} See Oneok, Inc., 575 U.S. at 376.

2. Federal Power Act

For roughly the first thirty years of the twentieth century, state and local governments oversaw the regulation of the electric industry. He Supreme Court put an end to those practices in 1927. He facts of the *Attleboro* case expose the shortcomings of the early twentieth-century regulatory model. In *Attleboro*, Rhode Island modified the terms and rates of a wholesale sale between one utility in Rhode Island and a second in Massachusetts. He Specifically, Rhode Island increased the sale rates which only applied to the utility in Massachusetts. He Court held that this violated the dormant commerce clause. He Court reasoned that the sale of electricity between the two states was "essentially national in character" and that Rhode Island's increase in rates charged to utilities located in other states "places a direct burden on interstate commerce." 150

The Court's holding created the aptly-labeled "Attleboro gap" because it divested the states of the authority to regulate interstate wholesale electricity sales, thereby leaving interstate wholesale electric sales entirely unregulated. Congress recognized that this was an issue, so in 1935 Congress passed the Federal Power Act ("FPA"), effectively closing the "Attleboro gap." 153

Under the FPA, Congress divided regulatory authority over the electric grid between the federal government and the states.¹⁵⁴ "Section 201 of the [FPA] gave the Federal Power Commission ([the Federal Energy Regulatory Commission's ("FERC's")] predecessor) authority over the

^{144.} Matthew R. Christiansen & Joshua C. Macey, Long Live the Federal Power Act's Bright Line, 134 HARV. L. REV. 1360, 1371 (2021).

^{145.} Pub. Utils. Comm'n of R.I. v. Attleboro Steam & Elec. Co., 273 U.S. 83, 90 (1927), abrogated by Ark. Elec. Coop. Corp. v. Ark. Pub. Serv. Comm'n, 461 U.S. 375, 393 (1983).

^{146.} *Id.* at 84-86; Jeffery S. Dennis et al., Federal/State Jurisdictional Split: Implications for Emerging Electricity Technologies 3 (2016), https://www.energy.gov/sites/prod/files/2017/01/f34/Federal%20State%20Jurisdictional%20Split —Implications%20for%20Emerging%20Electricity%20Technologies.pdf [https://perma.cc/F4NF-MU69].

^{147.} Attleboro, 273 U.S. at 85-86.

^{148.} *Id.* at 89-90 ("The rate is therefore not subject to regulation by either of the two states in the guise of protection to their respective local interests; but, if such regulation is required it can only be attained by the exercise of the power vested in Congress."); *see also* Christiansen & Macey, *supra* note 144, at 1371-72.

^{149.} Attleboro, 273 U.S. at 90.

^{150.} Id. at 89.

^{151.} Christiansen & Macey, *supra* note 144, at 1372; Robert R. Nordhaus, *The Hazy "Bright Line": Defining Federal and State Regulation of Today's Electric Grid*, 36 ENERGY L.J. 203, 205 (stating that after the *Attleboro* gap "states could regulate retail sales and intrastate sales, but—unless Congress acted—no agency had authority to regulate interstate wholesale electric sales").

^{152. 16} U.S.C. ch. 12; see Christiansen & Macey, supra note 144, at 1372.

^{153.} DENNIS ET AL., supra note 146, at 3.

^{154.} Christiansen & Macey, supra note 144, at 1372.

rates for 'the sale of electric energy at wholesale in interstate commerce' and 'the transmission of electric energy in interstate commerce." ¹⁵⁵ In addition, Congress gave FERC the authority to regulate "certain rates, charges, and practices in connection with or affecting those wholesale rates." ¹⁵⁶ At the same time, Congress specifically reserved oversight of some important parts of the electricity sector to be exclusively regulated by the states, such as "retail sales of electricity, 'facilities used for the generation of electric energy,' . . . and 'facilities used in local distribution' of electricity." ¹⁵⁷ As the Supreme Court observed, although the Act "extend[s] federal regulation, [it] had no purpose or effect to cut down state power. . . . The Act was drawn with meticulous regard for the continued exercise of state power, not to handicap or dilute it in any way." ¹⁵⁸

The FPA's division of authority between the federal government and the states has created what has come to be known as the "bright line." 159 The Court interpreted this "bright line" as "demarcat[ing] *exclusive* spheres of jurisdiction" between the states and the federal government. 160 In practical terms, the "bright line" keeps the states and the federal government within their respective spheres of jurisdiction. This means that state and federal regulators cannot "*directly* regulate matters reserved to the other sovereign *or* use their authority to regulate *indirectly* that which they were prohibited from regulating directly." 161 Following this principle, the Court has found state laws are preempted when a state directly or indirectly regulates matters exclusively reserved to the federal government, such as wholesale interstate rates. 162 Similarly, the Court has struck down federal regulations when the federal regulations directly or indirectly regulate matters exclusively reserved to the states, such as retail rates. 163

^{155.} Id. (quoting 16 U.S.C. § 824(b)(1)).

^{156.} Id. (citing 16 U.S.C. §§ 824d(b), 824e(a)).

^{157.} Id. (quoting 16 U.S.C. § 824(b)(1)).

^{158.} Panhandle E. Pipe Line Co. v. Pub. Serv. Comm'n of Ind., 332 U.S. 507, 517-18 (1947).

^{159.} Fed. Power Comm'n v. S. Cal. Edison Co., 376 U.S. 205, 215 (1964) ("Congress meant to draw a bright line easily ascertained, between state and federal jurisdiction").

^{160.} Christiansen & Macey, supra note 144, at 1372 (emphasis added).

^{161.} Id. at 1372-73 (first and third emphases added).

^{162.} See Hughes v. Talen Energy Mktg., LLC, 578 U.S. 150, 153-54 (2016) ("Maryland's scheme impermissibly intrudes upon the wholesale electricity market, a domain Congress reserved to FERC alone."). This form of regulation creates tension with the federal government, which necessitates a finding of federal preemption. See Christiansen & Macey, supra note 144 at 1373-74.

^{163.} See Christiansen & Macey, supra note 144, at 1373-74; Fed. Power Comm'n v. Conway Corp., 426 U.S. 271, 276-77 (1976) ("The Commission has no power to prescribe the rates for retail sales of power companies. Nor, accordingly, would it have power to remedy an alleged discriminatory or anticompetitive relationship between wholesale and retail rates by ordering the company to increase its retail rates.").

No matter how clear the FPA's "bright line" once was, the electric grid has substantially evolved in the eighty-plus years since the FPA's original enactment in 1935, which has made disputes about the FPA's allocation of jurisdiction more common. 164 Under the old market, vertically integrated utilities produced their own electricity, transmitted it over their own transmission and distribution systems, and sold it directly to their retail customers, all using technologies that roughly resembled those in place when the FPA was originally enacted. 165

Under this vertically-integrated market structure, the electric utilities controlled virtually all operations because they owned the generation, transmission, and distribution facilities. 166 This created a straightforward system because the "power and services flow[ed] in a single direction from the power plants, through the transmission and distribution systems to end users."167 This one-way system also made for a clear jurisdictional divide because under the FPA, FERC was responsible for regulating the "initial portions of the 'one-way' flow of power-wholesale sales of generated power between utilities in interstate commerce and the associated highvoltage transmission of electric energy in interstate commerce."168 Once the transmitted power reached distribution voltage and delivery for retail sales, the FPA transferred jurisdiction from FERC to the individual states for purposes of regulating "any other sale of electric energy and facilities used in local distribution."169 Under this system, an obvious jurisdictional "bright line" existed because "one could generally look to the voltage level of a particular facility, and where in the chain of generation to end use a transaction was taking place, to determine jurisdiction."170

With the passage of time, a "restructuring" of the electric grid occurred as the electricity market became more exposed to market forces. 172

^{164.} See Christiansen & Macey, supra note 144, at 1374 ("In those early days, disputes about the FPA's allocation of jurisdiction were rare.").

^{165.} *Id.*; *see also* FERC v. Elec. Power Supply Ass'n, 577 U.S. 260, 267 (2016) ("Decades ago, state or local utilities controlled their own power plants, transmission lines, and delivery systems, operating as vertically integrated monopolies in confined geographic areas. That is no longer so.").

^{166.} DENNIS ET AL., supra note 146, at 7.

^{167.} Id.

^{168.} Id. at 8.

^{169.} *Id*.

^{170.} Id.

^{171.} Christiansen & Macey, *supra* note 144, at 1375 n.70 ("Restructuring" is the term used to describe "[t]he process by which regulators introduced competition into energy markets," which "shift[ed] [regulation] away from rate regulated vertically integrated utilities.").

^{172.} Id. at 1374-75.

The restructuring of the grid both increased competition in the electric industry and made the electric grid much more integrated.¹⁷³

3. Recent U.S. Supreme Court FPA Preemption Jurisprudence

Since 2015, the U.S. Supreme Court has decided three major cases on preemption grounds under the Natural Gas Act ("NGA") and the FPA.¹⁷⁴ These cases delineate the permissible bounds of regulation for each sovereign under the FPA's dual-jurisdictional framework. Specifically, the Court emphasized the distinction between "actions that *regulate* matters reserved to the other regulator's exclusive jurisdiction and actions that merely *affect* matters reserved to the other's jurisdiction."¹⁷⁵ The FPA only preempts "the former, not the latter."¹⁷⁶ In other words, the FPA only "invalidate[s state or federal] actions that regulate—whether directly or by aiming at—matters reserved to the other's jurisdiction."¹⁷⁷ Before proceeding to the cases, two tests must be discussed.

The "direct regulation" inquiry asks "whether the statute or regulation in question directly regulates a matter within the other sovereign's exclusive jurisdiction."¹⁷⁸ This would apply if, for instance, a state law or regulation sets a wholesale rate.¹⁷⁹ As mentioned earlier, only FERC has the authority to establish a wholesale rate.¹⁸⁰ Consequently, the FPA would preempt such a state law or regulation because it is "directly regulating" a matter reserved to FERC's exclusive jurisdiction.¹⁸¹

The "aiming at" inquiry asks "whether a regulation that *nominally operates* within one regulator's sphere of jurisdiction *in fact regulates* a matter within the other regulator's exclusive jurisdiction." This relatively uncomplicated inquiry requires a court to discern "what the regulation does, the problem it is supposed to remedy, and the link between them." A state law or regulation will, therefore, survive a claim of preemption if the

^{173.} *Id.* at 1375; *Elec. Power Supply Ass'n*, 577 U.S. at 267 (stating that today "almost all electricity flows not through 'the local power networks of the past,' but instead through an interconnected 'grid' of near-nationwide scope.") (quoting New York v. FERC, 535 U.S. 1, 7 (2002)).

^{174.} See Hughes v. Talen Energy Mktg., 578 U.S. 150, 164 n.10 (concerning FPA) ("This Court has routinely relied on NGA cases in determining the scope of the FPA, and vice versa."); Oneok, Inc. v. Learjet, Inc., 575 U.S. 373, 3 (2015) (concerning NGA); Elec. Power Supply Ass'n, 577 U.S. at 264 (concerning FPA).

^{175.} Christiansen & Macey, supra note 144, at 1407.

^{176.} Id.

^{177.} Id. at 1407-08.

^{178.} Id. at 1408.

^{179.} Id. at 1409.

^{180.} See 16 U.S.C. § 824(b)(1).

^{181.} Christiansen & Macey, supra note 144, at 1409.

^{182.} Id. at 1410 (emphasis added).

^{183.} Id. at 1411.

state can demonstrate the regulation, *in fact, regulates* a matter reserved to the state's jurisdiction.¹⁸⁴

In *Oneok, Inc. v. Learjet, Inc.*, ¹⁸⁵ the Court applied the "aiming at" inquiry¹⁸⁶ to determine whether the NGA preempts persons from filing state-law antitrust claims against natural gas pipelines for engaging in behavior that violates state antitrust laws. ¹⁸⁷ The "aiming at" inquiry discerns whether the state law is "aimed directly at interstate purchasers and wholesales for resale," ¹⁸⁸ which results in preemption, or if the law is aimed at "subjects left to the states to regulate," which does not result in preemption. ¹⁸⁹ The Court determined that the state antitrust laws did not directly aim "at natural gas companies in particular, but rather *all businesses* in the marketplace." ¹⁹⁰ Because the state antitrust laws were *not* aimed directly at interstate purchases and wholesales for resale, the NGA did not preempt the state antitrust claims. ¹⁹¹

4. Preemption and Minnesota's Zero Carbon Law

In a prior lawsuit brought against Minnesota, North Dakota alleged that Minnesota's NGEA, a precursor to the current bill, was preempted by FPA.¹⁹² North Dakota argued that certain provisions of the NGEA served to regulate wholesale transactions of electricity in interstate commerce, which is a matter reserved to FERC.¹⁹³ Specifically, North Dakota claimed that Minnesota regulated the terms of wholesale transactions by barring utilities from "import[ing] or commit[ting] to import' power from a new large energy facility."¹⁹⁴ Essentially, they argued Minnesota regulated wholesale rates through a regulation of wholesale capacity and power transactions, which was in violation of the FPA.¹⁹⁵ North Dakota argued that "[w]hen [utilities] . . . 'import or commit to import' power from a new large energy facility to satisfy the obligations they owe their members, these are

^{184.} Id. at 1410-11 (emphasis added).

^{185. 575} U.S. 373 (2015).

^{186.} See Christiansen & Macey, supra note 144, at 1373.

^{187.} Oneok, 575 U.S. at 376.

^{188.} *Id.* at 385 (quoting Northern Nat. Gas Co. v. St. Corp. Comm'n of Kan., 372 U.S. 84, 94 (1963)).

^{189.} Id.

^{190.} Id. at 387 (emphasis added).

^{191.} Id. ("This broad applicability of state antitrust law supports a finding of no pre-emption here.").

^{192.} North Dakota v. Heydinger, 15 F. Supp. 3d 891, 903 (D. Minn. 2014), aff'd, 825 F.3d 912 (8th Cir. 2016).

^{193.} See Brief for Appellees/Cross-Appellants, North Dakota v. Heydinger, 825 F.3d 912 (8th Cir. 2016) (Nos. 14-2156, 14-2251), 2015 WL 416690, at *60-68.

^{194.} Id. at *62-63 (quoting MINN. STAT. § 216H.03, subdiv. 3(2) (West 2011)).

^{195.} Id. at *63.

wholesale transactions" because they are transactions of energy for resale, as opposed to retail sales to ultimate consumers. Therefore, because Minnesota overstepped into FERC's territory by regulating wholesale rates under the guise of prohibiting utilities from importing power generated from carbon-producing sources, FERC's wholesale rate-setting authority under the FPA preempted the Minnesota statute. 197

Although Minnesota's NGEA was not struck down on preemption grounds, North Dakota's line of reasoning persuaded Judge Murphy of the Eighth Circuit, who wrote a separate concurring opinion in *North Dakota v. Heydinger*. ¹⁹⁸ Judge Murphy specifically found that because "the import provision bans contracts for power from new large power plants, it thus bans wholesale sales of electric energy in interstate commerce." ¹⁹⁹ Therefore, because FERC has jurisdiction to regulate wholesale sales of electricity in interstate commerce, Judge Murphy would have found that "Minnesota's ban on certain capacity contracts [is preempted by the FPA because it] directly conflicts with FERC's jurisdiction." ²⁰⁰

5. Minnesota Statute

Minnesota's new zero-carbon law is not plagued with the same deficiencies as the NGEA, so it is unlikely to be preempted by the FPA. The new law does not directly regulate wholesale electricity transactions in interstate commerce, so it does not intrude upon FERC's exclusive jurisdiction.

However, the new law's carbon-free standard presents challenges to states with carbon-based electricity production. The standard states:

In addition to the requirements under subdivisions 2a and 2f, each electric utility must generate or procure sufficient electricity generated from carbon-free energy technology to provide the electric utility's retail customers in Minnesota, or the retail customers of a distribution utility to which the electric utility provides wholesale electric service so that the electric utility generates or procures an amount of electricity from carbon-free energy technologies that is equivalent to at least the following standard percentages of the electric utility's total retail electric

^{196.} Id.

^{197.} *Id*.

^{198. 825} F.3d 912, 923 (8th Cir. 2016) (Murphy, J., concurring in part and concurring in the judgment).

^{199.} *Id.* at 926 (This is because capacity contracts involve wholesale sales of electricity for resale instead of retail sales to ultimate consumers.).

^{200.} Id. at 927.

sales to retail customers in Minnesota by the end of the year indicated:

- (1) 2030 80 percent for public utilities; 60 percent for other electric utilities
- (2) 2035 90 percent for all electric utilities
- (3) 2040 100 percent for all electric utilities.²⁰¹

Notably, the law requires each electric utility to supply a specified amount of carbon-free electricity to "the electric utility's retail customers in Minnesota, *or* the retail customers of a distribution utility to which the electric utility provides *wholesale* electric service."²⁰² As described above, the FPA authorizes FERC to regulate "the sale of electric energy at *wholesale* in interstate commerce,' including both *wholesale* electricity rates and *any rule or practice 'affecting'* such rates."²⁰³ In contrast, the states can regulate "any other sale'—most notably, any *retail* sale—of electricity."²⁰⁴ This raises the question of whether Minnesota's zero carbon requirement, insofar as it applies to electric utilities that provide wholesale service, is preempted by the FPA.

Applying the Court's "aiming at" inquiry does not lead to the conclusion that Minnesota is illegally "aiming at" regulating matters within FERC's regulatory domain. Although Minnesota's zero carbon law unambiguously applies to "the retail customers of a distribution utility to which the electric utility provides wholesale electric service," 205 no indication exists that the law is "aimed *directly* at interstate purchasers and wholesales for resale." 206 In fact, the law clearly states that it must apply to a "distribution utility" that receives wholesale electric service from an electric utility. 207 In the electricity supply chain, the distribution utility qualifies as a retail seller—it has already purchased electricity from a wholesale seller and is selling that electricity to customers for use—meaning that a distribution utility is not selling the electricity "to any person for *resale*." 208 Therefore, the zero carbon requirement is not preempted by the FPA because it does not aim directly at wholesale electric sales.

^{201. 2023} MINN. SESS. LAW SERV. ch. 7, sec. 10 (West).

^{202.} *Id.* (emphasis added).

^{203.} FERC v. Elec. Power Supply Ass'n, 577 U.S. 260, 264 (2016) (quoting 16 U.S.C. §§ 824(b), 824e(a)) (emphasis added).

^{204.} Id. (quoting § 824(b)) (emphasis added).

^{205.} Sec. 10.

^{206.} N. Nat. Gas Co. v. State Corp. Comm'n of Kan., 372 U.S. 84, 94 (1963) (emphasis added).

^{207.} Sec. 10.

^{208. 16} U.S.C. § 824(d) (emphasis added).

On the other hand, an argument could be made that the zero carbon law is implicitly "aiming at" wholesale sellers by invoking distribution utilities that purchase electricity from wholesale sellers. However, this argument is likely unpersuasive because the law is directed at distribution utilities which only has an incidental effect on wholesales, not a direct effect.

V. POTENTIAL IMPACT IN NORTH DAKOTA

North Dakota has a legitimate concern regarding Minnesota's new policy. As written, the law would require Minnesota electric utilities to procure the bulk of their electricity from carbon-free energy sources, regardless of whether that electricity is generated in Minnesota.²⁰⁹ Electricity generated in North Dakota and sold to utilities in Minnesota would be subject to these regulations.

As a major energy-producing state,²¹⁰ North Dakota may face significant economic ramifications under this new policy. According to the U.S. Energy Information Administration ("EIA"), "North Dakota generates more electricity than it consumes, and *about two-thirds* of the power generated in the state is sent to other states and Canada via the regional electric grid."²¹¹ Based on the EIA's figures for 2021, the last year for which information is available, North Dakota generated a total of 4,309.7 trillion Btu,²¹² of which 4,054.4 trillion Btu was generated from fossil fuel-producing sources,²¹³ and 271.5 trillion Btu was generated from renewable sources.²¹⁴ This means that nearly ninety-four percent of the energy generated in North Dakota is derived from fossil fuel-producing sources.²¹⁵ Minnesota's zero carbon policy would, therefore, require Minnesota-based utilities to divest from ninety-four percent of the energy generated in North Dakota by the year 2040 so those utilities meet their quota obligations.²¹⁶

^{209.} Sec. 10.

^{210.} See North Dakota State Profile and Energy Estimates: Profile Analysis, U.S. ENERGY INFO. ADMIN., https://www.eia.gov/state/analysis.php?sid=ND#87 [https://perma.cc/UAR5-FS45] (last updated July 20, 2023).

^{211.} Id. (emphasis added).

^{212.} U.S. ENERGY INFO. ADMIN., supra note 131.

^{213.} See id. (North Dakota produced an estimated 362.3 trillion Btu in coal, 1,386.9 trillion Btu in natural gas, and 2,305.2 trillion Btu in crude oil in 2021.).

^{214.} See id. (North Dakota produced an estimated 102.8 trillion Btu in biofuels, 1.8 trillion Btu in wood and waste, and 150.7 trillion Btu in other renewable sources.).

^{215.} See id. (The calculation for this figure is: 4,054.4 divided by 4,309.7 equals 0.94 or 94 percent.).

^{216.} See supra notes 9-13 (By 2040, Minnesota must procure 100 percent of its energy from carbon-free sources. Therefore, the bulk of energy generated in North Dakota would be off-limits for utilities in Minnesota.).

If the statute is upheld by the courts, North Dakota may be wise to expand its sources of carbon-free electricity before the statute goes into effect.

VI. CONCLUSION

On February 7, 2023, Minnesota Governor Tim Walz signed into law HF 7 that established a carbon-free electricity standard and created incentives for certain generating facilities, prioritizing local employment.²¹⁷ Despite the State's goals of ensuring that its residents have reliable, affordable, and safe energy resources, how Minnesota seeks to achieve these goals has raised constitutional questions. Legal challenges against Minnesota's zero carbon law are currently being pursued,²¹⁸ likely under the dormant commerce clause.²¹⁹ North Dakota may argue the extraterritorial doctrine applies.²²⁰

Pending the lawsuit's outcome, Minnesota currently has seven years before utilities must purchase at least eighty percent of their electricity from carbon-free sources. Assuming the law remains upheld by the courts, North Dakota will be best positioned to remain a viable electricity supplier to Minnesota if it can expand its current portfolio of renewable sources over the next several years.

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^{217.} MINN. DEP'T OF COM., supra note 1; see also 2023 MINN. SESS. LAW SERV. ch. 7 (West).

^{218.} See Amy Dalrymple, North Dakota Industrial Commission Moves Toward Suing Minnesota Over Carbon-Free Bill, BISMARCK TRIB. (Feb. 6, 2023), https://bismarcktribune.com/news/state-and-regional/north-dakota-industrial-commission-moves-toward-suing-minnesota-over-carbon-free-bill/article_198f56a6-a65b-11ed-91f3-c37b111388f1 html [https://perma.cc/B6EG-JVQT]; Jeremy Turley, North Dakota Leaders Ready to Spend Millions on Possible Lawsuit Against Minnesota, FORUM OF FARGO-MOORHEAD (Feb.

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^{219.} Zoya Teirstein, Why North Dakota is Preparing to Sue Minnesota Over Clean Energy, GRIST (Mar. 2, 2023), https://grist.org/politics/why-north-dakota-is-preparing-to-sue-minnesota-over-clean-energy/ [https://perma.cc/WF9H-ZJB8] ("The law, North Dakota regulators said, infringes on North Dakota's rights under the Dormant Commerce Clause in the United States Constitution by stipulating what types of energy it can contribute to Minnesota's energy market.").

^{220.} See discussion supra Section IV.A.1.

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